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Strategic fit in a dynamic industry: case studies of ASEAN-region airlines

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UNIVERSITÉ DE POITIERS
ÉCOLE DOCTORALE - SOCIÉTÉS ET ORGANISATIONS
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STRATEGIC FIT IN A DYNAMIC INDUSTRY: CASE STUDIES OF ASEAN-REGION AIRLINES

L'ADÉQUATION STRATÉGIQUE DANS UNE INDUSTRIE DYNAMIQUE
ÉTUDES DE CAS DES COMPAGNIES AÉRIENNES DE LA RÉGION DE L'ASEAN

Thèse en vue de l'obtention du Doctorat en Sciences de Gestion
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“L’université de Poitiers n’entend donner aucune approbation ni improbation aux opinions émises dans les thèses; elles doivent être considérées comme propres à leur auteur.”

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RÉSUMÉ

L'objectif de cette recherche est d'étudier les réponses stratégiques des compagnies aériennes de la région de l'Association des Nations de l'Asie du Sud-Est (ASEAN) face à la création d'un marché unique de l'aviation civile intégrant dix pays membres. Nous cherchons à aborder cette problématique en adoptant un cadre d'analyse fondé sur la transformation des capacités dynamiques d'une organisation et le modèle Environnement-Stratégie-Organisation (ESO) de Milliot (2013, 2014). Nous utilisons quatre études de cas pour explorer les actions spécifiques à envisager face aux impacts de l'environnement externe ; les cas étudiés sont ceux de Vietnam Airlines, Qatar Airways, Derry Air et NokScoot Airlines. Notre enquête empirique est fondée sur l'analyse de documents, des entretiens avec cinq cadres supérieurs des compagnies aériennes étudiées et 14 experts régionaux et internationaux de l'aviation civile. Pour valider les résultats du point de vue de la demande, une analyse par clusters en deux étapes est proposée. Elle s'appuie sur des données collectées auprès de 444 voyageurs cambodgiens et vietnamiens résidant au Cambodge, au Vietnam et dans d'autres pays qui utilisent les voies aériennes comme moyen de transport dans la région de l'ASEAN. Les résultats indiquent que les changements technologiques, les forces politiques mondiales, les forces juridiques, les gouvernements, les actionnaires, les fournisseurs, les concurrents, les distributeurs, les clients et les employés sont des attributs clés de l'environnement externe qui interagissent de manière complexe. Ces parties prenantes sont à la source des impacts les plus significatifs sur les stratégies développées par les compagnies aériennes de la région de l'ASEAN. Cette étude empirique indique que le processus d'adéquation stratégique dans l'industrie du transport aérien de l'ASEAN doit associer cinq types de stratégies, notamment une stratégie de croissance des entreprises, une stratégie d'innovation interne, une stratégie de gestion des coûts, une stratégie de gestion des parties prenantes et une stratégie d'innovation technologique. Ces stratégies sont mises en œuvre et combinées pour être en adéquation avec les forces environnementales externes et faciliter l'ajustement organisationnel nécessaire pour assurer aux compagnies aériennes une meilleure compétitivité.

Mots-clés: changement environnemental, adéquation stratégique, impacts des parties prenantes, compagnies aériennes, région de l'ASEAN

ABSTRACT

The objective of this research is to examine the strategic responses of air carriers in the region of Association of South East Asian Nations (ASEAN) when associating with opening up the ASEAN Single Aviation Market (ASAM) among ten member countries. We are seeking to address this matter by generating an analytical framework based on the dynamic capabilities transformation of an organization and the guidance of the Environment-Strategy-Organization (ESO) framework developed by Milliot (2013, 2014). We employ four case studies to explore specific actions against the external environmental impacts; the case studies are Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines. Our empirical survey is based on the analyses of the documents, the primary interviews with five top executives of the case-studied airlines and 14 regional and international aviation experts. In order to validate results from the demanding perspective, a Two-step Cluster analysis is proposed with data collected from 444 Cambodian and Vietnamese travelers residing in Cambodia, Vietnam and other countries that use airways as a means of their transportation within ASEAN region. Results indicate that technological change, global political forces, legal forces, governments, shareholders, suppliers, competitors, distributors, customers, and employees are the key attributes of the Stakeholder environment, which depict the most significant impact on the strategies developed by ASEAN-region airlines. This empirical study indicates that the process for strategic fit in the ASEAN airline industry must involve five types of strategies including a business growth strategy, an internal improvement strategy, a cost management strategy, a stakeholder management strategy, and a technology innovation strategy. These strategies are implemented and combined to achieve a strategic fit in confronting with external environmental impacts and obtain an organizational fit to head the airline toward a better competitiveness.

Key words: environmental change, strategic fit, stakeholder impacts, airlines, ASEAN region

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GENERAL INTRODUCTION

1. Research Context

When a country's market is pressed into joining a regional, unified, multilateral market by the impact of environmental changes, organizations front the challenges of facing threats. Despite the environment remaining more or less turbulent, organizations face an ongoing need to formulate strategies to ensure their success. Given that organizations face multiple environmental and organizational contingencies, an organization is obliged to seek an ongoing fit between its strategy and the environmental situation within which it exists. It is a challenge for managers of an organization and must be taken into account when formulating or reformulating their strategy to optimize their organizational performance.

The purpose of this research is to examine how organizational performance, in the context of a dynamic industry, will maintain its strategic fit in adapting to environmental changes. We are seeking to address this matter by developing a strategic fit framework through which to present the processes based on the organization's dynamic capabilities. Thus, environmental and organizational circumstances should be identified by utilizing insights from traditional contingency arguments, recent resource-based perspectives, and industry-specific knowledge. Organizations such as ASEAN-region airlines have been observed and employed as case studies for the aviation as one of the most dynamic and competitive industries in the world. Additionally, An Open Skies Agreement¹ is currently identified as an external environmental factor impacting on airlines in ASEAN.

Beside the main business as passenger transportation, an airline might develop other different products and services such as logistics, maintenance repair and overhaul services (MRO),

¹ An International Air Transport Agreement

ASEAN Single Aviation Market (ASEAN-SAM) also known as **ASEAN Open Skies Agreement/Policy**, is the region's major aviation policy. It is geared towards the development of a unified and single aviation market among ASEAN members in Southeast Asia projected to begin 1 January 2015, though all agreements have not been signed. The aviation policy was proposed by the ASEAN Air Transport Working Group, supported by the ASEAN Senior Transport Officials Meeting, and endorsed by ASEAN Transport Ministers. The creation of the ASEAN-SAM was a key component of the road map for the establishment of the ASEAN Economic Community.

The ASEAN-SAM is expected to fully liberalize air travel between member states in the ASEAN region, allowing ASEAN countries and airlines operating in the region to directly benefit from the growth in air travel around the world, and also freeing up tourism, trade, investment, and service flows between member states. Since 1 December 2008, restrictions on the third and fourth freedoms of the air between capital cities of member states for air passengers services have been removed, while from 1 January 2009, full liberalization of air freight services in the region took effect. On 1 January 2011, full liberalization on fifth freedom traffic rights between all capital cities took effect.

The ASEAN single aviation market policy will supersede existing unilateral, bilateral and multilateral air services agreements among member states which are inconsistent with its provision. The plan was for all carriers from ASEAN to enjoy unlimited third, fourth and fifth freedom operations within the region. However, after the deadline was passed in early 2016, three ASEAN members—the Philippines, Indonesia and Laos—reluctant to ratify the full agreement. Currently, Indonesia remains opposed to opening up its secondary cities, the Philippines has excluded Manila from the agreement and Laos has yet to free up Luang Prabang and the national capital Vientiane.

catering, crew training, ancillary products and services, etc...in order to contribute to its total revenues. In this research, “passenger transportation” becomes a strategic business unit to be discussed in achieving the airline’s resource optimization and value, though we mention some relating services in our data analysis section.

2. Research Question

The airline industry does not generate high rates of profitability compared to other industries (Hanlon, 1996; IATA, 1995). It’s one of the most enduring folk wisdom dicta in all commerce, the profitability of the industry as a whole has been somewhat variable (McFarlane, 2019). Reasons include price deregulation, tough competition, new technology, and low-cost competitor airlines. As a result, managers find it difficult to employ a sustainable competitive strategy and apply necessary organizational and strategic changes when there are massive changes within the airline industry and competition worldwide. In such a context, airline managers must improve company performance and seek measures to increase operational efficiency in order to maintain their competitive advantage.

The global aviation industry is forced to restructure (Economist 1996; IATA, 1995; ATW, 1997; Reynolds, 2008) and change due to liberalization of world markets, bilateral agreements, and increased competition. From 1945 onward, the airline industry was owned and financed by governments in order to promote their country, or to use the airline as a tool for boosting trading interests internationally. From 1970 into the 1980s, competition within the global airline industry was not fierce due to the stringent industry regulations imposed by governments and a lack of new market entrants. Since 2008, the industry faced three major challenges, including significantly higher than expected fuel prices, a potentially weaker economy, and labor cost pressures (Reynolds, 2008).

Since the aviation industry is mostly set up as an oligopolistic market structure, the majority of airlines were protected by government ownership and regulations, hence, they were safe from high competition on domestic and international routes. In this setting, it seemed there were no price competition or promotional efforts, the quality of the products and services provided was uneven, and low efficiency was evident in developing distribution systems through networks (Borenstein, 1989). Many countries use bilateral air service agreements as the key instrument for international air transport liberalization. Up to now, thousands of bilateral air service agreements have been reported, of which 70 percent are agreements and amendments comprising certain forms of liberalized arrangements, for instance, the expansion of traffic rights², multiple designations with or without route limitations, freedom of capacity decision, freedom of pricing, and the enlargement of airline ownership and control. Bilateral air services agreements also deal with Computer Reservation Systems (CRSs), airline code-sharing, aircraft leasing and interline transport when the airline business progresses. The bilateral Open Skies air services agreements allow full market access for all airlines without restrictions on third,

² **Freedoms of the Air.** The freedoms of the air are a set of commercial aviation rights granting a country's airlines the privilege to enter and land in another country's airspace. They were formulated as a result of disagreements over the extent of aviation liberalisation in the Convention on International Civil Aviation of 1944, known as the Chicago Convention. (Source: Wikipedia)

fourth and fifth freedom traffic rights³, as well as designation, capacity, frequencies, code-sharing and tariffs.

Following in the footsteps of the EU and US, the ASEAN region was seeking air transport liberalization under the open skies policy, aiming for a single and unified aviation market by 2015. The Open Skies Agreement aims to synchronize commerce and investment in order to integrate these sectors into a single market. The effect of the policy will be to create a fiercely competitive environment within the region when it unifies all players in the global economy and boosts intra-regional trade and investment flows to the significant consumer market.

An Open Skies Agreement enhances regional and domestic connectivity, integrates production networks, enhances intra-regional trade, attracts investments, deepens regional ties, and further strengthens ASEAN's concept of its centrality while allowing the specific region to simultaneously expand into global markets. Open Skies air transport agreements are expected to bring mutual economic benefits to the signatory countries. However, it is an ongoing challenge to achieve the necessary compromises between parties, especially between countries at differing levels of economic development and airline capacity in the ASEAN region.

The Air Transport Working Group prepared the competitive air services policy as a roadmap for the integration of ASEAN aviation. The policy removes of 3rd, 4th, and 5th freedom traffic rights restrictions on a progressive basis. However, the movement by each member towards

³ **First Freedom of the Air** - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to fly across its territory without landing (also known as a First Freedom Right).

Second Freedom of the Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State or States to land in its territory for non-traffic purposes (also known as a Second Freedom Right).

Third Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down, in the territory of the first State, traffic coming from the home State of the carrier (also known as a Third Freedom Right).

Fourth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to take on, in the territory of the first State, traffic destined for the home State of the carrier (also known as a Fourth Freedom Right).

Fifth Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State to put down and to take on, in the territory of the first State, traffic coming from or destined to a third State (also known as a Fifth Freedom Right).

Sixth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting, via the home State of the carrier, traffic moving between two other States (also known as a Sixth Freedom Right). The so-called Sixth Freedom of the Air, unlike the first five freedoms, is not incorporated as such into any widely recognized air service agreements such as the "Five Freedoms Agreement".

Seventh Freedom of The Air - the right or privilege, in respect of scheduled international air services, granted by one State to another State, of transporting traffic between the territory of the granting State and any third State with no requirement to include on such operation any point in the territory of the recipient State, i.e the service need not connect to or be an extension of any service to/from the home State of the carrier.

Eighth Freedom of The Air - the right or privilege, in respect of scheduled international air services, of transporting cabotage traffic between two points in the territory of the granting State on a service which originates or terminates in the home country of the foreign carrier or (in connection with the so-called Seventh Freedom of the Air) outside the territory of the granting State (also known as a Eighth Freedom Right or "consecutive cabotage").

Ninth Freedom of The Air - the right or privilege of transporting cabotage traffic of the granting State on a service performed entirely within the territory of the granting State (also known as a Ninth Freedom Right or "stand alone" cabotage).

(Source: Manual on the Regulation of International Air Transport (Doc 9626, Part 4))

Open Skies can be seen as very doubtful and careful. Open Skies may bring both economic benefits to some countries, while causing some countries to lose due to their constraints and capacity limitations. Acceptance to participate in the common policy from these less-developed countries will be essential in order to move towards Open Skies.

Open Skies, if executed viably and reaching fulfillment as proposed, should deliver overall net economic advantages for the countries ratifying the agreement. The primary impeding issue is that not all individual member signatories will gain, and thus some will not be willing to enter such agreements. General additions will need to be made, through several differing procedures, as such competition forcing fare prices down and imposing additional pressures on airlines to keep expenses as low as possible. Secondly, trade openness implies that carriers will serve specific markets regardless of country of origin, and, if competition is strong, they will be compelled to pass the gains on to travelers. Thirdly, the adaptability of operations under Open Skies implies that airlines will have the capacity to design networks which will amplify effectiveness.

Supposing the Open Skies Agreement functions as intended, it should deliver effectiveness gains, thereby implying the benefits to those gaining will exceed the losses to those losing. When foreign travelers gain, the country of origin can gain in that tourism becomes more appealing, and if extra tourism is viewed as creating economic advantages, liberalization will lead to more noteworthy advantages from tourism. The virtually unavoidable issue is that there will be losers in the market. Competition and exposure to trade will put pressure on producers, particularly airlines and their workforces. Productivity may fall, and the working environment may become more hazardous. Some carriers may not cope adequately, and should that happen, a percentage of the expense will be borne by their workforces. Indeed, even where workers remain employed, they may be compelled to accept lower wages and lesser rate working conditions. The fact that Open Skies will have negatively impacted players, implies that agreements are typically hard to close, particularly among groups of various countries, unless they collectively share the view that open markets will serve consumers better and thereby permit airlines to end up becoming more productive.

Concerns may emerge on three levels:

- For individual countries, Open Skies may yield lower net economic advantages compared to the present, more controlled environment;
- For individual countries again, while there will be net gainers from Open Skies, there will be noteworthy groups, such as a long-established yet inefficient national airlines, which lose from such a move, and thus those countries may be hesitant to accept the move to Open Skies; and
- Even when individual member countries see themselves as probable net gainers from Open Skies in economic terms, they may have non-economic objectives, such as national defense and security, which they may see as unfavorably influenced by Open Skies and therefore they may be unwilling to make the necessary moves in that direction.

In fact, while several liberalization agreements have been reached to date, there have, however, been challenges for the liberalization of the international aviation market. Despite government

contributions, the negotiations for liberalizing ASAs among countries remain a work in progress and result in disagreements and bargaining. Therefore, with the impact of bilateral open skies air service agreements in the airline industry, there is a need to explore a strategic fit in this dynamic industry such that airlines are able to prepare during the process of global liberalization. The objective of this research is to examine the responses of ASEAN region air carriers when associated with the opening up the ASEAN air transport markets between signatory member countries. Given certain knowledge of the airline industry, two main research questions are addressed as:

- 1) *What are the business environment impacts on the strategies developed by ASEAN-region airlines?*
- 2) *What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*

3. Theoretical Background

This research employs three core theories, namely Stakeholder (Freeman, 1984), Co-operation (Axelrod, 1984), and Social Regulation (Reynaud, 1999). The Stakeholder theory allows us to examine the variables, taking into account all parties with a stake in the firm, including customers, suppliers, owners, managers, employees, and even associated communities (Freeman, 1984). The Co-operation and the Social Regulation theories assist in explaining the airlines' strategies in responding to the currently turbulent airline industry environment.

Stakeholder theory suggests that an organization will have a better chance to resolve the issues if they can identify and analyze the relationships with the groups and individuals who can affect or are affected (Parman et al., 2010). From a stakeholder perspective, a business can be understood as a combination of relationships among different groups having a stake in activities that formulate the business (Freeman, 1984; Jones, 1995; Walsh, 2005). Stakeholders are defined as customers, suppliers, employees, financiers, communities and managers that interact and create trade value. According to Freeman (1984), the executives have the duty to manage and shape the relationships to create values for stakeholders and should find solutions to resolve the stakeholder interests' conflicts and to some extent they should create more values (Harrison et al., 2010; Wahid et al., 2017). The management of stakeholder relationships will help the business survive and thrive in capitalist systems (Phillips, 2003) and the management that focusses on the creation, maintenance and alignment of stakeholder relationships will accomodate practitioners to create values and avoid failures (Posr, Preston, and Sachs, 2002; Sisodia, Wolfe and Sheth, 2007).

Co-operation theory helps to define the rules of co-operative management, which makes it possible to resist the constant incursions in the enterprise of dominating, competing rules (Draperi, 2006). The successive transformations of the social economy in the past, its current evolution, and the conditions for the transformation of the new social economy indicate that cooperative rules can only be produced by cooperation between members, an act by which the conventions and social and economic rules founding collective action are built. Far from being acquired habits, the conventions that enable co-operation – in work, in the organization of the enterprise, in the social and economic construction of markets – are constantly negotiated.

Cooperation takes time, and is constantly challenged. It necessitates on the part of the actors an and interactions. In this social regulation theory, we follow Reynaud's concept of negotiation to settle exchange which implies agreeing in rules in such a way that the exchange takes place. Collective negotiation is part of a more or less formalized framework, which is established to solve a problem common to both parties, leading to an agreement which is a provisional text crystallizing the commitment of the protagonists, and taking place within existing agreements. The important thing is the creation of the regulations which aim to put order into the interactions, to frame and to place the actions under the control of the parties present. It is necessary to negotiate and invent a solution, which makes negotiation much more than a bargaining position or optimization of viewpoints.

The ESO triple analytical framework and key concepts, Dynamic Capabilities and Strategic Fit, have been employed to identify performance by organizations, especially as applied to the context of the aviation industry. The ESO framework focuses on the interaction between the external contexts of the multinational (Environment), the organization's orientations and actions (Strategy) and its capacity for implementation (Organization). Dynamic capabilities are used in the context of rapid changing environment (Teece, 2017) and dynamic capabilities are themselves considered resources by which to respond to new demands and deliver strong performance. Strategic fit is defined as a strategy to draw the organization's actions into alignment with the needs and demands of its environment, and *that a strategy can work for an organization only when it fits well with the organization's external and internal environments* (Lee and Kim, 2012). Strategic fit will help to manage all internal elements within an organization in order to warrant an implementation process for reconfiguration or transformation, and managerial alignment will enable higher performance by maintaining a fit with the external environment.

4. Methodology

This research employs case studies to explore, organizational strategies in the ASEAN region and seeks to uncover their fit with the environmental changes and consumer's attitudes towards their organization's operations. The case studies reflect a real-world setting, thereby allowing recognition of a high degree of realism, most evidently seen at the level of control of behavioral events. A two-fold definition (Yin, 2009, p. 18) states that "*a case study is an empirical inquiry which investigates a contemporary phenomenon in depth and within its real-life context, in case there are no transparent boundaries between phenomenon and context*". Using the case study analysis, researchers will obtain more variables of interest, rather than relying purely on data points, because one result can be reliant upon various sources of evidence and other results can be sourced from previous theoretical propositions.

In order to validate the results from the case studies, a qualitative analysis was conducted, with primary data collected from 19 aviation industry experts in ASEAN. The empirical data gathered for this dissertation is used as evidence for the case studies of Vietnam Airlines (Vietnam), Derry Air (Operating in ASEAN region), NokScoot Airlines (Thailand) and Qatar Airways (Operating in ASEAN region). The anticipated result generates beneficial information for strategic practitioners who wish to advance theoretical knowledge of strategic fit through case studies.

In addition, a limited survey of 444 passengers from Cambodia and Vietnam was conducted in order to ascertain how passengers assess the services of ASEAN-region airlines. Two-step cluster analysis is employed to define clusters of passengers using airlines in ASEAN countries on the basis of three categorical variables including passenger location, passenger occupation, passenger monthly income, and one consistent variable, price. This cluster analysis may or may not validate some of the findings presented in this research. We can explore whether or not the assessment of the aviation industry players towards the customers aligns with the assessments of the customers themselves toward the airlines and their service offerings.

5. Research Organization Structure

This dissertation consists of three main parts. Part One consists of three chapters, including the core theories and research frameworks. Chapters 1 and 2 present the theoretical background including: (1) Environment and Organization, (2) The Influence of Stakeholder Theory on the Organizational Environment, (3) Employment of Co-operation Theory in the Business World, and (4) Employment of Social Regulation Theory in Co-operative Negotiations. Chapter 3 presents the Research Frameworks and Conceptual Model Proposition.

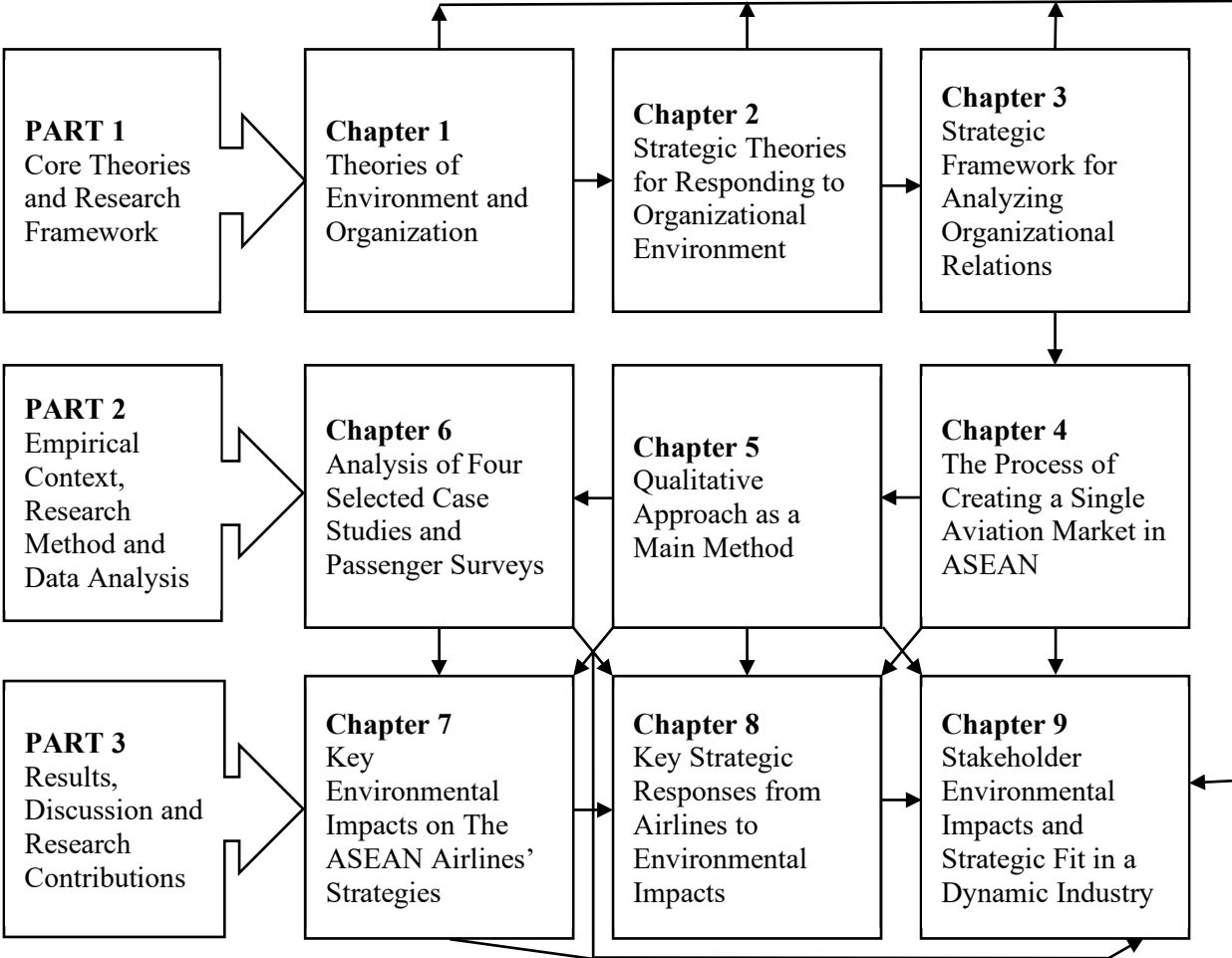
The second part also contains three chapters, presenting the empirical context, research methodology and data analysis.

The final part contains a further three chapters, presenting the results, discussion and theoretical contributions. In Chapters 7 and 8, we present seven findings generated by analyzing 19 in-depth interviews from aviation industry specialists working in Association of Southeast Asian Nations (ASEAN). Discussion of these results is presented in Chapter 9 with the generation of a practical model applied to the airline industry under the guidance of the ESO framework.

The organization of the research's and the linkages between the chapters are represented by the following wire diagram. In this wire diagram, the flow from Chapter 1 to Chapter 9 presents the coherence and development of this dissertation. Parts One and Two, with their core theories and frameworks, will guide the research's direction and the guidance to formulate the data collection method and analysis to obtain results. Part Three proves the corroboration from real facts, leading to theorization and thus to contribute to existing theories and frameworks.

Chapter 4, with the presentation of the empirical context, supplements to Chapter 8 and allows the understandings of how the airlines in the region response strategically to environmental impacts. Chapters 5 and 6, with the presentation of strategies and qualitative analysis of four individual selected airlines employed as case studies, including the quantitative analysis of passenger surveys from two ASEAN countries, illustrate to some of the findings presented in Chapters 7 and 8. Chapters 1, 2, 3, 4, 5, 6, 7, and 8 are used as resources for the discussions and formulate theoretical contributions in Chapter 9.

Figure 1: Research Organization Structure



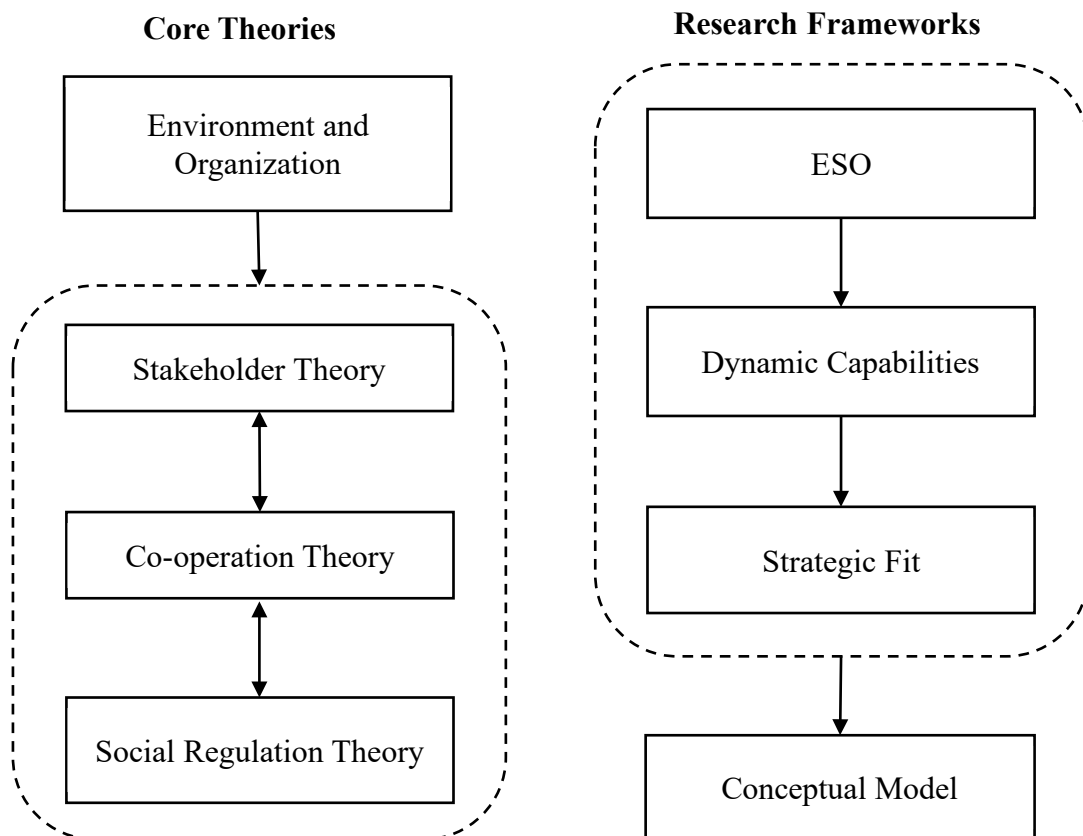
PART 1

CORE THEORIES AND RESEARCH FRAMEWORKS

This part is structured in three chapters. The research question has guided the entire research process. The selected core theories are employed to explain, predict and master phenomena such as relationships, events, or behavior; while the analytical frameworks are used to understand the interrelated, coherent sets of ideas and models.

Chapter 1 presents the context of this study and theories of environment and organization. Chapter 2 presents strategic theories for responding to organizational environment and Chapter 3 presents strategic framework for analyzing organizational relations. The structure is illustrated by the following diagram:

Figure 2: Employed Core Theories and Research Frameworks



CHAPTER 1

THEORIES OF ENVIRONMENT AND ORGANIZATION

In this chapter, we present two sections which are: (1) Delineation of the External and Internal Contexts and (2) Stakeholder Theory and Organizational Environment. Section 1 presents the general definitions of environment and the impacts of the environment to the organization. Section 2 presents the Stakeholder Theory of Edward Freeman (1984) and the influences of this theory on the strategic management process and organizational strategies.

SECTION 1

DELINEATION OF THE EXTERNAL AND INTERNAL CONTEXTS

An organization is born, and operates or survives within its environment, where opportunities and threats occur. Although the future can never be predicted perfectly, it is clearly important that entrepreneurs and managers attempt to analyze their environments as carefully as possible in order to anticipate and influence environmental changes. The macro environment is the highest-level layer, consisting of broad factors that impact on almost all organizations, to a greater or lesser extent, in which future issues in the political, economic, social, technological, ecological and legal environments may affect the organizations.

1.1 Definition of Organizational Environment

Organizations, known as part of the social system, consist of members of society that share the same interests. Organizations can have use different methods and technologies to achieve their goals and can be different in the size, location, activities and markets. Organizations are also under different economic, political, social environments and cultures. The important feature of the organization is its adaptation to changes that happen outside the organization (Muscalu et al., 2016).

Scholars from two contrast prototyped companies, Basic Bolt Company and Terrific Technologies, have defined the organizational environment as following:

“Organizational environments are composed of forces or institutions surrounding an organization that affect performance, operations and resources.”

There are two types of organizational environments, that are Internal Environment and External Environment (Ogundele, 2005; Adebayo et al., 2005). An organization’s internal environment consists of the entities, conditions, events and factors that influence its activities, which exposes the organization’s strengths and weaknesses. Factors that are frequently considered part of the internal environment include the employee behavior, the organization’s culture, mission statement, and leadership style (Stewart, 2016). An organization’s external environment consists of the entities, conditions, events, and factors surrounding the organization that influence its activities and determine its opportunities and threats, which is called an operating

environment. Factors affecting the organization's external environment include customers, public opinion, economic conditions, government regulations and competition (Stewart, 2016).

The environments refer to all external elements that have the potential to affect parts of the organization. The concept of external business environment is understood as the forces beyond the organizational boundaries (Shaikh, 2010). Fernando (2011, 2017) regards business environment as external forces, factors and institutions that are beyond the control of the business and they affect the operation of a business organization. These external factors include customers, competitors, suppliers, distributors, industry trends, substitutes, regulations, government activities, economic influence, demographics, social cultural factors, innovations, etc.. Thus, the organization must develop a plan that will accommodate it to confront with various environmental forces (Oluremi and Gbenga, 2011).

There are two types of external business environments which are Direct (Task) Environment and Indirect (General) Environment (Adeoye, 2012). Direct (task) environment comprises of factors that directly affect the organization's operation and performance; which are customers's competitors, suppliers, government regulatory agencies, labor union. Indirect (general) environment consists of elements that have an indirect influence on the organization. This environment includes the factors such as social values, education, politics, economy, legal, behavior demographics, natural environment, natural resources and technologies, etc... However, according to Hatch (1997) and Ebers (2015), the external environment can be categorized into three most common environments, that are the inter-organizational network, the general environment, and the international/global environment.

1.1.1 Inter-Organizational Network

In the business world, every organization is communicating and interacting with other organizations daily, proving its existence and operation in its environment. The organization's collaboration with others will allow it to procure raw materials, facilities and equipment, hire employees, and conduct other functional activities. Since the organization produces a product or service for consumption, it will also interact with its customers. Other environmental actors can be governments, associations, distributors or agencies. In short, the inter-organization network consists of interacting elements such as suppliers, customers, competitors, unions, regulators and other special-interest agents.

According to Ebers (2015), inter-organizational relationships refer to longer-term relationships between organizations such as suppliers, customers, competitors, trade associations, and public sector organizations pursuing a mutual interest while also remaining independent and autonomous, thus retaining their own interests. They can take various forms of co-operation such as long-term sourcing agreements, partnerships, consortia, joint ventures or alliances. Inter-organizational networks among individuals, groups, or organizations stand for overall patterns that evolve from such relationships (Knoke, 2012).

Most of the researchers view the inter-organizational network as a way to address complex problems by taking advantage of a broader resources and increased capacity (Bryson et al., 2006; Gilchrist, 2006; Hoberecht, Joseph, Spencer, and Southern, 2011; Keast, Mandell, Brown, and Woolcock, 2004; Riley and Best; Weber and Khademian, 2008). These inter-

organizational networks are considered inter-sectoral requiring collaboration among government, business, non-profits, communities and the public as a whole (Bryson et al ., 2006; Gilchrist, 2006; Conteh, 2013) .

Organizations join or form networks for a variety of reasons, including the need to gain legitimacy, serve clients more effectively, attract more resources, and address complex problems. But regardless of the specific reason, in a general sense, all network organizations are seeking to achieve some end that they could not have achieved independently (Provan and Kenis, 2008, p . 240).

1.1.2 General Environment

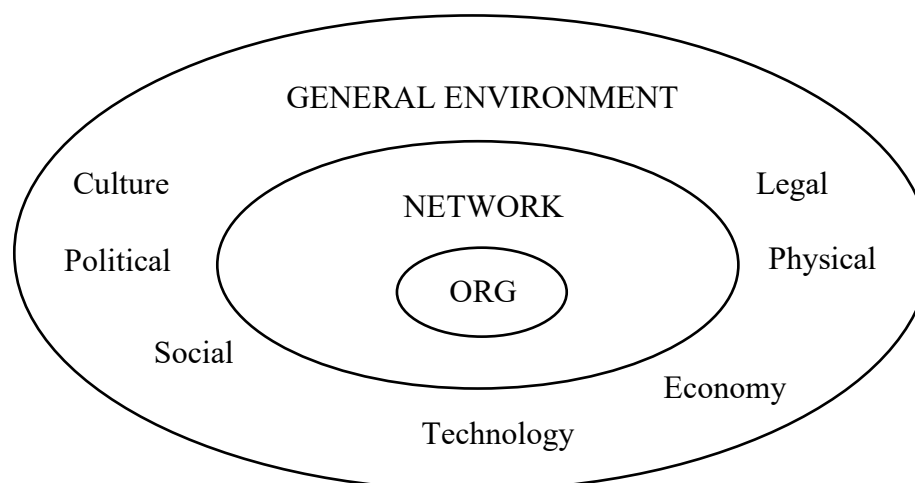
The organization's general environment consists of a range of external factors or forces that may influence its performance and operation. There is a host of general forces at work in an environment, and general environmental conditions can be useful in better appreciating the links between an organization and its environment. PESTEL analysis is an important tool for executives to organize factors within the general environment and to identify how these factors influence industries. To analyse the general environment, different sectors, such as social, cultural, legal, political, economic, technological and physical, should be included. The analysis of those dimensions aims to understand the conditions beyond the organization's boundaries and to facilitate shaping the organization and articulating its achievements. The organization's managers have to consider the general environment's attributes when they plan, organize, lead and control the organizational operation.

According to Daft (1997), ten identified environmental sectors that may have an impact on particular organizations: (1) industry, (2) raw materials, (3) human resources, (4) financial resources, (5) markets, (6) technology, (7) general economy, (8) government/ legal, (9) sociocultural, (10) international; and his definition of Business Environment is as following:

“An organization's environment is defined as all the elements existing outside the boundary of the organization that have the potential to affect all or part of the organization (Daft, 1997).”

The general environment is the larger environment in which the task environment is embedded, including political and legal forces, macroeconomic forces, demographic forces, sociocultural forces, technological forces, and international forces. The general environment shapes the task environment, thus determining the opportunities and threats that the organization has to deal with.

Figure 3: Sectors of the General Environment



Source: Hatch (1997)

Political and Legal Forces

The political environment is usually described in terms of the distribution and concentration of power, and the nature of the political systems employed in those areas of the world in which the organization operates. According to Okeyo (2014), the implication of political environment to a business organization is that the arising risk might earn through direct impacts or indirect impacts. The legal environment is defined by the constitutions and laws of the nations in which the organization conducts its business, as well as legal practices in each of those domains. According to Adeyo (2012), legal environment comprises of laws, regulations enabling the environment to achieve greater levels with the investment from private sectors delivering more wealth and job creation.

Sociocultural Forces

Sociocultural forces refer to the way in which changing social factors and values affect an industry, creating opportunities and threats. Concern with the cultural sector revolves around issues such as history, traditions, expectations of behaviour; and the values of the society or the societies in which the organization operates. It refers to people's attitude to work and wealth, role of family, marriage, religion and education (Tacheva, 2007). The social environment is also related to demographics, social class structures, class mobility patterns, and social factors such as customs, tradition, values, beliefs, poverty, literacy, life expectancy rate, etc.... (Ajonbadi, 2017). Other elements involved are social institutions composed of educational systems, religious practices, trades, and professions.

Economic Forces

Economic forces can affect the profitability of an organization operating in one country. Four important factors defined in the economic environment are the economic growth rate, interest rates, currency exchange rates and inflation rates (Griffin, 1997). Economic growth with an expansion of customer expenditures tends to mitigate competitive pressures for industries. The economic environment also consists of labour markets, financial markets and product or service markets where ownership may be public or private. To analyse an organization's economic

sector, it requires the contribution of all fiscal policies, consumption patterns, capital investment patterns and banking systems. Ogundele (2005) posits that the economic environment goes a long way in determining and defining the opportunities for an organization since the expanding economy provides operational scope for the organizational survival. However, a period of recession can cause failures to the organization, which can collapse the organizational structure.

Technological Forces

The technological environment provides knowledge and information in the form of scientific developments that the organization can acquire and use to produce output. In a sense, the environment possesses the knowledge to produce its desired outputs and contributes this knowledge to various organizations, which then undertake the production processes for the benefit of others in the environment. Technological change can simultaneously create a host of new product possibilities, thus can create an opportunity and a threat for the organization. Technological change can affect the height of barriers to entry and therefore reshape industry structure. An example is the rapid expansion of internet which has changed the competitive structure of many industries, lowering entry barriers and reducing customer switching costs, increasing the intensity of rivalry in many industries and lowering both prices and profits.

Physical Forces

The physical environment embraces the factors such as nature and natural resources; and refers to the tangible, or material, objects and conditions surrounding a business. The natural environment includes geographical and ecological factors that influence the business operations. These factors include the availability of natural resources including water, carbon, nitrogen, other minerals and trace elements needed to form the components of living cells, weather and climatic condition, location aspect, etc... (Monteith and Unsworth, 2013). Business is greatly influenced by natural environment and it is advised to establish manufacturing premises closed to the material sources. Government's policies should maintain ecological balance, conservation responsibility on most of the business sectors (Shaikh, 2010). Some organizations have direct and immediate concerns with physical sector elements ranging from coal and oil reserves, such as organizations operating in the fossil-fuel extraction industry, to accessible harbours and associated infrastructure as required by organizations involved in import or export trades or those operating as shipping companies, etc. The physical environment refers to the urban environment such as green space, housing stock, transportation networks, pollution, noise, traffic congestion, and the geological and climate conditions of the area the city occupies (Ompad et al., 2017). The built environment refers to housing form, roads and footpaths, transport networks, shops, markets, parks and other public amenities, and the disposition of public space (Weich et al., 2001).

1.1.3 International/ Global Environment

In a broader environment, such as internationally or globally, the environment aims to encompass cross national boundaries or a global scale. Concern for conditions and trends in the international environment will, likewise, be part of a total environment picture. Competition occurring in a regional (Rugman, 2005) or global market would reflect an economic and political trend in the international setting. According to South-Western⁴ (2007), international

⁴ A division of Thomson Learning

environment consists of international politics and international laws. Political relations and conflicts between countries can have a profound impact on organization trying to do business internationally and business can profit if relations between countries improve. There is no enforceable body of international law and organizations are subject to home and host-country laws. The co-operation among nations are signed under bilateral treaties assuring fair treatments.

In many respects, the international environment can be analyzed using the same distinctions as those of inter-organizational networks and the general environment. This is because as soon as an organization begins to expand its activities beyond the boundaries of its home nation, it will interact regularly with representatives of organizations from those other nations, joint-venture partners, consumer groups, tariff collecting agencies, tax authorities, licensing agents, to name but a few, and all of these will be part of the organization's network. Even before entering into international operations or exchanges, the organization will be affected by competitors that operate in international markets, and by organizations that enter the organization's domestic markets from abroad.

1.2 Impacts of Environment to Organization

When an organization's business confronts a tough competition, the situation becomes more complex and uncertain. Therefore, Effendi et al. (2010) state that environment, organizational structure, and strategic orientations would have a causal relationship with the organization's business performance. They also confirm that the relationship between environment and strategic orientation and the relationship between organizational structure and strategic orientation will help the organization to improve its performance.

1.2.1 Organization and Contingency Theory of James Thompson

The contingency theory is followed as it aims to clarify how an organization performs under different contingencies, which is the foundation for establishing appropriate structural designs and management actions in each case. In previous assumptions, organizations in various forms exist concurrently and operate under different conditions. These conditions depend not only on internal organizational factors, but also on the prevailing external environments. Every organization must, therefore, attempt to harmonize its structures, its internal processes and the specific contingencies or circumstances which characterize those, such as environment, size, technology and so on. There are two factors which specify environments: uncertainty originating from the environment, and the distribution of resources (Silva and Ferreira, 2017). Uncertainty implies a lack of information and reflects the complexity and dynamism of the environment, or put another way, it can be called the degree of variability. Meanwhile, the organization's resource distribution implies the specific impact from the investment, technology or the human capacity.

Within the contingency approach (Kieser and Kubicek, 1983), the organizational structure should respond to various levels of uncertainty. When the environment is less knowledgeable because of the existence of dynamic and complex levels, the organization is required to be more flexible and less rigidly structured in order to adjust and adapt promptly to different conditions.

In contrast, an organization which is familiar with the environment is able to maintain its fixed structure and performs with stability over time.

According to Thompson (1967), organizations are viewed as open systems, fundamentally interdependent with the environments over which they have only limited control, yet subject to criteria of rationality. Organizations can be thought of as taking on three levels of responsibility and control (Parsons, 1960): (a) technical level, concerned with achieving the processing tasks of the organization; (b) a managerial level, charged with controlling and servicing the technical unit; and (c) an institutional level, which articulates the organization to the community and its institutions.

Thompson conceived of the environment in terms of several key dimensions: (a) the organization's domain, or the claims it stakes out for itself; (b) its task environment, with which it is most interdependent; and (c) the power and dependence relationships implied by the nature of its domain and task environments. According to Levine and White (1961), the organization's operating field is identified with its range of products and the types of services it provides in the market. When there exists a domain consensus, that is recognition of the organization's claims by those within the organization and others with whom the organization interacts, the organization has a relatively well-defined role in a larger system.

The most relevant component of this larger system, from the organization's point of view, is its task environment (Dill, 1958): (a) customers or clients; (b) suppliers of materials, labour, capital, equipment, and work space; (c) competitors for markets and resources; and (d) regulatory groups, including government agencies, unions, and inter-organization associations (Thompson, 1967). The task environment is pluralistic and composed primarily of other organizations with their own domains and task environments. Thus, the dependence of the organization on this pluralistic environment introduces threats to its rationality. Thus, task environment dependency creates contingencies or potential sources of uncertainty for the organization. In addition, the task environment's elements may impose constraints and contingencies on organizational actions, which limit the organization's ability to act.

The organization seeks to manage the uncertainty imposed upon it, by its interdependence with the environment, in two ways: (a) through internal strategies of adaptation and adjustment, or organizational design, or (b) through external strategies, or modes of interactions. A final aspect of organizational structure, determined by environmental uncertainty, is the complexity of the boundary-spanning element. Therefore, a heterogeneous task environment exhibits the organization's constraints, and a dynamic task environment exhibits the organization's contingencies. The organization responds to this type of uncertainty by setting up units designed to cope with specific contingencies. Thus, Thompson (1967, p. 73) emphasizes that "*the more constraints and contingencies the organization confronts, the more its boundary-spanning component will be segmented.*"

In addition to these internal structural adaptations, the organization uses strategies for interacting with the task environment in order to manage its interdependence and shield the internal workings of the organization from uncertainties. Where the basic injunction for internal adaptation is to internalize the uncertainty, the basic strategy for external adaptation is to

minimize dependence and seek control. Because dependence implies constraints or contingencies, the organization will seek to minimize them, first by maintaining alternatives (e.g., securing contracts for a critical resource with more than one supplier), and second, by seeking power relative to those upon whom the organization is dependent. One way to attain a level of power is to acquire prestige, as establishing a positive image of the organization - with relevant constituencies - aids in controlling the organization's dependence on these groups by making support of the organization more attractive. Power may also be acquired through the use of co-operative strategies, such as contracting, co-opting, or coalescing with elements of the task environment which are potential sources of uncertainty.

The organization, in effect, seeks to create a negotiated environment (Cyert and March, 1963) where the future becomes more predictable. Organizations may achieve power, or a level of control, over each other through the exchange of commitments which, while reducing environmental uncertainty, also constrain the organization's future actions. There are three sorts of commitments (Thompson, 1967, p. 35-36) which increase the level of the constraints, including: (a) contracting, "the commitment to get the exchange of performances in the future"; (b) co-opting, "the process of integrating new elements into the leadership or policy to reform a new organizational structure in order to prevent threats to penetrate its stability"; and (c) coalescing, "an establishment of a joint venture with another organization in the environment." These different strategies for managing dependence by gaining power correspond to differing levels of concentration in the task environment.

According to Carroll and Mui (2008), the contingency theory of management can be applicable to the theory of strategic fit, in which the strategy is matched and aligned with higher degree of congruency, supposed to be contingencies (Santala and Parvinen, 2007). These contingencies are classified as environmental contingencies and organizational contingencies. The environment contingencies are a set of possibilities which are independent of organization strategies and comprise of direct and indirect competition, technology change, impact on cultural and social trends due to competition; political, legal and regulatory environment, demographic or cross border limitations and regional economy fluctuations (Nielsen, 2010). With respect to a strategic fit, as these contingencies tend to be dynamic in nature, it allows a strategic fit to manage the environment as well as accelerate the process of operations with an ongoing strategy (Zajac et al. 2000). The organizational contingencies are under the control of authorities administering the strategy in formulation and implementation, thereby insisting on strategic alignment by taking steps addressing to organizational goals, vision and mission (Carroll and Mui, 2008).

1.2.2 Organization and Environmental Turbulence

The business environment consists of a set of varying relationships between stakeholders, and this relationship environment can be altered by individual decisions (Lewontine, 1996). In fact, these relationships between stakeholder elements incessantly initiate the environment. According to previous researchers in 1990s, such as Achrol (1991); Hamel and Prahalad (1994); Kotter (1996); Glass (1996); Loewen (1997); Conner (1998), et al., the business environment has been changing faster than ever before, and the change displays two major dimensions: complexity and turbulence (Dess et al., Robbins, 1990; Huber, 1991).

Complexity is defined as the measure of heterogeneity or diversity of environmental sub-factors such as customers, suppliers, socio-politics and technology (Teopaco, 1993; Lane and Maxfield, 1996; Chae and Hill, 1997; Chakravarthy, 1997). When complexity increases unexpectedly, it is more difficult to understand or use information to plan and predict (Black and Farias, 1997). According to Farrel and Conner (1998), all systems eventually increase in complexity, leading to more changes in the future. It becomes more difficult as the system becomes more complex (Black and Farias, 1997), resulting in problematic adaptations to the changing environment (Lane and Maxfield, 1996; Merry, 1995).

Turbulence in an environment is considered as being dynamic, implying a rapid and unexpected change in the environmental sub-dimensions (Conner, 1998; Vorhies, 1998). We do not see great changes in a stable environment, but when a change occurs, it is unpredictable. The environment is turbulent when there are lots of unexpected changes. A turbulent environment is caused when there are changes effected by the advance of technology, telecommunication and media (McKenna, 1991; Samli, 1993; Iansiti, 1995).

The growth in environmental turbulence has seen an increase in competition moderation in the likes of information, innovation, quickened development cycles, unpredictable customers, as well as in products and services (Achrol, 1991; Pine et al., 1993; Haleblan and Finkelstein, 1993; Chakravarthy, 1997). In order to operate in these turbulent environments, managers are required to make quick, smart decisions, as well as innovative technological improvements (Davis et al., 1991). Changes of environment, as mentioned by Lynch (1995, p. 46), refer to the elements known as “*chaotic, fragmented and unpredictable and complex and turbulent*”. Mavondo (1999) argued, and proved, that an unstable environment leads to heterogeneity, whereby instead of imitating or copying one another, organizations are inspired to differentiate themselves from their competitors.

Even complex and turbulent environments can be attractive, where organizations hesitate to cope with unstable conditions, ways to deal with such environments must be found. Many of these organizations suppose it is impossible to identify a causative link between environmental variables and management actions because of a combination of the complexity of variables and the chaotic nature of environments (Windsor, 1995). However, in recent research, scholars have explored the inter-relationship between an organization and its environment (Polonsky et al., 1999). Organizations co-exist and co-evolve with their environments and therefore influence the environment to a greater extent than previously thought (Brooks and Weatherston, 1997).

Organizations can shape their environments by formulating their industries or co-operating with each other, in doing so they can impose a level of control over their environments. The environment is not only impacted by external forces, but also can be influenced by the organization (Anderson et al., 1994). Co-determination or co-evolution between organizations and their environments can be seen as a complexity of the business environments (Achrol, 1991; Polonsky et al., 1999). The fact that changes of environment start slowly and are unpredictable, indicate the dependence of the environment on preliminary conditions (Tedesco Analytics, 2001).

1.2.3 Organizational Strategies towards Environmental Challenges

There are three environmental challenges which have the most decisive influence on an organization's structure, and how, depending on these factors, they change the design of the organization.

The first factor can be considered as the economic globalization. The world economy at the beginning of the twenty-first century is experiencing one of the greatest moments of dynamism and change in history. This dynamism is identified by the increased interdependence of goods and services markets and production factors, and consequently, to ongoing obstructions to free trade and the liberalization of capital movements. Restrictions on free trade, however, have diminished significantly in several areas such as agriculture, textiles, services, and copyright, thanks to negotiations through the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO).

In such an economic context, new challenges such as innovation, international competitors, and market expansions into international arenas have placed pressures on organizations. These are demanding proposals on a wider scale than mere local or regional actions, because in addition to global operating and management strategies and organizational forms, these new realities in markets and international competition must be considered. The second factor is defined as the increased uncertainty in the business environment. The speed with which changes are occurring in the economic world is introducing greater levels of uncertainty, especially in business areas, where constant transformations, resulting from reductions in technological and product development cycles, from improvements in production processes, and so on, which are often difficult to predict, and are demanding greater follow-up capacity from organizations in order to adapt to the new surrounding conditions. The capability of organizations used to respond in both strategic and organizational aspects, will be key instruments to their ongoing long-term survival.

Competitive rivalry is recognized as the third factor which characterizes the business environment (Voiculet et al., 2010). Due to increased requirements from customers and market saturation, the organization is obliged to strive for a competitive advantage in order to maintain its position in the market. As a result, organizations tend to concentrate on know-how, or on their dominant added value chain. Organizations need a prodigious capacity to follow up and adapt to different customer tastes in the products and services they are able to provide. This requires the organization to consider greater reliability and quality in its production systems, particularly in urging innovation and the creation of intangible assets, such as design and branding, to generate greater product quality.

SECTION 2

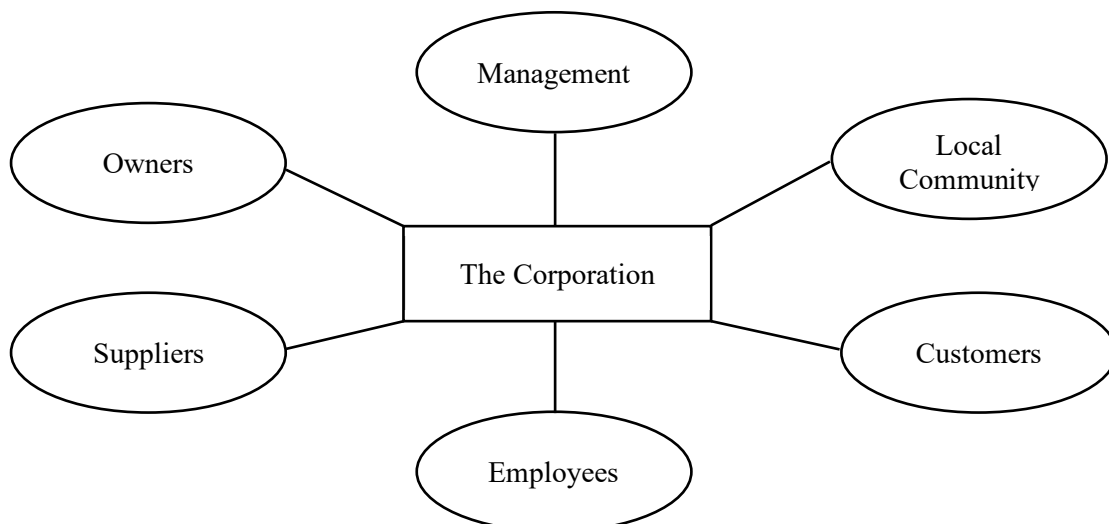
STAKEHOLDER THEORY AND ORGANIZATIONAL ENVIRONMENT

The organization must be responsible to both internal and external stakeholders when they deploy their organizational strategies (Polonsky, 1995). Each stakeholder group has different expectation relating to organizational performance. These expectations may cause conflict between the organization and its stakeholders. Stakeholder Theory has helped to shed light on the role that businesses should play in society (Donaldson and Presto, 1995) and the organizational behavior towards the environment (Henriques and Sadorsky, 1999).

2.1 Stakeholder Theory of Edward Freeman (1984)

The idea that an organization should have an expanded role and responsibilities to other stakeholders, besides its owners, concerns the improvement of its competitive position. Corporations comprise stakeholders, groups or individuals who can benefit from, or be harmed by, corporate actions, and whose rights may similarly be violated or respected. The concept of stakeholders is a generalization of the notion of stockholders, who has some distinct rights in the organization. Stockholders have the right to demand certain actions from the management, whereas stakeholders have the right to make claims or requests. Freeman and Red (1983) define two senses of stakeholder. The narrower definition categorizes dominant groups which are crucial to the survival and success of the corporation. The wider definition categorizes any individual who can influence, or is influenced by, the corporation.

Figure 4: A Stakeholder Model of the Corporation



Source: Freeman (1984)

Figure 4 above describes the basic stakeholders in a typical large corporation. Each stake is of equal value/importance and can contribute to the effects in terms of both harms and benefits. According to Freeman, managers do not perform their duties for the shareholders or stockholders of a corporation, but rather, to the “stakeholders”:

Definition of Stakeholder

“A stakeholder of a business is someone who has any stake whatsoever in the goings-on of a business. This means that anyone affected by the actions of the business has a stake (an interest) in what that business does. So, this includes not only shareholders, but also employees, customers, suppliers and often even the entire community.”

(Freeman, 1984, p. 45)

Owners of a corporation have financial stakes in the form of stocks, bonds or other financial instruments, and they will expect some form of financial returns in kind from them. Either they have contributed capital directly to the organization, or they have some historical claim made through a series of morally justified exchanges. The organization affects their livelihood or, if a substantial portion of their retirement income is in stocks or bonds, their ability to care for themselves when they no longer work. Of course, the owner's stake will differ by type of owner, financial preferences, moral preferences and so on, as well as by the type of organization.

Employees are employed by the organization, provide their specialized skills, and also play a role as a stakeholder group. In return, they expect security, wages, and benefits. To gain their loyalty, the organization needs to cultivate and support them through difficult periods. Employees are expected to follow the instructions of management in most cases, to speak favorably about the organization, and to be responsible citizens in the local communities within which the organization operates.

Suppliers, interpreted in a stakeholder sense, are vital to the success of the organization, for raw materials will determine the final product's quality and price. In turn, the organization is a customer of the supplier and is therefore vital to the success and survival of the supplier. When the organization treats the supplier as a valued member of the stakeholder network, rather than simply a source of materials, the supplier will respond favorably when the organization is in need.

Customers exchange money or resources for the organization's products and in return receive the benefits of the products. Customers provide the financial lifeblood of the organization in the form of revenue. Given the level of reinvestment of earnings in large corporations, customers indirectly pay for the development of new products and services. According to Peter and Waterman (1982), organizations can determine their own characteristics and performance by concentrating on customers, which can lead to success with other stakeholders. By paying attention to customer's needs, management automatically addresses the needs of suppliers and owners.

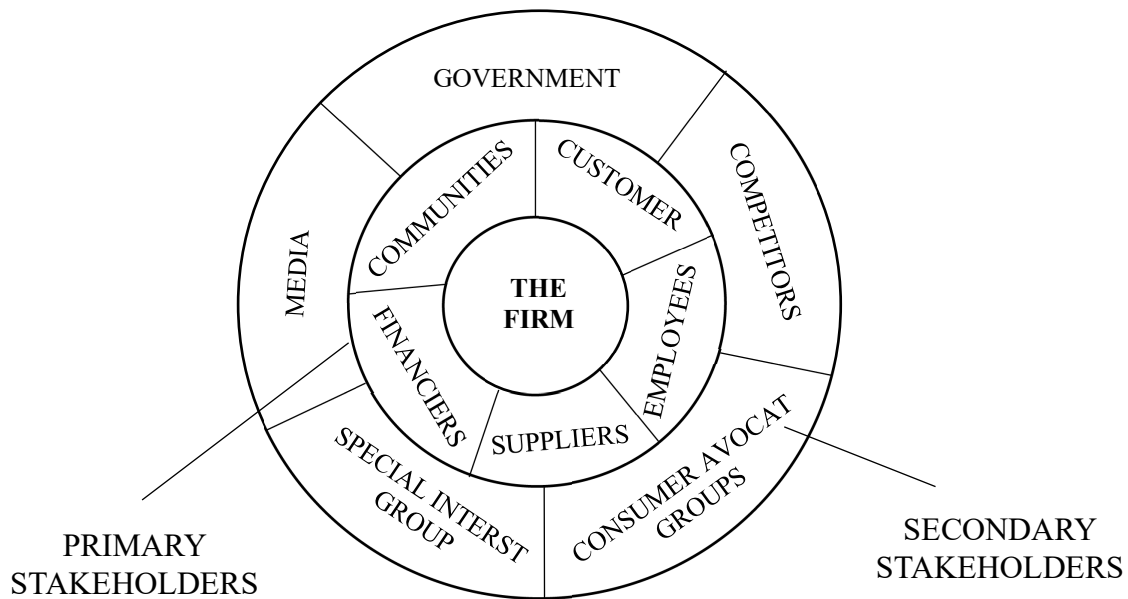
The local community grants the organization the right to build facilities and, in turn, it benefits from the tax base and economic and social contributions of the organization. In return for the provision of local services, the organization is expected to be a good community citizen, as is any person, either natural or artificial. The organization is not permitted to endanger the community, such as through causing pollution or releasing toxic waste. If, for some reason, the organization must leave a community, it is expected to work with local leaders to make the departure as smooth as possible.

Management plays a significant role in a large corporation, and some of them may possess a personal ownership stake. Alternatively, management's stake can be explicated or implicated with an employment contract. However, management, on the other hand, has a duty to safeguard the welfare of the abstract entity, which is the corporation as a whole. In general, the executive management has the duty to guarantee sound operation of the corporation and balance the conflicts among stakeholders. Owners expect to get higher financial returns, while customers expect the producers to invest more in research and development. Employees always long for higher salaries and increased benefits, while the local community wants the producers to contribute benefits useful to the community. Despite the fact that the owner of a business can make decisions which impact all the above stakeholders, Freeman confirms that businesses must fulfil their duties to all stakeholders who have an interest in their decisions and the conduct of the business.

There are other stakeholders beyond the common stakeholders as financiers, customers, employees, and communities (Freeman, 1984). Figure 5 shows the level of relationships between financiers, customers, suppliers, employees and communities, which are characterized as the "primary" or "definitional" stakeholders. However, one particular stakeholder is more important than another, sometimes no suppliers, in a start-up business. The start-up might pay more attention to their key customers as well as to their venture capitalist. In some broader definitions, executives must take any group or individual into consideration if they can affect or be affected by the organizational operations. Some groups that affect the primary stakeholders are defined as "secondary" or "instrumental" stakeholders.

Clarkson (1995) characterizes primary stakeholders and secondary stakeholders clearly. Primary stakeholders' relationships are characterized by mutual interdependence and considered as those "without continuing participation, the corporation cannot survive as a going concern" whereas secondary stakeholders are not too vital to the organization. Thus, primary stakeholders are considered as the organization's partners and secondary stakeholders have the voluntary relationships within the organization. In the process of value creation, stakeholders do not stand alone but inherently connect to each other. There are raised questions as: "*How could a bondholder recognize any returns without management paying attention to the stakes of customers or employees?*", "*How could customers get the products and services they need without employees and suppliers?*", "*How could employees have a decent place to live without communities*". Thus, the problem of the stakeholder theory is how to solve the priority problem, indicating the most important position of each stakeholder or how do researchers make trade-offs among stakeholders.

Figure 5: Creation Value for Stakeholders



Source: Freeman, Harrison, and Wicks (2007)

In the 1960s, the concept of the stakeholder changed when the business environment became more sensitive and included consumer groups and environmentalists. In this period, the environment was seen as being stable and predictable, thus, Freeman (1984) stated that previous literature only considered friendly and legitimate stakeholders, and was not concerned with groups such as competitors, because the totality of the stakeholder environment was disregarded. Prior to Freeman, Porter (1980) had divided the stakeholder environment into Strengths, Weaknesses, Opportunities and Threats, or SWOT analysis.

In his book “Strategic Management, A Stakeholder Approach”, which aimed to build a framework responding to managers who had to cope with turbulence and changes in the business environment, Freeman (1984) argued:

“Gone are the good old days of worrying only about taking products and services to market and gone is the usefulness of management theories which concentrate on efficiency and effectiveness within this product-market framework”. (Freeman, 1984, p. 4)

When there are changes in the business environment, traditional strategy frameworks do not work sufficiently well as a means for developing new strategic directions for managers. Organizations facing turbulence are in need of new management and new conceptual frameworks. Freeman’s framework responded to this challenge when the internal and external changes were understood as:

“The emergence of new groups, events and issues which cannot be readily understood within the framework of an existing model or theory.... It makes us uncomfortable because it cannot be readily assimilated into the relatively more comfortable relationships with suppliers, owners, customers and employees...It

originates in the murky area labeled “environment” and affects its ability to cope with internal changes.”(Freeman, 1984, p. 11)

When facing turbulence, a new model of the organization is needed to cope with the changes. Freeman (1984) displays his view of the organization with a common hub (Figure 5). Managers are not mentioned as stakeholders because, in this view, they are presumed to work within the organization and within the hub. Freeman’s diagram illustrates a quite general view, however, in reality, the stakeholder groups can be divided into further specific sub-categories. Freeman replaces the traditional term “Stockholder” with “Stakeholder” from an economic point of view, whereas stakeholders are defined as “any group of individuals who are or can affect an organization’s achievement objectives” (Freeman 1984).

Stakeholder management aims to manage different groups and relationships in an effort to ascertain a strategy for an organization. According to Freeman (1984), managers should formulate and implement processes to gratify the benefits of those who possess a stake in the business, implying stakeholders, stakeholder management, or a stakeholder approach relating to strategic management. This process reflects the management and the integration of the relationships and interests of a group of stakeholders, including shareholders, employees, customers, suppliers, communities and others, to ensure a better competitiveness of the organization over the long-term. A stakeholder approach employed to develop business strategies normally concerns the active management of the business environment, relationships and shared interests of all shareholders. According to Donaldson and Preston (1995)’s contribution to the literature, the concept of a stakeholder is distinguished by normative and analytical stakeholder theories.

Freeman’s normative theory mentioned below is considered to be at the core of stakeholder theories. Donaldson and Preston (1995)’s point of view indicates that stakeholders own a recognized interest of real value in the organization. They employ normative theory in response to questions such as “*What are the responsibilities of the organization in respect of its stakeholders?*” and “*Why should organizations take care of interests other than the interests of shareholders?*”. Thus, the normative theory reflects the morals, values and philosophical aspects. As a result, Freeman reasons that Donaldson and Preston’s theory separates the economic and ethical areas. According to Freeman’s view, moral implications would have to exist in every organization. Many previous authors concur that relationships between the organization and stakeholders are established through moral commitments, and this can reflect the organization’s values and principles. Each organization will have to define its own fundamental moral principles, which can then be used as a basis for decision making.

One point in the normative stakeholder theory specifies that the organization’s decisions have to be ethical when they affect stakeholder’s outcomes. In such situations, the organization has to construct its ethical principles to balance the effects that one agent has upon other agents. Vice versa, any decision made without consideration of its impact is considered unethical. According to Donaldson and Preston (1995), an organization should not ignore claims from stakeholders, because they have an intrinsic value directly linked to the organization’s interests. Therefore, the organization should build its principles, or “rules of the game”, in order to interact with stakeholders.

2.1.1 Freeman's Normative Theory

Prior to the Donaldson and Preston (1995) normative theory, Evan and Freeman (1990) built a normative theory based on this stakeholder definition: *“Those groups who are vital to the survival and success of the corporation”*. Those groups imply customers, employees, suppliers, communities, shareholders and managers. Thus, Evan and Freeman (1990) re-define the meaning of stakeholder's interests, including two principles: (a) the principle of corporate legitimacy, and (b) the stakeholder fiduciary principle.

Principle of Corporate Legitimacy

An organizational management should be focused on benefits to the stakeholders. Stakeholders take part in decisions that significantly affect their interests.

The Stakeholder Fiduciary Principle

Managers are required to act in the interests of stakeholders, similarly for the interests of the corporation, in order to ensure the survival of the organization.

Besides working as normal employees, managers also have a duty to protect the interests of the organization in which they are working. As a result, Evan and Freeman (1990) propose a stakeholder “Board of Directors”, plus a director, elected unanimously by the other stakeholders, to care for all stakeholders and make stakeholder management practicable.

Freeman (1994), in his “doctrine of fair contracts” develops an approach showing how contracts can be made between the organization and its stakeholders. Stakeholders are supposed to be coherently self-interested and to be aware of the organization's potential success or failure. Under this circumstance, there are six rules for the parties to choose as following:

- The principle of entry and exit: The contract has to define the process that clarifies entry, exit and re-negotiation conditions for stakeholders to decide when an agreement can be fulfilled.
- The principle of governance: Procedures for changing the game rules must go along with unanimous consent, leading to stakeholder governing board.
- The principle of externalities: If the contract is done between party A and party B and involves party C, then party C has to be invited as a party of the contract.
- The principle of contracting costs: Each party must share the cost of the contract.
- The principle of agency: Any party must fulfill the interests of all stakeholders
- The principle of limited immortality: The organization should continue to fulfill the interests of stakeholders for a long period of time.

These principles guide actual stakeholders in formulating an organizational constitution or charter. It allows to build strategy on ethical asking, *“What does a company stand for?”* in conjunction with its strategic decision. Other authors, Kochan and Rubenstein (2000) have developed a normative stakeholder theory based on a study of the Saturn automotive manufacturer. In this study, the authors ask and answer the question *“Why should stakeholder models be given serious consideration at this moment in history”*. They argue this is both a normative and positive inquiry and they conclude that stakeholder firms will develop when the

stakeholders hold significant assets that are in risk and have influence. However, stakeholder firms will be sustainable when their leaders provide responsiveness to stakeholders.

2.1.2 Freeman's Analytic Theory

The stakeholder theory shows the reaction of managers towards stakeholders in achieving their interests, while affecting the stakeholders to implement corporate goals. Freeman's model contributed by Salvage (1991), Clarkson (1995), Jones (1995), and Mitchell, Agle, and Wood (1997) has indicated that the stakeholder theory admits the linkage between the organization and the interests of each stakeholder. Researchers use the analytic theory to answer the question: "*How to arrange stakeholders into a hierarchy influence?*". However, the authors have reached no unanimity of agreement about the concept, because different points of view remain.

Freeman gives out two definitions of a stakeholder based on his studies and visions as following:

- "*Group of people who can affect or can be affected by the achievement of the organization's objectives*" (Freeman, 1984, p. 46)
- "*Those groups who are vital to the survival of the organization*" (Freeman, 2004, p. 58)

Freeman considers it necessary to define who the stakeholders of the organization are in order to increase the efficiency of the organization's stakeholder management. His first definition can be rendered as the question "*Who are those groups who can affect or can be affected by the achievement of the organization's objectives?*". Specific groups should be defined as discrete categories of stakeholders, each with their own corresponding list of interests. To Freeman, the organization has a central position and is connected to all surrounding stakeholders.

The organization needs to find an optimal strategy for each group of stakeholders, in order to balance all interests, through analysing the actual behaviour, co-operative potential, competitive threats and possible partnerships between stakeholder groups. Stakeholder behaviour can be investigated through their past actions, and partnerships may be developed in the event that different stakeholder groups share common interests or common issues relating to the activity of the organization, which may later coalesce into a more powerful stakeholder group.

Under Freeman's vision, managers of the organization should filter common actions, interests, beliefs or objectives between stakeholder groups within their business environment. The establishment of a partnership could change a stakeholder's strategy and position on current issues. Therefore, the organization should understand the long-term objectives of each group of stakeholders and consider them as rational. Freeman has distinguished two variables to determine the optimal strategy for stakeholder management, including the relative power of stakeholders to threaten, and their potential to co-operate. The threat power can be regulated by dependence recourses, with the partnership establishing capabilities of a stakeholder, as well as the related threats, forming particular issues, while the co-operation potential is regulated by a stakeholder's capacity to expand this dependence with the organization.

It is believed that the greater the dependence, the greater the willingness to co-operate. Based on this belief, Savage et Al. (1991) characterize four types of stakeholders as following:

- Supportive stakeholder which reflects high co-operative potential and low competitive threat. This type of stakeholder is considered the most standard type. Supportive stakeholder includes the board of trustees, executives, managers, employees, suppliers, service providers, non-profit organizations and parent companies.
- Marginal stakeholder reflects low co-operative potential and moderate competitive threat. This stakeholder can be counted as consumer interest groups, professional associations and shareholders.
- Non-supportive stakeholder reflects low co-operative potential and highly competitive threat. This stakeholder can be counted as competitors, unions, media and government.
- Mixed blessing stakeholder reflects high co-operative potential and highly competitive threat. This stakeholder can be counted as client and organizations with complimentary products and services.

Thus, Freeman categorizes four key strategies based on the above stakeholder categories:

- When the group is supportive, an offensive strategy could be adopted. This strategy will change the stakeholder's objectives and perceptions or dominate the stakeholder to achieve more favourable conditions.
- When the group is non-supportive, a defensive strategy could be adopted. The key objective is to curtail or curb the competitive threats from the stakeholder by means of reinforcing current beliefs about the organization, maintaining existing programs or allowing the stakeholder to drive the integration process.
- When the group is mixed blessing, a swing strategy could be adopted. The organization needs to take decisions such as changing the rules or the transaction process.
- When the group is marginal, a hold strategy could be adopted. The organization needs to hold its existing position and keep its present strategic program.

2.2 Development of Stakeholder Theory

Previous researchers propose the obligation to identify the stakeholders for organizations, in which the alignment between the organization and its stakeholders will ensure the success (Bryson, 2004). In reality, the literature confirms that there is no specific type of stakeholder in general but the stakeholders diverge depending on the industry, organization, geographic location and particular problem (Mitchell et al., 1997; Bailur, 2006; Gil-Lafuente and Paula, 2013). Donaldson and Preston (1995) state that all stakeholders are equally important in the relationship with organization and neither of them is prominent. Their model comprises of key stakeholders including investors, political groups, customers, the public, employees, trade associations, suppliers and the government, however, more stakeholders are proposed by other researchers, including non-governmental organizations (Delaporte et al., 2010; Sontaite, 2011; Gil-Lafuente and Paula, 2013), the media (Neville et al., 2005; Fiedler and Kirchgeorg, 2007; Dickinson-Delaporte et al., 2010; Sontaite, 2011), business partners (Neville et al., 2005; Sontaite, 2011; Florea, 2013), local community (Neville et al., 2005; Sontaite, 2011; Gil-Lafuente and Paula, 2013; Florea, 2013), natural environment (Neville et al., 2005), board of directors (Florea, 2013), owners, competitors, retailers, trade associations, government regulatory agencies, financial institutions, interest groups (Sontaite, 2011) and even terrorists (Freeman, 1984).

There are different stakeholder groups to mention through the development of the theory:

Internal and External groups

Internal stakeholders refer to the organization's financial activities and concern about profit, efficiency and financial return whereas external stakeholders refer to the organization's actions and these stakeholders are interested in value, quality, satisfaction, long-term relationships, ethical and moral actions of the organization, financial support and etc., (Florea, 2013). Internal stakeholders are normally considered to be the key ones, however, external stakeholders can take more priority in some events and cannot be devalued (Bailur, 2006). Internal stakeholders are shareholders, owners, employees, managers, the board of directors. External stakeholders cover customers, suppliers, business partners, community, the public, competitors, the government, special interest groups, retailers, trade associations, government regulatory agencies, financial institutions, analysts/experts, terrorists - the external (Freeman, 1984; Sontaite, 2011; and Florea, 2013).

Primary and Secondary groups

Many researchers such as Freeman (1984), Clarkson (1995), Mitchell et al. (1997), Bailur (2006), Sontaite (2011), Florea (2013), Mishra (2013), Wolf (2014) agree that stakeholders should be divided into primary and secondary types. The primary stakeholders are most important to the organization's continuation (Clarkson, 1995; Bailur, 2006; Sontaite, 2011; Mishra, 2013). Clarkson (1995) argues that though the secondary stakeholders are also important to organization, the organization's persistence is not governed by the secondary stakeholders. Sontaite (2011) includes consumers, suppliers, employees, owners, community in the primary stakeholder group; whereas media, competitors, financial institutions, government, public interest groups are categorized in the secondary stakeholder group. (Florea, 2013) proposes the third group, namely key stakeholders, and is defined as "*people or*

organizations who might belong to either or neither of the first two groups” (Florea, 2013, p. 132). The third stakeholder group is important to the organization’s management during decision-making process and strategic implementation. They can be policy makers, officials, important professionals or community personalities who have a strong position or influence on the organization (Florea, 2013).

Normative, Functional, Diffused and Customer groups

Dowling (1995) stakeholders into four groups based on the homogenous reputation within groups, namely normative, functional, diffused and customer. Normative stakeholders secure the organization’s functions and establish rules and norms for the organization, involving the government, regulatory agencies, trade associations, professional societies, shareholders, the board of directors. Functional stakeholders involve in the organization's daily operations including employees, suppliers, unions, distributors, service providers. Diffused stakeholders take an interest of the organization during the crisis period namely journalists, community members, and the special interest groups. The fourth stakeholder group involves customers who secure welfare of the organization. These four groups of stakeholders have different approaches and have an unequal perception toward the organization.

Regulatory, Organizational, Community and Media groups

Henriques and Sadorsky (1999) propose four stakeholder groups. The regulatory group includes those stakeholders such as trade associations, informal networks, competitors. The organizational group includes consumers, suppliers, employees and shareholders. The community can act against the organization’s activities and have a significant impact on the results of organization's performance. This stakeholder group is closely associated with the media group which forms public opinion about organization, especially during the crisis of organization.

Groups in order of Power and Interest

Freeman (1984) developed four groups of stakeholders under the influence of power and interest level matrix. The importance of each stakeholder group to the organization depends on where the stakeholders find themselves in Freeman (1984)’s matrix (Gregory, 2007). Polonsky and Scott (2005) state that the position of stakeholder in the matrix enables the organization to formulate appropriate strategies to deal with stakeholders (Gregory, 2007). Mitchell et al. (1997) prove that most stakeholder may have the influence on the organization’s performance, and it is possible to distinguish the interested stakeholders from dis-interested ones by grouping them under the power and interest.

Bryson (2004) argues that stakeholders are defined by two opposite criteria. Certain researchers argue that stakeholders must have the power affect directly to the future of the organization whereas other researchers argue that the stakeholders should be powerless to affect the future of the organization. In order clarify and systematize the stakeholder concepts, Mitchell et al., (1997) propose to group stakeholder concepts according to these following criteria:

- Existing relationships between organization and,
- Power dependence - when the organization is dependent on stakeholder and vice versa or there is a mutual power dependence relationship,

- Basis for legitimacy of relationship,
- Stakeholder interests – where legitimacy is not implied.

Among different definitions with similar meanings, Matuleviciene and Stravinskiene (2015) propose that (Freeman, 1984)'s definition could be considered as one of the best stakeholder definitions, which identifies concisely and accurately the relationships between the organization and stakeholders, based on the power dependence. With reference to Freeman (1984), the stakeholders could be treated as groups or individuals, who can affect or be affected by the purposes of the organization. Table 1 below shows the summary of the Stakeholder Concepts Interpretations from various authors such as Freeman (1984), Mitchell et al., (1997), Post et al. (2002), Leach (2002), Bryson (2004), Bailur (2006), Dickinson – Delaporte et al. (2010), and Florea (2013).

Table 1: Stakeholder Concept Interpretations

Year	Author	Definition
EXISTING RELATIONSHIPS		
1991	Thompson et al.*	"Groups in relationship with an organization"
1993	Brenner*	"Having some legitimate, non-trivial relationship with an organization [such as] exchange transactions, action impacts, and moral responsibilities"
1994	Freeman*	"Participants in "the human process of joint value creation"
1994	Wicks et al. *	"Interact with and give meaning and definition to the corporation"
2008	Kliatchko***	"All the relevant publics or multiple markets with which any firm interacts"
POWER DEPENDENCE		
1984 – 2013	Freeman (1984), Mitchell et al., (1997), Bailur (2006), Florea (2013)	"Those groups without whose support the organization would cease to exist"
1964	Rhenman*	"Are depending on the firm in order to achieve their personal goals and on whom the firm is depending for its existence"
1971	Ahlstedt and Jahnukainen*	"Driven by their own interests and goals are participants in a firm, and thus depending on it and whom for its sake the firm is depending"
1983	Freeman and Reed*	1) "Individual or group who can affect the achievement of an organization's objectives or who is affected by the achievement of an organization's objectives" 2) "Groups on which the organization is dependent for its continued survival"
1984	Freeman	"Any group or individual who can affect or is affected by the achievement of the organization's objectives"
1987	Freeman and Gilbert*	"Can affect or is affected by a business"
1988	Bowie*	"Without whose support the organization would cease to exist"
1992	Nutt and Backhoff**	"All parties who will be affected by or will affect [the organization's] strategy"
1994	Langtry*	"The firm is significantly responsible for their well-being, or they hold a moral or legal claim on the firm"
1994	Starik*	"Are or might be influenced by, or are or potentially are influencers of, some organization"
1995	Nasi*	"Interact with the firm and thus make its operation possible"
1995	Brenner*	"Are or which could impact or be impacted by the firm/organization"
1998	Eden and Ackermann**	"People or small groups with the power to respond to, negotiate with, and change the strategic future of the organization"
2002	Johnson and Scholes**	"Those individuals or groups who depend on the organization to fulfill their own goals and on whom, in turn, the organization depends"

2002	Post et al.	"The stakeholders in a firm are individuals and constituencies that contribute, either voluntarily or involuntarily, to its wealth-creating capacity and activities, and who are therefore its potential beneficiaries and/or risk bearers"
2002	Leach	"People whose personal or professional welfare depends substantially upon the outcomes of the partnership"
2008	Roloff***	"Any individual or group who can affect or be affected by the approach to the issue addressed by the network"
2013	Florea and Florea	"Stakeholders are the persons, institutions, organizations, formal and non formal groups which are interested or can be affected or which could influence the company decisions or actions"

BASIS FOR LEGITIMACY OF RELATIONSHIP

1987	Cornell and Shapiro*	"Claimants" who have "contracts"
1988	Evan and Freeman*	1) "Have a stake in or claim on the firm" 2) "Benefit from or are harmed by, and whose rights are violated or respected by, corporate actions"
1989	Alkhafaji*	"Groups to whom the corporation is responsible"
1990	Freeman and Evan*	"Contract holders"
1992	Hill and Jones*	"Constituents who have a legitimate claim on the firm ... established through the existence of an exchange relationship" who supply "the firm with critical resources (contributions) and in exchange each expects its interests to be satisfied (by inducements)"
1994	Clarkson*	"Are placed at risk as a result of a firm's activities"
1995	Donaldson and Preston*	"Persons or groups with legitimate interests in procedural and/or substantive aspects of corporate activity"
1995	Bryson**	"Any person group or organization that can place a claim on the organization's attention, resources, or output, or is affected by that output"
1995	Clarkson*	"Stakeholders are persons or groups that have, or claim, ownership, rights, or interests in a corporation and its activities, past, present, or future"

STAKEHOLDER INTERESTS – LEGITIMACY NOT IMPLIED

1989	Carroll*	"Asserts to have one or more of these kinds of stakes" - "ranging from an interest to a right (legal or moral) to ownership or legal title to the company's assets or property"
1991	Savage et al. *	"Have an interest in the actions of an organization and ... the ability to influence it"
1993	Carroll*	"Asserts to have one or more of the kinds of stakes in business"
1995	Clarkson*	1995 "Have, or claim, ownership, rights, or interests in a corporation and its activities"

* cited in (Mitchell et al., 1997); ** cited in (Bryson, 2004); *** cited in Dickinson – (Delaporte et al., 2010)

Source: *Matuleviciene and Stravinskiene (2015)*

2.3 Stakeholder Theory Influence on Strategic Management Process

The stakeholder management objective is to create methods to manage strategically different groups and relationships. Freeman (1984) considers that the idea of stakeholders, or stakeholder management, or a stakeholder approach strategic management, proposes that managers must formulate and implement processes that satisfy those groups who have a stake in the business. Managers could apply a stakeholder approach as a tool to implement the strategic management process for the organization when required. Stakeholder-based strategic management tools have been provided by previous authors who worked on stakeholder theory. Freeman (1984) offered an alternative approach to strategic management that addressed many of the concerns the field had identified as important. The stakeholder approach (i) embraced external analysis as a way to help firms deal with an increasingly turbulent environment (Schendel and Hofer, 1979); (ii) “*acknowledged obligations to segments of society other than stockholders*” (Learned et al. 1965, p. 17); (iii) integrated economic with political strategy-making processes (MacMillan, 1978); (iv) was consistent with Newman’s (1979) “contributor group” approach; (v) contained elements of both adaptation and enactment (Bourgeois, 1984); (vi) was consistent with what managers actually do (Mintzberg, 1971); (vii) incorporated an organizational learning perspective (Mintzberg, 1978); and (viii) included the concept of resource dependence (Pfeffer and Salancik, 1978). In his final paragraph, Freeman summarizes:

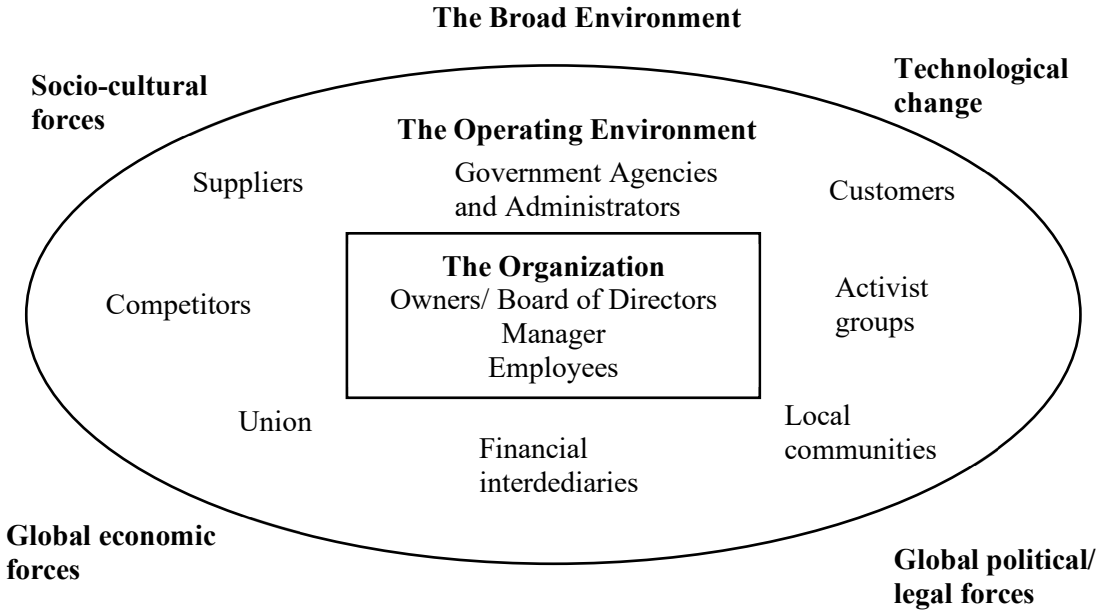
“The business environment of the 1980s and beyond is complex, to say the least. If the corporation is to successfully meet the challenges posed by this environment, it must begin to adapt integrative strategic management processes which focus the attention of management externally as a matter of routine”. (Freeman, 1984, p. 249)

Freeman’s (1984) model for the strategic management process started with the evaluation of stakeholders, followed by the provision of a set of tools to manage stakeholders in harmony with the organizational objectives, and ending with a measurement of stakeholder satisfaction with organizational outcomes. Harrison and St. John (1994)’s further contribution is to integrate stakeholder-based perspectives with various strategic perspectives derived from other theories, such as industrial organization economics, the resource-based view, cognitive theory, institutional theory, organization theory, transaction cost economics, and agency theory. These authors integrated traditional theories of strategic management to stakeholder analysis and management and considered this process as natural as applying Porter’s Five Forces to the industrial competition’s study. They also proved that many of the best-run organizations have integrated stakeholder analysis and management processes into their organizational planning.

In Figure 6 below, Harrison and St. John (1994, 1998) further segment the stakeholder environment into three zones. The Broad Environment includes society, technology, economy, while Legal covers the regulatory context in which the organization and its operating environment exist. In this setting, the organization has little or no influence over the Broad Environment. The Operating Environment of an organization consists of external stakeholders which can have an impact on it. In the central zone, The Organization itself is composed of stakeholders, usually internal, firmly attached to the organization. Previously, Harrison and St. John’s strategic management process model used the resource-based view as a tool to allow managers to determine how to employ internal stakeholders to create competitive advantages.

On the other hand, Porter’s (1985) Five Forces are used to analyse external stakeholders, and traditional economic approaches are used to analyse the Broad Environment (Harrison and St. John 1994, 1998). In the more recent literature, Post et al. (2002a) relabelled Harrison and St. John’s three zones of stakeholders as the Social Arena, the Industry Structure, and the Organizational Resource Base.

Figure 6: The Organization and Its Primary Stakeholders



Source: Harrison and John (1998)

In addition, the influence of stakeholders on organization derives from the usage of power (Mitchell et al., 1997; Casciaro and Piskorski, 2005; Neville et al., 2005) which is considered as a privilege to manage stakeholder resources or under pressure (Post et al., 2002). The fact that the organization is depending on resources has put it in a weaker position towards stakeholders (Neville et al., 2005). To avoid this, the organization needs to reduce the dependency on resources and increase its possibility to arrange its own resources (Wolf, 2014). Krstic (2014) argues that the inter-relationship between stakeholders and the organization does not bring a positive but also a negative effect in terms of profit, persistence, relationship and corporate reputation. A collaboration between stakeholders and the organization allows the organization to reduce risk, increase the availability of resources, solve arising problems, implement certain business processes and improve the quality of products and services (Krstic, 2014).

2.4 Stakeholder Theory Influence on Organizational Strategies

From the initial concept of stakeholder theory, the stakeholder perspective indicates the mutually interdependent relationships between the organization and its stakeholders (Parman et al., 2010). While there is research focusing on the organization's management of its stakeholders, other scholars are specifically researching the stakeholders' influence strategies over the organization. According to later scholars such as Wright and Ferris (1997), Scholes and Clutterbuck (1998), Rodgers and Gago (2004), and Sharma and Henriques (2005), the influence of external stakeholders over the organization has intensified noticeably in recent years.

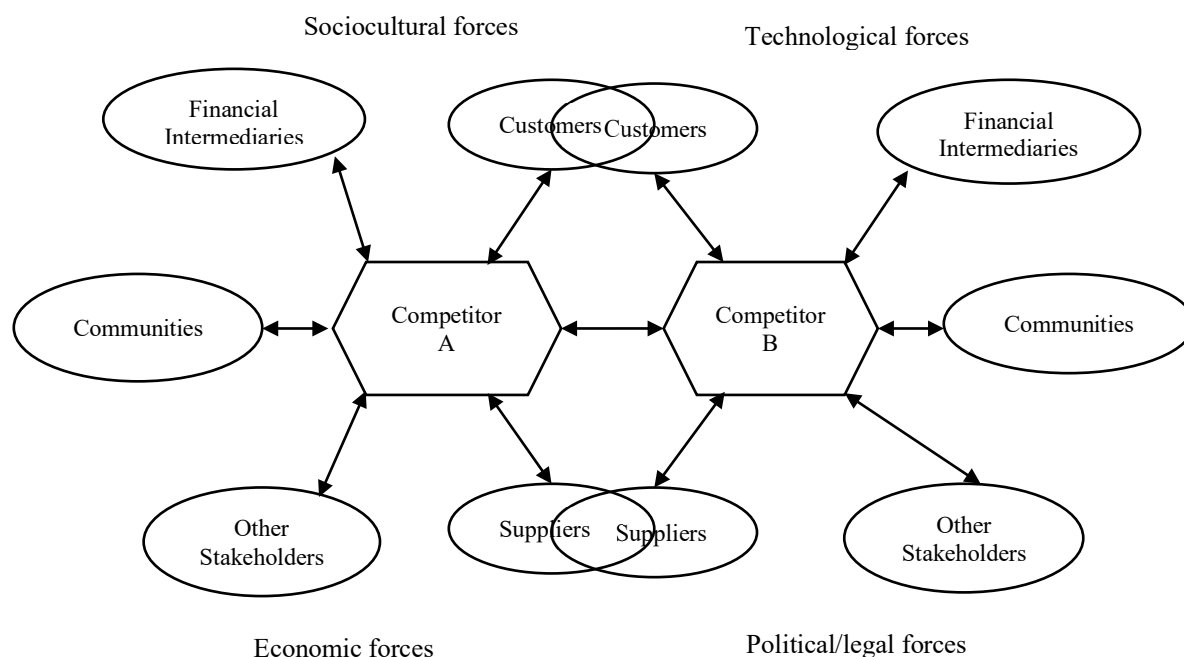
Early theorists working on stakeholder theory, such as Dill (1975), and Freeman and Reed (1983), analysed the influence of the stakeholders over the organization in terms of the stake type and power source. Harrison and St. John (1996) further worked on the stakeholder influence over the environmental uncertainty, indicating one part of stakeholder power. Later researchers such as Mitchell et al. (1997) identify more factors such as urgency, power, and legitimacy, to allocate to different stakeholders in the organizational management. Rowley (1997) also states that the organization is concurrently influenced by various stakeholders in the business environment. Other authors such as Granovetter (1985), Wasserman and Glaskiewicz (1994), and Oliver (1991), respectively use social network analysis and resource dependence theory to argue that the organization's stakeholder network, and the individual networks of this network, leverage the opposition of stakeholder demands.

Based on the resource dependence theory (Pfeffer and Salancik 1978), Freeman (1999) has identified four types of stakeholder strategies having an influence over the organization, including withholding, usage, direct and indirect. Withholding strategy affords stakeholder influence if their threat of withdrawal is plausible and probable. Usage strategy directly involves conditions to stakeholders that supply contracts. Direct influence strategy is used when stakeholders deploy directly the flow of resources, whereas indirect influence strategy is used when third parties deploy the flow of resources. Thus, based on the mutual interdependence relationships between the organization and its stakeholders, Freeman further develops the theory to envisage which type of strategy stakeholders will use to influence the organization. Stakeholder theory enhances the resource based theory by tackling two criticisms: providing a direction for the organization to manage its resources in order to achieve competitive advantage (Priem and Butler, 2001) and raise a question that how economic rents should be distributed once they are created (Barney and Arkan, 2001) into a network of stakeholder relations.

In the stakeholder theory literature, there are still expectations of developing better models for handling stakeholder relationships. Stakeholder management infers the organization has to serve a broad range of stakeholders, in which competitors are but one of the important factors to manage. According to Freeman (1984), and Harrison and St. John (1994, 1998), most of the stakeholder theories envision competitors standing alongside other types of stakeholders. Figure 7 below indicates the new concept of the stakeholder network where one competitor's network competes with the others. Competitors can sometimes also be suppliers, customers, or joint-venture partners, and these actors enrich the competitive models. This concept has been

raised by Lado, Boyd, and Hanlon (1997) to delineate that competition and co-operation inherit an interrelated dimension as in Figure 7 below.

Figure 7: Competing Stakeholder Networks



Source: Lado, Boyd, and Hanlon (1997)

This conceptualization is useful to address the economic efficiency issue because we can compare the economic performance of competing networks of stakeholders. From a strategic management perspective, this conceptualization would be considered as a competing network of stakeholders, where one competitor's network is competing with the other network. The merging model resistance reflects the conceptualization for economic efficiency, diversities of stakeholder roles, and stakeholders' competing networks (Parman et al., 2010). From a realistic perspective, managers face various pressures from multiple stakeholders, thus, it is good to understand longer-term implications of the organization's actions. If the organization ignores or harms any of its key stakeholders, it can receive negative implications in the future. From the stakeholder perspective, researchers state that the organization's stakeholder network can make itself be a source of sustainable competitive advantage (Harrison et al., 2010).

The organization's business activity exposes the relationships with stakeholders, including at least customers, suppliers, employees, financiers and managers, through interacting and creating values; and these relationships are expected to be understood (Wahid et al. 2017). Stakeholder theory is currently widely applied, however, the perspective of organizational relationships is arguably under-represented and the knowledge of how internal organizational processes influenced to strategic management is lacking (Koistinen et al., 2018). Stakeholder theory holds that managers should partake in sustainable practices since they have a moral obligation to satisfy a variety of constituents who have a legitimate (e.g. shareholders, customers and employees) or silent (e.g. the environment and community) interest on a firm (Freeman, 2010). Stakeholder theory has been frequently used to explain firms' motivation for

practising sustainability (Meixell and Luoma, 2015). Particularly, the motivation can be explained from the institutional perspective. In general, stakeholders such as the public, employees, customers, suppliers, and shareholders can exert coercive, normative, or mimetic pressure to influence firms to implement certain sustainable practices (Zhu and Sarkis, 2007).

Conclusion of Chapter 1

The types of environment discussed in this research refer to the inter-organizational and the general environment. Under the influence of the environment, the organization has to manage the uncertainties imposed on it by leveraging internal strategies of adaptation and adjustment or external strategies with differing modes of interactions. We mention the contingency theory of James Thompson to clarify how an organization performs under different contingencies. Every organization must attempt to harmonize its structures, its internal processes and the specific contingencies or circumstances. We explore the mutually interdependent relationships between the organization and its stakeholders under the stakeholder perspective. Stakeholder management infers the organization has to serve a broad range of stakeholders and the organization is concurrently influenced by various stakeholders in the business environment. To deal with stakeholders' influences and resolve the organizational issues, we complement and present strategic theories in responding to the organizational environment in Chapter 2, which are engaged as a research's guidance.

CHAPTER 2

STRATEGIC THEORIES IN RESPONDING TO ORGANIZATIONAL ENVIRONMENT

In this chapter, we present the Co-operation theory (Axelrod, 1984) and the Social Regulation Theory (Reynaud, 1999) as strategic theories to help responding to organizational environment. We mention about Game theory (Neumann, 1937) to analyze the negotiation and co-operation in searching for optimum solutions, in which technology co-operation and competition are two key instruments for the airline industry to grow. In dealing with stakeholders, we employ the negotiation concept presented in the Social Regulation theory to explain the solutions and the resulted interactions for rules and regulations imposed by governments or international authorities.

SECTION 3

EMPLOYMENT OF CO-OPERATION THEORY IN THE BUSINESS WORLD

Co-operation is currently considered a goal in doing business as well as in many activities carried out by governmental and non-governmental organizations. In trying to expose some of the traditional business myths regarding individualism, the idea of co-operation has become an important strategic point in the business world. Co-operation is more than a collection of individuals, in which a business community ought to be more than just a collection of firms, and each organization is striving for its own self-gain (Lurie, 2016). New co-operative activities in this period of time are known as alliances, technological agreements, joint-ventures and industrial alliances with local or foreign partners under various forms of co-operative activities (Lurie, 2016).

3.1 Robert Axerold's Game Theory in Organizational Co-operation

Game theory is a theoretical framework for perceiving social situations between players (Hayes, 2019). In some respects, game theory is the science of strategy to obtain the optimal decision-making of independent and competing actors. The key point in game theory is that one player's payoff is contingent on the strategy implemented by the other player. The game recognizes the players' identities, preferences, and strategies and how these strategies affect the outcome.

3.1.1 Game Theory

Game theory was initially developed by John Von Neumann (1937) and Oskar Morgenstern (1944). The theory preliminarily focused on zero-sum games where players gain in an oppositional manner, implying that what one player gains is at the loss of another player in the game. According to these authors, all bilateral zero-sum games allow only one way of playing in which the specific payoff for each player will return a game's value. To reach this value, each player needs to set his optimum strategies to prevent maximum loss that the other player can inflict on him.

Game theory is popularly applied in many economic areas when multi-party decisions are required to be made. Using game theory in exchange models, such as negotiation and bidding, can be seen at a micro-level. At an intermediate aggregation level, game theory is used in company behaviour models, in the field of labour economics where workers compete for promotion, or financial economics where investment decisions are made. At the higher level of aggregation, game theory is applied to analyse issues in macroeconomics and international economics.

It was initially believed that applying game theory to social and economic contexts could formulate zero-sum games as suitable models for understanding the behaviour of rational players in conflict situations. In fact, the majority of game examples do not show tough, head-on opposition between player's interests, but a mix of incentives to encourage a confrontation and co-operation in analysing games. The best result for the game is not always achieved when rational individual interest is the only consideration during the interaction between agents.

Zero-sum games are also known as Nash's equilibrium, in which players have agreed on a particular game plan. A Nash equilibrium requires players to set a proper strategic profile for the game, known as an equilibrium, to allow one player to set strategy and other players will comply with it without any single deviation. The Nash equilibrium does not allow one player to improve gains through another player's strategy. There are two types of games categorized as (a) static games where players make decision and gains simultaneously by the combination of their previous actions, and (b) dynamic games where decisions are made continuously. In both static and dynamic games, each player might obtain complete or incomplete information. From combining chosen actions, each player's gain function is known at the first step. At the second step, the player does not know another player's gains. Therefore, four concepts of equilibrium are stated as followings:

- Nash's equilibrium, which means static games with complete information
- Sub-game perfect Nash equilibrium, which means dynamic games with complete information
- Nash's Bayesian equilibrium, which means static games with incomplete information, and
- Perfect Bayesian equilibrium, which means dynamic games with incomplete information

3.1.1.1 Nash's equilibrium - Static games with complete information: the prisoner's dilemma

In this game, each player is allowed to choose his own strategy and the combination of all chosen strategies will determine the gains for each player. The most popular example of this game is the prisoner's dilemma narrating that two gangsters are arrested and apprehended by the police in separate cells. The two gangsters can either plead innocent or guilty, with three outcome options. If neither of them confesses, each gangster will receive one month in jail. If both confess and plead guilty, each will receive six months. In the third case, if one of them confesses, the police will set the confessor free and consign the other gangster to nine months in jail.

The payoff matrix in Table 2 below shows the results that each prisoner will get, depending upon their options. It is obvious that each prisoner will want a minimum amount of time in jail. The payoff matrix of prisoner 1 shows that "Confess" dominates "Don't confess". If prisoner 2

confesses, prisoner 1 will get six months in jail and, vice versa prisoner 1 will be released. Then, his optimal strategy would be “confess”. Thus, both prisoners will act for their own interests, which means confess.

Table 2: Prisoners’ Payoff Matrix

		Prisoner 2	
		Confess	Don’t confess
Prisoner 1	Confess	(6,6)	(0,9)
	Don’t confess	(9,0)	(1,1)

Source : Pena and Arroyabe (2002)

However, there is another choice for both prisoners if they compromise with each other. If both of them confess, each will get six months in jail and if neither confesses, each will get only one month in jail. This possibility implies co-operation between the prisoners by promising each other not to confess. In fact, each prisoner still has a temptation to double-cross the other by promising not to confess, and then confessing to ensure they will be released. Thus, both prisoners would choose the stable strategy, although it is not the most optimal solution, that is both “confess”.

The “pollution game” is another example in which pollution acts as the external factor affecting the business environment. When the business environment is not effectively controlled, companies will maximize profits and pollute the natural environment rather than install waste management equipment to control their wastes. It is obviously known that if the organization behaves appropriately and addresses its polluting operations, its customers will have to endure higher prices due to higher production costs. The organization may go to bankrupt or lose customers if they raise their prices too high. Therefore, the pressure of competition among rivals and the will to survive will lead all organizations towards Nash’s equilibrium, in which no company will gain higher profits by reducing pollution as stated in Table 3 below. This is a situation where the “Hidden Hand” mechanism of perfectly efficient competition is destroyed, and the Nash’s equilibrium is inefficient from a social point of view, leading to intervention by the state in establishing legislation or taxes on emission which drive the companies to ensure the clearance of pollution (Less pollution; Less pollution). In this equilibrium, the organizations gain fewer profits than in the case of high pollution, but the common environment is protected.

Table 3: Pollution’ Payoff Matrix

		Company B	
		Less pollution	High pollution
Company A	Less pollution	(20,20)	(-10,100)
	High pollution	(100,-10)	(70,70)

Source : Pena and Arroyabe (2002)

3.1.1.2 Nash's Bayesian Equilibrium - Static Games with Incomplete Information

The two examples mentioned above imply a recognition that the agents have complete information about rivals' preferences. Nevertheless, the basic point is that agents do not know their opponents' exact strategic plans, e.g. prices, etc. The incomplete information game indicates the case where agents do not get full information about their opponent's attributes. In this uncertain situation, agents are able to use a series of probabilities to prepare possible actions for the game. The agents are called Bayesian. Bayesian agents will transform their initial perceptions derived from their identical distribution of probabilities into the opponents' behaviour. In this case, Nash's Bayesian equilibrium will determine the actions each agent takes to obtain the maximum payoff after receiving information.

3.1.1.3 Dynamic Games with Complete or Incomplete Information

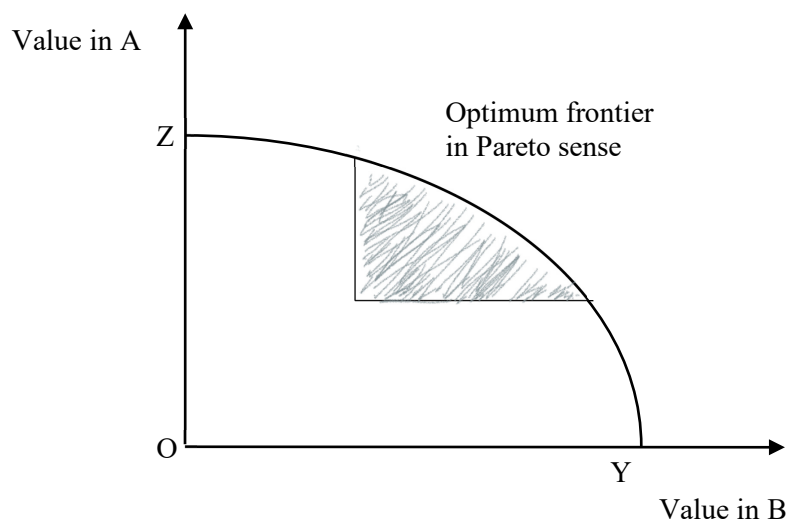
Agents make their decisions rapidly and permanently without envisaging other factors occurring during their negotiations. In this situation, agents can make decisions, based on a pre-established order, to generate a temporary route for the game, which can be illustrated by the case of auctions. Selten (1975), Kreps and Wilson (1982) introduced the concept of perfect equilibrium and developed a model for dynamic games to improve on the previous literature.

3.1.1.4 Cooperation between Agents

Many formal models have been constructed to provide useful analytical elements to address the development of co-operation and its steadiness in certain circumstances since 1950. In order to formulate principles for co-operation, a framework based on two behavioural assumptions for agents should be: (a) the agents follow their own interests; and (b) the agents attempt to maximize their utility, and search for their own economic efficiency, also known as Pareto's Optimum.

Taking into consideration that resources are allocated effectively during co-operation, in a classic Pareto sense, it is impossible to improve the welfare of an agent without affecting the other. Since it is always possible to improve the situation of an agent, without creating prejudice to others, this implies that there will be no wastage in efficient situations. Pareto's concept of efficiency can be explained with the following example. We assume an economy where, only two agents, A and B, exist. Figure 8 below shows the combinations of utility levels which each can obtain with the goods consumed, explaining the frontier of utility possibilities. Given a quantity of resources in the economy, the frontier shows the maximum utility level that A can reach corresponding to each of B's utility levels. The negative gradient shows that, in the event that no resources are wasted, then, in order to improve the overall well-being of A, it is necessary to withdraw resources from B, while in the meantime, this worsens the economy's overall well-being.

Figure 8: The Frontier of Utility Possibilities



Source: Pena and Arroyabe (2002)

From any point inside the frontier, it is possible to improve one agent's well-being without prejudicing the other, by moving towards the frontier. Agent B obtains all goods at point Y, and its utility is at the maximum level, given that the goods exist. On the other hand, at point Z, Agent A has all the existing goods, and its utility is at its maximum possible level. Both points Z and Y are efficient in a Pareto sense. Even efficiency, in a Pareto sense, represents a criterion for knowing how wasteful a certain situation is. Nevertheless, it does not tell us anything about whether this is the best way of allocating resources (points Z and Y are obviously unfair and very inequitable). The crux here lies in how to define an equitable allocation. With regards to this, and the different viewpoints presented in the literature on the concept of equity, we should emphasize:

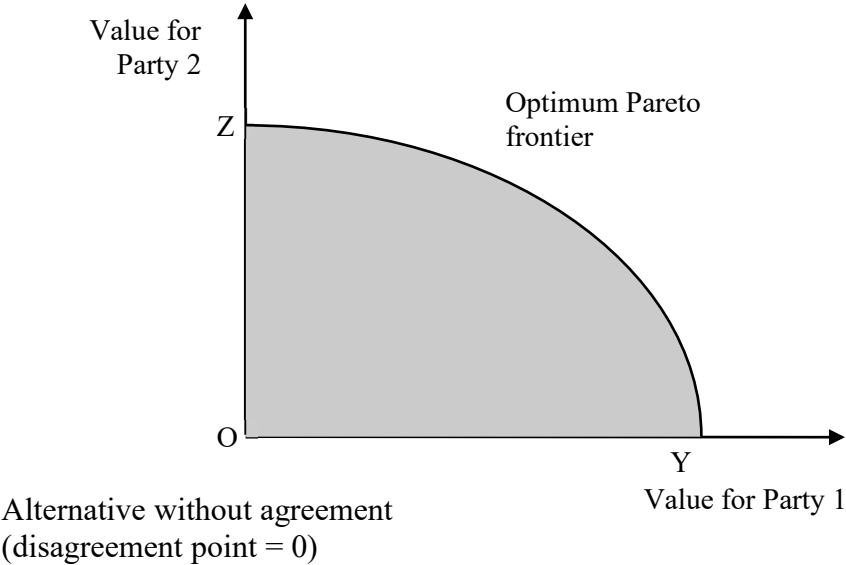
- The Utilitarian point of view, which considers everyone's utility to be equal, and therefore, maximizing total utility for all members of society.
- The Egalitarian view, which involves a fair and equal distribution of goods among all members of society.
- The Rawlsian view, which allows inequalities by arguing that fair and equal distribution of resources can eliminate the incentive of the majority of productive persons to make an effort. By rewarding the most productive people, more goods and services can be produced to improve the overall well-being of the poorest members of society.
- The market-based view, according to which the results of resource allocation processes in a competitive market are equitable because it rewards those who are most capable and who work the most.

3.1.2 Solutions to the Co-operative Game: The Core of the Co-operative Game

The theory of co-operative games concentrates its efforts on searching for optimum solutions from a Pareto point of view. The key aim here is to reach an agreement between agents intervening in the process. Co-operative negotiations can be represented graphically, as shown in Figure 9 below. The figure represents a negotiating situation where two interested parties

can reach various agreements, and which we shall call the results of a co-operative game. Each party may evaluate, on a numeric scale, the attractiveness of each possible agreement, including the possibility that no agreement is reached, the starting point (point zero in the figure), which is the denominated point of disagreement.

Figure 9: The Frontier of Negotiation Possibilities

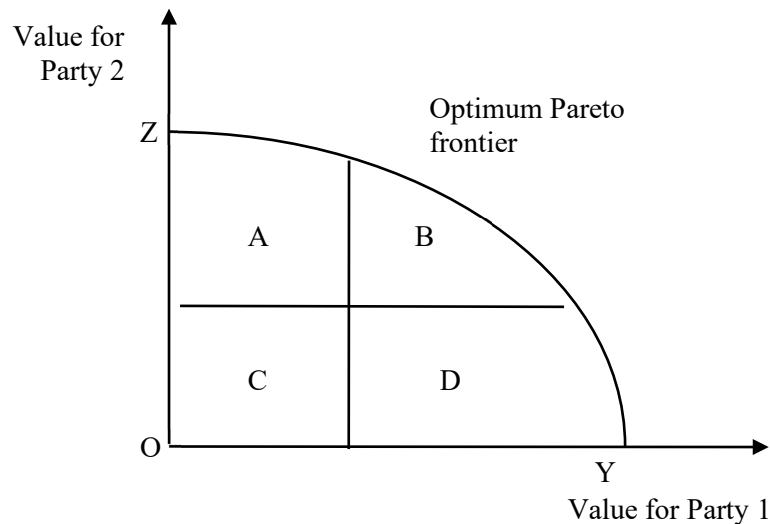


Source: Pena and Arroyabe (2002)

A utility, or gain, is the result of successful negotiations for an agreement. The best alternative for each party is represented by an inner frontier set at the utility, which will be obtained from a negotiated agreement. This curve represents efficient agreements, or rather, possible agreements from each party’s point of view, as well as regarding questions that cannot be improved without prejudicing the other party. This curve refers to the Paretian frontier of the negotiating situation. The shaded area, which represents the combinations of the different possible agreements, is called the negotiating area.

The theory of co-operative games assumes that co-operation will take place when the game’s result is a Paretian optimum. With the assumption that having many Paretian optima happens in all games, the theory concentrates on the criteria development aimed at deciding which form of Paretian optimum should be considered the solution to the game, which has led to the existence of a great number of very different solution concepts. Sebenius described the ‘negotiator’s dilemma’ from the solution proposed, which proves to be very interesting. The latter concluded that, two types of strategy can be deduced from the negotiating process between economic agents: (a) Co-operative strategies that attempt to create value and to share it; and (b) Competitive strategies aimed at gaining value over the other party.

Figure 10: The Negotiator's Dilemma



Source: Pena and Arroyabe (2002)

Figure 10 here showcases the results represented graphically. The negotiator faces four possible situations in the dilemma:

- In Zone A, the optimum frontier determines efficiency, but not equitable solutions, since Party 1 co-operates, and Party 2 competes;
- In Zone D, as with Zone A, the frontier determines efficiency, but also not equitable solutions, since in this case it would be Party 1 who competes and Party 2 who co-operates;
- In Zone B, the optimum frontier determines efficiency and equitable solutions, where both agents collaborate; and
- Zone C determines a series of solutions that are sub-optimal, from an efficiency standpoint, and where it is in both parties' interest to compete and not to co-operate.

Both efficiency and equity principles, therefore, represent the main stay of co-operation between rational economic agents. In order for co-operation to take place, alongside both negotiating agents searching for joint economic efficiency (Pareto's optimum), these solutions should also be equitable, in line with those where the agents attempt to create and share value.

3.2 Incentives to Co-operate via Repetitive Games

Game theory's objective is to analyse outcomes in a specific context when it is required to specify the players, the choices, the outcomes, and the payoffs to the players. The game allows players to make their choices or select their strategies as well. The assumption of rationality in game theory is extremely strong because all players are assumed to be rational and have the ability to do unlimited calculations.

This assumption has been broadly challenged, and Herbert Simon (1982) has emphasised that people are normally limited by their situation, constrained in processing information, as well as to being limited by the shortage of time to make choice decisions. Therefore, according to March (1978), people prefer to employ the rule of thumb rather than delving further into

detailed calculations. People tend to experiment rather than attempt to seek out a careful, optimal solution, and will be more likely to mimic the success of previous actors than to experience the situation in a full manner themselves (March, 1978).

In recent years, researchers working on game theory have reduced the weight given to the assumption of rational actors and have begun examining numerous forms of adaptive behaviour (Samuelson 1997, Hofbauer and Sigmund 1998, Fudenberg and Levine 1998, and Young 1998). The previous research on adaptive actors and evolutionary processes characterizing co-operation theory is now relatively infrequently mentioned in game theory.

Game theory was created to fill the gap in understanding about why one person's decision could affect another person's decision. Thus, game theory assists in analysing decisions which affect other people's decisions, with these decisions being labelled "strategies". Co-operation theory employs game theory as the basis for its analysis, and the prisoner's dilemma game is mentioned by most previous researchers. In this game, players have a set of choices, which are defined as either co-operate or defy, and the outcomes, called the payoffs, are determined by those choices.

Finally, the payoffs produced have four outcomes. These are: Reward, for mutual co-operation, R; Punishment, for mutual defiance, P; the Temptation payoff for unilateral defiance, T; and the Sucker payoff for unilateral co-operation, S. The prisoner's dilemma is thus defined as $T > R > P > S$, with the second condition of $R > (S+T)/2$ being added to obtain optimal mutual co-operation. In such a game, players can set a strategy to decide each of their moves and choices based upon the information given them. Players will have an opportunity to establish co-operation based on the mutuality of their expectation for their future. Tit-for-Tat is an example of this reciprocating strategy for the iterated prisoner's dilemma game, which allows players to co-operate on the first move, then provide decisions following on from other players' previous moves.

Up to this point, we have looked into game theory (basic outlines) and the criteria according to which agents will participate in co-operative games. We have also highlighted how mutually co-operative behaviour provides greater benefits for the group than an individual agent's unilateral actions. Nevertheless, in assessing agent behaviour, we assume that each agent will pursue their own interests (individual utility) and maximize utility by obeying economically rational criteria.

At the beginning of this chapter, we analysed the example of the prisoner's dilemma. This shows how individual rationality can lead to collective irrationality, and to the worst-case scenario from a collective point of view. In a game of this type, which is only going to last for one round, the most interesting rational option for each individual consists in not co-operating (both prisoners will receive one-month sentences if they choose to remain silent and not co-operate, the most favourable and mutually equitable outcome for both parties).

It should then be asked if there is any possibility of co-operation taking place, and under what conditions or circumstances. Axelrod (1984) answers this question by analysing a particular type of co-operation, which cannot be generalized, called reciprocal co-operation. Reciprocal

co-operation, according to this author, argues that co-operation between selfish and rational agents is possible. This can be achieved, if the temporary dimension is introduced in repeating the game an indeterminate number of times, and if such agents decide to base their respective behaviour norms with relation to the other party on the reciprocity principle.

Co-operation may take place in the present, when the probability of the two agents meeting and being connected in the future is high, he stated. This argument is based on the grounds that two-time dimensions are introduced into the context of repeated games, that is, the past and the future between the agents, these time dimensions substantially change the static nature of the prisoner's dilemma situation.

In a repeat game situation, where the temporary dimension is specifically introduced, there is some probability the two agents may meet again in the future. In this aspect, today's decisions will not only affect the present, but will also exert an influence on the future decisions of both agents. Present decisions constitute past information for agents in the future. With this rational behaviour assumption, this information will be incorporated into the decision-making process in the future.

In the event there is a strong probability of prolonged interaction, either more frequent or longer lasting, between the two agents in the future, each will have a mutual interest in adopting co-operative behavior, expecting it to be reciprocated by the other party because this mode will maximize their future outcomes. A necessary condition for co-operation may be associated with the prolonged interactions. However, this may not be sufficient to ensure co-operative behaviour between the parties.

Nevertheless, what behaviour norms the agents will adopt still remains to be resolved. According to Axelrod (1984), the most interesting and profitable behaviour, is a 'tit-for-tat', which is based on the principle of reciprocity. This is a question of a conditional strategy which consists initially of co-operation and subsequent mimicry of the other agent. This behaviour, therefore, incorporates a guarantee mechanism to avoid opportunism by the other party, the punishment for not co-operating in successive games. This punishment signifies a huge loss in future outcomes for the other party with respect to what is potentially achievable should both agents co-operate. This guarantee mechanism, in turn, benefits from reputation and learning, resulting from past interactions.

The tit-for-tat strategy is credible in that if one player cheats, it is obvious the other player will not continue to comply with the agreement. The threat of cheating in the future becomes highly credible and sufficiently supportive of a monopoly equilibrium result. The probability of two agents meeting again depends on the environment in which they are located, generally speaking. Distance studies of proximity between the agents is likely, at least initially, and can be tackled from three perspectives:

- Geographical, where physical distance is the relevant variable;
- Sectorial, where proximity, as a productive activity, is achieved through complementary and similar activities; and

- Organizational, where joining associations or federations acts as an avenue which leads to organizational proximity.

In-depth knowledge and understanding of the environmental structures where the agents are located affords the potential for reciprocal co-operation to be measured. From this approach, one means of promoting co-operation in a situation of distant proximity consists of reorganizing the socioeconomic structure by favouring the creation of associative networks, or the emergence of companies with complementary activities to existing ones etc., such that the proximity levels can be increased, and future interaction levels augmented.

Game theory is applied in many competitive scenarios and the participants are called players. Further researchers also agree with the traditional definitions and develop the theory in a broader context. Osborne (2002) defines a player as an individual or group of individuals making a decision. Camerer et al., (2001) outline the assumptions of the game theory, in which all players formulate beliefs based on their analysis of what others might do, then choose a best response given those beliefs, and adjust best responses and beliefs until they are equal. Camerer et al., (2001) emphasize that these assumptions are sometimes violated, meaning that not every player behaves rationally in difficult situations. Osborne and Rubinstein (1994) highlight that the basic assumption that motivates the game theory is that decision-makers are rational and they reason strategically. These researchers also state that decision-makers are aware of their alternatives for optimisation.

Osborne (2002) explains game as description of strategic interaction that includes the constraints on the action that a player can take and also the player's interests but he does not specify the actions that the players do take. Turocy and Stengel (2001) highlight that a game with only one player is usually called a decision problem, and a game is any situation where there are at least two players. These players may be individuals, groups, firms, nation or any combination of these. Pindyck and Rubinfeld (2009) present an example for games as a scenario where organizations compete with each other by setting prices, or a scenario where a group of consumers are bidding against each other at an auction. Turocy and Stengel (2001) also emphasized that the notion of the game theory provides methods to formulate, structure, analyse and understand strategic scenarios.

Sihlobo (2012) views that game theory is not simply a matter of mathematics but it also concerns the real world as well, involving decision-making by several players that also affect the interests of other players. Players are accommodated with their preferences, their information, the strategic actions available to them, and how these factors influence their payoffs (returns). In any situation where there are more than two players, a decision by player 1 does also affect the interest of other players (player 2).

Game theory covers several respects such as economics, political science, and psychology, as well as logic and biology. It builds an abstract between theory and real life situation. In real life situation, game theory can be observed in many marketing and sales industries, in auctions and in peoples' behavior. Organizations in large industries apply game theory in most of their management strategies, when a certain decision or strategic development has to be taken. Some game strategies do come into practice and this theory is used in many fields of competitive

scenarios and can even be suitable in any economic related field where decision-making is of importance.

3.3 Coopetition between Organizations

The coopetition concept and its variants have been debated in the literature. This concept was born in early 1913 and used to illustrate the relationships between independent dealers of the Sealshipt Oyster System. The dealers were urged to co-operate, for the benefit of the system overall, while they were simultaneously competing with each other in the market. Dagnino and Padula (2002) conceptualize that, at the inter-organizational level, coopetition is taking place when the organizations share a partial congruence of interests with one another. The organizations will co-operate with each other when they can benefit from an increased value of the total system compared to the value created without interaction with each other. According to Bengtsson and Kock (2014), coopetition is delineated as a paradoxical relationship between two or more actors which involve in cooperation and competition interactions.

Coopetition is a system of interactions and characterized by both dependence and independence of the entities involved, therefore, it is essentially a matter of symbiotic integration (Ralandison et al., 2018). The inter-organization competition is based on the structure of the industry and the organizational behavior (Baum and Korn, 1996), emphasizing the collection of strategies using to shape the market and achieve dominant position (Miller and Chen, 1994; Santos and Eisenhardt, 2009). Coopetition is viewed as a direct or indirect interaction or relationship; and is defined as a direct collaborative and competitive interaction among actors (see Bengtsson and Kock, 2000; Gnyawali and Park, 2011) and as a value net (see Brandenburger and Nalebuff, 1996). The cooperative and competitive interactions in coopetition are divided between actors in the value net definition whereas they are divided between activities in the relationship between any two parties. Bengtsson and Raza-Ullah (2016) argue that a distinction must be taken between coopetition as in network context, and coopetition as a relationship between organizations. Coopetition is described as occurring along one field, where increased competition occurs at the expense of co-operation, and as a combination of one competition and one co-operation where different levels of both co-operation and competition needs to be managed (Bengtsson et al., 2010).

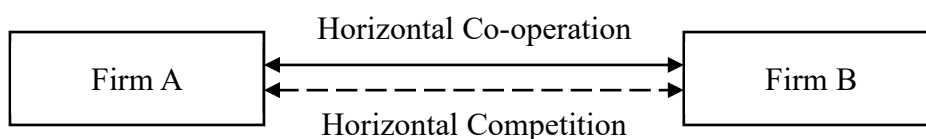
The concept of coopetition is multifaceted. Coopetition corresponds to a relationship of simultaneous cooperation and competition. When cooperation takes place on the same level of the value chain, coopetition is horizontal (Gnyawali, He and Madhavan, 2008). When two direct competitors cooperate vertically, it is then a vertical coopetition strategy (Depeyre and Dumez, 2010; Pellegrin et al. 2013). The organizations can adopt simultaneously horizontal and vertical coopetition strategies (Fernandez and Le Roy, 2010; Depeyre and Dumez, 2010; Chiambaretto, 2011, Pellegrin et al. 2013).

Horizontal coopetition

Nalebuff and Brandenburger (1996) reflect in coopetition strategies all complementary relationships between organizations. Coopetition is considered to be both cooperative and competitive behavior between organizations offer the same type of product to the same group

of customers (Pellegrin et al. 2013). When cooperation is horizontal, competition is qualified as horizontal competition (Bengtsson and Kock, 2000; Le Roy et al, 2010).

Figure 11: Horizontal Coopetition

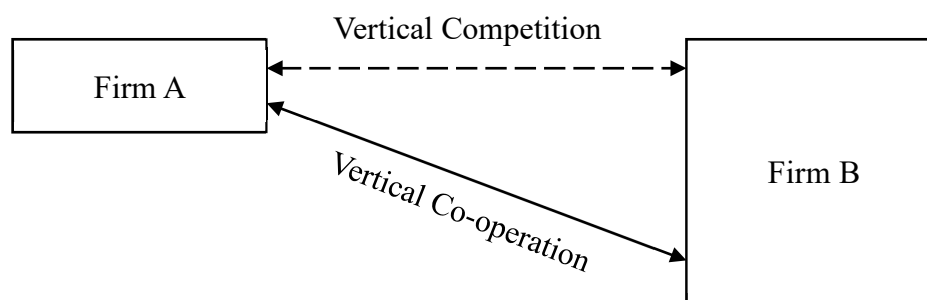


Source: Adapted from Pellegrin-Boucher et Le Roy (2008)

Vertical Coopetition

Other actors are interested in competition relationships in which competition is horizontal and cooperation is vertical (Padula and Dagnino, 2002; Depeyre and Dumez, 2010, Pellegrin et al. 2013). For example, a supplier of electronic components may cooperate with a computer manufacturer, while at the same time producing computers (Chiambaretto, 2011). Vertical cooperative relationships often relate to distribution activities and the distribution of resources between different actors (Kaplinsky and Morris, 2001; Kotzab and Teller, 2003; Kovacs and Tatham, 2009). According to Bengtsson and Kock (1999), horizontal coopetition relationships are based on a strong interdependence between organizations due to the competitive dimension of their relationship. They are less visible, more tacit and more informal than the vertical competition where relationships are more visible, more formal and more constrained. The following figure 12 shows the vertical competition strategy.

Figure 12 : Vertical Coopetition



Source: Adapted from Pellegrin-Boucher et Le Roy (2008)

In some complicated cases, when two direct competitors adopt both vertical and horizontal cooperative relationships, then horizontal and vertical competition strategies will combine (Fernandez and Le Roy, 2010; Depeyre and Dumez 2010; Chiambaretto, 2011; Pellegrin et al, 2013). For example, Fernandez and Le Roy (2010) note this type of competition in the space industry. Cooperation is both vertical and horizontal. Those companies do not hesitate to pool resources located on the same links of the value chain in order to create new ones, which constitutes a real cooperative learning dynamic between competitors (Fernandez and Le Roy, 2010).

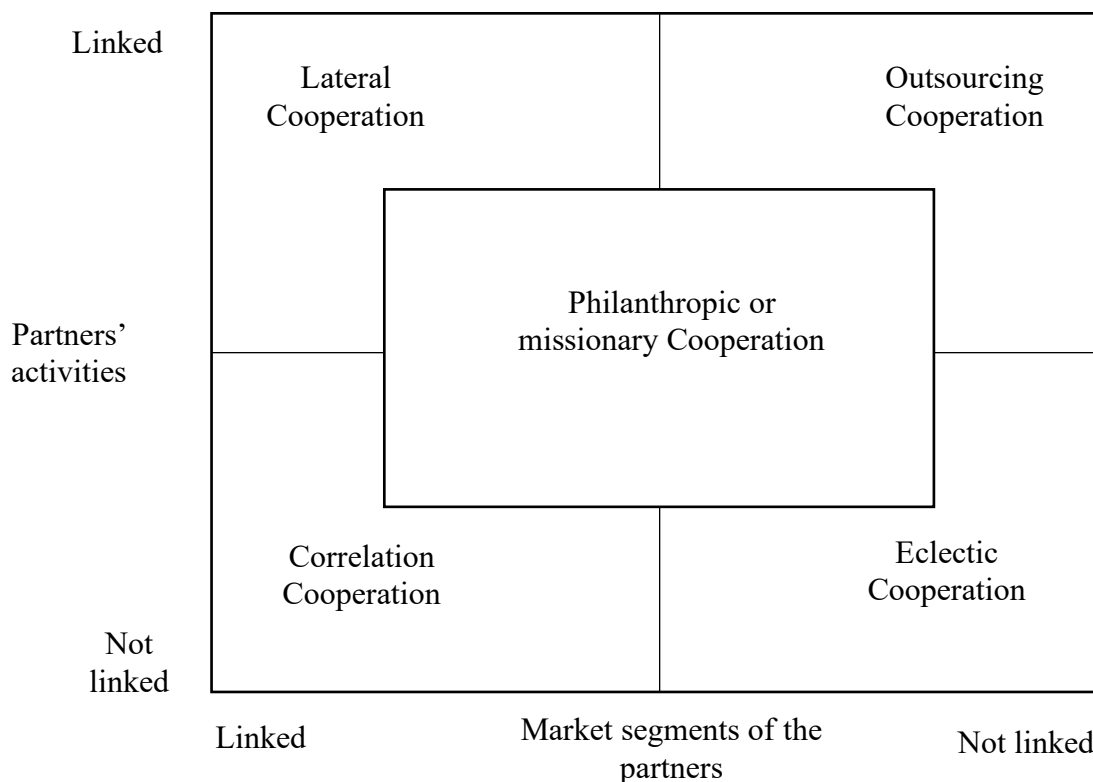
Coopetition often occurs when organizations share the same market, explore technological knowledge and research new products, while competing for market share and exploiting the knowledge at the same time. Such interactions arise concurrently at different levels in the value chain, in which the case the arrangement between PSA Peugeot Citroën and Toyota can be an example. These two car manufacturers have shared components for a new urban vehicle, which was introduced as the Peugeot 107, the Toyota Aygo and the Citroën C1. This type of co-operation helps these companies save costs while allowing them to remain strongly competitive in other domains.

For organizations, coopetition brings several direct advantages, such as cost reductions, complimentary resources, and technological transfers, and yet some difficulties, such as distribution of control, equity in risk, and trust, do exist. Coopetition allows two or more organizations to be involved in the same project using a more cost-efficient plan. Asgari, Afshar and Madani (2013) suggest employing co-operative game theory as a foundation for equitable and efficient allocation of the benefits of co-operation among the organizations. In their studies of the construction industry, the co-operative organizations would no longer see each other as direct competitors but look for co-operation in resource planning and allocation in order to reduce costs.

At the intra-organizational level, coopetition is implemented between individuals or departmental units in the same organization. Some studies, based on the Game theory and social interdependence theories, have shown a presence and relationships between concurrent co-operation and competition among departmental units, the antecedents of coopetition, and organizational behaviours on knowledge sharing. According to researchers such as Schrader (1990) and Von Hippel (1994), knowledge sharing has two values, including the basic knowledge value (r) and the value-added (v). The value-added (v) indicates that the receiver will gain an advantage while the sender is unaware they are losing knowledge value by sharing with others. Payoff is considered the outcome and the value which the parties gain or lose by sharing knowledge.

During coopetition, the co-operation agreements which competitive organizations have legally employed, with more or less strategic links, provide new capabilities to address challenges in the rapidly evolving business world. In order to produce various possible forms of agreements, Milliot (1999) proposes the following typology to identify five essential types of inter-company co-operation. Figure 13 below presents the co-operative structure with two axes. The vertical axis presents the level of activities between the entities involved in the relationship, and the linkage between activities where the operations are carried out by the co-operating organisations. The horizontal axis makes it possible to identify the links between the market segments targeted by the partners. There is a linkage between market segments here when the members of the agreement are interested in the same client. The intersection of these axes allows for identification of the following co-operation types.

Figure 13: The Cooperative Structure between Organizations



Source: Milliot (1999)

Lateral Cooperation (joint venture, licensing, franchising, etc.)

This type of co-operation is characterized by the co-operating partners sharing related fields of activity and market segments. It generally translates into an association between otherwise direct competitors, i.e. the agreement signed between PSA and Fiat, to produce a single-cabin vehicle.

Outsourcing Cooperation (subcontracting, franchising, distribution agreement with specialized wholesalers, etc.)

This type of co-operation regroups the organizations with shared activity links, but who do not aim at the same clients. The co-operation is carried out by partnerships between the entities which have complementary competencies and resources on the vertical axis, i.e. the sustainable subcontracting agreements between Renault and its main suppliers.

Correlation Cooperation (functional cobranding, distribution agreement with non-specialized retailers, etc.)

This type of co-operation engages organizations which are interested in the same market segments, but who do not have a direct connection. This interesting type of co-operative relationship has an essentially commercial objective, such as in the agreement between Air France Group and Hertz where a range of complementary services are exchanged.

Eclectic Cooperation (symbolic cobranding, sponsoring, joint venture, etc.)

This type of co-operation represents those organizations having both separate activities, and market segments. It generally allows partners to develop a differentiation strategy by benefiting

from the partner's image and/or skills, i.e., the joint venture established by Mercedes and Swatch to design and manufacture a Smart car.

Philanthropic or Missionary Cooperation (can be added to the four previous types)

This type of co-operation can relate four types of relationships presented above. It is based on the defence and/or use of social messages, namely: ecology, humanitarian action, defence of minority, etc. for example the partnership between McDonald's and W.W.F. to launch the WEcology journal to educate young people about environmental issues.

Philanthropic Co-operation requires specific competencies, in order to manage the inter-organizational relations, based on communicative and relational networks. For Upton and McAfee (1996), they employ these skills to identify and organize the information broker whose mission is to design and update the system, maintain the system's security, and seize the development opportunities. The authors cite the example of AeroTech, launched by McDonnell Douglas, which is aimed at facilitating collaboration with various partners. This broker manages the database, develops software, offers training manuals, translates different formats, etc. in order to help associated organizations integrate into this community, orchestrated by the multinational aspects of the aerospace sector.

In the literature, it is argued that co-competition is the most advantageous relationship between competitors (Bengtsson and Kock, 2000) and organizations can achieve efficient performance and economic benefits by gaining valuable resources from their co-competitive relationships and strengthening their competitive capabilities (Gnyawali and Mahavan, 2001, 2006; Lado et al., 1997). However, there are contradict debates from other researchers such as Kim, 2009; Park and Russon, 1996; Ritala, 2012 stating that co-competition can be a risky relationship that is detrimental to co-operation effectiveness and can result in failure because the significant level is not defined on how cooperation affects the nature of competition and organizations are concurrently competing for consumer demand. The co-competition strategy does not only reflect the relationship between the co-competition entities and organizational factors, but also manifest the economic and market context (Ritala, 2012), which explain why co-competition strategy is often employed in highly dynamic and competitive markets. In addition, organizations in the high-tech industry have the tendency to collaborate with their competitors when there incur high research and development expenses. Thus, the changing environment and organizations' reconfigured resources achieved through co-competition may force organizations to re-evaluate their co-competition strategies.

SECTION 4

CO-OPERATION BETWEEN ORGANIZATIONS

The concept of business co-operation is considered a 'hybrid' form between the market and the organization (Williamson, 1991), or as an intermediate organizational form (Imai and Itami, 1984) between externalization, or pure market, and internalization of productive activities, or pure organization. There are different possibilities to form a business co-operation in order to obtain economic efficiencies by minimizing transaction costs.

4.1 Co-operative Forms between Organizations

Main co-operation Agreements with or without Capital Participation

Co-operation agreements with capital participation normally constitute minor shareholdings or crossholdings between co-operating organizations. A new organization may be established if the involvement of capital is greater, and this is known as a joint venture or common subsidiary. Co-operation agreements without capital participation are formalized by means of written contracts or verbal agreements. The choice of co-operation type depends on the conditions of the co-operating organizations, and the following:

- The duration, intensity and frequency of the co-operation activities proposed;
- The need to make a joint investment; and
- The degree of trust between the co-operating companies.

If co-operation is intended to be long-term, for example, this will involve frequent relations and require intense co-ordination, which means a co-operation agreement with capital holdings may be the most suitable option. If, on the other hand, the co-operation proposed does not require the joint use of resources and is for a limited period of time only, it will not generally be necessary to establish capital holdings.

We classify the order of co-operation forms as following based on the characteristics of co-operations (Jakobson et al., 2015). The characteristics of the potential co-operation form mostly involve legal aspects that imply a high meaning. From this perspective, we need the involved partners, the type of co-operation form and the legal form to cover legal requirements. Besides the adaptation to the imposed regulations, a co-operation form can handle the objective liability and the characteristics of the co-operation forms such as the model provision, specialization and cultural fit should respond to this point. The technical or personnel quality as well as their level of know-how from both parties should have a close relationship to the work's complexity or technical requirements. Having possible co-operation forms identified, further characteristics can help to identify a certain organization. The organization's position shows the experience and the reputation (Silva, 2013) of a co-operation form. Groppo and Hec (2009) state that more experience and high reputation should help to minimize most of the challenges and Niehaves and Krause (2010) state the experience in a prior co-operation leads to more success in co-operation.

Joint Ventures

A joint venture arises from co-operation between organizations who create a discrete independent organization to carry out a particular activity. The most important feature of a joint venture organization is that it is set up with legal status and engages in business on its own behalf, albeit in co-ordination with the strategic objectives of the parent organizations. Joint ventures can be classified as follows:

- As a function of shareholders' contributions: if they have the same capital holding, these are usually called balanced, or symmetrical, and asymmetrical if any party has a significantly larger holding; and
- They may be domestic or international, according to the geographical area in which they operate. In this case, normally international, the local partners provide personnel, market access and knowledge of surrounding business conditions; the foreign organization basically provides the technology and production capacity.

The common subsidiary is an organization established to operate in an invested country and owned or controlled by its parent company. This organization may or may not manufacture in that country. The establishment of a common subsidiary, because of the importance of a parent organization's investments, therefore, involves a greater commitment and more risk.

Outsourcing

The organization will entrust another organization, as its subcontractor, on any contract including fabrication of product components, part of the production process, or even the entire production or service provision. In this co-operation form, the main organization, known as the contractor, can economize costs, employ short-term capacity from the subcontractor or they may lack the necessary internal resources to undertake the projects. By subcontracting, the organization can concentrate on its core activities and use its sufficient resources to work more effectively while transferring its requirements externally to reduce costs and fixed assets. This allows greater flexibility and adaptability.

Licensing

A license is a contract whereby an organization, the licensor, grants another organization, the licensee, the authority to use its industrial property rights in exchange for payment. Rights will often include patents, trademarks, design, author's rights, know-how, as well as technical information. Wider agreements, such as the supply of materials, technical assistance, as well as to the extent of information sharing on advances made with respect to the technology, which is the object to the licensor, may be included. The aim is to cover gaps in an organization's technological development. The license contracts are more common at the international level, as they enable the organization which owns the property rights to avoid risky commercial and industrial operations, whereas, the licensee, who more often than not understands the market better, has the chance to use these rights to optimize greater technological competence.

Spin-offs

This form of co-operation consists of a corporation, usually a larger one, creating a new, discrete, external entity from a previously internal division or department. This encourages and supports the creation of another team of skilled workers from within their existing workforce.

The big concept here, is that the new organization becomes a partner in carrying out the relevant activities that were previously performed by the former department or division of the large organization. This is known as the spin-off agreement. This form of co-operation is sometimes a result of the large organization's processes disintegrating, as above-mentioned. Certain activities can be externalized this way to enable concentration on key productive processes as well as for cost reductions. The activities that are spun-off are normally subcontracted to subsidiaries, often owned or managed by ex-employees of the parent organization. The activities matter not only in production, but also in information technology (IT), maintenance services and others. This spin-off agreement generally implies that the main organization provides technical and financial support, whereas the new organization commits to providing the services or activities for which it was created, to the main organization.

Franchising

The franchise is an agreement through which an organization, the franchiser, grants another organization, the franchisee, the rights to market or make an established product in exchange for certain economic compensation. The franchise contract usually corresponds to the following characteristics:

- The franchisee owns the business and makes the necessary investment to establish and operate it;
- The franchiser supplies a name or brand, and a common display and design in franchised establishments.

Franchisers also provide know-how and corresponding technical and commercial assistance, with conditions:

- There is franchisee exclusivity in the franchise agreement for a particular geographical area; and
- Payment of economic compensation to the franchiser in respect of the right of exclusivity (geographical and of image or product).

Franchises come in many forms, mainly depending upon the type of activities, and the level of integration among the participants. Franchising eliminates growth boundaries for the franchiser, since generic expansion involves substantial investment of resources. For the franchisee, it represents an opportunity to take advantage of the franchiser's resources while maintaining a level of autonomy and independence.

Consortiums

Consortiums, also at times called temporary organization associations or associations of economic interest, are agreements that aim to carry out activities jointly. The activities conducted are generally characterized by one organization alone not having the total technical or financial capacity to undertake those activities unilaterally. Consortiums enable the partners to maintain their legal independence, although they represent greater involvement in the form of common bodies whose basic mission is to co-ordinate partners' activities, and, in some cases, representation before third parties. A consortium allows both investment costs and risk management costs to be shared, alongside any profits earned.

Networks

Networks are a form of co-operation, characterized by numerous agreements made by participants which may link public or private institutions, as well as financial bodies, among others. Co-operation agreements are links which allow participants to join networks. Key components in a network are the wide variety and complexity of relationships, which generally belong to the large numbers of international corporations and organizations involved. The main point of the network structure is the importance of indicating that networks are dynamic bodies, possibly beginning with one structure and evolving when changes to the environment occur as a result of external influences such as markets, political changes, etc., and internal changes brought on from experience, increased numbers of partners, and so on.

The formal structure is reduced to a minimum in the 'ad hoc' network, since the partners generally know each other quite well and maintain cordial, frequent contact, and communications between interested partners are intensified as the need arises. Each partner organization is responsible for its own area of influence within the network, thereby allowing quicker and more flexible responses to meet the requirements of potential customers. Network complexity is generally based on the requirement to establish intensive regional co-operations, backed by an international vertebral column. Each partner in the network is responsible for building its own regional network, with access to support mechanisms, information sources and potential customers thereby being multiplied. This type of network is appropriate for specific projects requiring a heterogeneous group of collaborators.

Clusters

On a higher plane of analysis, we have observed the appearance of organization associations seeking a common adaptation to surroundings, or a series of individual units adopting a specific organizational form, that is, forming themselves into a group. This type of adaptation, generally carried out between small and medium-sized companies, involves the existence of a certain degree of independence and co-operation in performing a series of tasks, in addition to the necessary pooling of resources, capacity and competitive potential in the search for a joint strategy or co-operation to deal with environmental conditions. These groups, which Porter calls 'clusters', are defined as 'natural associations between companies in a certain sector with other companies or supporting sectors related to their activity'. He distinguishes sectorial clusters into two parts: delectable productive sectorial systems on a country-wide scale, which represents a co-operation mechanism between large and medium sized companies; and local clusters with productive interaction phenomena on a local scale, which represent co-operation between small and medium sized companies.

The cluster's main feature consists of a diversified complexity of mutually dependent companies, where the participants combine co-operative and competitive features in their relationships. All authors emphasize the clusters' most important significance as being the generation of a series of externalities based on shared information flows, and knowledge based on a network of established relationships between all the participants. Because of the peculiar nature of the cluster, it is possible to talk of a culture that is common to all participants: external companies should not compete against an individual organization, nor even against one group of companies, but against whole subcultures, whose organic nature is what makes them most difficult to imitate, and is, therefore, their most sustainable competitive advantage. In analysing

organizational groups from a theoretical point of view, evolutionist theories try to establish parallels between biological evolution in species and in organizations. They, therefore, emphasize the importance of communal adaptation compared to individual adaptation, when a specific form of organization is adopted by a series of units that thereby become a collective.

4.2 Principles for Co-operation

For companies seeking to carry out business functions jointly, otherwise known as co-operation, a contractual relationship is involved. There must be beneficial incentives for both parties in this form of joint effort and collaborating companies will obtain greater utility than they otherwise would have individually.

- What is the optimal number of companies that could profitably be involved in a co-operation agreement?
- What types of incentives may be involved?
- How will the costs and profits be mutually shared accordingly?

The principles, taken from the theory of co-operative games, have been postulated (Pena and Fernandez de Arroyabe, 2002) as following:

First Principle

When the total utility of acting in conjunction with others is greater than the sum of utilities for each participant, a co-operation incentive arises. This is specified as the characteristic function of co-operation, under the incentive to co-operate, from the theory of co-operative games.

Second Principle

The amount of profits obtained via co-operation will be shared, with the total sum of profits allocated to each participant, in equal portions, from the total profits earned (Pareto's optimum or maximum economic efficiency). Total profits obtained, or the co-operation earnings function, determines the denominated core solutions of the co-operative game. This represents the profits, or earnings, obtained by each agent.

The core, as seen in Figure 8, is divided by the frontier of utility possibilities that show the maximum level of utility an agent can achieve for every level of the other agent's utility, or efficient situations in a Pareto sense. Inefficient co-operative solutions can be produced within the frontier, making it possible to at least improve one agent's utility without prejudicing the others. Furthermore, in order to compare points located on the frontier, the need arises to seek solutions or equitable distribution that result in an equilibrium situation, which the agents have no incentive to abandon.

Third Principle

Each participant is required to contribute resources, at least on similar parity, to those provided independently under Individual rationality. This characteristic form of co-operative function produces joint profits with respect to the individual situation. The co-operative game is questioned in a scenario where, in order to obtain greater profits or earnings, each agent must contribute more resources to act co-operatively than if acting individually.

Fourth Principle

Profits obtained by a certain number of companies will be lower than those to be obtained by incorporating a new element into the co-operative, as determined by the condition of group rationality. In accordance with the First Principle, the incorporation of a new agent into the co-operative should increase collective utility. The Shapley index determines that each agent's average value contribution to the co-operative group has already been established.

In the example of the prisoner's dilemma, the game solution is known as the Nash equilibrium when both prisoners choose to confess in order to maximize their own benefit. In addition, there exists another co-operative equilibrium where the results are favourable for both players. One agent may come into conflict with other agents when that agent pursues their own objective, whereas they could achieve better results by engaging in co-operation. With co-operation, each person is required to contribute to, and receive from, the agreement, and commit to corresponding liability. However, it is not a certainty that all parties will comply with the agreement because any person may prefer to take advantage of the co-operation without incurring any associated cost. Returning to the example of the prisoner's dilemma, if one of the prisoners fails to remain silent, the other prisoner, the one who confesses, would be freed from jail one month earlier.

As a result, there is a tension within the co-operation when an individual interest is exercised. In reality, the dilemma between conflict and co-operation increases because co-operation agreements are made between institutions and organizations with various objectives, preferences, capacities and decision-making criteria in uncertain environments. The tension can be considered a threat to, or conflict in, the co-operation among organizations when there is an incompatibility between the actual and desired action. The situations leading to outright conflict may originate from incompatible objectives, disagreement over decisions, or contribution of resources. On the other hand, implied conflicts may derive from the attitudes and feelings of the parties surrounding communication, expectations, functions and perceptions. Therefore, the difficulty in predicting the agents' behaviour can be considered a game of dynamic equilibrium when conflicts occur in the co-operation, leading to management complexity.

4.3 Technological Co-operation between Organizations⁵

Technological co-operation aims to achieve competitive business results, based on research, technical development and technological innovation. The technological co-operation allows the organization to combine technological capabilities and research results to achieve competitive advantages through collaboration with other organizations. Technological co-operation can be defined as an agreement between two or more independent agents who develop a technological process by joining or sharing their skills and/ or resources (Arranz and Arroyabe, 2009). The type of co-operative agreement depends on contingencies of the environment, the characteristics of the item to be transferred, the qualities and behavior of the contracting agents (Gulati, 1998).

⁵ Mainly based on Pena and Fernanderz de Arroyabe (2002)'s book: Business Cooperation: From Theory to Practice

4.3.1 Technological Change as a Contribution to the Economic Growth

According to the Royal Spanish Academy's dictionary, the concept of "technology" is defined as a series of industrial processes for a particular product or sector, in which technology can be defined as an incorporation of skills, or an integration of applications, enabling people to implement productive activities or services based on available means and resources. Nezeys (1985) distinguishes the difference between technology and technique by indicating that technology relates to knowledge, with the employment of specific skills, to improve and create new techniques, whereas technique itself, relates to an operation and production process which requires implementation in order to produce a product. From a techno-economic perspective, the concept of technology is considered to be the knowledge of a production system, and the techniques and skills relating to this system are what allow the people to perform effectively.

When changes occur, such as with the introduction of new processes or production technologies, the innovation introduced to the market is known as technological change. Dosi (1983) states that technological change can be seen in different forms, such as new services, product feature modifications, product variations, etc. The technology change, on one hand, is considered a factor in reducing production costs, as with production technology, on the other hand, a factor creating an altered demand for an existing product is a product innovation. Generally, in the classical and neoclassical economics, where all economic agents are identical and the competition model is perfect allowing all production possibilities, the technological factor has been barely recognized. However, the technology and technological change, by analysing the production function between output and products, can be determined in an exogenous manner, and analysed with economic variables such as costs, productivity, prices etc.

Schumpeter (1961) recognizes that technological changes contribute to economic growth and introduce technological considerations to the production function theory in neoclassical economics. This marks the initial study on the influence of technological variables in setting the relationships between productivity and market structures. In further research in the 1980s, the technological change is referred to in structural theory under both macro and micro-economic points of view. In regard to the macro-economic viewpoint, one group of researchers studied the relationships between different aspects of the macro-economic effects on technological progress, including models of economic development linked to production functions, international trade theory, economic cycle interpretations, economic development theory, etc. From the micro-economic viewpoint, another group focused on the analysis of the strategic competence of the technological nature and how Research and Development (RandD) affects the industrial structure and markets. The key studies refer to scale performance, the design of structures for the market, the state's role toward technical advances and in regulating markets, the institutions' role in protecting patents, other mechanisms, and RandD policies.

4.3.2 Technology as a Competitive Factor for Organizations

Schumpeter (1961) was the first researcher to suggest the importance of a company's innovations in growing its business. Before the 1970s, Ansoff (1965) followed with many theoretical and empirical studies, the role of technology was analysed as a competitive factor

and technological innovation was identified as the central factor in the organisation's competitiveness. In the 1980s, the analysis of the impact of technological innovation on the company's competitiveness had been developed to be seen as a strategic factor, which can be synthesized as:

- The competitive weakness of the U.S. compared to Germany and Japan in relation to medium and high technological products in the global market. This lack of U.S. competitiveness drove the dollar devaluation in 1971, and the abandonment of the Bretton Woods monetary system.
- The oil crisis of 1973 led to crude oil and industrial price increases. Consequently, companies in developed countries sought to implement massive changes in production processes through the application of energy saving technologies. This became one of the main strategies to reconfigure the industry through the adaptation of technology.
- The demand for capital goods slows when industrial reconfiguration has taken place. The companies strive to diversify their products, based on new technology, as a strategic factor and search for new markets for company growth.
- The demand from new industrial powers in the emerging Southeast Asia markets and radical innovations, including advances in micro-electronics, new materials, laser applications and alternative energy sources, brought severe pressure to bear on the competitiveness of organizations and the markets.

From diversified research, it can be concluded that technology itself will not bring competitive advantages if it is not attached to any organization which administers it efficiently. According to Kay (1993), innovation can be a factor to contribute to competitive advantage but the result of innovation is actually the consequence of combining competitive advantages. The process of turning innovation into a competitive advantage requires a strong support of various elements. From the 1990s, many theoretical works have implied that new technology employed in the business strategies will play a primary role in the organization and relate to all of the organization's activities, formulating an importance of intangible resources, such as available technology, or staff training and motivation, or brands, etc, in order to build the organization's competitive advantage. These resources will be combined to build complex interaction patterns, including specific abilities or distinctive competencies. In general, the technological developments, innovations, and the structure of technology systems, are considered important factors in order that an organization may attain competitive advantages.

4.3.3 Technology Co-operation as a Cost Reduction Instrument

Arrow (1962) states that technology is an unacquired knowledge, but an experience knowledge accumulated through learning, and with technological skills. With the accumulation of learning experiences, the technological skills of an organization can be acquired and developed, leading to improved performance. On the other hand, the theory of resources and capabilities proposes that technology would be considered as an organization's intangible resource, which is an endogenous variable, a factor of competitive advantage, and a fundamental resource for the

organization. Since the acquisition of technology certainly involves transaction costs and heavy investments, organizations in a situation of technological need, will seek co-operation to reduce costs. Small organizations, especially, must build co-operative relationships with other organizations including companies, government, universities, institutions, etc.

In this move to a co-operation process, public policies relating to technology and the government's role in formulating the relationships between scientific, technological and industrial systems should be re-considered. The fact that the development of technology, which is a strategic factor in improving the organization's competitiveness, has stimulated a change in public policy design in technological development, places greater emphasis on technological management policies at the organizational level. In addition, technology creation is heavily focused in developed countries because they are pioneers in researching, experimenting and accumulating technological skills. The resulting technology processes are labelled technology transfer when shared with other countries. Due to differences in technological culture, co-operation becomes an ultimate mechanism to transfer the technology between the principal and the recipient.

The technological process is a result of the interaction and co-operation implemented by agents and institutions, which later formulates the relationships between science, technology, industrial systems and innovation systems. According to Rosenberg (1976), the system with such interaction aids in multiplying and accelerating technological results. Consequently, Dosi and Orsenigo (1985) stated that the improvement of the theory of technology a great influence on institutions, when they are motivated by the existence of uncertainty, to fulfil their needs for technological requirements. According to these authors, institutions have dual roles in acting as decision makers and organizers of interaction and co-operation between agents who participate in the innovation process.

Furthermore, globalization has flourished due to advances in transportation and communications technology, leading to increased growth in international trade, idea and cultural exchanges, and the production of "techno-globalism", also called the internationalization of technology. Since "the nature of technology is engaging, stimulating, and well worth pondering at length" (Arthur, 2009), since it requires a high spend to acquire, making it difficult for a single organization to afford the knowledge, organizations need to search for a new mechanism through which to attain this knowledge. In regard to this matter, co-operation is thought to be an instrument to reduce transaction costs and open accessibility to technological skills to all organizations which require the technology. Bayona et al. (2001) prove that organizations can share the costs of the innovation and overcome the lack of financial sources by doing co-operations. Therefore, organizations that consider innovation costs to be difficult to control will have a lower tendency to co-operate because they concern that the lack of management would be more severe when more organizations are working on the same innovation project. However, Sakakibara (1997) and Hagedoorn (1993) prove that although the lack of finance is a motivation for co-operative research and development, it is not the most important factor when the need to access to knowledge and complementary technologies taking precedence. Later, Cassiman and Veugelers (2002) prove that motivations related to the cost of innovation increase the tendency to co-operate.

SECTION 5

EMPLOYMENT OF SOCIAL REGULATION THEORY IN CO-OPERATIVE NEGOTIATION

Cooperative, collaborative or interest-based negotiation involves parties in an effort to jointly meet each other's needs and satisfy interests (Folberg et al., 2010). Negotiation is pondered as a collaboration to solve the challenge of finding opportunities for creating additional value. In practice, the competitive and co-operative elements are inseparably interlink. In this section, we present the Social Regulation theory originated from Jean Daniel Reynaud (1999), in which his concept of negotiation is employed to analyze the interrelation between issues, anticipated future relationship between the parties, the counterpart's negotiation approach, and the amount of stake can influence one's approach to negotiation.

5.1 Social Regulation Theory of Jean Daniel Reynaud (1999)

Originating from the study of industrial relations and collective negotiations in France in the 1960s, Reynaud proposed a theory relating to the social processes of regulatory production and the resulting collective action (Reynaud, 1999, 2003, 2004). Social regulation is a process of regulatory production which is unceasing, constantly developed, amended, weakened or strengthened by social actors. The study of industrial relations clarifies that the protagonists agree, not on general or specific principles, but on the creation of legitimate rules. Such a perspective is elaborated by Flanders (1968, p. 20) in positing that "*negotiation is not a bargain, a collective agreement is not a collective bargain*", whereby negotiation does not allow the selling or buying of labour but creates the rules for setting the terms of this transaction. Collective bargaining produces common rules that govern individual bargaining, "*by controlling, for example, learning quotas or women's work, the unions in their power created as much as rules affecting any market*" (Flanders, 1968, p. 17).

The form of joint drafting of standards can, therefore, not only be interpreted as an economic process, but also a political process as noted by Bevort and Jobert (2008, p. 30), where the English trade unions consider negotiation also achieves social goals. For Reynaud, the Union does not stand outside, but at the heart of the company in which it contributes endogenously to normative production, and negotiation is not intended to destabilize the company, but to make opposition between employers and trade unions an opportunity to define common and legitimate rules together without external intervention. Of course, this is qualified because of massive State intervention in negotiations, particularly since 1981. The State will doubtless intervene in negotiations when it involves issues such as the improvement of employment yet control of the negotiations by the State risks confiscating the employees' normative power. Professional negotiation not only sets salaries, but invents the rules for determining salaries, while at the same time, these rules govern and direct the interactions between the protagonists. In other words, the industrial relations system is unencumbered by the social system but creates the social system. This system is not governed by standards and external values, but by the rules which the actors involved constantly invent.

Industrial relations are still an area to deepen the theory of social regulation, because this theory allows emergence of forms of new social regulations such as "local regulations" (Jobert, 2003) which make it possible to deal with employment, training and additional issues, now the purview of local authorities, while at the same time encouraging the protagonists to construct spaces of regulation allowing for political decisions by the communities, such as in local joint commissions, site delegates, aid for the organization of working time, amicable conflict regulations, etc. Regulation around these projects contributes to the formation of a collective actor, but also compromises in the conflicts of power and rules which order their social exchange.

The theory also clarifies the limits of these social regulations, such as a threat that national regulations address, a reduced capacity for socio-economic actors to mobilize, or projects competing with others. In this perspective, Thoemmes (2009) emphasizes collective bargaining which allow collective agreements to be obtained in small enterprises, where the actors invent a rule of law to set the conditions for the exchange. This rule allows entry into the negotiating field by transforming an employee into a representative able to negotiate with the employer on the arrangement of working time even, though the employee is not unionized. Against the odds, even with this inexperienced actor, these local agreements are much more favourable than those concluded when trade unions are present, which is testimony to the importance of "intermediate regulations" in the construction of a legitimate social order.

Despite opposition from Friedberg (1993) on formal structures to informal structures, Reynaud (1988) differentiates between two types of co-operative regulation which are part of a social relationship, where they are produced by actors in terms of the collective. On one hand, with the Control Regulation (CR), those who hold the power to create the regulation strive to control the situation and "stand outside the regulation of a social group" (Reynaud, 1988, p. 10), whereas on the other hand, the Autonomous Regulation (AR) designates "the construction entailing the constraint and learning of a set of social norms". There are two unavoidable sides of Control and Autonomous regulations, opposing in a certain way, yet they complement each other in the life of the organization (Bréchet, 2008). In organizational operation, this issue can be seen in the form of a Joint Regulation because it designates an agreement and the proceeds of a negotiation (Reynaud, 1988, p. 15). This Joint Regulation can be understood as a Control Regulation as well, "since it comes from the outside which give rules to the actual units of the performance" (Reynaud, 1988, p. 16; Paradeise, 2003).

Ultimately, the notion of social regulation allows for explanation of how individuals react to the constraints of actions, interpret situations, invent cognitive frameworks to find sense in action, mobilize and confront judgements about the effectiveness of a particular type of organization (Terssac, 2003, p. 15). The emphasis is on the "social fact" of action as a process producing regulations, and not on a sequence of events which would suffice to find the chains and understand their relations to the action. Thus, the theory of social regulation leads to considering the relations of power in all its diversity: to separately analyse the different structures of the game which allow them to be understood; to pose as empirical problems which the factors can explain in different transformations; the influence each system can have on another; or even general tendencies of transformation of social systems (Reynaud, 2003).

5.2 From Joint Regulation to Social Regulation

If the starting point of the theory of social regulation remains labour relations, it does not confine this theory to the field of collective negotiation. While negotiation is the most rationalized form of social exchange, this theory also suggests less elaborate forms of social life and less explicit forms of social exchange. Extended to the domain of organizations, this theory allows an understanding of the genesis of social order as the product of the regulations which take their sources both on the side of the management and direction, as well as on the side of subordinates or performers.

For performance analysis, the logic of Joint Regulation supporting the TRS (Theory of Social Regulation) links the work of ergonomists and psychologists on the role of the deliberates and controversies in the construction of working situations (Clot, 2010), in respect of the conflict of standards in which the actors are struggling (Schwartz, 2009), or on the working groups developing or revealing "the rules of trade" (Caroly, 1997). On one hand, the transformation of regulations is impeded from the point of view of competition, oppositions or contradictions between existing regulations. On the other hand, the Control Regulation and Autonomous Regulation express the power relationships between the actors, the flexibility, and the legitimacy of the hierarchies, to impose on the regulation of work.

5.2.1 Joint Regulation: The Meeting between Autonomy and Control

The theory of social regulation postulates the existence of a plurality of sources of legitimate regulations, from which it aids in understanding how they form, oppose or combine. For Reynaud (1999, p. 20), in the company, *"What is happening is not only interests, but claims to the rules, the wills of regulation. But one of the parties holds, in practice, the statement and the execution. The other seeks to promote informal practices, clandestine networks of complicity: at best, to introduce them into the official organization; at least to shelter and enforce them. It is convenient to present this meeting as that of two regulations, control regulation and autonomous regulation."*

The outcome of this meeting is, for Reynaud (1997), a joint regulation understood as "any regulation which is the result of several legitimacies", not forgetting they are built in opposition to each other and thus in innate conflict. For him, joint regulation does not exclude asymmetry in power relations when he observes that *"joint regulation such as that developed by employers and unions in a collective agreement is a control regulation to open organizations"* (Reynaud 1997, p. 115).

The regulation of control aims to construct a certain effective, and if possible, legitimate, social order, which is developed to bind individuals together according to a certain discipline aimed at enforcing a set of social obligations, whether imposed or consented. It does not alter the undeniable attempt to control, which is lodged in these regulations, including obliging the partners to enter the game, and to invest in previously delimited spheres of action. Autonomous rules signify that the social actor is never allowed to be fully imprisoned in the settings of independence. The social actor claims to have his rights recognized, to be able to develop local initiatives, to assert his ability to produce his own rules of action, or his willingness to co-

manage a system. Its action is a response to constraints, faced with heteronomous devices, a unitary State, external devices for structuring activities, institutions which regulate its behaviour, and control and sanction mechanisms. The actors attempt to have their actions recognized as legitimate, or to assert their effective contribution, in the definition of the rules, and attempt to exercise their autonomy by nibbling margins of manoeuvre or negotiating.

5.2.2 Joint Regulation: A Special Case of Social Regulation

This concept of Joint Regulation, as viewed by various authors, will be discussed strongly. To begin, Reynaud (2003) shows that the employment rules derive from joint regulations, but of a particular type. The management of unemployment differentiates the specificities of local situations, and the control regulation emanating from "above" crushes all possibility of any emergence from another source of regulation. For a local regulation, it should facilitate the processing of these own social demands brought by local actors, as these requests do not necessarily overlap with national directives. Similarly, with assistance plans in terms of employment, the regulation is not as common as one might think, since a stakeholder, the employer, attempt to seize the initiative by ensuring the job seeker enters into a contract directly with Unedic, without the national employment agency being utilized. The employer will not succeed, but this shows the terms of the regulations are never definitively fixed, and the stakes are unpredictable.

Other authors show the regulations can be one-sided, such as stated by Terssac and Lalande (2003), on rules created for the modernization of the SNCF (National Railway Company, in France) not being derived from a meeting between autonomous regulations and control regulations, but rather from initiatives aimed at changing the methods of machine maintenance. These initiatives would be experimented with autonomously and then imposed on all, whereupon they would be used to challenge the existing order and combat those in the established order. With the negotiation focused on the terms of the exchange, the commitment of each modernization project is exchanged against the recognition and promotion of the people in the organization and, symmetrically, the retirement means the exclusion of any management position.

In addition, the rules are fluid not fixed, so can change sides depending on the phase of the project, moving from autonomous regulation to control regulation. Initially, these rules are autonomous, produced by a minority group that affirms its competence, more than its power. Subsequently, these same autonomous rules will be extended and become constraints to all, therefore the rules of control whose non-compliance is sanctioned, then a system of obligations is imposed.

The initiative to develop autonomous regulation on the margins or against official rules is extended by a normalization which transforms the autonomous regulation at the beginning into a regulation of control imposed on all. Joint regulation seems to be an extreme, and limited case, of social regulation. To be concerned with social regulations, it is not to be concerned with the regulations of a system already built, but to the objects of its construction. It is not to clarify the regulations of an activity under the effect of constraints, but to take as object the very activity of regulation, whereby individuals assemble their constraints, accept them or

challenge and reject them. This is not to analyse the modes of regulation according to singular mechanisms or structures, but to clarify the manner in which, and the reasons why, individuals act in this way.

What is observed is that the actors construct a system of exchange and co-operation for the production of the rules, and in this theory, this system of actions and sustainable interactions is called social regulation. This social regulation does indeed order the action and fix the constraints, through activity by which the actors develop their intentions, construct the meaning of their actions and finally regulate their independence. Concerning social regulations, it is not to hypothesized that the actors will find harmoniously acceptable and respected compromises, it is on the contrary, to assert the difference of rationality. But at the same time the interdependence places individuals in a situation of interaction and forces them to confront and exchange, including their differences, and this interdependence forces them to find common rules to regulate and to engage in a social exchange. It is not a question of regulating a pre-existing system to ensure it functions in accordance with predetermined standards, but to build the social system in accordance with the expectations of the actors, and the resources they possess, to make themselves understand. The place of social regulations in the construction of systems remains essential, as these regulations form the basis for social exchange and the construction of system values.

There is no normative system to which the social regulations would obey, and no displayed quantities to which the regulations would conform to correct the drift. As a consequence, to be interested in social regulations, it is not to be interested in the regulations of an erected system, but to take its construction, which is not to clarify the regulations of an activity under the effect of constraints, but rather to take the activity of regulation whereby individuals construct their constraints, accept them or challenge them. This is not to analyse the types of regulation according to singular mechanisms or structures, but to clarify the manner and the reasons why individuals act like this.

5.3 Fundamental Concepts: Conflict, Regulation and Negotiation

Three fundamental concepts constitute the main core of the theory: "the conflict, the negotiation and the regulation", which form the title of a book by Reynaud (1999), bringing together some of his articles.

5.3.1 The Notion of Conflict

First, the notion of conflict is a core concept of this theory. In the first sense, open conflict is the expression of discontent that could not be resolved other than by this type of expression. For him the conflict is not a sign of "anomaly", and one could say that in the theory of social regulation it would be the lasting absence of conflict that would at least be an "anomaly". So, conflict is a "normal" type of operation, since each actor carries a rationality by which he tries to make others admit to influencing their behaviour. The meeting of these actors through conflict constitutes a community capable of building collective action, defining common interests, of engaging together, or in other words, to manage their social interactions by inventing common rules and being admitted, by the parties in attendance, which will form the

rules of the game. It is the analysis of the conflict which allow one to appreciate the scope and the solidity of this solution, because the conflict "*shows how far the regulation works, in which cases it is inadequate or inconsistent, and what are the elements of change that threaten the study of the conflict shows the limitations and weaknesses of the regulation and makes it possible to make assumptions about the potential changes in this regulation*" (Reynauld, 1999, p. 113). Groux (2001, p. 223) shows that the conflict "on" the regulations does not exhaust the notion of conflict which can be extended to conflicts "of" rules, "conflicts that act within the system of rules and thus become part of the production of rules (and regulations) ". In Alter (2009), Alter, shows a deficit of social regulations, since on the one hand with the subordinates "one gives" while on the other side of the framework "one takes", thus the conflict emerges when the regulation is interrupted by the non-recognition of what is given by the employees, while the management fails to receive.

5.3.2 The Notion of Regulation

Then the concept of the rule of the game is central to designate the product of the meeting of the actors, since what is produced and what is exchanged by the actors, are rules. As Reynaud writes in the preface to his second edition of the "Rules of the Game", to lay down rules is because the actors assert a claim to the rules. The contribution to the formation of the regulations, their maintenance or their transformations is consubstantial to the action, not the result of any submission of this action to values. What is the regulation? In the same preface, Reynaud (1997, p. IV) specifies his definition: "*The regulation is an organizing principle. It may take the form of an injunction or a prohibition to strictly determine behaviour. But it is more often toward an action guide, a yardstick that allows to carry a judgement, a model that directs action. It introduces into the symbolic universe of meanings, partitions, and linkages*". Inspired by the work of Schelling (1980), the author of the theory of social regulation updates the permanence of the regulations, which are self-maintained, as in the measure of interest corresponding to the respect of the regulation.

5.3.3 The Concept of Negotiation

Finally, negotiation is the third core concept of the theory of social regulation. Collective negotiation is part of a more or less formalized framework, which is established to solve a problem common to both parties, leading to an agreement which is a provisional text crystallizing the commitment of the protagonists, and taking place within existing agreements. In Flanders' (1968) way of designing the negotiation, he defines negotiation as "*any exchange where the partners seek to modify the terms of the exchange, any relationship where the actors challenge the rules and their relations*" (1999, p. 15). Negotiation is a settled Exchange which implies agreeing on rules in such a way that the exchange takes place, such that to negotiate is to make common rules, because for Flanders "what we exchange are rules" and it is this production of rules that is the basis of social exchange. The important thing is the creation of the regulations which aim to put order into the interactions, to frame and to place the actions under the control of the parties present. To say that negotiation leads to the creation or modification of the regulations, does not exclude negotiating situations in which the rules prevail such as the traditional rules sometimes mobilized or the institutional rules, but which will be reinterpreted. The closeness of this theory with the theory of the negotiation of Strauss

(1992) whose work is to invent a social order negotiated by the intervention of the skills of medical personnel. Indeed, the hospital's goals for patient healing are accepted, but this document does not solve the daily problems of the work. It is necessary to negotiate and invent a solution, which makes negotiation much more than a bargaining position or optimization of viewpoints. The invention of solutions to situations is indeed the result of an interaction, but which is settled just as for Strauss, "the sick-psychiatrist relationship is a structured interaction".

Viewed in this manner, there are two consequences: these devices are one of the conditions for finding advantageous solutions, and moreover, the actors commit themselves to use this form of rules to manage their opposition. By choosing to use them, the actors create social ties and by refusing them, they affirm a willingness to separate. The concept of negotiation does not apply to everything, or everywhere, because there are many co-operation situations in which the partners do not negotiate in order to act together, either because the agreement is sufficient to not require negotiation, or because they have agreed not to question, at least for a time, the existing rules. The very notion of negotiation is a general category of the theory of social regulation, because on one hand it is not limited to negotiation in form and institutionalized, which illustrates collective bargaining, but extends to forms of interactions which are the subject of confrontation and compromise, exemplified by "quasi-negotiations". On the other hand, it is a social regulation because it is not a stage of relationships, but a permanent process which accompanies relationships between individuals. Agreement or rupture are not the only ways to punctuate a relationship, since a unilateral decision may suspend it momentarily during the process, or a defection by one or other of the protagonists can interrupt the process. Finally, because it can take various forms, in that it can be implicit and result in questioning of the standards imposed, be individual when the employee discusses his contract or his remuneration or be collective when a party represents the interests of a majority of others, or additionally that it is increasingly relocated downwards and locally, at the company level and not the branch. Within this theory, negotiation is central, as it refers to the effort and the concessions which the protagonists make in order to elaborate and establish rules together: *"the conflict obliges to seek and formulate a common definition and mutually acceptable of its stake. Negotiation discovers or invents points of convergence of mutual expectations"* (1999, p. 235). The compromise, as a set of regulations accepted by both parties, confers the outcome of the negotiation with a legitimacy, yet the negotiation does not eliminate any asymmetry of the positions of the parties involved, rather, provisionally regulating the inequality of the ratio of forces, around an area of convergence acceptable to the parties present.

5.3.4 Negotiation Strategy

According to Walton and McKersie (1965), there are two different negotiation strategies: Distributive Strategy and Integrative Strategy. Distributive strategy refers to the behaviors that negotiators use when they try to claim as much value as possible for part. Integrative strategy refers to behaviors that negotiators use when they try to create values and claim values. Weingart et al. (1990) present two major findings for negotiation strategies. (a) Distributive strategy attempts to influence the counterpart to make concessions by using threats and emotional appeals and generatr single issue. (b) Integrative strategy obtain sharing information about interests and priorities, and then implementing tradeoffs to generate high joint gains. Other researchers prove that many negotiators generate high-joint gains by consolidating

information about interests and priorities that they gain during the first half of the negotiation and incorporate trade-offs in the second half of the negotiation (Olekalns and Smith, 2000; Adair and Brett, 2005; Liu and Wilson, 2011). Kong et al. (2014)'s study confirms that negotiators using distributive strategy claim more values than those who engage in less distributive strategy, but normally fail to identify tradeoffs that would have created values; on another hand, negotiators using integrative strategy create more value than negotiators using distributive strategy.

Distributive Strategy

Three different distributive strategies are defined in the literature: (a) take it or leave it, (b) objective standards, and (c) first offers and bargaining. Harnett and Cummings (1980) documented the "take it or leave it" distributive strategy as Boulwarism. These researchers found that negotiators naturally reject "take it or leave it" offer even this offer is better than their alternative one. Fisher, Ury, and Patton (2011) refer "objective standards" as a distributive strategy when a negotiator might use to justify the fairness of his offer and to influence the counterpart in order to make concessions. Objective standards criteria are used to measure or code the influence in negotiations (Weingart et al., 1990; Adair and Brett, 2005; Gunia, et al., 2011). Thirdly, other researchers such as Galinsky and Mussweiler (2001), Gunia, Swaab, Sivanathan, and Galinsky (2013) have anchored the effect of first offers used in bargaining strategy. Bargaining strategy is carried out with the principle of starting high/low level depending on the negotiator's role and need to concede to preclude the standoff. First offers strongly affect the ultimate outcome because the counterpart anchors on the opening offer.

Integrative Strategy

Walton and McKersie (1965) described an integrative strategy as a strategy that would capture the value needed for negotiators' interests and priorities. Pruitt (1981), in his further study, described three different integrative strategies in negotiations, which are (a) explicit information exchange, (b) implicit information exchange, and (c) heuristic trial and error. Explicit information exchange strategy consists of an exchange of questions and answers that generate insight (Thompson and Hastie, 1990; Thompson, 1991) about negotiators' interests (Fisher et al., 2011) and priorities (Walton and McKersie, 1965). This set of strategic behaviors has been shown in many studies as the simplest route for joint gains (Brett, 2014). The study of implicit information exchange and heuristic trial and error as integrative strategies has been less mentioned than explicit information exchange. Pruitt (1981) notices that negotiators have a tendency to ask the counterpart to concede on issues that are particularly high priority to the negotiator. Pruitt (1981) observe that negotiators' offers reveal information about their underlying interests and priorities and suggest that implicit information exchange embedded in the nature of offers and influenced attempts could substitute for explicit information exchange.

According to Pruitt (1981), negotiators engaging in heuristic trial and error will start the negotiation by proposing multi-issue offers that satisfy their high priorities. A concession to a lower level of priority is made when the counterpart rejects all proposals that the negotiator could make at the higher level of priority. Pruitt (1981) implies the negotiator can use heuristic trial and error strategy to offer multiple equivalent values before moving to a set of offers at a lower equivalent value. When the negotiator's multi-issue offer is rejected by the counterpart, the first negotiator reconfigures his initial multi-issue offer to see if the counterpart would be

interested instead of conceding. Heuristic trial and error strategy was a successful in generating joint gains although it did not generate insight. According to various researchers as Olekalns et al. (1996), Olekalns and Smith (1999), Adair and Brett's (2005), Liu and Wilson (2011), suggest that western culture negotiators may begin their negotiations by exchanging questions and answers about interests and priorities and then in the second half of the negotiation start putting that information together in multi-issue offers.

Conclusion of Chapter 2

In conclusion, Co-operation theory mentioned in this chapter helps to define the rules of cooperative management, which makes it possible to resist the constant incursions in the enterprise of dominating, competing rules (Draperi, 2006). The concept of negotiation does not apply to everything, or everywhere, because there are many co-operation situations in which the partners do not negotiate in order to act together, either because the agreement is sufficient to not require negotiation, or because they have agreed not to question, at least for a time, the existing rules. The very notion of negotiation is a general category of the theory of social regulation, because on one hand it is not limited to negotiation in form and institutionalized, which illustrates collective bargaining, but extends to forms of interactions which are the subject of confrontation and compromise, exemplified by "quasi-negotiations". Within this theory, negotiation is central, as it refers to the effort and the concessions which the protagonists make in order to elaborate and establish rules together. The compromise, as a set of regulations accepted by both parties, confers the outcome of the negotiation with a legitimacy, yet the negotiation does not eliminate any asymmetry of the positions of the parties involved, rather, provisionally regulating the inequality of the ratio of forces, around an area of convergence acceptable to the parties present.

CHAPTER 3

STRATEGIC FRAMEWORK FOR ANALYZING ORGANIZATIONAL RELATIONS

In this chapter, we present the employment of the ESO Tripartite Analytical Framework in Section 6 and the employment of two key concepts, namely Strategic Fit and Dynamic Capabilities in Section 7. The ESO framework focuses on the interaction between the external contexts of the multinational (Environment), the organization's orientations and actions (Strategy) and its capacity for implementation (Organization). Dynamic capabilities are used in the context of rapid changing environment (Teece, 2017) and dynamic capabilities are themselves considered resources by which to respond to new demands and deliver strong performance. Strategic fit will help to manage all internal elements within an organization in order to warrant an implementation process for reconfiguration or transformation, and managerial alignment will enable higher performance by maintaining a fit with the external environment. These theoretical frameworks play an important role in guiding the entire process of this study and they are relevant to three core theories that are used in this research.

SECTION 6

EMPLOYMENT OF TRIPARTITE ANALYTICAL FRAMEWORK

In this section, we present Lemaire's PREST model to define the dimensions of the environment that we examine. A business environment can be studied by looking at its various components which have a different influence on organization responses (Olson, Slater and Hult, 2005). In previous studies, environmental dimensions refer to external opportunities, uncertainty, complexity and threats and point to the importance of examining the environment to understand and explain how organizations come out with strategic decisions (Ostos et al., 2016). In this study, the relationship between strategic and environment factors is investigated based on managerial alignment, which helps to define capabilities and competencies to provide competitive advantage to the organization.

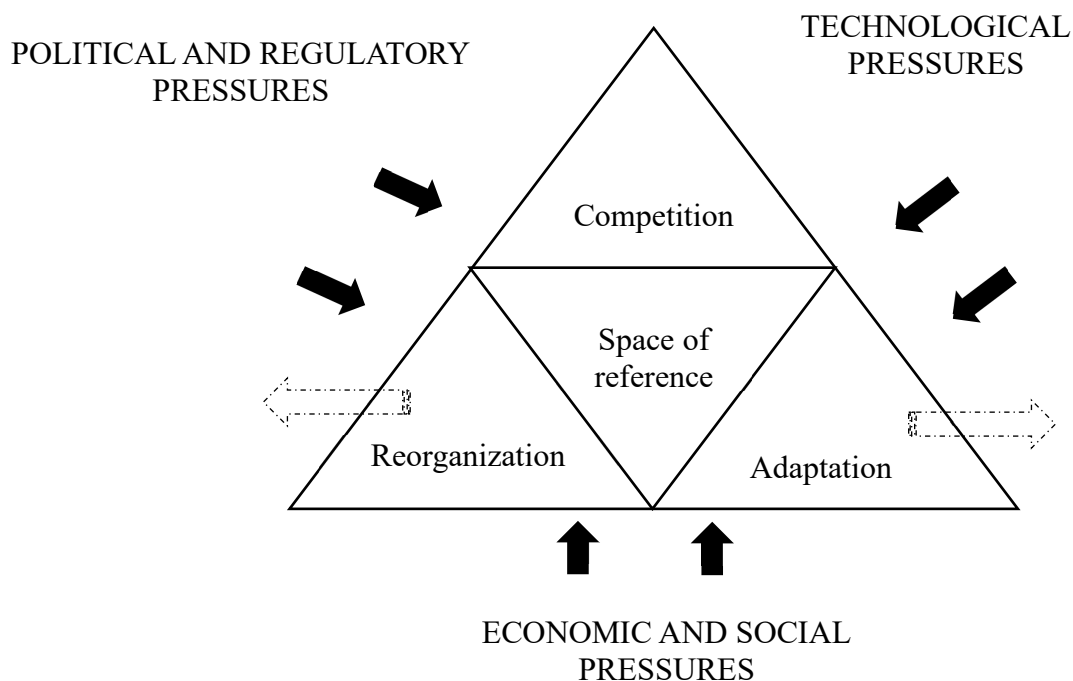
6.1 Adaptation of ESO Model

The key framework chosen for conducting this research is a tripartite model inspired by the work of Galunic and Eisenhardt (1994), and Sais and Metais (2001). The ESO model (Milliot, 2013, 2014) focuses on the interactions between the external context of the multinational (Environment), the organization's orientations and actions (Strategy) and its capacity for implementation (Organization). The ESO model allows contemporaneous study of causalities which illustrate the need to ensure alignment between making a decision (S) and implementing that decision (O). The relationship between Strategy (S) and Organization (O) is crucial to efficient management as it ensures the internal coherence of activities developed by an organization (Milliot, 2013).

We employ Lemaire's PREST schema (2000, 2013) to define the dimensions of the Environment (E). This model is reliant on the geo-sectorial reference space related to the

organization's internationalization. This zone of global extension the organization is applicable for a country, a group of countries, or the entire world, and relies on whether the organization aims to define its procedure in a narrowly focused or a broader way. For this space, the author distinguishes Political, Regulatory, Economic, Social and Technological pressures on three levels.

Figure 14: Multilevel Analysis of the PREST Model



Source: Lemaire (2000, 2013)

Level One conveys that external pressures exist on the macro-environment scale, for example, actors recognize forces applied on the business world. Next, from a meson-environment perspective, sights are determined to occupy a geo-sectoral space. The diverse actors working in this space recognize the stakes and challenges related to the external pressures, for example, rivalry, reorganization and adaptation. Finally, on the micro-environmental level, this focuses on the reference space which allows for pinpointing key levels in which the actor can mobilize, and the responses from organizations and their partners to the recognized stakes.

In the original model, Lemaire integrates the strategies pursued by companies on the micro-environmental level. To construct the tripartite model used for this research, on Level Three of the PREST model we need to distinguish the external stakeholders (e.g. strategic allies, suppliers, distributors, support organizations, credit rating agencies) of the firm whose strategy is under study. These stakeholders, key actors in the environment of proximity, exert an influence over the decisions made by the company and/or are affected by those decisions.

From the perspective of the development of an organization in a specific economic area, the analysis of the environment takes into account a number of factors regarding the national or supranational realms. These factors are considered to have a possible direct or indirect influence on the attitude of both local authorities and foreign firms seeking to expand their direct investments. These external pressures can be either favourable or unfavourable in respect to the

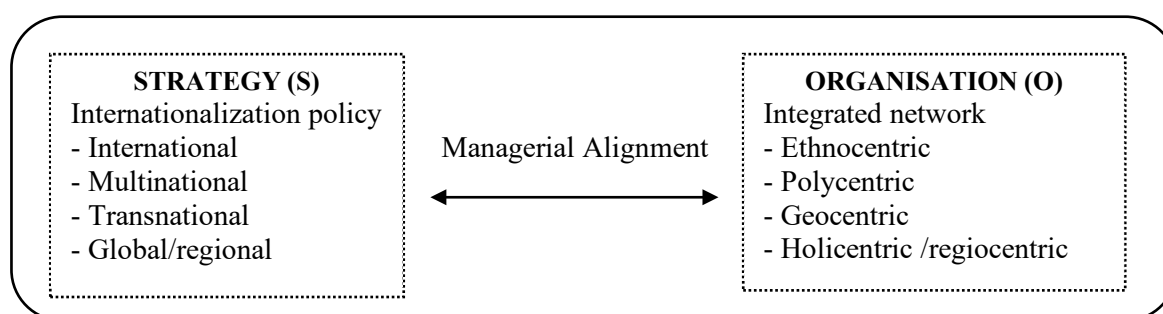
development of an organization's business, in the eyes of local authorities or the eyes of corporation decision-makers.

As the environment is in perpetual change, it is necessary for strategic planning to change accordingly in order to maintain a balance, or 'fit', with the external environment. The relationship between strategic and environmental factors is investigated, based on managerial alignment. Managerial alignment is a method for understanding the nature of business through the correlation of business processes and strategies. It is the process and the result linking an organization's structure and resources with its strategy and business environment. This method enables higher performance by optimizing the contributions of people, processes, and inputs to the realization of measurable objectives and, thus, minimizing waste and misdirection of effort and resources to unintended or unspecified purposes.

6.2 Managerial Alignments

In global business environments, managerial alignments should be viewed, broadly, as encompassing not only human and other resources, but also across organizations with complementary objectives. The use of managerial alignments allows an organization to envision its longevity and fact find practicable visions for the future. The significance of managerial alignment in a business context has been dedicated to fit between competitive business strategies, especially capabilities into internal factors. It is one of the main strategic approaches and suggests organizations will enhance their performance if they develop and implement their competitive strategies based on their resources and capabilities. Furthermore, due to the inherently dynamic nature of strategic alignment, dynamic capabilities have been advocated as a necessary part of any managerial alignment. An organization will achieve real alignment, where strategy and goals can help people move in a desirable direction. Recent research highlights the significance of the connections between direction, strategy, goals, and purpose to an organization's sustained performance. A business is best aligned, with respect to its corporate strategies, when the interests of all stakeholders in the business are in alignment with the strategic objectives of the business itself. Managerial alignment focuses energy, eliminates redundancy and conflicting efforts, and defines the capabilities and competencies which provide competitive advantages to the organization.

Figure 15: Managerial Alignment for International Ventures



Source: Milliot (2005)

To identify the action plans (S) adopted by a multinational organization, Milliot (2013) proposed a matrix based on three pillars of internationalization: market of reference, main entry mode(s), and main development mode(s). This matrix, built upon the cross between the level

of interdependence of activities and the level of concentration/dispersion of decision-making power, identifies four internationalization strategies: international, multinational, transnational and global/regional, as shown in Table 4 below:

Table 4: Typology of Internationalization Strategies

	Concentrated decision-making power	Dispersed Decision-making power
High interdependence between activities	<p>Global or regional strategy Principal market(s): multinational, regional, continental or global. Principal entry modes: final sales, limited duration partnerships and foreign direct investment Principal development form: standardization (international norms)</p>	<p>Transnational strategy Principal market(s): multinational, regional, continental or global Principal entry modes: final sales, limited term partnerships and foreign direct investment Principal development forms: standardization and adaptation (national, regional and/or international norms)</p>
Low interdependence between activities	<p>International strategy Principal market: country of origin Principal entry mode: final sales Principal development form: standardization (country of origin's norms)</p>	<p>Multinational strategy Principal market(s): host countries Principal entry mode: foreign direct investment Principal development form: adaptation (for each market, host country's norms)</p>

Source: Milliot (2013)

International Strategic Orientation

The company has a strong concentration of decision-making power and weak coordination of international activities. The entities abroad (point of sale, assembly factory, etc.) are, in fact, highly dependent on the pivot entity (head office, main factory, etc.) which are generally located in the company's country of origin. At the same time, most activities constituting the value chain are concentrated in the same country.

This strategy is characterized by a weak adaptation of the company's products offered abroad. The pivot market is, in principle, the original market. It is the conditions observed in this market which determine the concept, the manufacturer and the marketing of the products. Foreign markets are considered satellite markets which allow, as far as possible, the seizure of commercial opportunities. The primary mode of internationalization is the assignment of patents or the export of products manufactured in the country of origin. Licensing is sometimes used to disseminate know-how and brands. This orientation is often adopted by small and medium-sized companies which are studying foreign markets.

The Multinational Strategic Orientation

This strategy is characterized by a dispersion of decision-making power and a low degree of coordination between activities in different countries. In contrast to the international strategy, this orientation does not pay particular attention to the home market in order to approach foreign markets. It seeks to respond precisely to the conditions of each intended national market. It is the portfolio management strategy (collection of local activities) that results in a strong adaptation of the products. The big difference with the mono-domestic strategy is that the company can spread the financial and commercial risks across several markets. Subsidiaries are quite autonomous, so direct investments are often used as an essential means of

internationalization. Licensing concessions (know-how, branding) are also granted to partners to facilitate implantation abroad.

Transnational Strategic Orientation

Studied in detail by Bartlett and Ghoshal (1989), this orientation is characterized by a low concentration of decision-making power and strong co-ordination of geographically dispersed activities. The key principle of this strategy is summarized by the famous slogan, reiterated in the early nineties by the Asea Brown Boveri (ABB) Senior Executive Level at the time: “Think globally and act locally.” Presented simply, this strategy attempts to reconcile the advantages of standardization for upstream activities in the value chain such as common strategic vision, economies of scale, etc., and adaptation for downstream activities such as motivation within subsidiaries, products meeting local requirements, etc. This relies on various attribute systems to optimize activities across one or more continents and is based on the international decomposition of productive processes (Lassudrie-Duchêne, 1982) to meet consumer demand for difference (Lassudrie-Duchêne, 1971).

Implementing such an approach requires employing the three generic methods of internationalization: direct investment from abroad (production subsidiary, distribution subsidiary, joint venture, etc.); concessions of limited duration (leasing, licensing, franchising, etc.); and firm sales (export, patent assignment, turnkey contract, etc.). In point of fact, direct investments are essential for large scale distribution of the various complementary operations requiring greater or lesser degrees of integration. Not always able to finance the large investments required for its regional or global presence, the company also resorts to vertical and horizontal co-operation with various types of partners. These modes of co-operation take the form of subcontracting and engineering contracts, patent and trademark licenses, joint research and production, joint manufacturing and marketing. The integration of geographically dispersed operations means exporting is a widely used modality for implementing this strategy.

The Global Strategic Direction

This strategic orientation makes it possible, with decision-making power concentrated in the parent company, to co-ordinate geographically distributed activities in several countries in order to respond in a harmonized way to the global market. This strategy, seldom retained, only seems effective for a limited number of activity sectors (aeronautics, IT, financial markets, etc.). It is based on the idea that the increasing homogeneity of world demand allows for the adoption of a standardized marketing mix (Levitt, 1983). The company can thus concentrate its production tools on territories, country of origin not necessarily included, which propose the most attractive attribute systems. The main modalities for internationalization are direct investments in the selected countries (to develop value-creating activities) and export (since the activities are relatively concentrated in the context of the global market).

Perlmutter (1969) identifies three types of attitude, ethnocentric, polycentric and geocentric, in the parent companies compared to the units located abroad. These types of attitude are useful for translating decisions into implementation. In fact, Milliot (2005, 2013) correlates the international strategy to the ethnocentric profile, the multinational strategy to a polycentric profile, and the transnational strategy to a geocentric profile. To establish a complete correspondence with the typology, the author (2005) adds the holicentric profile to Perlmutter’s

classification. This specific type of attitude corresponds to the global strategy (Milliot, 2005, 2013).

International Strategy and Ethnocentric Orientation

Perlmutter's ethnocentric profile is particularly relevant to understanding the implementation of an international strategy. Indeed, to ensure the consistency of its actions abroad, the head office defines the values and interests of the community, taken in relation to the country of origin market only. In principle, it exercises strong authority over its subsidiaries. By determining homogeneous performance indicators, the general management thus closely controls operations carried out abroad. To facilitate this control, and to respect the logic of the standardization chosen, the leaders usually come from the country of origin.

Multinational Strategy and Polycentric Orientation

The polycentric profile illustrates the principal organizational logic necessary for the implementation of the multinational strategy. The values and interests of the company are indeed appreciated at the local level since the heterogeneity of the markets generally impose a decentralization of decision making. The parent company, therefore, has weaker authority over its units located abroad. As for the managers of the subsidiaries, they are in principle from the host countries because they must be able to adapt the industrial and commercial logic to the particularities of the local markets.

Transnational Strategy and Geocentric Orientation

The geocentric profile reflects the application of the transnational strategy. The parent company, in order to gain efficiencies, attempts to establish intra-organizational collaboration (between itself and subsidiaries, and between the subsidiaries themselves) on a regional or global scale. This collaboration, which allows for the implementation of industrial and commercial policies integrating both universal and local standards, requires regular and coordinated monitoring of operations. To ensure this task, leaders are chosen for their international skills and experiences. The officials from the country of origin are therefore relatively few except, sometimes, when the identity reference of the company is unique.

Global Strategy and Holicentric Orientation

The supranational integration of economies, in certain sectors of activity, makes it possible to approach the world market in a homogeneous way. The standards on which the design, manufacture and marketing of the product are based are then almost universal. As performance indicators are global, the headquarters can easily centralize decision-making to control geographically dispersed and interdependent operations. Contrary to the ethnocentric profile, this centralization is not always ensured from the country of origin by members from this country. The importance of the field of action, in fact, invites the company to set up wherever attribute systems are most advantageous. Similarly, key positions are generally entrusted, whatever national origin, to people with the most adapted skills. We note in fact, however, that the country of origin remains strongly represented when the identity reference is unique.

There are three dimensions to distinguish these different strategies: the market(s) of reference; the primary entry modes(s) (final sales, limited-term partnerships, and/or foreign direct investment); and the principal development form (standardization, adaptation or a hybrid

approach). Co-operation policies, which represent a limited-term partnership and/or foreign direct investment, are integrated into the matrix below (with or without equity investment, and with or without the creation of a new legal structure).

Ultimately, the Organization (O) is defined as a reticular system which associates different internal units (divisions, functions, departments) and/or external ones (strategic allies, subcontractors, distributors) and adopts particular relational forms (authoritarian/consensual, formal/ informal, centralized/decentralized). Based on this definition, we can classify two types of reticular systems as being Integrated networks and Non-integrated networks.

When independent organizations control a number of entities abroad (e.g. branches, subsidiaries), they are called integrated networks. These networks include, on the inter-organizational level, organizations which share a legal structure and demonstrate a high level of interdependence with other entities (e.g. economic interest groupings, joint ventures). Non-integrated networks gather together the legally autonomous organizations and allow their members to withdraw without requiring organizational restructuring (e.g. cooperatives, business clubs sharing a common goal).

Perlmutter (1969) analyses integrated networks bound by complex and polymorphic relationships. By studying the relationships established between a parent organization and its subsidiaries, the author identifies three managerial profiles: the ethnocentric (centred on the home office), the polycentric (centred on the subsidiary) and the geocentric (centred on a system integrating both home office and subsidiaries). The fourth profile, regiocentric, a more recent addition by Heenan and Perlmutter (1979), is distinguished by the strong centralization of decision-making power in order to standardize actions on the regional level. The regiocentric profile does not cover the organizational modes of companies targeting continental or even global markets. As a result, this fourth profile is completed with a holicentric profile (Milliot, 2005) as having a more global vocation as in Table 4 below:

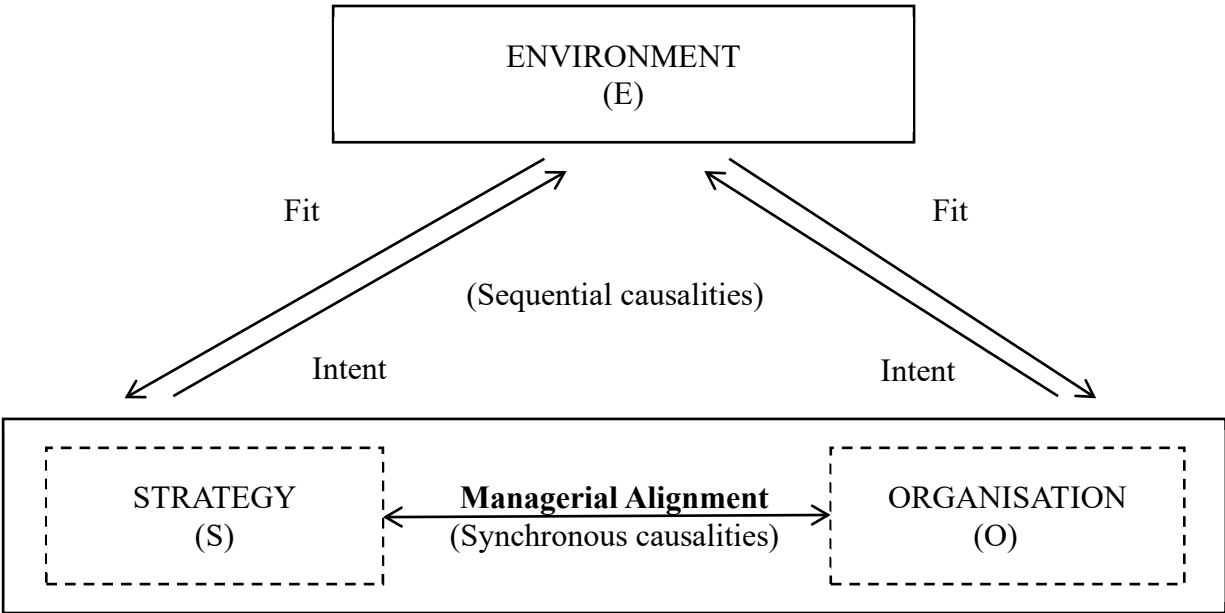
Table 5: Parent Organization – Subsidiary Organizational Orientations

Orientation	Ethnocentric	Polycentric	Geocentric	Holistic/ Regiocentric
Relations between parent organization and subsidiaries, and between subsidiaries	Strong dependence of subsidiaries on the parent organization	Relative independence of subsidiaries in relation to the parent organization and other subsidiaries	Strong interdependence between the parent organization and subsidiaries, and between subsidiaries, on the national, regional, continental or global level	Strong interdependence between units on the regional, continental or global level, orchestrated by the parent organization.
Authority and decision-making	Strong involvement of parent organization in running its subsidiaries	Weak involvement of the parent organization in running its subsidiaries	Strong collaboration between the parent organization and its subsidiaries, and between the subsidiaries	Strong involvement of the parent organization in running the subsidiaries
Communication and information flow	Large number of orders and advice from the parent organization to the subsidiaries	In frequent exchange of information between the parent organization and the subsidiaries, and between the subsidiaries	Considerable exchange of information between the parent organization and its subsidiaries, and between the subsidiaries	Considerable exchange of information, coordinated by the parent organization
Evaluation and control	Country of origin's performance indicators	Host country's performance indicators	Association of different performance indicators (local, regional, continental and/or global)	Regional, continental or global performance indicators
Reference cultures	Local (country of origin)	Local (host country)	Local, regional, continental and/or global, (except when the identity reference is single, that if the country of origin)	Regional, continental or global (except when the identity reference is single, that of the country of origin)
Occupation of key positions	Agents of the country of origin, throughout the world	Agents of the host country, in their own country	Agents of different nationalities throughout the world, but with a high concentration of agents from the country of origin when there exists a single identity reference	Agents of different nationalities throughout the world, but with a high concentration of agents from the country of origin when there exists a single identity reference

Source: Adapted from Perlmutter (1969), Heenan and Perlmutter (1979) by Milliot (2005, 2013)

Similarly, the ESO framework allows us to study synchronous causalities that illustrate the need to ensure alignment between making a decision (S) and implementing it (O). This continual search for internal coherence refers to the notion of ‘management’ (Helfer, Kalika and Orsoni, 2013). It allows us to better understand the sequential causalities which characterize the relations between the environment (E) and the organization (S and O). The first response arises from the principle of “fit” (Chandler, 1962; Learned et al., 1965), which invites the decision-makers of the organization to answer or adapt to the PREST demands presented above. The second reaction, in contrast, is associated with the principle of “intent” (Hamel and Prahalad, 1989), which is based on the notion that a multinational’s strategic choice, and associated implementation, can modify one or several aspects of the PREST environment. In his model of “bundling assets”, for example, Hennart takes into consideration the economic impact which a multinationals’ subsidiaries can cause locally (2009).

Figure 16: ESO Model



Source: Milliot (2013)

Relations between Environment-Strategy

According to the principle of fit (Learned et al.,1965; Porter, 1980; etc.), the framework of business condition, at least partially, the choice of company strategy (diversification/specialization, competition/co-operation, etc.). In opposition, the principle of intention (Hamel et Prahalad, 1989) advances when the strategy can, in parallel and in sequence, influence the dynamics (legal, technological, etc.) and the relational nature (conflictual, symbiotic, etc.) of the environment.

Relations between Environment-Organization

The characteristics of the activity section (legal constraints, cultural aspects, etc.) often enforce a particular organizational manner (Chandler, 1962). Occasionally, the companies, with their capacity for innovation and adaptation, in return modify this environment by developing the working logic and the profiles of the original competences (Hall et Saïas, 1980). The sequential causality, which defines the linkage between the environment and the relevant organization, is similar to the first relation namely fit or intention.

Relations between Strategy-Organization

The chosen development policy determines the organizational form (functional, divisional, etc.) which subsequently enables its implementation. Conversely, the chosen structure reinforces the strategic policy of management. At the strategic-organizational level, there are recurrent interactions which reflect the need to synchronize the choices and modes of developed action. The purpose here is to align the objectives, goals, plans, structures, procedures, resources, culture and leadership style adopted, to achieve the desired performance to face the market conditions encountered. This complex and evolving synchronization of multiple internal dimensions reflects the principle of managerial alignment. This alignment refers to intra- and inter-functional coordination, which helps develop sustainable competitive advantages over their rivals.

The combination of the ESO framework and the concepts of Strategic Fit and Dynamic Capabilities presented at Section 7 allows us to formulate a conceptual model that is able to work out in an airline industry.

SECTION 7

STRATEGIC FIT AND DYNAMIC CAPACBILITIES

In this section, we present two key concepts of strategic fit and dynamic capabilities. Strategic fit expresses the degree to which an organization is matching with its resources and capabilities in confronting with the external environment. The matching takes place through strategy and it is vital that the organization has actual resources and capabilities to execute and support the strategy. Strategic fit relates to the Resource-based View of the organization stating that the key to profitability is not only through positioning and industry selection but rather through an internal focus on resources and capabilities (Grant, 2007).

7.1 The Concept of Strategic Fit

Strategic fit is a concept given several interpretations in the management literature. Different scholars emphasize different aspects of strategy and other parts of the organization, or the external environment with which it should be aligned. It has been argued that the world is moving towards a confluence of tastes and preferences, and at a point in the future, a global marketing strategy will be equally successful across different markets (Ohmae, 1985; Yip, 1994). However, this view is widely contested by other scholars who argue that global firms still must consider localizing their marketing strategies. This applies especially when operating in emerging markets which are very different from well-developed domestic markets (T. Khanna and Palepu, 2006). Whether or not markets are globalized, the expanding company needs to find a footing and ‘fit’ in its new market in order to enhance performance and choose between standardization or localization strategies.

Strategic fit has been researched and conceptualized with both external and internal dimensions. The school of thought in strategy implementation focuses on alignments with the coordination, or integration, between strategy and structure units, or the internal elements (Chandler, 1962). Waterman (1982) emphasized that strategy implementation is more than just fitting between the right strategy and structure. Waterman (1982) further argued that the possibility of successfully executing a strategy depends heavily on the interaction among the seven elements of the McKinsey 7-S framework, in which hard elements include Strategy, Structure, Systems; and the soft elements include Skills, Staff, Style and Shared Values. In addition, a congruence among internal organizational elements should be reached in order to achieve competitive advantages (D’Aveni et al., 2004). On the other hand, the “Gestalts” school of thought, is also interested in the interaction effects between the organizational environment and organizational survival structure or effectiveness (Venkatraman, 1984).

Drazine and Van De Ven (1985) have examined alternative forms of fit via different approaches: Selection, Interaction and Systems. In the selection approach, fit is interpreted as an assumed premise underlying congruence between context and structure, without looking into the impact of the context. In the interaction approach, fit is understood as an interaction effect of the organizational context and structure on performance. In the systems approach, fit is defined as the internal consistency which integrates multiple contingencies and multiple structural characteristics in order to obtain performance effects.

According to Venkatraman (1989), a match between related variables derives from strategic fit. Internal consistency or alignment is also defined as a form of strategic fit by Ensign (2001). Strategic fit has been a critical building block in the development progress of strategic management theory (Drazin and de Ven, 1985). While previous researchers, such as Andrews (1971) and Hofer and Schendel (1978), consider strategic fit a key concept in normative models to formulate strategy, Dess and Lumpkin (2003) claim that the strategic fit of internal elements in an organization must guarantee the success of the implementation process.

Venkatraman (1989) further suggests six perspective forms of fit including, moderation, mediation, profile deviation, covariation, matching and Gestalts. The first four perspective forms, moderation, mediation, profile deviation, and covariation, have clearly incorporated performance implications in hypothesizing strategic fit, whereas the last two forms, matching and gestalts, do not present the same action. Within these six perspectives, Venkatraman (1989) allows researchers to select an either specific perspective to follow or apply a multi-method approach. The reasoning is that results followed by the selection may lead to erroneous conclusions.

The mediation perspective posits the existence of an intervening factor between antecedent and outcome variables. Complete mediation will be obtained when the antecedent on the outcome variables is not significant, whereas both results show the significance between the relation of antecedent and the intervening variable, and the significance between the intervening variables and the consequent variables (Venkatraman 1990). For strategy concepts which fit between two related variables, a matching perspective is invoked. Stated contrarily, the measure of fit between two variables is developed independently of any performance indicator (Venkatraman 1989).

On the other hand, the co-variation perspective views fit as a pattern of internal consistency among a set of underlying, theoretically related variables including elements of strategy, structure, and processes (Venkatraman 1989). Under “Gestalts” thought, investigators are allowed to incite alternate perspectives with precise functional forms when using two variables to conceptualized fit. However, the degree of precision should be lessened when involving many variables. This can be defined in a multivariant perspective to perceive the degree of internal coherence in a set of theoretical attributes (Venkatraman 1989).

Another school of thought on strategy formulation is interested in the fit between strategy and environmental conditions, which are external elements (Chandler, 1962; Hofer, 1975). The relationships are causal, in that the strategies must match the external conditions as criteria, if the organization is to survive and gain a competitive advantage (Porter, 1980 and 1985). In later research, Hill and Brown (2007, p. 1333) define strategic fit as “... *the degree of linkage or consistency between the competitive priorities, delivery system and infrastructure of an operation*”. Hill and Brown (2007) agreed that the concept of strategic fit has an external dimension as well, even though the focus in the definition is on the internal dimension.

The external dimension refers to the fit between the organization, its operations and the competition in the market, and is thus, the context where the organization implements its strategy. The internal dimension assesses how well the organization aligns its business and

operational strategies whereof the marketing strategy is one part. The different functions in an organization need to be aligned to ensure internal strategic fit. Hill and Brown (2007) also emphasize that most strategic fit research work relating to the external dimension has been conducted mostly on the manufacturing industry, whereas little research has been done in the services industry. Hill and Brown’s research has been conducted with domestic organizations in a single country, and focused on internal factors, however, they also consider external factors when expanding the research into international spheres.

Zajac, Kraatz, and Bresser (2000) employed strategic fit to measure the alignment of an organization and its external environment with a study based on U.S. savings and loans institutions. Actually, this study works with local companies in the domestic market only, while it is supposed to obtain strategic fit between a company and its foreign market. This is caused by research limitations such as distance, culture and language barriers. Nonetheless, Zajac et al. (2000) stated that strategic fit should be viewed as a dynamic concept rather than a snapshot of a particular period in time. This implies that strategic fit is a concept which can be evaluated continuously and finetuned or improved over time. Moreover, Lukas, Tan, and Hult (2001) argued that since the organization has no direct control over its environment, they will be better placed to advantage by continuously adapting and making strategic changes to improve performance in the new market environments. Furthermore, Zajac et al. (2000) introduced several external factors crucial to organizational changes. They argued that there are specific conditions which are valid to research whether a company manages to obtain a strategic fit. Firstly, an ever-changing environment is necessary. Secondly, the environment and organization attributes need to differ. Thirdly, the choice of strategy is not straightforward. Fourthly, factors influencing the strategic fit must be clear. Finally, performance measurement is important. As organizational factors, the organization’s competencies and internal resources are prevalent. Environmental factors, which include both micro and macro factors, have an impact on the business, such as competition and economic policies in the foreign market. Their model is introduced in Table 6 below:

Table 6: Four Possible Scenarios in The Pursuit of Dynamic Strategic Fit

		Does Strategic Change Occur?	
		Yes	No
Is Strategic Change Needed to Establish Dynamic Strategic Fit?	Yes	Beneficial Strategic Change (Dynamic Fit)	Insufficient Strategic Change (Dynamic Mistfit)
	No	Excessive Change (Dynamic Misfit)	Beneficial Inertia (Dynamic Fit)

Source: Zajac et al. (2000)

As can be seen in Table 6 above, Zajac et al. (2000) highlight four types of strategic (mis)fit. All are dynamic and depend on the organization’s actions in relation to the external environment. These different scenarios are introduced in Table 7 below.

Zajac et al. (2000) argued that previous assumptions about strategic fit referred to it only becoming apparent during a period of stagnation, with an assumed bivariate relationship. The dependent variable was the organizational structure, which therefore, should be counted as static. The only independent variable, the environmental factors, were included. The conclusion was often assumed to be that strategic fit was easy and highly achievable for organizations operating in similar markets.

Table 7: Fit or Misfit

<p>Beneficial Strategic Change The company re-adapts its strategy in alignment with the external environment leading to improved performance. The ability to obtain a dynamic strategic fit need to be applied throughout several dimensions of the firm.</p> <p>Dynamic fit</p>	<p>Insufficient Strategic Change The company fails to change its strategy in alignment with its environment, which subsequently leads to lower performance.</p> <p>Dynamic misfit</p>
<p>Excessive Change The company misjudges its environments and changes even though it was already aligned with the environment. Consequently, the performance drops.</p> <p>Dynamic misfit</p>	<p>Beneficial Inertia The company can use its initial strategy without pressure from the external environment to change which leads to improved performance. Inertia can also be caused by internal factors such as unique resources which offset the need for change.</p> <p>Dynamic Fit</p>

Source: Adapted from Zajac et al. (2000)

However, in today's business world, a more dynamic interpretation of strategic fit is required. This applies also in terms of the time frame. The factors affecting strategic fit, or misfit, are directly related to organizational strategy (e.g. the marketing mix) as well as environmental factors and organizational contingencies. The proposed interpretation of strategic fit is considered dynamic, since several factors which are not considered as a snapshot in time, are included. The relationships and variables are introduced in Table 8 below:

Table 8: Towards a Re-Conceptualization of Strategic Fit

	Traditional view	Proposed View
Time frame	Static	Dynamic
Assumed Relationship	Bivariate	Multivariate
Dependent Variable	Organizational Structure	Organizational Strategy
Independent Variables	Environmental Factors	Environmental Factors and Organizational Contingencies
Fit: Common/Unique?	Fit is Common Across Organizations in Similar Environments	Fit is Largely Unique, Given Differences in Organizational Contingencies

Source : Zajac et al. (2000)

According to Gaberielsson et al. (2012), it is possible for organizations to achieve strategic fit through adaptation. Companies with specific characteristics have greater chances of success compared to others. They consider that large multinational corporations from bigger domestic economies have a larger customer base. Resulting, therefore, in the belief that having more resources will help them succeed in achieving strategic fit in their new markets as compared to smaller companies.

Achieving strategic fit seems to be a matter of possessing larger resources, which is reasonable, since the company can use a larger budget to assess the new market. Moreover, the company will create and apply an appropriate (marketing) strategy to penetrate the market. Furthermore, it is easier to achieve strategic fit in markets which are similar to home markets. Strategic fit is more difficult to attain in a distinctly different market with higher infrastructure, preferences and business structures. This is particularly true if the company chooses to keep its current strategy (Albaum et al., 2003). However, Zajac et al. (2000) also argued that, striving to obtain strategic fit within the external environment may require too many internal changes and create a misfit within the company culture. Therefore, it may not always be beneficial for a company to change its strategy when entering a new market.

According to Zajac et al. (2000), Lukas et al. (2001), and Lillis and Macaulay (2012), strategic fit has a direct impact on performance. The researchers, Xu, Cavusgil, and White (2006) explored how this fit affects performance. They argued that a company is unlikely to benefit from using a standardized global strategy due to differences in tastes and preferences. However, they considered that a global strategy, on the other hand, can be beneficial in the dimensions of, competitive position, opportunities in the new market as well as the product life cycle. Moreover, when external factors such as the local market and consumer tastes are similar in both the home and host country, it can be advantageous to persevere with the same strategy. Nonetheless, the political actor is equally important, and taken into serious consideration, due to the significant impacts it can have on business behaviours in politically volatile markets.

The term “fit” defines a strategy as one which draws the organization’s actions into alignment with the needs and demands of its environment. When the competencies of the organization satisfy the demands of the environment, then the organization is selected and retained, provided with resources, and legitimized. Strategy is concerned with actively managing fit in order to achieve competitive advantage which will ensure the organization’s survival, profitability, and reputation. Other researchers such as Lee and Kim (2012, p. 31), point out “...*that a strategy can work for an organization only when it fits well with the organization’s external and internal environments.*”. They emphasize alignment between internal operations and the business environment as a second definition of a strategic fit. This definition clearly highlights the internal and external factors, but it does not specify what factors, giving the definition a lack of clarity and leaving it open to interpretation.

Lillis and Macaulay (2012, p. 40) defined strategic fit as:” *...the degree of linkage or consistency between what the business strategy has specified as the means by which competitiveness will be achieved and the delivery system and infrastructure of its operations.*” The competitiveness factor in this aspect is explained as a strategic fit objective, whereas the infrastructure and operations used to obtain it are explained as being the measures. However,

this does not include the external environment, even though the definition includes the competitor as a crucial performance influencer, one that will most likely affect the company's performance in a new market.

Gabrielsson et al. (2012 p. 29) define strategic fit in the marketing aspect: "*The strategic fit perspective emphasizes the need to maintain a close and consistent linkage between a firm's marketing strategy and the context in which it is implemented.*" This definition implies that the performance of an organization will be boosted if there is a strategic fit between marketing, environment and internal processes. When the organization expands its business internationally, the choice of standardizing or localizing its products or services is a most important point relating to marketing and fit. Their argument is based on past international experiences that influence the organization's marketing strategy in the local market. Their final conclusion indicates that a standardized marketing strategy will benefit the organization if there is a fit with the external environment, especially when the globalized business environment creates more pressure. This definition of strategic fit has a focus: a fit between organization and external environment, which guides the analysis of their research.

7.2 The Concept of Dynamic Capabilities

The concept of Dynamic Capabilities is derived from the Resource Based View theory and has gained more attention in strategic management since the early 1990s. Capabilities refers to how a company allocates its resources and applies them to raise productivity. These skills reside in an organization's rules, routines, and procedures, which allow managers to make decisions and manage the internal processes to achieve the organizational objectives. Moreover, a company's capabilities are the product of its organizational structure, processes, and control systems. They specify how and where decisions are made within a company, the kind of behaviours the company rewards, and the company's cultural norms and values.

The resources of an organization consist of tangible and intangible assets. However, managers find it more difficult to manage the intangible assets (Teece, 2007). Intangible assets include processes, skills, routines and capacity, and are a key source of sustainable value creation (Kaplan and Norton, 2004, p. 7). Such valuable resources which are difficult for competitors to imitate can be a source of competitive advantage (Barney, 1991). For resources which are both tangible and intangible, some are defined as dynamic capabilities, while others are not accounted for. To other researchers, such as Barney (1991) and Halfat et al. (2007), not all the organization's resources, including capacities, processes or routines, are considered dynamic capabilities or seen as potential sources of sustained competitive advantage (Barney, 1991). Therefore, the capabilities common among organizations will not be considered as sources of competitive advantage (Eisenhardt and Martin, 2000).

When the environment is difficult to predict (Sirmon, Hitt and Ireland, 2007), the resources may not create value in responding to market changes, even though organizations attempt to use dynamic capabilities to produce resources. Processing resources do not guarantee the building of capabilities, since their relationships are always changing (Grobler, 2007), therefore organizations must strive to match resources and markets (Boccardelli and Magnuson, 2006) by focusing on the uncertainties. As a result, new and improved resources are born in response

to new demands as the organization's performance is different at various times when the resource positions are changing (Zott, 2003) and dynamic capabilities are built based on internal processes and efforts, rather than external efforts (Grobler, 2007). Further empirical research also suggest that dynamic capabilities are better used in rapidly changing environments (Wu, 2010, 2006, 2007), which is in line with Lichtenthaler (2009)'s conclusion as the effects of absorptive capacity, known as a form of dynamic capabilities, performs more strongly during technological and market turbulence.

According to various researchers, dynamic capabilities are not seen as the organization's performance (McKelvie and Davidson, 2009), but their ability to reconfigure resources (Zahra, Sapienza and Davidson, 2006). Dynamic capabilities are able to run six functions to reconfigure resources in any lifecycle level of capability (e.g., founding, development and maturity lifecycle) to allow organizations to position themselves in the existing market, to enter new markets or to exit the current market even though they share common capabilities. Six functions of Dynamic Capabilities are to renew, recombine, redeploy, replicate, retrench and retire the resources/capacities (Helfat and Peteraf, 2003). In short, dynamic capabilities not only create resources, but also eliminate resources when confronting situations.

Following research by Macpherson, Jones and Zhang (2004), Helfat, et al., (2007) and Ambrosini, Bowman and Collier (2009), states that dynamic capabilities are namely designed to modify the resource base from zero to higher level capabilities and include dynamic capabilities which will renew themselves in line with the changed level of the environment. The resources and capabilities of the organization can be regarded in hierarchical order, where resources are categorized as zero order, capabilities as first order, followed by core capabilities as second order and dynamic capabilities as third order competences in the hierarchy process. The later order is considered superior to its predecessors; thus, capabilities are considered better resources for competitive advantage (Wang and Ahmed, 2007). Helfat, et al. (2007, p. 28), and have taken the same definition as "the emphasis in dynamic capabilities is on change processes, inventing and re-inventing the architecture of the business, asset selection, and asset orchestration." In recent literature, Barreto (2010) also defined dynamic capabilities as being to create change to the resource base. From the above definitions, dynamic capabilities are viewed as being to reconfigure, renew and modify resources, including the organization's processes, routines and organizational competences.

Therefore, a sense of dynamics is critical in strategy because strategy is always being developed, refined, reviewed and implemented against a set of moving targets which combine every aspect of the industry condition. The external dynamic elements, such as the changes in industries, markets, and competitors, will affect current and future resources and capabilities. The concept of dynamic capabilities will be used to explore a dynamic analysis of markets, industries and competition. Such analysis can help to understand the future strategies of organizations within a given industry, and the implications of industry evolution for current resources and capabilities. After Teece, Pisano and Shuen (1997), other researchers, such as Eisenhardt and Martin (2000), have followed the work and made dynamic capabilities a fundamental discussion in related management fields. Although there are several arguments around the concept, this work focuses on Teece, Pisano and Shuen's definition of dynamic capabilities. Pisano and Shuen (1997, p. 516) defined dynamic capabilities as the organization's

ability to integrate, build, as well as reconfigure both internal and external competences to address changing environments.

In order to facilitate theory development and intellectual dialogue, some acceptable definitions are desirable. The following are proposed:

Production Factors

These are “undifferentiated” inputs available in disaggregate form in factor markets. By undifferentiated we mean they lack an organization-specific component. Land, unskilled labour, and capital are typical examples. Several factors, such as public knowledge, may be available for the taking. Such resources must be “non-fugitive”, in the language of Arrow. Property rights are usually defined as the most important rule for the production factor.

Resources

Resources are organization-specific assets which are difficult, if not impossible, to imitate. Such examples may include trade secrets, specialized production facilities, and engineering experience. Such assets are difficult to transfer, primarily due to the transaction and transfer costs. Such assets may also include tacit knowledge.

Organizational Routines/ Competences

Organization-specific assets can be assembled into integrated clusters, ranging from individuals to groups. This enables distinctive activities to be performed, which constitute the routines and processes within the organization. Such examples may include quality, miniaturization, and systems integration. Capabilities, as such, are typically feasible across multiple product lines., This may also extend outside the organization to embrace alliance partners.

Core Competences

These competences define an organization’s fundamental business at its core. Core competences must be derived from looking across the entire spectrum of an organization’s products and services. When combined with appropriate complementary assets, the value of core competences can be enhanced. Analyzing how distinctive a core competence may be depending upon how well-endowed the organization is in comparison to its competitors. Another point for consideration is the amount of difficulty competitors will encounter in attempting to replicate the organization’s competences.

Dynamic Capabilities

Dynamic capabilities are defined as an organization’s ability to incorporate, build, and finetune internal and external competences to address rapidly changing environments. In essence, they reflect an organization’s ability to achieve competitive advantages via innovative forms (Leonard-Barton, 1992).

End Products

End products are the final goods or services produced by the organization, based on the utilization of the organization’s competences. Its performance (price, quality, etc.) will be highly dependent upon its competences (its capabilities over a period of time).

Strategic fit is related to the dynamic capabilities of the organization when it indicates the achievement of profitability derives from an organization's internal focus on its unique characteristics in terms of resources and capabilities. A unique blend of resources and capabilities can eventually be developed, which the organization can transform into a competitive advantage. However, it is crucial to differentiate between resources and capabilities. Resources refer to the inputs for production, whereas capabilities reflect the organization's processes in accumulating learning and knowledge. Strategic fit matches the organization's resources and capabilities with the external environment, in the event that the organization must possess actual resources and capabilities in order to implement its strategy.

7.2.1 Dynamic Capabilities and Organizational Performance

Dynamic capabilities affect organizational performance directly and indirectly. The indirect effects on performance manifest themselves through a reconfiguring of the resource base, and can be accomplished through creating, extending, and modifying that base. (e.g. Eisenhardt and Martin, 2000; Kale, Dyer and Singh, 2002; Helfat et al., 2007). These reconfigurations aim to positively influence organizational performance. Dynamic capabilities have a direct impact on performance values such as creation, maintenance, and utilization of dynamic capabilities, on the other hand, these also create the direct effect of additional expenditures. Strategic orientation regulates the relationship between dynamic capabilities and organizational performance (Slater, Olson and Hult, 2006).

The role of strategic alignment is multifaceted. Strategic alignment influences the development of dynamic capabilities as it creates a pathway for investment and knowledge-related processes. Strategic alignment dictates which learning mechanisms take place. Furthermore, an organization's strategic alignment moderates the trigger-relationship between environmental turbulence, internal change, and dynamic capabilities utilization, as it will decide which internal and external changes the organization will react to, and the choices of dynamic capabilities will be carefully considered and applied. Lastly, strategic alignment will help regulate the resource base reconfiguration activities, based on the dynamic capabilities. This is achieved through differential timing of dynamic capability utilization and selection of which component parts of the resource-base are to be reconfigured.

How dynamic capabilities are viewed in an organization is an evolutionary extension of the resource-based perspective, as it scrutinizes how capabilities evolve, as well as how organizations deal with environmental turbulence (Helfat et al., 2007). The term 'dynamic' distinguishes one capability (e.g. the operational capability to create new products) from another capability (e.g. reform in the way an organization develops new products) (Zahra, Sapienza and Davidsson, 2006). In this example, the newly minted routine for product development, which is an operational capability, is distinguished from the ability to alter such capabilities.

Dynamic capabilities do not impact directly on the production of a product, or the provision of a marketable service. Therefore, they do not impact directly on an organization's output (Helfat and Peteraf, 2003). They do, however, impact the productive process indirectly by assimilating,

reconfiguring, gaining, and channelling resources to respond to environmental turbulence, or to create internal or external changes (Eisenhardt and Martin, 2000; López, 2005).

Different opinions exist as to whether a dynamic capability, in and of itself, can be the main source of a competitive advantage. Teece, Pisano, and Shuen (1997) shared the view of the resource-based theory of the organization which requires resources to be precious, rare, impossible to imitate, and which cannot be substituted to generate a competitive advantage (Barney, 1990, 1996). Eisenhardt and Martin (2000) expressed a contrasting opinion which argued that best practices of dynamic capabilities do exist, and dynamic capabilities do show equifinality, homogeneity, and substitutability across organizations.

While dynamic capabilities emerge from path-dependent histories, and are unique standalone processes (Teece, Pisano and Shuen, 1997), they do share several common features across organizations. However, they also differ in their effectiveness. Moreover, dynamic capabilities do not result in competitive advantage. They only create values indirectly through the reconfiguration of an organization's resource base, for example. Therefore, a dynamic capability may seem worthless in a scenario where the resultant realignment did not generate the intended outcome, yet this capability may be valuable in another case (Zahra, Sapienza and Davidsson, 2006).

Helfat et al. (2007) stated that traditional measures of performance (value creation, competitive advantages, sustainable competitive advantage, and rental yield) can be applied to dynamic capabilities. However, those measures do not include a time dimension (except for the ideology of sustainable competitive advantage) and do not clearly inculcate the development and lively character of dynamic capabilities.

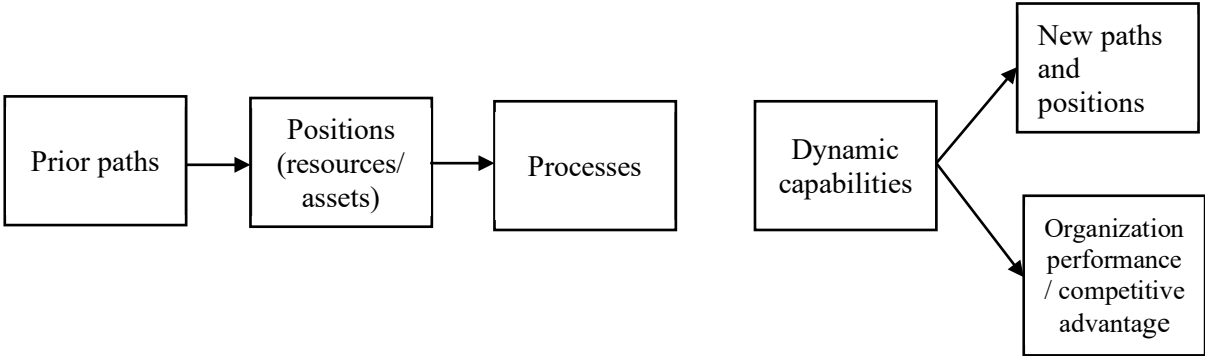
To overcome this, Helfat et al. (2007, p. 7) added two measures to their concept, coined as 'evolutionary fitness', those of organization survival and organization growth. They stated that evolutionary fitness "refers to how well a dynamic capability enables an organization to sustain, via creation, extension, or realignment, its resource base." Organization survival is the most obvious indicator of whether an organization can adapt to environmental turbulence. If an organization maintains evolutionary fitness, this implies that it can survive long-term. Survival is a crucial necessary condition for organizational growth. This measure incorporates the extent of evolutionary fitness in the form of increased organizational size over time, be it in terms of cash flow, property, or other measures of magnitude (Helfat et al., 2007, p. 15).

However, it is important to note that the two constructs, organization survival and organization growth, are not necessarily covariant. Growth does not guarantee survival, and not all growth is inevitably profitable (Markman and Gartner, 2002). Possessing dynamic capabilities does not automatically lead to superior organizational performance (Zahra, Sapienza and Davidsson, 2006). In summary, a dynamic capability is defined as the organizational ability to create internal changes and/or to respond to environmental turbulence. This is achieved through reconfiguring (creating, extending, modifying) the organizational resource base (Eisenhardt and Martin, 2000; Penrose, 1959; Zahra, Sapienza and Davidsson, 2006). Meanwhile, dynamic capabilities are also highly path dependent (Ellonen, Wikstrom, and Jantunen, 2009), where an organizations' performance may be explained by the differences in their path dependencies,

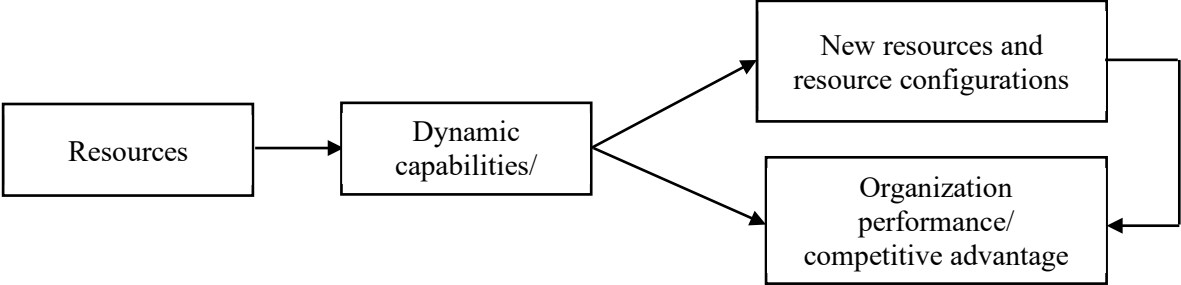
which has an impact on how they modify resources over time (Zott, 2003), since capability accumulation only can occur through experiences (Bayer and Gann, 2007). Experience is interpreted as the relationships between the organization’s aspirations and performance, as well as the conflicting goals whereby organizational routines will change at points when experiences are changing (Augier and March, 2008). Organization decision-making is based on capabilities already possessed which will shape and influence future capabilities. Therefore, the effects of changes are determined by the organization’s configuration of its capabilities prior to levels and types of changes (Benner, 2009). In this case, the organization is following specific paths in capability building which differ vastly from other organizations, and hence cause the differences in outcomes (Wang and Ahmed, 2007).

Figure 17: Basic Chain of Logic in Core Dynamic Capabilities Articles

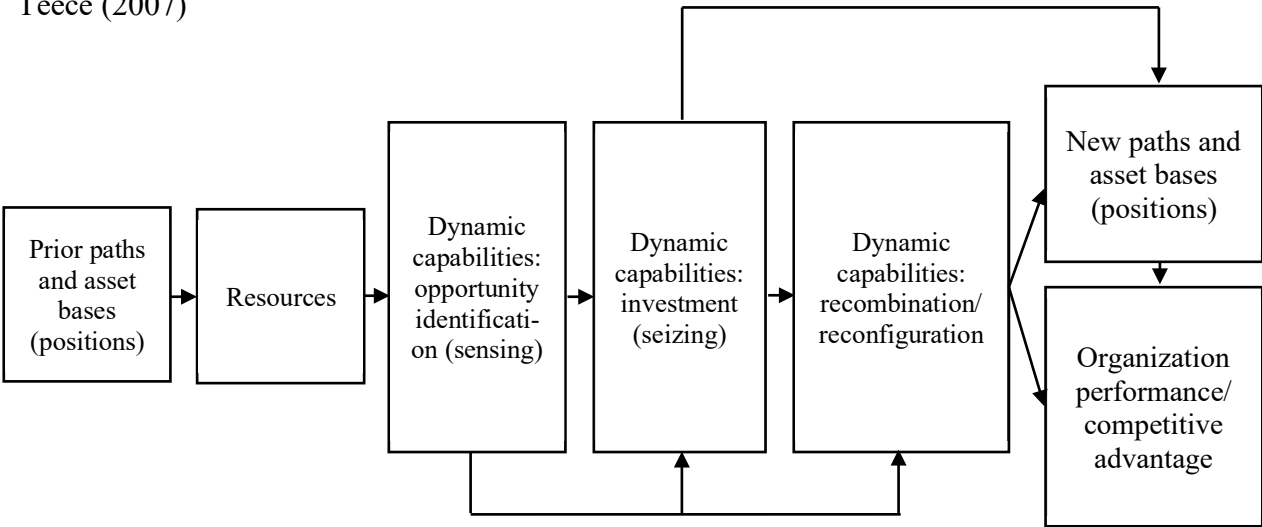
Teece et al. (1997)



Eisenhardt and Martin (2000)



Teece (2007)



Source: Teece (1997, 2007) and Eisenhardt and Martin (2000)

In Figure 17 above, Teece et al. (1997) posit that prior paths, such as an organization's history or previous investments, lead to current organization market positionings with tangible and intangible assets. Dynamic capabilities reside in organization processes which can alter current positions, lending an effect on organization performances and competitive advantages, as well as leading towards new positions and paths. With a special focus on certain types of dynamic capabilities, Teece (2007) used a chain of logic to expand upon his previous 1997 research.

Eisenhardt and Martin (2000) describe dynamic capabilities as the processes which organizations can use to gain, incorporate, reconfigure and reallocate resources, leading to new resources and resource alignments, i.e. new positions in Teece's terms. Dynamic capabilities have a direct impact on organization performance and competitive advantage, and also an indirect effect on resource reconfiguration. Although Eisenhardt and Martin (2000) viewed competitive advantages as being more difficult to achieve through dynamic capabilities than Teece, their fundamental thoughts on chain of logic parallel those of Teece and of Helfat et al. (2007). In the later articles, opportunity identification, or "sense intuition", and investment in seizing these opportunities, which are part and parcel of dynamic capabilities, can lead to new positions and paths. These, in turn will affect an organization's performances in terms of growth, profits and competitive advantage. Subsequent to investments, dynamic capabilities which are recombined or reconfigured in response to the market and environment, can further enhance the accumulated asset base of the organization, leading to additional effects on organization performance and competitive advantage, with possibilities for new market positions and paths.

7.2.2 Dynamic Capabilities and Business Models

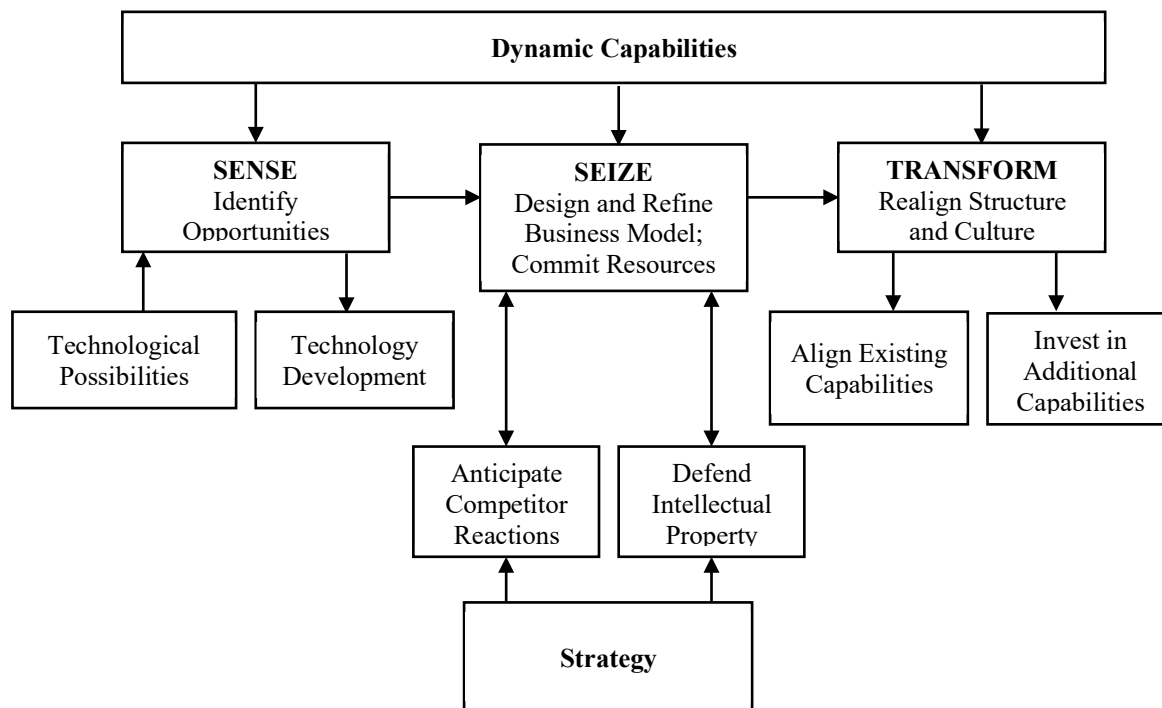
Dynamic capabilities, as illustrated in figure 18 below, include the sensing and seizing opportunities, and transforming the organization. These processes are essential to bolster a business model, allowing an organization to improve its current capabilities, and those of its partners, toward high-payoff industry where those new resources can then be able to shape the changes in the business environment. The dynamic capabilities of an organization can be used to formulate a business model which reflects customer needs and aspirations; hence, the organization must continue sensing and seizing opportunities, and periodically transforming various aspects of the organization in order to reposition itself and address newer threats and seize arising opportunities. An organization does not necessarily need to possess strong dynamic capabilities in all aspects. It can be excellent at sensing new opportunities, yet relatively weak at identifying new business models; adept at developing new business models yet have insufficient resources to implement and refine them. When an organization is strong in all aspects of sensing, seizing, and transforming, it possesses "strong dynamic capabilities". An organization with strong dynamic capabilities is able to build and renew its resources, assets and ordinary capabilities, and reconfigure them when needing to respond to changes in the environment. The organization's resources must be linked with the activities of partner organizations in order to deliver value to customers.

According to Teece (2007), in the majority of cases, managerial competences must act as a key element of dynamic capabilities for an organization to seize new opportunities when it needs to devise and refine new business models. (Helfat and Martin (2015) confirmed that managerial

competences have been developed as a sub-field of dynamic managerial capabilities and become an important feature in supporting the design and implementation of new business models. In a later modification, Teece (2014) states that the dynamic capabilities of each organization are unique because they are formulated based on the idiosyncratic characteristics of its entrepreneurial managers, history-honed routines and the culture of the organization. Therefore, it is difficult for the competitors to replicate the dynamic capabilities of a certain organization because they may not fully comprehend the inherent complexities of the system (Lippman and Rumelt, 1982). Strong dynamic capabilities can be considered a sustainable competitive advantage because the more deeply the capabilities are embedded in the organization, the less time the management team are occupied with attending to them.

To many researchers, business models have linkages with strategy. However, Teece (2010) sees them as a separate analytical exercise and agrees the Rumelt (2011, p. 6) definition of strategy as being “*a coherent set of analyses, concepts, policies, arguments, and actions that respond to a high-stakes challenge*”. Strategic analysis is the foundation on which to build a particular business model or to discard an old business model in order to gain a competitive advantage in the marketplace (Casadesus-Masanell and Ricart, 2011). According to these researchers, “Strategy has been the primary building block of competitiveness over the past three decades, but in the future, the quest for sustainable advantage may well begin with the business model.” Thus, dynamic capabilities can be translated as a primary building block of the organization’s competitiveness which enable incorporation with strategy to design business models. In normal cases, corporate strategy will be employed to design business models, especially in this era of technology. A business model will impact the feasibility of a strategy with a determination of costs and profitability. In the event that there is a conflict between the business model and strategy, the management team has the duty to decide which factor should be changed in order to obtain new resources. The model of an organization which is built upon dynamic capabilities will reflect the interdependence between the elements. Figure 18 below shows the relationships between the organizational design and dynamic capabilities, in which dynamic capabilities and strategy are combined to create and refine a feasible business model which can help the organization transform and allow it to sustain and enhance its capabilities and resources with adequate profits.

Figure 18: Simplified Schema of Dynamic Capabilities, Business Models, and Strategy



Source: Teece (2017)

7.3 Conceptual Model Proposition

Based on the literature review and the research frameworks, this study proposes a conceptual model describing the interactions between the environment, strategy and organization, and the manner in which the organization employs its resources to transform itself for efficient performance and attainment a better competitiveness in the industry. Followed the work of Milliot (2013), the proposed framework coordinates both dynamic capabilities and industry's life cycle as sources of performance and drivers of strategy. This exploration embraces Barney's (1991) definition of resources: organization resources incorporate all assets, capacities, organizational procedures, organization attributes, data, knowledge, and so forth, controlled by an organization, which empower that organization to imagine and implement strategies.

In the model proposed, strategy is a noteworthy channel of associations between the competitive environment and resources. From another viewpoint, strategy acts as a support to the deployment of an organization's assets in a competitive environment (Harris and Ruefli, 2000), with the intention being to create a competitive advantage. Specifically, organizations continually take hostile and protective strategic actions against competitors (Baum and Korn, 1996) in adjusting to the competitive environment. Moreover, strategy is subject to, and obliged by, the controlled assets (Collis, 1991), and strategy facilitates the advancement and insurance of existing assets and the creation or obtaining of new assets, considering the competitive environment within the industry.

In addition to gathering competitive advantages, resources may build the organization's capability to charge higher prices and, consequently, add to performance, by helping the organization find a suitable value linked to competitive advantage. Moreover, assets may be utilized to construct entry barriers, thus enhancing performance at the industry level. For example, an organization may utilize its financial ability to provoke the government to erect entry barriers which enable organizations in the industry to charge high prices once yield has been confined. Performance, perceived here as profit in excess, depends upon the desirability of the industry in which the organization operates, as well as the organization's competitive advantage.

In sustaining a business, it is a challenge for senior executives to identify the jump-off point for starting to build a high-performance organization geared for better competitiveness. The primary question is: Should organization set clear priorities, strive to attract new talent, create new incentives, or alter the decision-making process to transform itself into a high-performance organization? While such efforts may work, each action will consume some of the organization's time and resources. According to Bain and Company, identification of the starting point is derived from the combination of three factors: the organization's current performance, long-term objectives and competitive situation. In a price-sensitive industry, such as with airlines for example, the success factor would entail the organization's behaviour being tuned to offer low fares.

For business effectiveness, executives need to identify and focus on the specific outcomes the organization would like to achieve. Bain and Company propose an approach, called Organizational Navigator, to set a best practice for better results. The Organizational Navigator

allows senior executives to recognize their organization's strengths and weaknesses, and critically, which outcomes will matter most in generating the organization's superior business performance. In a survey of 665 companies in various industries world-wide, Bain and Company found six organizational outcomes were key factors in achieving high performance:

- a. alignment with the company's strategy
- b. capability of executing strategy with the right talent, processes, and tools
- c. effectiveness at making critical decisions
- d. adaptation to the rapid change of the business environment
- e. efficiency in realizing the benefits of scale and scope
- f. engagement to go the extra mile

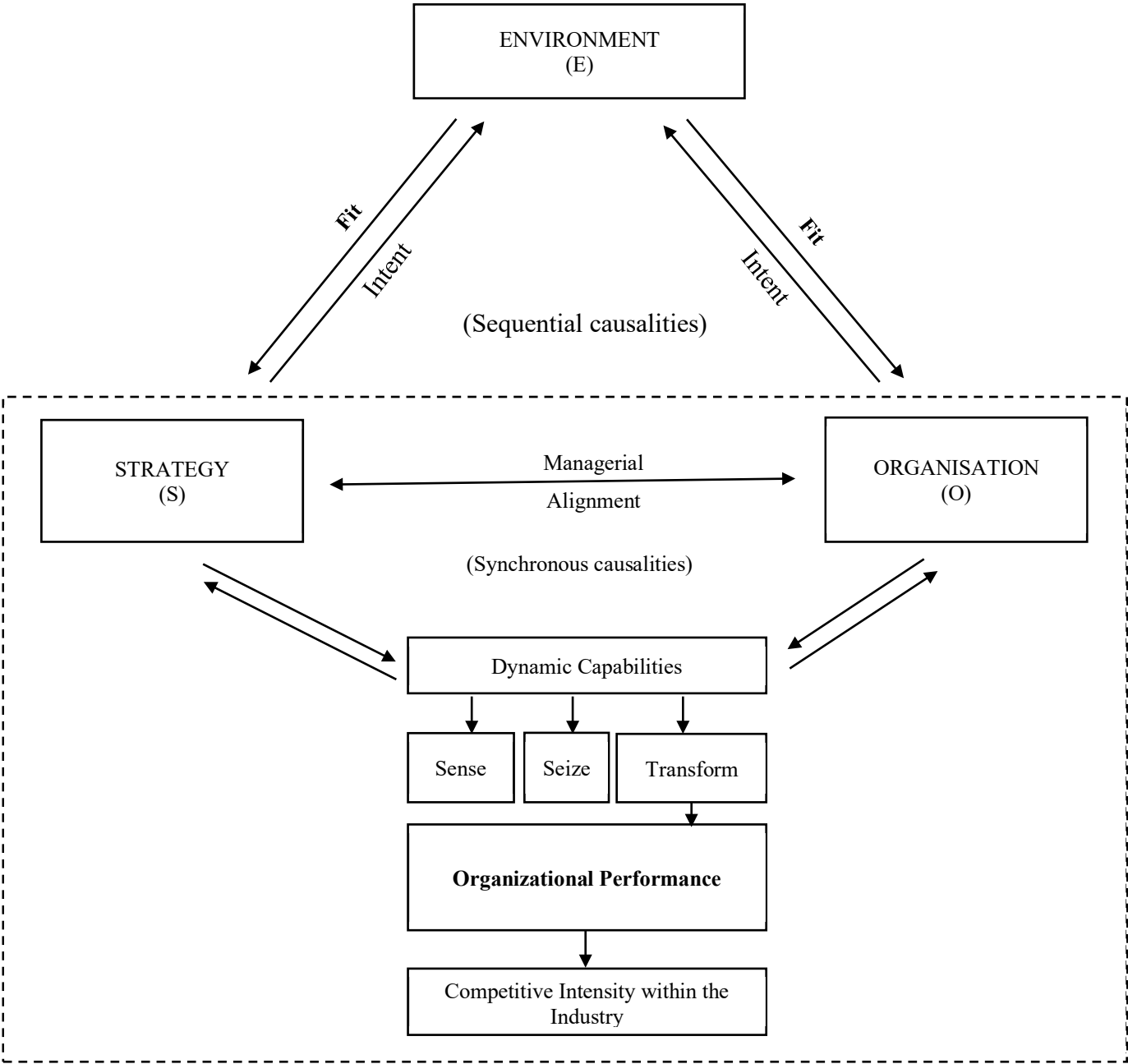
The first three results are confirmed as the foundation for strong business performance, and the final three are defined as accelerators, facilitating organizations a true competitive edge, given that they have in place a solid foundation. The first three outcomes are generated by the following explanations: (a) Without a great strategy, the organization obviously will not succeed unless it executes well enough. Senior executives ought to align their organization's resources with the strategy, and especially when there are changes in the strategy. (b) In order to achieve superior performance, the organization must identify and transform its essential capabilities to implement its strategy. (c) The organization can outperform when its executives can make better and faster decisions and execute them consistently. Decision effectiveness requires everyone in the organization to understand how and what decision is to be made, who has the authority to make it, and by when it can deliver best results.

The last three accelerators are explained as: (d) To have consistent growth, the organization is required to adjust itself to a dynamic and competitive environment, and the organization will become best when it is able to adapt quickly. (e) Senior executives will have to minimize the complexity in their organizations by simplifying the management structure for efficiency and productivity. (f) Lastly, people are eager to go the extra mile if they have some ownership of their work. The organization will be more successful if it is able to engage its employees in the organization's profitability by drawing out their discretionary energy.

Thus, the conceptual model in Figure 19 below will be compared later, in Section 20 - Chapter 9, with the generated physical model corresponding to the airline industry in the ASEAN region. Comparing the conceptual model with the real-world facts will express the issues in a richer picture. According to Checkland and Scholes (1990), a conceptual model can be used as a source of questions in response to the real world, with four types of comparison methods. The questions are answered and discussed through the debate, which is considered a method of ordered questioning. The second method is to reconstruct a sequence of events from the past and compare those with future events if the physical model had actually been implemented. The third method is to make the question more general by exploring the reasons why the model would be different from the current reality. The fourth method is to create a new model of "what exists", which has a close similarity form to the original, with the aim of redrawing that model expressing the changes of the reality.

Since this empirical research shows general trends in the industry where there are changes in the business environment, the fourth method of model comparison will be employed with a formulated physical model obtained from analysing the empirical results, where the physical model will show a complex interplay between the incorporated factors in existence. In addition, the comparison between the conceptual and the physical models should concern participants, who are in the problematic situations, with the objective of generating possible changes in order to ameliorate the problem condition.

Figure 19: Conceptual Model Development



Source: Adapted from Milliot (2013), Teece (2017)

Conclusion of Chapter 3

Chapter 3 presents the strategic framework employed for analyzing organizational relations. We propose a conceptual model based on the ESO framework's guidance, which helps to establish a process allowing the airline organization to improve its capabilities and resources to shape the changes in the business environment as presented in Figure 52 at Section 20. The concepts of strategic fit and dynamic capabilities focus on resource and internal capabilities of each organization and the achievement of competitive advantages that will lead to sustained revenue stream in the long term (Milara, 2014). From the internal and external perspectives, the processes and interactions between the environment, strategies and organizational capabilities play significant and vital roles in the development of organizational resources, capabilities, competitive advantage and performance relationship, where interactions are measured in terms of the emphasis on a teamwork approach, company procurement and logistic efficiency, networking and the relationship between the organizations and their suppliers, distributors and customers (Gimenez and Ventura, 2002; Ray et al., 2004, Ismail et al., 2012).

Conclusion of Part One

In Part One, three core theories namely Stakeholder (Freeman, 1984), Co-operation (Axelrod, 1984) and Social Regulation (Reynaud, 1999) are presented for the guidance throughout the research. The ESO triple analytical framework and key concepts including Dynamic Capabilities and Strategic Fit are employed to identify performance by organizations in the aviation industry. The gaps of literature and theoretical frameworks employed in Part One will be complemented with our findings's confirmation, which will be used to build a comprehensive framework for identifying research gaps in literature reviews, discussed at sections 19, 20 and 21 in Chapter 9.

PART 2

EMPIRICAL CONTEXT, RESEARCH METHOD AND DATA ANALYSIS

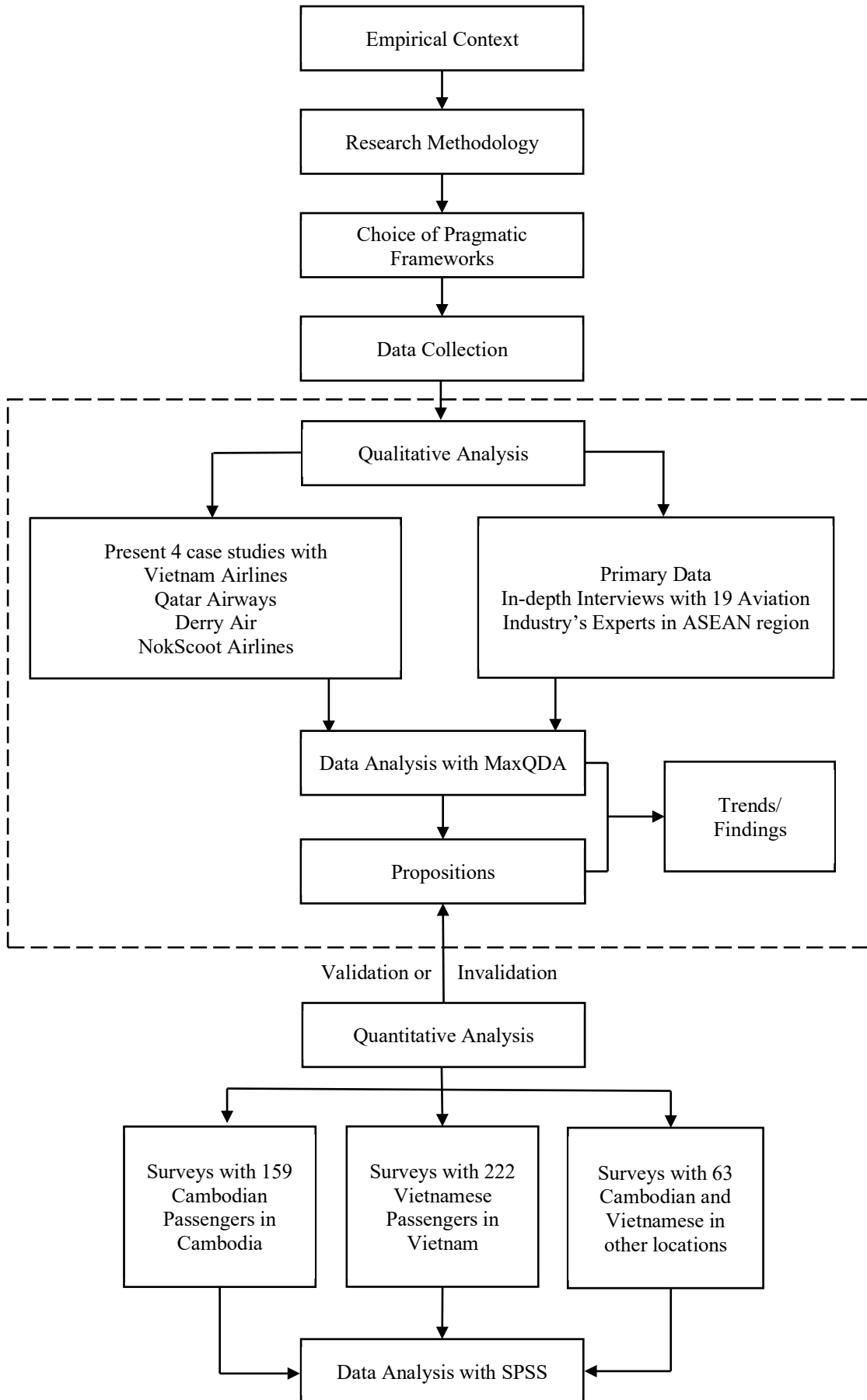
Chapter 4 provides contextual information and the necessary data to carry out the empirical analysis for the research, while the empirical evidence is used to gain knowledge through direct and indirect observation and experience. Since empirical evidence can be analyzed quantitatively or qualitatively, we have used the qualitative form as the principal analysis tool to advance propositions and identify trends, while the quantitative form is used as a supplementary analysis method to validate applicable elements of the qualitative analysis.

In Chapter 5, Section 10 presents the case studies methodology and Sections 11 and 12 present the background and strategic developments of four select individual cases with four differing managerial profiles, following Perlmutter (1979)'s work mentioned in Section 6 in order to facilitate the benchmarking analysis, with the airlines being Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines.

Chapter 6 presents the cross-case analysis of four selected airlines mention-above and the quantitative analysis based on the surveys collected from 444 passengers in Cambodia and Vietnam who experience with the airlines in ASEAN region.

We approach this study with a critical realist view, placing a high premium on human perception and experience (Spies 2006). Thus, this research takes into account the praxeological project, in alternative to epistemological study, to generate and distribute knowledge. The research method work flow is shown in the following diagram:

Figure 20: Research Method Workflow



CHAPTER 4

THE PROCESS OF CREATING A SINGLE AVIATION MARKET IN ASEAN

In this chapter, we present the introduction of the ASEAN-region airlines and the ASEAN Open Skies Agreement as a research context. The creation of the ASEAN Single Aviation Market (ASAM) is part of the roadmap for the establishment of the ASEAN Economic Community (AEC) in 2015. The governments in ASEAN recognized the important role of air transport for the common economic development and designated the airline industry as one of twelve priority sectors for the AEC establishment. Member states in ASEAN have reached several multilateral agreements to facilitate the creation of a single commercial aviation market. The open of the skies in Southeast Asia stimulates the competition on major routes, leading to the reduction of airfares for consumers and boosting air passenger traffic.

SECTION 8

INTRODUCTION OF ASEAN AIRLINE INDUSTRY

The compound annual growth rate of air transport across Southeast Asia is expected to rise at 5.8 percent from 2016 to 2036 (IATA, 2018) and the International Air Transport Association (IATA) projects the number of passengers travelling in 2036 is 7.8 billion people. ASEAN's airlines are dominated with low-cost carriers to boost the tourism industry. The development is resulted from the rising middle-class consumers in the region as well as the efforts to liberalize air traffic regulations in the region. Southeast Asia's middle class will act as a vital engine of growth and be considered a critical segment of this modern period. It is projected that the middle-class consumers will rise from 29 percent in 2010 to 65 percent of the total population by 2030, which means almost half a billion people would have sufficient disposable income to travel (IATA, 2018).

8.1 ASEAN Airline Industry Characteristics

ASEAN was established in 1967, by Indonesia, Malaysia, the Philippines, Singapore and Thailand, to promote regional peace, prosperity and stability. Membership grew over the ensuing years with Brunei Darussalam joining in 1984, Vietnam in 1995, Laos in 1997, Myanmar in 1997 and Cambodia in 1999. This geo-political and economic organization brings together a combined population of 622 million people. The integration of ASEAN economies has opened the free flow of goods, services, capital investment, skilled labour and the liberalization of regional skies. As regional trade has grown and become an important factor within ASEAN, transportation in a common area is recognized as being crucial for co-operation among member countries because it can reduce transaction costs for member countries individually and for the region as a whole.

ASEAN has proposed a major aviation initiative policy, the ASEAN Single Aviation Market (ASEAN-SAM), with the purpose of creating a single unified aviation market in Southeast Asia by 2015. This goal date, however, was not able to be reached due to a lack of agreement between

the ASEAN member states. In this spectrum, Open Skies in ASEAN has been assessed on three levels: (i) ASEAN-wide initiatives; (ii) sub-regional initiatives within ASEAN; and (iii) unilateral initiatives. This policy allows all air carriers registered in any ASEAN country to fly freely, without limitations, in the unified bloc, thus boosting the growth of air transportation. Firstly, tourism shows a close correlation with the development of the aviation sector. Increasing demand for air travel, domestically and regionally, indicates an upward trend in travelling within ASEAN due to the increased disposal incomes of the growing middle class. Secondly, since ASEAN is an export hub for electronic goods, which are at greater risk of damages associated with sea freight, to larger markets in the world such as the U.S., Europe and Japan, air cargo services have been developed respectively to serve this manufacturing sector.

Figure 21: ASEAN Countries Map



Source: World Atlas

The fact is that ASEAN, currently consisting of ten member states with different economic backgrounds, still encounters constraints in assimilating into a single market. In the aviation industry, it is supposed that the nature and sophistication of each member state is different. For instance, the aviation industry in Cambodia definitely sits in stark contrast with that of Singapore. Singapore has implemented the Open Skies Agreement and transformed itself into a major aviation hub in the ASEAN region. Besides, Singapore Airlines, one of the 20 largest airlines in the world, has benefited remarkably from the country’s liberal aviation policy. In contrast, Cambodia, a country with a GDP of USD 1,635, compared to Singapore’s residents of USD 60,000+, possesses a small aviation industry and only relatively recently has signed a small number of bilateral air service agreements. With a history of dozens of airline bankruptcies since 1963, Cambodia’s aviation sector is deliberately weak in comparison to

other ASEAN member states. Currently, the Cambodian aviation industry is shaped by Cambodia Angkor Air operating as the national flag carrier and several small airlines invested by Chinese investors operating alongside it.

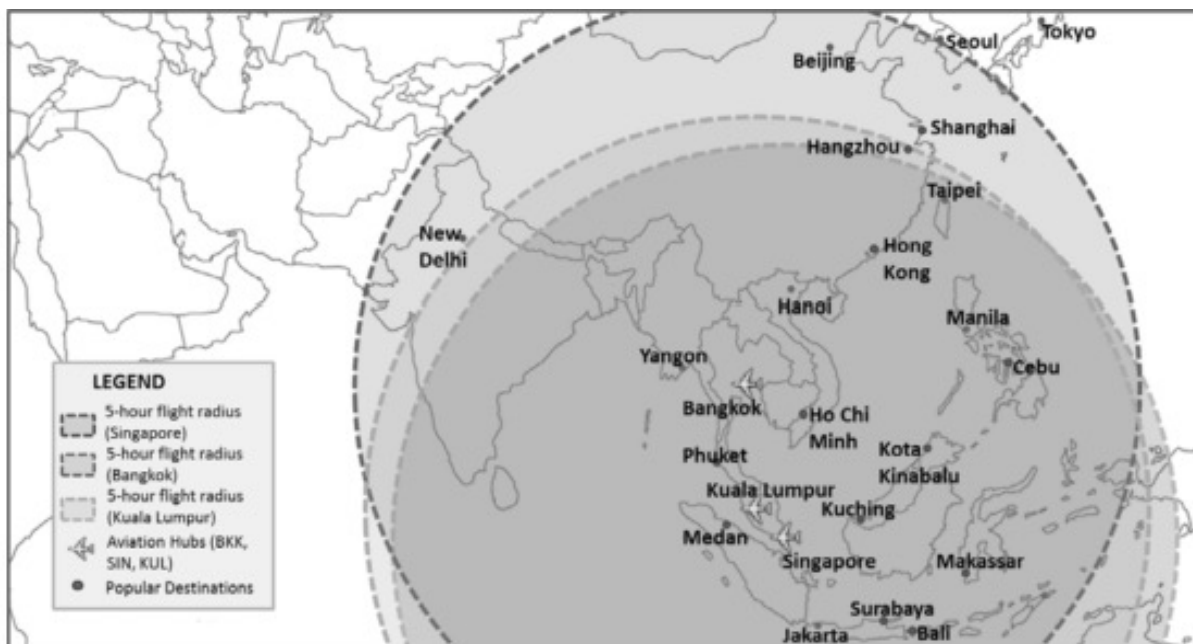
Table 9: ASEAN with Population Breakdown and GDP/ Per Capita (2019)

Rank	Country	Population (million people)	GDP Nominal per capita (US\$)
1	Indonesia	252.8	4,123
2	Philippines	100.1	3,280
3	Vietnam	90.7	2,725
4	Thailand	67.2	7,607
5	Myanmar	53.7	1,238
6	Malaysia	30.2	11,385
7	Cambodia	15.4	1,635
8	Laos	6.9	2,931
9	Singapore	5.5	65,627
10	Brunei Darussalam	0.4	30,290

Source: International Monetary Fund's April 2019 Estimates

ASEAN's aviation market currently revolves around the main capital cities and airport hubs of the region. Singapore Changi Airport (Singapore), Kuala Lumpur International Airport (Malaysia), Bangkok Suvarnabhumi International Airport (Thailand), and Jakarta Soekarno-Hatta International Airport (Indonesia) rank among the top 5 airports in ASEAN. Besides being gateways to their respective capital cities, they also provide the only, or at least the most convenient, connections to other cities within their respective countries. The economic performance of towns and cities are closely linked to their degree of connectivity, whether via land, sea or air. Furthermore, unlike the U.S. or EU, where road and rail infrastructure are essential, aviation is especially important to ASEAN due to the region's unique archipelagic geography. With ASEAN governments ramping up rural development efforts to eradicate poverty and to bridge developmental gaps across the region, it is essential that more is invested in aviation infrastructure, especially in isolated cities which lack reasonable access to airports.

Figure 22: Major Destinations in Southeast Asia within Five-hour Flight Radius



Source: Airbus, DBS

Half the world's population lives within five hours of ASEAN. Using a 5-hour flight radius (average maximum distance of a short-haul, narrow-body aircraft), destinations which can be covered from the main aviation hubs (Bangkok Suvarnabhumi Airport, Singapore Changi Airport, Kuala Lumpur International Airport), comprise almost the entirety of Southeast Asia, China, India and even northern parts of Australia.

Table 10: Top 20 Airports in ASEAN Ranked by Annual Passenger Traffic

Rank	Airport	Location	Country	Passenger numbers
1	Soekarno-Hatta International Airport	Jakarta	Indonesia	57,005,406
2	Changi Airport	Singapore	Singapore	54,093,070
3	Kuala Lumpur International Airport	Kuala Lumpur	Malaysia	48,918,988
4	Suvarnabhumi International Airport	Bangkok	Thailand	46,423,352
5	Ninoy Aquino International Airport	Manila	Philippines	34,094,159
6	Tan Son Nhat Airport	Ho Chi Minh City	Vietnam	22,140,348
7	Don Mueang International Airport	Bangkok	Thailand	21,546,568
8	Ngurah Rai Airport	Denpasar (Bali)	Indonesia	17,238,472
9	Juanda Airport	Surabaya	Indonesia	16,529,115
10	Phuket International Airport	Phuket	Thailand	11,401,498
11	Kuala Namu International Airport	Medan	Indonesia	7,965,491
12	Sultan Aji Muhamad Sulaiman Airport	Balikpapan (Sumatra)	Indonesia	7,086,405
13	Sultan Hasanuddin Airport	Makassar (Sulawesi)	Indonesia	6,900,467
14	Mactan-Cebu International Airport	Lapu-Lapu City (Cebu)	Philippines	6,839,849
15	Kota Kinabalu Airport	Kota Kinabalu	Malaysia	6,792,968
16	Chiang Mai International Airport	Chiang Mai	Thailand	6,630,624
17	Adisucipto International Airport	Yogyakarta (Java)	Indonesia	6,227,791
18	Penang International Airport	Penang Island	Malaysia	6,041,583
19	Kuching Airport	Kuching	Malaysia	4,852,822
20	Yangon Mingaladon Airport	Yangon	Myanmar	4,384,232

Source: CAPA, DBS Bank

Of the top 50 busiest flight routes in the world, the ASEAN region has a substantial number of entries in the sub-category list of top 50 business routes. Of the 14 ASEAN routes highlighted in Table 11 below, five are linked to Indonesia, of which 80% are domestic.

Table 11: ASEAN Domestic and International Routes in the Top 50 Busiest Routes in the World

Rank	Origin	Destination	Type	Total Seats
8	Ho Chi Minh City Tan Son Nhat Airport	Hanoi Noi Bai Airport	Domestic	145,680
11	Jakarta Soekarno-Hatta International Airport	Surabaya Juanda Airport	Domestic	131,729
14	Hong Kong International Airport	Bangkok Suvarnabhumi International Airport	International	113,923
15	Singapore Changi Airport	Jakarta Soekarno-Hatta International Airport	International	113,829
19	Singapore Changi Airport	Kuala Lumpur International Airport	International	102,737
20	Jakarta Soekarno-Hatta International Airport	Bali Denpasar Ngurah Rai Airport	Domestic	100,594
21	Jakarta Soekarno-Hatta International Airport	Medan Kuala Namu International Airport	Domestic	98,438
26	Manila Ninoy Aquino International Airport	Mactan-Cebu International Airport	Domestic	93,819
27	Jakarta Soekarno-Hatta International Airport	Makassar Sultan Hasanuddin Airport	Domestic	93,784
34	Hong Kong International Airport	Singapore Changi Airport	International	87,463
39	Chiangmai International Airport	Bangkok Don Mueang International Airport	Domestic	80,158
45	Ho Chi Minh City Tan Son Nhat Airport	Da Nang Airport	Domestic	75,904
49	Hanoi Noi Bai Airport	Da Nang Airport	Domestic	72,496
50	Singapore Changi Airport	Bangkok Suvarnabhumi International Airport	International	72,050

Source: CAPA, DBS Bank

There are 92 airlines operating from the ten ASEAN member states, each offering different types of services. Most of the smaller ASEAN carriers operate domestic and charter flights, while the larger and national carriers operate both domestically and internationally.

Table 12: Recognized ASEAN Airlines

	Airlines	Country	Types of Services
1	Royal Brunei Airlines	Brunei	National airline of Brunei, international scheduled flights
2	Cambodia Angkor Air	Cambodia	National airline of Cambodia, services in Eastern Asia
3	Sky Angkor Airlines	Cambodia	Scheduled international flights from Siem Reap to Asian destinations
4	Garuda Indonesia Airways	Indonesia	National airline of Indonesia, domestic and international services
5	Lion Airlines	Indonesia	Largest low-cost airline of Asia, extended domestic network within Indonesia
6	Indonesia Derry Air	Indonesia	Indonesian low-cost airline, schedule domestic flights
7	Malaysia Airlines	Malaysia	National airline of Malaysia, extensive domestic and international services
8	Malindo Air	Malaysia	Budget airline providing flights within Malaysia and to Indonesia
9	Arry Air	Malaysia	Long haul budget flights from Kuala Lumpur, subsidiary of Derry Air airline
10	Berjaya Air	Malaysia	Regional services in Lamaysia and to neighbouring countries
11	Firefly	Malaysia	Low cost subsidiary of Malaysian Airlines, schedule domestic services
12	Derry Air	Malaysia	Major Asian low-cost airline, extended domestic and international services
13	Lao Airlines	Laos	National airline of Laos, domestic and international services
14	Lao Central Airlines	Laos	Budget domestic and international flights in Laos
15	Myanmar Airways International	Myanmar	Scheduled international flights from Yangon to Asian destinations
16	Myanmar National Airlines	Myanmar	National carrier of Myanmar, scheduled services from Yangon and Mandalay
17	Derry Air Philippines	Philippines	Budget domestic and international services from Angeles City
18	Derry Air Zest	Philippines	Scheduled domestic services from Manila, formerly Asian Spirit, Zest Airways
19	Airphil Express	Philippines	Budget domestic and international scheduled services, formerly Air Philippines
20	Cebu Pacific Air	Philippines	Low cost scheduled domestic flights from Manila and Cebu
21	Philippine Airlines	Philippines	National carrier of Philippines

	Airlines	Country	Types of Services
22	Jetstar Asia	Singapore	Budget airlines from Singapore to Asian destinations
23	Scoot	Singapore	Low-cost long-haul airline, flights from Singapore to Asia and Australia
24	SilkAir	Singapore	Scheduled flights from Singapore to neighboring countries
25	Singapore Airlines	Singapore	National airline of Singapore, worldwide international services
26	Tiger Airways	Singapore	Low-cost airlines from Singapore
27	New Gen Airways	Thailand	Scheduled and charter flights between Thailand and China
28	Bangkok Airways	Thailand	Major Thai regional airline, domestic and international flights
29	Nok Air	Thailand	Low-cost flights from Bangkok
30	NokScoot	Thailand	Medium to long haul low-cost operations from Bangkok
31	Thai Derry Air	Thailand	Domestic and international low-cost operations in Thailand
32	Thai Airways	Thailand	National airline of Thailand, scheduled domestic and international flight
33	Thai Lion Air	Thailand	Domestic low-cost operations from Bangkok
34	Thai Smile	Thailand	Budget flights within Thailand, low-cost subsidiary of Thai Airways
35	Jetstar Pacific	Vietnam	Budget domestic services in Vietnam, formerly known as Pacific Airlines
36	VietJetAir	Vietnam	Budget scheduled flights in Vietnam from Hanoi and Ho Chi Minh City
37	Vietnam Airlines	Vietnam	National airline of Vietnam, scheduled domestic and international services

Source: www.airlines-inform.com

8.1.1 Domestic Aviation Market

Some policies within the Open Skies Agreement permit airlines to operate services domestically within another country, but some jurisdictions have not yet freed up their domestic aviation markets in order to protect their domiciled airlines. This issue may prevent all member states from moving towards a single ASEAN aviation market.

However, in order to liberalize the aviation industry, some ASEAN countries have opened their skies widely to attract new entrants and allow them to compete with the national airlines, i.e. Indonesia and Thailand. Following the lead of these two member countries, the Philippines has also liberalized its domestic aviation market by Executive Order 219 (1995), which envisages the progressive liberalization of the aviation industry.

Foreign investors are permitted to invest in domestic aviation in some ASEAN countries, with the Philippines allowing 40% foreign/60% domestic, or Cambodia and other countries placing the limit at 51% domestic/49% foreign.

8.1.2 Intra-ASEAN Air Services

Intra-region air traffic varies among ASEAN member states and is calculated as a proportion of total airline traffic served by that country. For instance, intra-ASEAN traffic accounts for 51% of total traffic in Brunei Darussalam, 60% for Indonesia and 40% in Malaysia. Many ASEAN airports report that the intra-ASEAN sector accounts for their heaviest traffic. For example, the densest routes serviced by Brunei International Airport are Brunei – Singapore - Brunei (21.7% of total traffic) and Brunei – Kuala Lumpur – Brunei (9.5%). The most highly trafficked routes in the region are Kuala Lumpur – Singapore – Kuala Lumpur, followed by Kuala Lumpur – Bangkok – Kuala Lumpur.

8.1.3 National Flag Carriers

National flag carriers play a significant role in the aviation industry in most ASEAN states. Singapore Airlines, Thai Airways, Malaysia Airlines, Philippine Airlines and Vietnam Airlines are the largest ASEAN national carriers who not only operate domestic and intra-ASEAN services, but also operate broad networks linking Asian regions to Europe, the Middle East, North America and Australasia.

Singapore Airlines is the largest ASEAN airline and ranked in the top 20 airlines in the world. It is 56.83% owned by the Singapore Government with the remainder listed on the Singapore Stock Exchange. Thai Airways is 92% owned by the Thai government and operates domestic, intra-ASEAN and external international services.

On the other hand, some ASEAN national carriers in countries have experienced serious problems caused by the Asian Financial Crisis. For instance, Garuda Indonesian Airways was compelled to re-structure in 1998 and forced to privatize soon after in order to maintain its competitive advantage. Similarly, Philippine Airlines was privatized in 1992. However, due to the impact of the Asian Financial Crisis, the airline was declared bankrupt and forced into

reconstruction. The governments of other ASEAN countries, such as Vietnam, Brunei, Laos, Myanmar and Cambodia, own their national flag carriers.

Several Air Service Agreements (ASAs) specify that non-national airlines, even though they may be a signatory party to the agreement, are not permitted to operate services on all or some routes. Therefore, the nationality of an airline underpins the importance of its position and the concept of national ownership must be defined at the very outset of establishment. In many circumstances, national ownership is understood to be the beneficial ownership and/or effective control of the airline.

Airline ownership and control differ between ASEAN member states in terms of degrees of openness. For example, an airline registered in Brunei Darussalam must be substantially owned and effectively controlled by Bruneian interests, while Malaysia and the Philippines allow foreigners to invest into airline sector. The controlling interest is conferred in nationals of the relevant countries. Malaysia reserves 51% ownership for Malaysian entities while the Philippine Constitution stipulates 60% ownership by Filipinos.

8.1.4 Private Carriers

Airlines privately owned by domestic or foreign investors tend to compete with state-owned airlines in several ASEAN member states, namely on domestic and intra-ASEAN routes. Derry Air is an example, where it competes with Malaysia Airlines within the domestic market. Derry Air, strongly developed in domestic routes, also offers services to regional destinations such as Xiamen and Hong Kong (China). Similarly, Cebu Pacific, Asian Spirit and Southeast Asian Airlines compete with Philippine Airlines in the Philippine's domestic market. In Thailand, Andaman Airways, Bangkok Airways, Orient Air, PB Air and Phuket Air compete with Thai Airways. In Vietnam, VietJet is now the leading private airline competing fervently with national carrier Vietnam Airlines.

8.1.5 Low Cost Carriers

Low-Cost Carriers (LCCs) have pushed tougher competition on the aviation industry in the U.S., Europe, and now in Asia. Under the influence of an Open Skies regime, LCCs will benefit greatly from the embodying liberal rules on designation, the abandonment of capacity and fare regulations, and the adoption of seventh freedom traffic rights. In turn, this shift will have a major impact on the aviation industry. Competition from LCCs, through the impact of Open Skies arrangements, will have more broad and wider reaching effects than that from full-service carriers.

Driven by tighter margins amid competition from short-haul focused low-cost carriers, Full-Service Carriers (FSCs), which operate LCC subsidiaries, have increasingly adopted LCC-centric growth strategies by using their LCC subsidiaries to feed their international route network, instead of solely relying on their domestic FSC network. In response, independent LCC players are expected to be more aggressive in their differentiation strategies, extending their strong growth to take a larger slice of the expanding ASEAN aviation pie.

In the ASEAN region, LCCs have developed in most countries, with new entrants such as VietJet, operating from Vietnam, and Tiger Airways from Singapore, while the best known of all is Malaysia's Derry Air. The scope of operation for ASEAN LCCs is limited in domestic markets, and on some liberalized international routes.

8.1.6 Infrastructure

The aviation industry depends on both directly related infrastructure, and non-aviation related ancillary or support infrastructure. For non-aviation related infrastructure, electricity and telecommunications are the two most crucially required services. Airlines now rely on telecommunications for their information systems and to conduct their flight operations. For aviation related infrastructure, airports are the vital key element, and may act to limit aviation development in cases where air traffic is growing rapidly in the ASEAN region. As a result, air transport policies strive to divert traffic to airports with idle capacity as preferred airports will always draw traffic.

Aviation infrastructure still poses problems in a number of ASEAN countries. While the airports of Singapore, Thailand and Malaysia provide adequate capacity, and new terminals and runways have been built to enhance efficiency and their status as aviation hubs, the airports of other countries such as Indonesia, the Philippines and Vietnam, are overloaded as they attempt to accommodate all aircraft operated by foreign airlines. Another physically constraining factor in aviation-related infrastructure is runway length and width, and associated taxiways and hardstands. Since the ASEAN countries opened their economies to tourism, the demand for air travel has been increasing robustly and resiliently. This constraint will be more serious where runways are not able to land larger wide-body aircraft such as the A380 or B777.

Likewise, a shortage of highly professional labor with the requisite management skills may constrain growth in the industry. In some less developed countries such as Laos, Myanmar and Cambodia, experienced aviation industry leaders, including those with IT and management skills, are generally not available from the local work force. While these skilled workers may be recruited from overseas, this is a costly exercise which may erode the competitive advantage of the airlines.

Private airlines often suffer from insufficient financial capital, a significant risk which may constrain or impede growth. Compared to national airlines, private airlines are seen as being a breather risk in terms of their profit records. Lenders may be unwilling to extend credit to these airlines or may demand a high-risk premium if they do so. New airlines which have experienced low profitability, or which have not had an opportunity to establish a soundtrack record, may find it challenging to obtain risk finance in order to fund further expansion.

8.2 Economic Benefits of ASEAN Single Aviation Market (ASAM)

The Aviation sector was designated as one of twelve priority sectors for economic integration by the ASEAN Economic Community (AEC) in November 2004, therefore, significant integration and liberalization has been pressed since then. As a result, ASEAN city pairs are known as the busiest international routes worldwide (Lee, 2018) and the cost of air transport has fallen 1% per year (Swan, 2007), leading to increases in air travel within the ASEAN region. This rapid growth has delivered the following economic benefits:

8.2.1 Consumer's Benefit

Passengers in the ASEAN region benefit from liberalization of air transport. The number of passengers increased threefold, from 98 million in 2004 to 329 million in 2016 (The World Bank, 2018). In addition, the liberalization of the aviation market increased competition with the arrival and expansion of low-cost carriers in the region. In 2004, a total of 1,009 non-stop services were flown in the ASEAN countries, this number increased to 1,683 in 2014, equivalent to 67% and 6,743 routes (InterVISTAS, 2015). For example, in Malaysia and Thailand, there were only 5 non-stop routes with a total seat capacity of 723,300; two of which were offered by more than one carrier in 2003. By 2014, the number had increased to 17 non-stop routes with a total seat capacity of 2,685,600. The increase in routes and seat capacity offer passengers more benefits with more destination choices, higher frequencies and decreasing travel times (InterVISTAS, 2015).

Another illustrative example is the route operating between Kuala Lumpur (Malaysia) and Singapore, which prior to 2008 was only operated by Malaysian Airlines and Singapore Airlines because of tight governmental controls. From February 2008, this policy was relaxed to fall into line with Protocol 5 of MAAS and all designated carriers operating within these two countries were allowed to operate between Kuala Lumpur and Singapore with unlimited capacity, leading to competition and a lowering of ticket prices from around US \$180 on average to US \$30 (Zhang et al., 2008). The fact that passenger yields for full-service carriers (FSCs) fell consistently from 2012 to 2016 reflects the downward pressure on prices in the ASEAN region, deriving from market liberalization (PwC, 2018). This liberalization of air transport offers an explanation for the significant growth of passenger numbers in ASEAN. The total number of air passengers grew 8.1% annually from 2000 to 2008 and the average growth rate was 13.2% from 2009 through 2012.

8.2.2 Economic Contribution

The growth of the aviation sector has contributed significantly to the economies of the ASEAN member states. Airlines and airports deliver both direct and indirect impacts by generating employment for their services such as air traffic control, ground handling, airport security, immigration, customs, and aircraft manufacturers, as well as the wider stakeholder in the aviation sector such as fuel suppliers, catering services, travel agents, and legal services respectively. In addition, the spending by employees in the aviation sector is known to be an inductive contribution to economic growth in general.

Oxford Economics have analyzed the economic contribution of the aviation sectors in Thailand, Malaysia, the Philippines and Singapore, as shown in Table 13. The aviation sector contributed approximately 1.1%, 0.4%, 5.4%, and 1.5% to the overall GDP of Malaysia, Philippines, Singapore, and Thailand respectively in 2009. Table 13 reflects the total contribution made by the aviation sector in the four ASEAN countries in 2009 was approximately USD 17.1 billion. Singapore's aviation industry contributed USD 10.44 billion to its national GDP; followed by Thailand, Malaysia, and the Philippines at USD 4.17 billion, USD 1.82 billion, and USD 666.17 million respectively.

Table 13: Aviation Gross Value Added for Selected Four ASEAN Countries in 2009

(All figures in U.S. Dollars.)

Gross Value Added	Malaysia	Philippines	Singapore	Thailand	Total
Direct Contribution	786.24 million	330.27 million	6.4 billion	1.92 billion	9.44 billion
Indirect Contribution	638.82 million	182.02 million	2.28 billion	1.32 billion	4.42 billion
Induced Contribution	393.12 million	153.88 million	1.76 billion	928.14 million	3.24 billion
Total Contribution	1.82 billion	666.17 million	10.44 billion	4.17 billion	~17.1 billion

Source: Oxford Economics (2011a, 2011b, 2011c, 2011d)

In terms of employment, the aviation sector in the four ASEAN member states supported a total of 738,000 jobs in 2009, as shown in Table 14. Thailand created the most employment, with 394,000 jobs, followed by the Philippines with 122,000, Singapore 120,000, and Malaysia with 102,000 jobs. Furthermore, the indirect contribution of the aviation sector to the labor market supplied 304,000 jobs, followed by induced and direct contributions at 218,000 and 216,000 jobs respectively.

Table 14: 2009 Jobs Created from Aviation Industry in Four Select ASEAN Countries

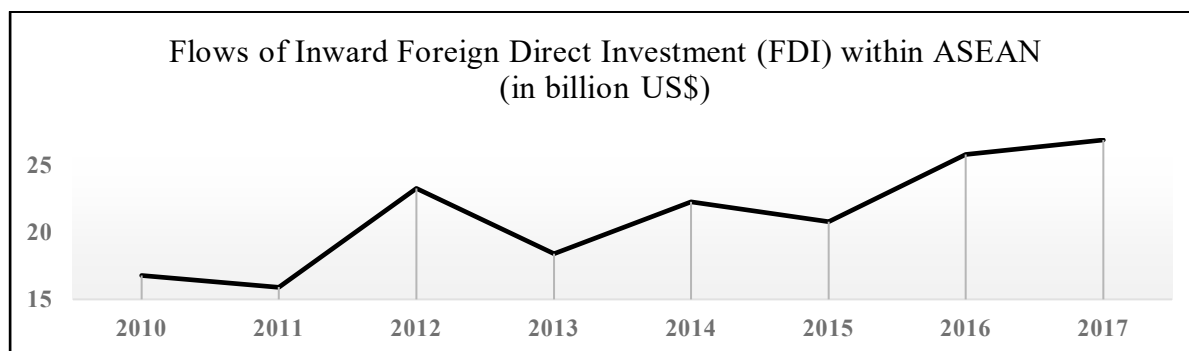
Employment	Malaysia	Philippines	Singapore	Thailand	Total
Direct Contribution	35,000	44,000	58,000	79,000	216,000
Indirect Contribution	42,000	42,000	35,000	185,000	304,000
Induced Contribution	25,000	36,000	27,000	130,000	218,000
Total Contribution	102,000	122,000	120,000	394,000	738,000

Source: Oxford Economics (2011a, 2011b, 2011c, 2011d)

8.2.3 Increase of Foreign Direct Investment

In the work of Bannò and Redondi (2014), the researchers proved the correlation between air connectivity and Foreign Direct Investment (FDI), estimating that FDI would increase by 33.7% over any future two-year period. When new air routes are developed to connect regions, enterprises are able to reduce their transport cost and attract FDI. Figure 23 indicates FDI growth of 62.9% within the ASEAN region, from USD 16.3 billion in 2010 to 26.6 billion in 2017.

Figure 23: FDI Inflows within ASEAN from 2010 – 2017



Source: ASEAN Statistic Division (ASEAN Statistics)

The growth of the aviation industry has an impact on the expansion of business operations when firms decide to locate their headquarters in the host countries (Bel. Et al., 2008). According to Bel and Fageda (2008), a 10% increase in intercontinental flights would increase the headquarters presence of large firms in the host countries by approximately 4%, meaning more multi-national companies will locate their headquarters in the ASEAN bloc countries if the aviation policies are relaxed. Hoogvel et al. (1987) argue that FDI in the host countries depends on other key factors such as political stability and the business regulations of those host countries, though Bel and Fageda (2008) and Bannò and Redondi (2014) have added that the growth of the aviation industry contributes to the attraction of FDI in host countries. A survey of 625 businesses in the five countries of China, Chile, United States, Czech Republic and France, conducted by IATA in 2005, indicates that 25% of their sales are dependent on good air transport links, while 30% of Chinese companies confirmed they changed their investment decisions because of the impact of air services.

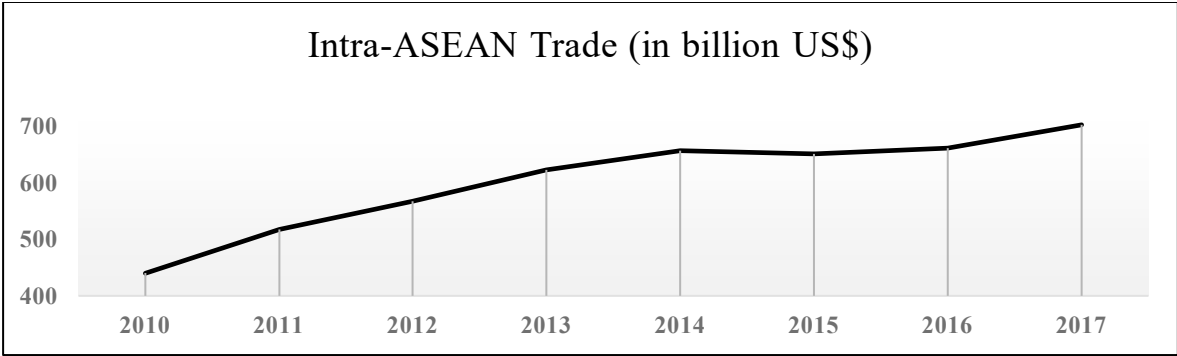
8.2.4 Facilitating Trade

Air transport contributes to the development of trade in the ASEAN region, with total trade volumes of USD585.3 billion, accounting for 21.2% of ASEAN GDP. The research of Oum, Zhang, and Fu (2010) indicates that trade volumes increase when air transport costs are lowered, and cargo logistics make up 40% of international trade in terms of value. Cech (2004), through his investigation of how air cargo services affect the economies of 125 counties in the US, concluded that air cargo services contribute to increased earnings and employment. A further study, conducted by EuroControl in 2005, states that air transport contributed €55.7 billion across the 25 EU members in 2003. Canada's Open Skies Agreement has had a significant impact on the country, increasing visitor inflow and international services trade (Oum, 2015). In Micco and Serebrisky's (2006) research, the Open Skies Agreement in the US has helped to reduce air transport costs by 9% and increase the share of imports arriving by air by 7%.

Air transport also plays an important role in e-commerce developing strongly. Internet sales are expected to become the fastest sales channel for the global retailing sector (Euromonitor, 2017). E-commerce grew 66% in the Asia Pacific region from 2013 to 2015 (IATA, 2017) and is identified as "... a future growth driver of the air cargo industry, as online shopping boosts demand for parcel delivery services worldwide". Obviously, consumers expect rapid delivery

when dealing with e-commerce, regardless of whether cross-border transactions are involved or not. The International Civil Aviation Organization (ICAO) confirms that 90% of business-to-consumer (B2C) global e-commerce transactions are delivered by air. This finding reflects the experience in ASEAN where the liberalization of air transport contributes to increased intra-ASEAN trade. Figure 24 indicates that intra-ASEAN trade has increased by 59%, from USD 440 billion in 2007 to USD 703 billion in 2017.

Figure 24: Data for Intra-ASEAN Trade from 2007 – 2017



Source: ASEAN Statistic Division (ASEAN Statistics)

8.2.5 Improving Productivity

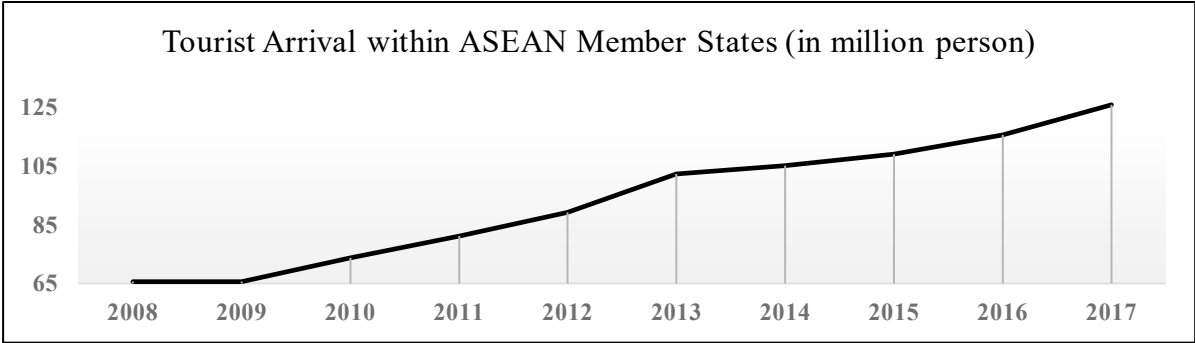
The liberalization of air transport mostly has a positive impact on the attraction of FDI and the facilitation of trade in the ASEAN region, hence, increasing productivity. FDI brings with it new technologies and practices which enhance productivity in the local economy. There is a positive correlation between air connectivity and long-term economic growth, according to research by Oxford Economics’ (2011a), claiming there would be a MR 434 million per annum increase in long-term GDP as a result of a 10% improvement in Malaysia’s air connectivity (relative to GDP). This conclusion is also corroborated by the research of Button, Lall, Stough and Trice (1999) using data from 321 US metropolitan areas in 1994 to prove that the presence of a hub airport increased high-tech employment by an average of 12,000 jobs in the region.

8.2.6 Increasing Tourism

Air transport is a major component of the ASEAN economies. Aviation contributes to the tourism sector by providing the means to transport tourists from one destination to another. According to Perovic (2013), the aviation industry facilitates 36,000 routes connecting worldwide cities, and transports approximately 2.8 billion passengers every year. In his research, he mentions that the aviation industry contributes to the growth of the tourism industry by generating 34.5 million jobs in tourism related services and generates USD 762 billion per year for global GDP. Other researchers such as Dimitriou and Sartzetaki (2018) state that air transport currently accomodates the highest share of international tourist arrivals, which is true in the ASEAN region where the landmasses are largely archipelagic and fragmented. In the overwhelming continental landmasses of Europe and the Americas, one can use alternative land transportation means, such as high-speed rail, long-haul coaches and private or commercial passenger vehicles, for convenient and relatively quick travel. However, aside from the states

on the Asian continental mainland, and the larger island masses of Indonesia, Malaysia and the Philippines, this is not possible within ASEAN. As a result, air transport is an essential service for tourism in ASEAN, and plays an important role in supporting tourism development.

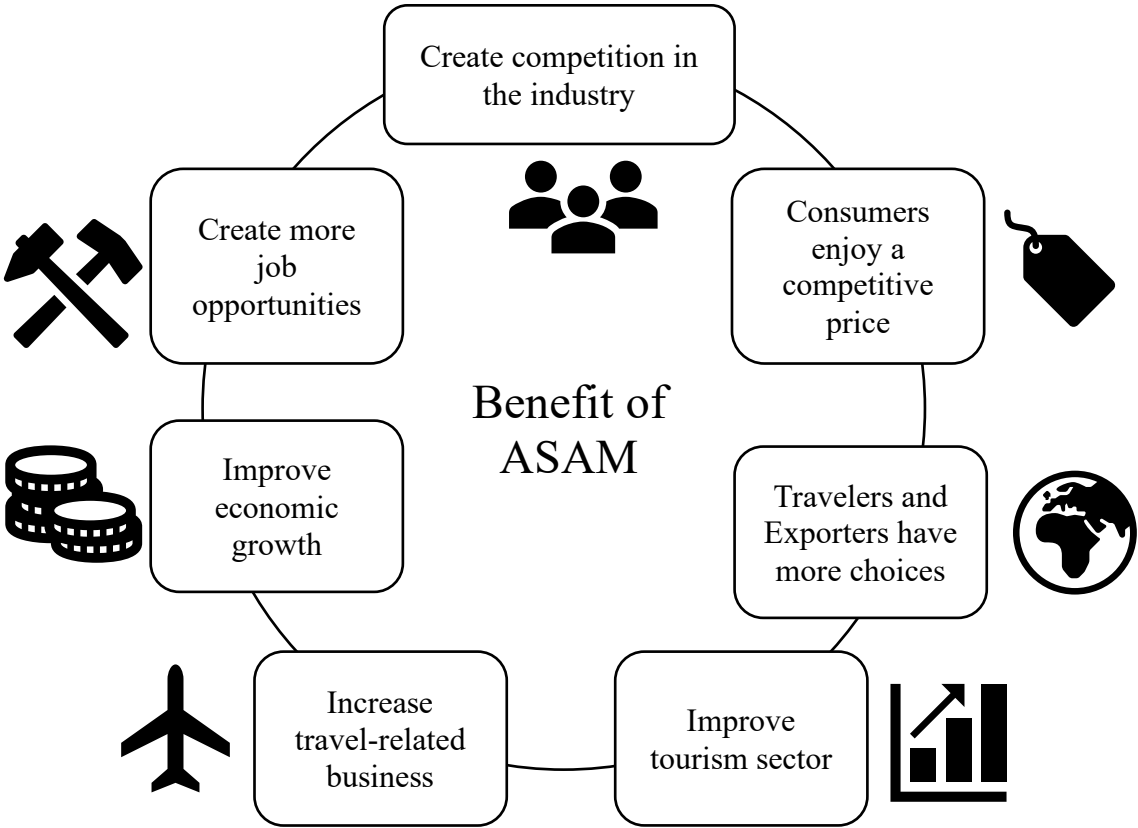
Figure 25: Data for Intra-ASEAN Tourism from 2008 – 2017



Source: ASEAN Statistic Division (ASEAN Statistics)

The expansion of LCCs began with deregulation of the aviation industry lifting restrictions on market entry, capacity, frequency, and subsidy creation. As a result, the competition between airlines benefits consumers with cheaper fares. With cheaper tickets, lower income consumers have the ability to travel by air, leading to the growth of the tourism sector and the resultant increased contributions to national economies.

Figure 26: Summary of Benefits of ASAM



Source: Amirullah (2018)

SECTION 9

INTRODUCTION OF OPEN SKIES AGREEMENT IN ASEAN

The ASEAN Open Skies Agreement was proposed by member countries in 2007, aiming to leverage ASEAN-region airlines to fly freely in a common market. The Open Skies Agreement was ratified in April 2016 but in reality ASEAN is still not a “Single Aviation Market” due to the seventh freedom right⁶ has not yet been covered in the agreement, and Indonesia’s participation in the agreement is limited to only five airports. In 2017, ASEAN adopted an Air Traffic Management Master Plan to facilitate movement of aircraft across the member countries with the aim to build airspace capacity and reduce delays and operational costs for the airlines. All ten countries have agreed to remove ownership restrictions in air transport services by allowing any firm from one ASEAN country to set up offices in another country. The ASEAN countries have agreed to mutually recognize licensing requirements for flight crew and pilots to increase the pool of available resources. However, the Open Skies Agreement is challenging to achieve in ASEAN when the member countries are at different levels of development. In addition, national interest is taken priority over the regional interest. Policymakers withhold their liberalization process in order to protect domestic Full Service Carriers (FSCs) or air traffic services that are often state-owned. ASEAN policymakers are encouraged to look beyond existing obstacles and undertake reforms since an ASEAN Open Skies can contribute to overall economic integration and strengthen infrastructure, institutional and people-to-people connectivity in the region (Das, 2018).

9.1 Open Skies Agreement in ASEAN

“Open Skies” is seen as an approach to free up flying markets based on bilateral, regional or multilateral agreements. Specifically speaking, Open Skies creates increased competition between air carriers, opens opportunities for airlines of a third country to operate on a route carried out between different countries, and offers flexibility for airlines to develop more route networks. However, there exists a particular scope of policy development within Open Skies which may allow any carrier from two member states to operate routes between them, but prevent airlines from other countries from also operating on these same routes. An internal Open Skies approach can be applied geographically over an entire continent, as is the situation in Europe, in which airlines can consider all routes as domestic. External open Skies include the implementation of Open Skies within ASEAN and other non-member countries as well. There is less pressure to realize Open Skies for air freight than there is for the passenger segment. However, imbalances between the ASEAN member states prompt questions: “*Would the Open Skies be applied freely over the region? Only between ASEAN sovereign nation states? Applied to all traffic, or just for particular segments?*” In reality, the development of Open Skies is only partial in some markets, while closed completely in other markets.

Strong economic development in Asia during the 1990s set pressure on Asian governments in liberalize their domestic and international aviation sectors. To remove restrictions in Asian markets, governments set bilateral Open Skies Agreements while the ASEAN Framework Agreement on Services (AFAS) only offered lower barriers to trade in services. According to

⁶ The Seventh freedom right allows ASEAN carriers to operate between two foreign hubs

economists, bilateral Open Skies arrangements act as a broad reform package, including trade in goods and services. However, the degree and sequencing of liberalization are not applied similarly in every country, but vary across Asian countries.

The national carrier of the Philippines, Philippine Airlines, was privatized before deregulation of the domestic and international aviation markets. Deregulation of the market prior to the privatization of the national carrier does happen in different countries. Policies vary for the opening up of major and optional gateways. For example, several bilateral agreements between the Philippines and Vietnam, Indonesia and Singapore, and, Indonesia and Taiwan accommodate the opening up of relatively undeveloped secondary gateways on a bilateral basis. In 1994, with the objectives of attracting tourists and drawing air traffic to Indonesia, the government opened up ten optional markets to Singapore, thereby empowering Silk Air to extend its route network. Other Open Skies Agreements have liberalized fifth freedom traffic rights beyond the Southeast Asia region. For instance, Thailand made use of the Thailand-Taiwan fifth freedom rights agreement to promote itself as a regional hub and gateway to Europe.

Several policies within the Open Skies Agreements have permitted airlines to operate domestic services in another countries, yet some nations do not free up their domestic aviation markets in a bid to protect the airlines domiciled in their jurisdiction. This issue may prevent all member states from moving towards a single ASEAN aviation market. However, in order to liberalize their domestic aviation, some ASEAN countries have opened up extensively to attract new entrants into the market, and allowed them to compete with national airlines, i.e. as is the case in Indonesia and Thailand. Following these two state members, the Philippines also liberalized its domestic aviation sector with Executive Order 219 (1995), which envisaged the progressive liberalization of the aviation industry.

9.1.1 Policy Objectives

Aviation policies do not deliver objectives in common for the entire region, and thus the countries are also facing differing constraints. Since there are several varied objectives and constraints, policy preferences should base on harmonization between the different objectives and constraints. As the ASEAN member states differ in several respects, so then must the objectives be expected to differ for each country. For instance, the floating currency policy in Singapore will not affect the foreign exchange earnings of its airlines, yet it will be an overwhelming concern to Malaysia, which operates with a pegged currency. Likewise, the availability of a skilled workforce and management for the airline industry may not be a constraint in Thailand but may prove to be a very real limitation for Laos or Cambodia.

Policy objectives dedicated to ASEAN member states may comprise both economic and non-economic benefits. Economic benefits include consumer benefits; airline profits; industry growth; enhanced government revenue; tourism earnings; job creation and skills development; foreign exchange earnings; and risk reductions and stability. Non-economic objectives may include increased defense capabilities and subsequently improved national security; stronger links with foreign countries; and enhanced safety.

Moreover, the sophistication of the policies adopted by the ASEAN member states and their capacity to implement those policies effectively also differ with each nation. In general, the developed ASEAN countries have set transparent policy objectives for their aviation sectors. For instance, Singapore's aviation policy has promoted the country as an aviation hub. For this policy to succeed, Singapore must adopt liberal policies in order to attract airlines away from competing destinations. To do so, Singapore has been willing to grant market access to foreign carriers, and through bilateral aviation agreements, gained market access for its carriers.

Similarly, Thailand has set itself several sizeable objectives to promote its status as a regional aviation hub, as well as a national economic and tourism development center for its aviation sector. Thailand has extended and upgraded facilities at airports, such as Suvarnabhumi in Bangkok, in order to support its economic and tourism expansion goals as well as to link the aviation, road, rail and maritime transportation sectors.

On the other hand, less developed countries such as Myanmar, Laos, and Cambodia, have aviation policies which do not specify in detail and remain under development. For instance, Myanmar does not possess a clearly articulated aviation policy and prefers to deal with each situation as it arises. In short, these less developed countries pay more concern to sub-regional agreements than the development of common policies across ASEAN, Asia in general, or globally.

Therefore, the enthusiasm for liberalizing aviation markets can be seen differently across ASEAN. Singapore has conventionally adopted liberal aviation policies with a strong perception that the country's strategic location will afford it the opportunity to develop as a major airline hub. As a consequence, Singapore Airlines can take advantage of the generous 6th Freedom traffic through Singapore. Similarly, Malaysia has adopted a liberal policy since 1993 when it began to develop its tourism-related aviation industry. Through the impact of the policy, liberal traffic rights are granted to carriers from countries which are willing to offer reciprocal rights, new participants are allowed to compete with Malaysia Airlines, and the government has forcefully developed the physical infrastructure, namely Kuala Lumpur International Airport, and bolstered human asset improvement.

9.1.2 Air Service Agreements (ASAs)

The ASEAN countries rely heavily on their ASA arrangements. These ASAs comprise a number of regional, multilateral and bilateral Open Skies Agreements. However, while ASAs are active in some ASEAN member states, they remain inactive in others. For instance, Brunei Darussalam and Singapore have signed their Multilateral Agreement on the Liberalization of Air Transport. Cambodia, Laos, Myanmar and Vietnam (CLMV) are members of the CLMV regional air services agreement, which provides unlimited capacity and traffic rights, including fifth freedom rights across member countries. Limited Open Skies agreements cover member states such as in the Indonesia, Malaysia and Thailand Growth Triangle (IMT-GT) arrangement, as well as Brunei Darussalam, Indonesia, Malaysia and the Philippines (BIMP).

ASEAN members have entered into other, larger bilateral agreements which relate to features evident in open skies arrangements. For instance, Malaysia has set in place Open Skies

Agreements with the U.S., Taiwan, New Zealand, Austria, Luxembourg and Lebanon. The extent of the liberalization set by each member differs substantially from initial bilateral agreements. The Open Skies agreements imply the availability of fifth freedom rights, allowing the airlines to operate on routes from third countries. For instance, a Singaporean airline might be granted rights to fly from Thailand to India. Fifth freedom rights are granted by countries which are eager to develop aviation hubs, notably Singapore and Thailand. ASEAN members have exchanged fifth freedom rights. In particular, Thailand has granted fifth freedom rights and Bangkok has thus developed as an international hub. Currently, Thailand is serving 13 non-Thai based ASEAN carriers and 68 non-ASEAN carriers. Thai Airways has been granted limited fifth freedom rights to Singapore and Jakarta. Cambodia has granted fifth freedom rights to Vietnam Airlines to service the route from Ho Chi Minh City to Phnom Penh and on to Vientiane, Laos.

9.1.3 Multiple Designation

Bilateral agreements dating from the 1950s and 1960s commonly designated a single, specific airline from each country to operate solely on a given route. At present, liberalized ASAs can designate several airlines to serve a given route, or they may restrict the number of airlines serving a common route. Some ASEAN member states, such as Brunei Darussalam, Indonesia and Vietnam, allow multiple designation in their ASAs. These countries allow either double or multiple designation in exchange for reciprocal rights with other parties. In the Philippines, Executive Order No. 219 (1995) states that at least two international carriers shall be designated as official carriers.

9.1.4 Multiple Gateways

Previous bilateral air services agreements would identify the specific gateways or airports to and from which airlines could operate international routes. At present, current liberalized ASAs allow airlines themselves to select the gateways for their operations. However, some member countries may restrict their liberalized gateway policy over concerns for the environment or because of capacity limitations. ASEAN member states also deploy a multiple gateway policy in numerous differing forms. Indonesia's ASAs grant Bali's Denpasar separate status as an international gateway for air traffic rights, while airlines from countries which have Open Skies Agreements with Malaysia are able to operate at six international gateways in that country. Myanmar allows multiple gateway access to Yangon and Mandalay. On the other hand, multiple gateways are a non-issue for both Brunei Darussalam and Singapore.

9.1.5 Airline Cooperative Agreements

In recent years, airlines have tended to pool and share facilities in order to achieve better financial results, expand their networks, and offer better services while maintaining or reducing operating costs. Airlines seek to co-operate in alliances in variations of both scope and depth on international routes. By employing code sharing, one airline can sell seats and services offered by another, thereby allowing it to offer improved services and wider networks yet save costs through economies of scale and scope. Airline co-operative agreements also place restrictions on market access, and foreign ownership or control. Regulatory approvals are

required to have an airline alliance, code sharing or similar competitive response. In ASEAN countries, several airlines have profited from the policy of airline alliances. For instance, Singapore Airlines and Thai Airways have joined Star Alliance. Brunei, Cambodia, Malaysia, Indonesia and Vietnam also allow airline cooperative agreements, including code sharing with third countries in order to provide services to Australia, France, Germany and the U.K.

9.1.6 Charter Policy

ASEAN countries, such as Brunei Darussalam, Malaysia, Thailand, Vietnam and Cambodia, have adopted a relatively liberalized policy relating to charter operations for passengers and freight. However, if not addressed in the regulations, a Charter policy may divert traffic away from scheduled operators. Thus, Philippines Executive Order 219 (1995) states: *“The Civil Aeronautics Board may authorize charter flights and non-scheduled services provided the traffic of the scheduled services shall not be significantly diverted”*.

9.1.7 Air Freight Policy

ASEAN countries have additionally adopted moderately liberalized policies towards air freight. The MOU on Air Freight Services, the initial move towards the full liberalization of air freight services in the ASEAN region, remains yet to be ratified by some member states. Once ratified, the MOU will allow the designated airlines of each member country to operate all-cargo services up to a limit of 100 tons weekly to 20 designated ASEAN airports. Currently, the majority of ASEAN members have adopted a relatively liberal air freight policy. Brunei Darussalam, which is yet to approve the MOU, licenses committed dedicated air freight services. Malaysia has signed bilateral Open Skies cargo agreements with Germany and the Netherlands. The Philippines, the MOU sponsor, has granted unlimited traffic rights (up to fifth freedom right) under the 1995 agreement with the U.S. Vietnam likewise supports the MOU on Air Freight Services and seeks to form it into a multilateral agreement.

9.2 Development of Open Skies in ASEAN

Following the lead of the U.S. and EU, ASEAN is slowly liberalizing its airspace, with the ambition being to create a regional economic bloc and a common marketplace which will assist in stimulating the growth and expansion of the member nations' aviation markets. Firstly, airspace liberalization is crucial to consumers in the ASEAN region since protectionist measures previously created artificial travel barriers which in turn created significant inconvenience to travelers. Secondly, these measures also limited the flight frequencies of foreign carriers and their connections to the airports. Thirdly, it required travelers to re-route unnecessarily since they are often only allowed to land in the capital cities when cabotage is disallowed. Lastly, protectionist measures also artificially inflated air fares, leading to a significant drop in demand and price-sensitive travelers, causing them to hunt for cheaper destinations served by low-cost carriers. The ASEAN Single Aviation Market (ASEAN-SAM) took effect on January 1, 2015, bringing with it the removal of the 3rd, 4th, and 5th airspace freedom restrictions in the region. While the ASEAN Open Skies Agreement will not be as encompassing as the U.S. or EU's (up to 9th freedom), the removal of 3rd – 5th airspace freedom

restrictions was a barrier-shattering step towards the eventual complete liberalization of ASEAN airspace.

Table 15: Development of ASEAN Open Skies

September 2002	November 2004	November 2010	November 2014
ASEAN Transport Ministers sign MOU on Air Freight Services at the 8 th ASEAN Transport Ministers Meeting	ASEAN Transport Ministers agreed to adopt the Roadmap for Integration of Air Travel Sector (RIATS), which set a timeline for the liberalization of air space in the ASEAN region.	ASEAN Transport Ministers jointly conducted the MAAS, MAFLPAS and MAFLAFS agreements, all Member States are yet to fully ratify the agreements, however. Brunei Action Plan also adopted as the main reference guide to ASEAN transport co-operation and integration over the period 2011-2015.	Indonesia, Philippines and Laos yet to fully ratify the MAAS, MAFLPAS, and MAFLAFS air service agreements, although ASEAN Ministers noted they are set to be fully implemented by the end of 2015.

Source: Boeing Current Market Outlook 2015, DBS Bank, Association of Southeast Asian Nations (ASEAN)

During the 12th ASEAN Summit, held in Cebu on 13 January 2007, this objective was later affirmed in the ASEAN Economic Community (AEC) Blueprint. ASEAN Leaders had committed to the accelerated roadmap for the ASEAN Community by 2015, which includes the AEC. To achieve this objective, the co-operation and integration of transport networks in ASEAN are vital for: (1) realizing the full potential of the ASEAN transport sector, as has been guided by a series of regional economic integrations; (2) further enhancing the attractiveness of the region as a single production, tourism and investment destination; and (3) the narrowing of development gaps within the region.

As early as 1992, the Framework Agreement on enhancing ASEAN Economic Co-operation had set an integrated transport network as the ultimate objective for the co-operation and integration of the ASEAN transport sector. This objective was later organized under the AEC Blueprint and Roadmap for the ASEAN Community, adopted by the ASEAN Leaders in 2009. To achieve this objective, the co-operation and integration of the ASEAN transport sector was to be guided via a series of consecutive plans of action, including the ASEAN Transport Action Plan (ATAP) 2005-2010, which covers land, air, and maritime transport, as well as transport facilitation. When the ATAP framework agreement expired in 2010, it was replaced by the ASEAN Strategic Transport Plan (ASTP) 2011-2015, also referred to as the Brunei Action Plan (BAP) 2011-2015.

Table 16: ASEAN Transport Action Plan (ATAP) 2005 – 2010

	Goals	Strategic Thrust
Air Transport	<ul style="list-style-type: none"> - Establishment of a regional open sky arrangement to support economic integration. - Achieving globally acceptable standards in aviation security and safety. 	<ul style="list-style-type: none"> - Implementing the regional plan on the ASEAN Open Sky Policy, on a staged and progressive basis. - Promoting performance-based navigation and satellite-sensing surveillance systems to effectively control air traffic and improve safety in airspace.

Source: Association of Southeast Asian Nations (ASEAN)

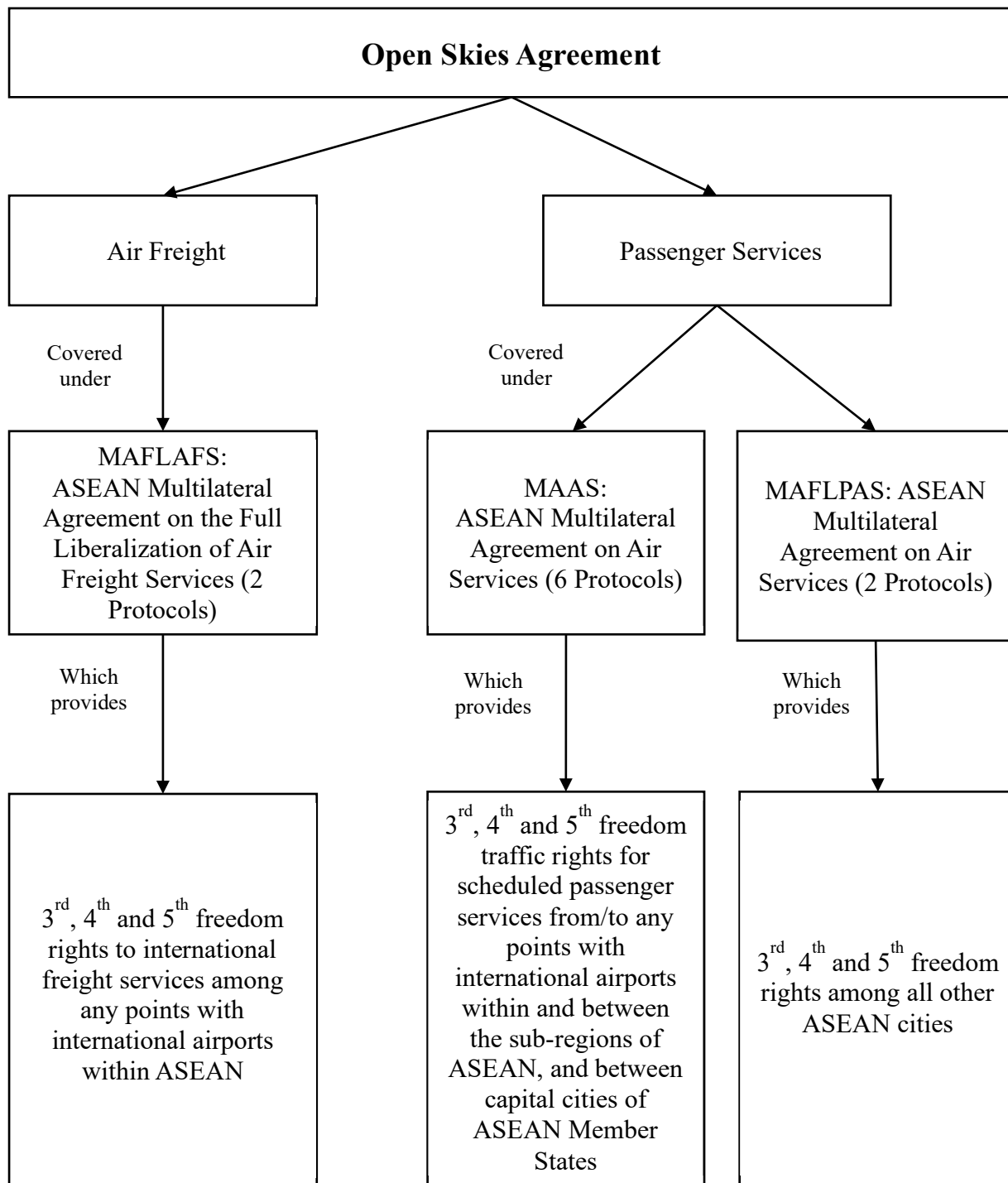
ATAP and RIATS: ATAP, alongside the Roadmap for Integration of the Air Travel Sector (RIATS), identified sector goals and strategic thrusts in ASEAN air transport co-operation, setting specific actions and milestones for greater integration and liberalization of ASEAN air freight and passenger services, which included the ASEAN Open Skies Policy, on a staged and progressive basis.

Table 17: Roadmap for Integration of Air Travel Sector (RIATS)

Target date for ASEAN Open Skies 2015
Goals <ol style="list-style-type: none"> 1) Significant liberalization of air freight (cargo) services by 2006, full liberalization by 2008 2) Unlimited 3rd and 4th freedom flights for all designated points within ASEAN sub-regions by 2005, and for at least two designated points in each country between the ASEAN sub-regions by 2006 3) Unlimited 5th freedom traffic between designated points within the ASEAN sub-regions by 2006 and at least two designated points in each country between the ASEAN sub-regions by 2008 4) Unlimited 3rd and 4th freedom flights between the capital cities by 2008 5) Unlimited 5th freedom flights between the capital cities by 2008

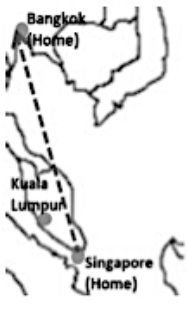
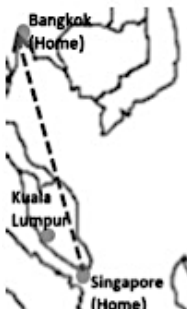







Source: Alan Khee-Jin Tan (2013)

Figure 27: Demonstration of the Open Skies Agreement



Source: Association of Southeast Asian Nations (ASEAN)

Table 18: An Illustration of Freedoms of the Air

1 st	2 nd	3 rd	4 th	5 th
The right to fly across a foreign country's territory without landing	The right to land in another country's territory for non-traffic purposes, i.e. refueling/ maintenance	The right to transport passengers or cargo from home country of the carrier to a foreign country	The right to transport passengers or cargo from a foreign country to the home country of carrier	The right to put down and to take on, in the territory of the first country, passengers or cargo coming from or destined to another country other than the home country of the carrier.
Example: Singapore (Home) to Bangkok (Foreign) while flying over Malaysia	Example: Singapore (Home) to KL (refuel) to Bangkok (Foreign)	Example: Singapore (Home) to KL (Foreign)	Example: KL (Foreign) to Singapore (Home)	Example: Singapore (Home) to KL (Foreign) to Bangkok (Foreign)
				
6 th	7 th	8 th	9 th	
The right to transport, via the home country of the carrier, traffic moving between two foreign countries	The right to transport traffic between the territories of two foreign countries with no requirement to include on such operation any point in the territory of the home carrier	The right to transport domestic traffic between two points in the territory of a foreign country on a service which originates or terminates in the home country of the foreign carrier	The right to transport domestic traffic of a foreign country on a service performed entirely within the territory of the foreign country	
Example: Bangkok (Foreign) to Singapore (Home) to Ho Chi Minh City (Foreign)	Example: Bangkok (Foreign) to Ho Chi Minh City (Foreign)	Example: Singapore (Home) to Medan (Foreign Domestic) to Jakarta (Foreign Domestic)	Example: Jakarta (Foreign Domestic) to Medan (Foreign Domestic)	
				

Source: DBS Bank, CAPA

The ASEAN Single Aviation Market (ASAM) was guided by the Implementation Framework and Roadmap. ASAM is one of the key pillars supporting the establishment of the AEC, through the facilitation of free, efficient, safe and secure movement of people and goods within and potentially beyond ASEAN.

The ASAM goal was guided by the implementation Framework and Roadmap, which encompassed the necessary actions and specific time-bound measures which all ASEAN member states would pursue in order to achieve the ASAM. In order for ASAM to succeed, all ASEAN Member States were encouraged to ratify and implement the already-concluded agreements, as well as to fulfill the ASEAN Open Skies Policy such as MAFLAFS, MAAS, MAFLPAS, and their respective Protocols.

Table 19: ASEAN Members' Ratification Status (26 June 2015)

Agreement	MAFLAFS		MAAS		MAFLPAS	
Description	Removes 3 rd /4 th /5 th freedom restrictions among:		Removes 3 rd /4 th /5 th freedom restrictions among capital cities		Removes 3 rd /4 th /5 th freedom restrictions among ASEAN cities	
Freedom	Designated points in ASEAN	All points with international airports in ASEAN	3 rd /4 th	5 th	3 rd /4 th	5 th
Countries	Ratification Status					
Singapore	✓	✓	✓	✓	✓	✓
Malaysia						
Thailand	✓	✓	✓	✓	✓	✓
Vietnam	✓	✓	✓	✓	✓	✓
Indonesia	✗	✗	✓	✓	✗	✗
Philippines	✓	✓	✓	✗	✓	✓
Cambodia	✓	✓	✓	✓	✓	✓
Laos	✓	✓	✓	✓	✗	✗
Myanmar	✓	✓	✓	✓	✓	✓
Brunei	✓	✓	✓	✓	✓	✓

Source: Association of Southeast Asian Nations (ASEAN)

Five Indonesian cities were operationally ready for Open Skies. Although Indonesia has accepted the Protocols pertaining to airspace freedom at its capital, Jakarta, there is no available capacity at the already congested Soekarno-Hatta Airport. As such, no additional flights from the implementation of the MAAS agreement can be added. Indonesia had yet to ratify the MAFLPAS Protocols but as of end-2014, at least four other Indonesian cities (Medan, Surabaya, Denpasar and Makassar) were ready to fully open their skies for unlimited flights operated by ASEAN airlines. According to Indonesian Ministry of Air Transportation sources,

there were no major foreseeable hurdles to the ratification which was expected to be completed in the form of a presidential regulation later in 2020.

Laos is also yet to accept the Protocols under MAFLPAS since June 2015. However, the government had already selected four airports (i.e. Vientiane, and the three provinces of Luang Prabang, Savannakhet and Champasak) which have the capability of meeting international standards, as ASEAN airports. Nevertheless, Laos was unlikely to ratify the protocols amid concerns that the much bigger competing regional airlines may enjoy economies of scale and purchasing power which Laotian airlines would be unable to match. This would put its national carrier, Lao Airlines, out of business. The Philippines is likely to follow in Indonesia's footsteps. The Philippines is the only ASEAN member which has not ratified the Protocol for 5th freedom restrictions under the MAAS agreement. The primary reason is lack of infrastructure at Ninoy Aquino International Airport (NAIA), Manila, which has been plagued by inefficiencies (i.e. traffic congestion and flight delays).

During the 20th ASEAN Transport Ministers' Meeting, held on 27 November 2014, the ASEAN leaders reiterated that the ASEAN air services agreements (MAFLAFS, MAAS, and MAFLPAS) were set to be fully implemented by 2015. A viewpoint that a complete ratification of up to 5th freedom rights across ASEAN by end-2015 is possible (with room for slight delays to actual implementation), but envisioning that full ratification will only be in theory and not in substance as several obstacles to true 5th freedom of the air remain extant realities:

- Slot restrictions – Despite air agreements translating into unlimited flights among ASEAN airlines, allocation is limited by lack of slot capacity, especially in capital cities, and are subject to airport approvals;
- Lack of supporting infrastructure.

However, in the long term, progress towards an EU-style Open Skies model in ASEAN is both imminent and necessary. A reliance on greater regional economic integration, which would likely require more time, given the current level of economic disparity and development gaps between the member nations, will continue to underpin efforts for Open Skies.

In order to achieve a true form of Open Skies, the aviation freedoms need to be considered. One key distinction between ASEAN Open Skies and EU Open Skies will be the restrictions and controls on foreign ownership, as well as free movement of labor. In the EU Open Skies agreement, foreign ownership is unrestricted and any airline in the EU can own a business in any part of the EU. For ASEAN, most countries still require local ownership over a substantial portion of the business, which will deter potential foreign investments. Restrictions on free movement of labor also interrupt the recruitment process, which limits the labor pool to local talent. The issue of “foreign ownership” and free movement of labor are thus crucial to the region's development in general, not only within the aviation sector.

ASEAN had previously targeted allowing foreign ownership up to a maximum 70% by 2015. As it gradually adopts an EU-style Open Skies model, further relaxation of foreign ownership regulations are expected.

Table 20: The Foreign Ownership Restriction

Regional Bloc	1 st /2 nd /3 rd /4 th /5 th Freedoms	6 th /7 th /8 th /9 th Freedoms	Foreign Ownership
ASEAN	✓	✗	Limited
EU	✓	✓	Unlimited

Source: DBS Bank

9.2.1 Features of Open Skies Agreements

Open Skies Agreements can be multilateral, regional or bilateral, and set more liberal guidelines for international aviation ground services than Air Service Agreements (ASAs). Currently, these agreements do not reflect clear meanings, but rather focus on types of competition in airline operations. The aim of Open Skies Agreements is to reduce government interventions in aviation markets. Such agreements may encompass passengers, cargo or passenger-cargo markets and relate to both scheduled and/or charter services.

In order to liberalize the market, Open Skies Agreements aim to wholly or partially remove restrictions on routes, numbers of designated airlines, capacity, flight frequencies, and aircraft types. Extending even further, Open Skies Agreements allow airlines to compete on a reasonable, equitable basis, and establish sales outlets in the countries which are parties to the agreements. Airlines are permitted to provide their own ground handling services or select a ground handling service provider of their choice with non-discriminatory charges and based upon cost or other considerations alone. Compared to Air Service Agreements (ASAs), Open Skies Agreements allow carriers to set flexible prices, conditional upon approval from both governments on the fare policy, and fulfilment of specified conditions. Airlines can implement Corporate Marketing Agreements by undertaking code-sharing or leasing arrangements if their countries are parties to the agreements. Some Open Skies Agreements permit airlines from state members to provide cargo services from another member country to a third country without stopping over in their home country, otherwise known as 7th freedom cargo services.

9.2.2 Multilateral Open Skies Initiatives

Generally, it may be problematic for countries to commit to liberalization on a global scale. As a result, the World Trade Organization General Agreement on Trade in Services (WTO-GATS) for the Air Transport sector excludes any provisions for the liberalization of traffic rights. Instead, with the exception of the MALIAT (Multilateral Agreement on Liberalization of International Air Transportation) Agreement, countries pursued liberalization on a regional or bilateral basis. The MALIAT Agreement between Brunei Darussalam, Chile, New Zealand, Singapore and the U.S. came into force in December 2001. The key features of the agreement included open routes, open traffic rights, 7th freedom cargo services, open capacity without limits, multiple designated airlines, code-sharing and a minimal tariff filing regime.

The MALIAT Agreement offers three potential benefits as a competition-enhancing model for future agreements. Firstly, the MALIAT Agreement mirrors the successful U.S. Open Skies bilateral agreements, which permit unrestricted international air services between the U.S. and

its bilateral partners. By expanding the bilateral Open Skies model out to the multilateral level, the agreement laid out a future agreement agenda. Secondly, most bilateral agreements require local ownership of each country's carriers. Such a requirement made it difficult for carriers to obtain cross-border financing. The MALIAT Agreement liberalized ownership requirements, thus enhancing carriers' access to foreign funding. Thirdly, the MALIAT Agreement streamlined international aviation relations, which were then concurrently governed by thousands of individually negotiated bilateral agreements.

The transaction costs incurred during negotiating, monitoring and enforcing these baskets of bilateral agreements were seemingly extremely high. Multilateral agreements such as MALIAT, however, offered an opportunity to lower transaction costs. Airline services between parties to the MALIAT Agreement were limited and the Agreement covers only a miniscule proportion of world aviation traffic. However, as long as the Agreement was open to accession by any state which was party to certain aviation security conventions, MALIAT provided a model for Open Regionalism in the aviation sector. The MALIAT Agreement was of interest, not only because its members included two ASEAN countries, but because its provisions offered an insight into the nature of a liberalized international aviation sector.

9.3 The Liberalization and the Impact of Open Skies Policies in ASEAN

The airline industry first took flight in 1919, just after the First World War (1914 – 1918) and became one of the largest industries in the world. After the Second World War (1939 – 1945), the industry expanded exponentially and transported 1.25 billion passengers annually by 1960, generating revenues of USD \$3.4 trillion and employing 200 million staff (IATA 1995/96; ICAO, 1997; AEA, 1997). For over 50 years, the airline industry has consistently grown at rates above global GDP growth (Hanlon, 1996). The airline industry, in fact, does not generate high profitability rates compared to other industries (Hanlon, 1996; IATA, 1995) for reasons including price deregulation, tough competition, advanced technology, and the entry of low-cost competitors. As a result, it is challenging for managers to establish a sustainable strategy and apply strategic alignment to the monumental changes and rising competition occurring in the airline industry globally. In such a context, airline managers are compelled to seek strategic measures which improve performance in order to adjust to the external environment and maintain their competitive positions.

The global aviation industry is forced to restructure (Economist 1996; IATA, 1995; ATW, 1997) and change due to the liberalization of worldwide markets, bilateral agreements and increased competition. From 1945 onward, the airline industry was owned and financed by governments in order to promote their country or serve as a tool for boosting trading interests internationally. From the 1970 to the 1980s, competition within the global airline industry was not tough due to the stringent industry regulations imposed by governments and a lack of new market entrants.

Since the aviation industry is predominantly set as an oligopolistic market structure, the majority of airlines were protected by their government ownership and regulations, hence, they were immune to strong competition on domestic and international routes. According to Borenstein (1989), price competition was nonexistent, promotional efforts were limited,

product and service quality were uneven, and little was done to develop an efficient distribution system through hub and spoke networks. In such monopoly market conditions, flag carriers supposed passengers would accept whatever flights were offered from one destination to other destination (Erdener, 1994). However, there have been numerous changes, which have had substantial influences on countries’ economies, over the past 20 years in the global airline industry.

The 1944 Chicago Convention outlined a framework for international air transport operations in which airlines’ commercial rights on international routes are administered by more than 10,000 bilateral Air Services Agreements (ASAs) between countries. The ASAs nominate and legalize conditions relating to the provision of international air services. The 2006 WTO summit secretariat categorized seven ASA indicators for the openness of scheduled air passenger services as shown in Table 21 below:

Table 21: ASAs’ Seven Indicators for the Openness of Schedule Air Passenger Services

Indicators	Explanations
1. Grant of rights	The liberalization of Air transport allows airlines to provide services over designated markets.
2. Capacity clause	These are regulations on traffic volumes, frequency of service and/or aircraft types
3. Tariff approval	Air fares need to be approved or not before releasing to the market
4. Withholding	The controllers need to define the conditions for the foreign carrier to operate, such as ownership and effective citizen control requirements
5. Designation	The controllers govern the number of airlines allowed to serve the market between two countries and on specific routes
6. Statistics	That requires the exchange of operational statistics between countries or their airlines
7. Cooperative arrangements	That regulate the cooperative marketing agreements between airlines

Source: IATA

In previous research, Piermartini and Rousova (2008), in examining 2,299 ASAs in ICAO and WTO databases, found the most frequently used regulations were on pricing, capacity and co-operative arrangements. Additionally, the researchers learned that 60% of the ASAs allowed multiple designations while 40% allowed only single designations.

In the U.S. market, the government instituted the liberalization of international air markets by enacting the International Air Transportation Competition Act in 1979. This deregulated the U.S. domestic airline industry and promoted liberalized bilateral ASAs with foreign countries. The first Open Sky achieved between the U.S. and the Netherlands, in 1992, removed the constraints on capacity and frequency for aviation services between the two countries. As of 25th November 2008, the U.S. had reached open skies agreements with 94 countries worldwide, making it the global open skies hub nation (US Department of State, 2009).

In the meantime, the EU countries also established a single aviation market for the EU community carriers by adding Cabotage rights in 1997. As of 11th January 2007, the EU common market has been recognized by 66 countries worldwide. Their ASAs allow air carriers originating from Europe to operate flights between the EU and those 66 countries. Following on from this openness, the EU-US Open Aviation Agreement (OAA) was signed and went into effect on 30th March 2008, liberalizing air transport between the two continents. Meanwhile, other nations have strived to negotiate similar agreements in order to liberalize the international aviation market and remove the remaining constraints.

In most countries, bilateral air services agreements are the key instrument for liberalization of international air transport. Up to now, thousands of bilateral air service agreements have been reported, in which 70 percent of these agreements and amendments comprise certain forms of liberalized arrangements, for instance, the expansion of traffic rights, multiple designations with or without route limitations, freedom of capacity decision, freedom of pricing, and the enlargement of airline ownership and control. Bilateral air services agreements also deal with computer reservation systems (CRSs), airline code sharing, aircraft leasing and interline transport when the airline business progresses. The remarkable development of the bilateral open skies air services agreements is the provision of full market access without restrictions on third, fourth and fifth freedom traffic rights, designation, capacity, frequencies, code sharing or tariffs.

In fact, several liberalization agreements have been reached, however, where there have been serious challenges for the liberalization of the international aviation market. Despite the benefits of government contributions, the negotiation of liberalizing ASAs among countries is still a work in progress and stalled by disagreements and bargaining. Therefore, with the impacts of bilateral open skies air services agreements on the airline industry, there is a need to explore a strategic fit in such a dynamic industry where airline organizations are going to have to be prepared during the process of global liberalization.

Conclusion of Chapter 4

In reality, countries with Open Skies Agreement support the highest performing airlines. The Open Skies Agreement allows them to serve a larger market at lower costs. The success in the airline business derives from operational experience, astute business practices, and the service quality. ASEAN's major carriers such as Thai Airways International, Malaysian Airlines, Garuda Indonesia, Vietnam Airlines and Philippine Airlines have been known as highest international airlines in terms of service standard and safety. However, they are not as competitive as their western counterparts in a global market because there is a vital difference between the ASEAN and European aviation industries. Europe and America have a unified regional standard in flight control, safety policy operated under the control of the Federal Aviation Administration and European Aviation Safety Agency. In the aviation industry, harmonized standards are crucial to simplify day-to-day operations and lower transaction costs. Thus, ASEAN is in needs to work towards establishing an ASEAN aviation authority and implementing regional standards.

CHAPTER 5

QUALITATIVE APPROACH AS A MAIN METHOD

Chapter 5 consists of three sections reporting the theorizing method from case studies and the individual reports of four different airlines employed as case studies. The abduction theorizing method and qualitative approach are mainly referred in this research. We introduce different methods of theorizing from case studies and propose the selected one to guide this research. For the illustrations, two different airline business models including full-service carriers and low-cost carriers are examined and four different airline managerial profiles are observed, allowing the understandings of wider respects of the ASEAN airline industry. The airlines' backgrounds and strategic developments are presented, indicating strategies implemented by each airlines to confront with the environment and accommodate their business growth.

SECTION 10

EMPLOYMENT OF CASE STUDIES METHODOLOGY⁷

The main empirical work for this study utilizes a case study approach and this approach is particularly useful when there is a need to obtain an in-depth appreciation of an issue, event or phenomenon of interest, in its natural real-life context (Crowe et al., 2011). This section presents the choice of paradigmatic framework, research design, analytic techniques, methods of theorizing from case study, exploration of a paradigmatic alignment and the decision of case selection. The case studies methodology employed in this research is mainly based on the PhD course given by Milliot (2019) and follows this author's suggestions.

10.1 Choice of Paradigmatic Framework

The airline industry is extremely dynamic, and its environment is populated with complex external and internal factors, thus we employ the case study method for this research so as to explore and explain specific actions against this environment in real-world settings, and furthermore, to do so with a high degree of realism. For case study research, the information employed is recorded from discrete, selected units such as individuals, groups, organizations, processes, or projects, etc. A case study is also defined as a research project which considers the variety of elements which are present in the context of the study (Eisenhardt, 1989). Yin (2014, p. 16) has stated that "*a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident*".

According to previous researchers such as Hallberg (2013) and Hyet et al. (2014), case study methodology does not reflect accurate results, however, Hyett et al. (2014) considered "*few studies provided an accurate description and rationales for using a qualitative case study approach*", identifying five key issues as being (a) absent methodological details, (b) unclear case selection processes, (c) unaccounted for contextual boundaries, (d) few details about

⁷ This section is based on a course given, for PhD students, by Milliot (2019).

“researcher case” interactions and triangulation, (e) and insufficient methodological justification. For this research, the phenomenon investigated is the existence of external environmental factors impacting on strategy implementation within their real-life context, in which the cases are four airlines in the ASEAN region, Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines, which are used as the wellsprings for multiple sources of evidence such as primary interviews and organizational documents to demonstrate the research findings.

Before undertaking a case study, it is important to look at the paradigmatic frameworks which can ordinarily be used to address case study questions. The frameworks are used to address several types of cases and are formulated in the three dimensions of the epistemological project, the ontological perspective, and the methodological protocol (Guba, 1990; Guba et Lincoln, 1994; Mbengue, 2001; Milliot and Freeman, 2015).

The ontological perspective and methodological protocol dimensions have been examined and respectively identified as reflecting the inbeing/essence of reality and referring to an inquiry process. There are three key schools of ontological perspectives in the traditional debate, being the positivists (reality has its own inbeing/essence), the relativists (reality is a construct or a social/psychological interpretation), and the critical realists, a new-born perspective associating the positivists and the relativists to each other.

Positivists suppose that scientific reasoning is universally true. This philosophy is based on the principle of objectivity, with extensive variations:

- **Original positivism** (Comte, 1830 -1842). The objective is to understand a distinction between sciences and non-sciences (humanities). This school of thought assumes that only trustworthy knowledge from empirical observations or casual explanation, etc. can allow verification. Verification means a definition of truth, and in this principle a theory is admitted when it is recognized as true in all predicted cases. However, it is impossible to get total and absolute verification.
- **Neopositivism** or **Logical positivism** (Vienna Circle in the 1920's). These researchers such as Schlick (1918, 1925) and Waismann (1930) believed in the unity of science (concept of *unified science*) and retained Comte's verification principle. Original positivism and neopositivism are based on realism, which allowed for independence between the observer and the reality and led to a strong determinism.
- **Post-neopositivism** (a new school of thought derived from the Vienna Circle in the 1930's). In this decade, the verification principle was abandoned and substituted by the refutation/falsification principle (Popper, 1934)). This principle believes that a theory is considered scientific only if it is naturally refuted and one conflicting case is sufficient to refute/falsify a theory. According to Popper, truths can be falsified when further knowledge and resources are available to disprove.

The positivist ontology is encouraged for use with single or multiple case studies (*Inductive theory-building* and *Natural experiment* methods [Welch *et al.*, 2011]). However, there are

some constraints, such as: dubious conclusions from case studies; feeble emphasis on contextualization; and the principle of scientific objectivity is uncertain.

Relativists suppose that the conception of truth is not universally true, but subjective, and thus it will relate to the context and/or to the researcher's character. From this point of view, the two primary approaches of constructivist and interpretative epistemologies are introduced. According to Bachelard (1938), Toulmin (1953), Piaget (1967), the world's knowledge derives from human and social constructions and a variety of methodologies are applicable to science. Followed this philosophy, Le Moigne (1990) identified his five basic and recurrent principles: (a) reality representativeness (lack of objectivity by the researcher), (b) constructed universe (the studied reality depends on the researcher's result expectations), (c) projectivity (the researcher defines the research as a project), (d) general arguments (various scientific reasonings are workable), (e) and action based on specific reasoning (need to take action to deal with the complex reality). The constructivists ontology is appropriate for single or multiple case studies, where interpretive sense-making and contextualized explanation methods can be employed (Welch et al., 2011).

The critical realism perspective is recommended by Bhaskar (1975, 1979), who disagrees that natural objects and social objects should be studied with the similar approaches, since social objects are irreducible compared to natural objects. Sayer (1992, p.5), a critical realist, has stated that "the world exists independently of our knowledge", and the science must be critical of its object. For that reason, realism is epistemologically justified and associated with both positivism and relativism.

We approach this study with a critical realist view, placing a high premium on human perception and experience (Spies 2006). Thus, this research takes into account the praxeological project, in alternative to epistemological study, to generate and distribute knowledge. The praxeological project concentrates on the study of the logical processes of human actions and practices to characterize and outline norms, rules, and obligations, which impact decision-making and implementation.

10.2 Research Design

According to Burns and Grove (2003:195), research design is defined as "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings". Another author, Parahoo (1997:142), defines research design as "a plan that describes how, when and where data are to be collected and analyzed", whereas Polit et al. (2001, p.167) define research design as "*the researcher's overall for answering the research question or testing the research hypothesis*".

The majority of authors suppose that case study research will fall into the qualitative realm. Thomas (2011, p.21) argues: "*case study's conspicuous shortcomings in generalizability, far from minimizing case study's offer, in fact free it to offer something different and distinctive in social scientific inquiry. Thus, the potential of case study may be realized in developing something rather more nuanced than generalized knowledge - in what I call exemplary knowledge*". Researchers customarily employ the qualitative approach to examine the behavior,

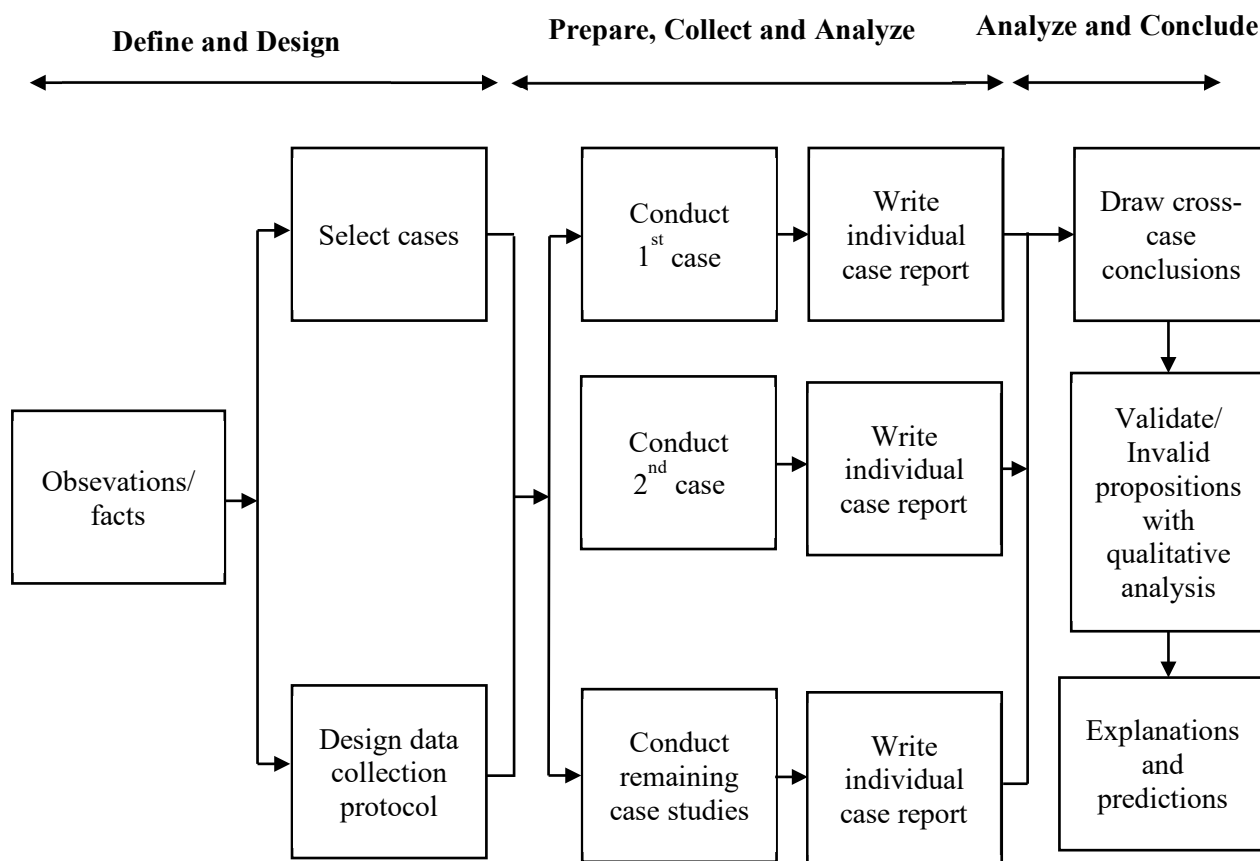
perspectives, experiences and human perceptions, and then to emphasize their understandings of these factors. Although case studies adhere to qualitative research methods, both quantitative and qualitative data can be utilized as supporting evidence. Eisenhardt and Bourgeois (1988) proposed combining quantitative data from questionnaires and qualitative data from interviews and/or observations.

There are four options for data analysis which may be employed for case studies (Milliot and Freeman, 2015):

- Quantitative analysis of qualitative data (turning data from words and images into numbers; e.g., descriptive statistics, quantitative textual analysis (thematic text analysis, semantic text analysis, network text analysis [Carlw, 2000]);
- Quantitative analysis of quantitative data (drawing statistical inferences from quantitative data; e.g., occurrence);
- Qualitative analysis of qualitative data (searching for interpretations, meanings and/or understandings from qualitative data; e.g., text interpretation, qualitative textual analysis (categories, coding scheme, etc.); and
- Qualitative analysis of quantitative data (searching for interpretations, meanings and/or understandings from quantitative data; e.g., subjective clarification of hard data).

Consequently, this research approach is qualitative, explanatory-descriptive and contextual. From the four case studies data analysis options mentioned above, we process the analysis with the options of “qualitative analysis of qualitative data” and “qualitative analysis of quantitative data” for this study as the data recorded is from interviews, observations and questionnaires. Though the qualitative method is primarily used to analyze and retrieve results in this research, the quantitative method is used to supplement the qualitative analysis for partial validation of the results. This can be considered as the “mixed method research” – a “*class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study*” (Johnson and Onwuegbuzie, 2004, p.17, emphasis added). To implement a mixed method design with four cases studied, it is imperative that the same research questions are employed for each case, to collect complementary data, and to conduct counterpart analyses (Yin, 2006b), thus, the research design is adapted as in Figure 28.

Figure 28: Case Study Research Design



Source: Adapted from COSMOS Corporation

To design a case study process, it is essential to initially obtain observations or facts, which is the active acquisition of information from a primary source, then select cases and conduct the data collection process as in Figure 28. Each individual case comprises all facts and evidence sought in order to reflect the whole study. Conclusions from the first case can be information for the second case to replicate and the results of each case should be focused in the report summary. In this research, four selected cases provide the possibility of direct replication. Analytic conclusions, resulting discretely from each of the four cases will be more influential than those deriving from a single case alone.

10.3 Choice of Analytic Techniques

The analytical technique employed is “Explanation Building”, aiming to analyze the case study by building an explanation. In normal case studies, explanation building has been conducted in narrative form. Since it is believed that narratives are not always accurate, the explanations of the cases studies should reflect particular theoretically significant propositions. In these four case studies, the objective is to formulate an explanation which is true for each individual case even though there are different aspects in each case. As a result, it is able to comparably provide a complete explanation for the findings from the four studies.

For explanatory case studies, the process of building the explanation generates a series of iterations:

- Construction of an initial theoretical statement or an initial proposition
- Comparing the findings of an initial case against such a statement or proposition
- Revising the statement or proposition
- Comparing other details of the case against the revision
- Comparing the revision to the facts of a second or more cases
- Repeating the process as frequently as required

10.4 Methods of Theorizing from Case Study

Through the data analysis process, the research constructs the existing theories from the case studies, since theory development is a core element of organizational research (Eisenhardt, 1989). Normally, researchers will develop a theory by combining observations from previous literature, common sense, and experience, however, this requires work with empirical reality permitting the development of a testable, relevant, and a valid theory (Glaser and Strauss, 1967).

Based on the integration of these four elements of theory (abstract reasoning), model (structure representation, concept (mental/ cognitive description of a phenomenon) and/or method (process of investigation/ inquiry based on orderly arrangement), Milliot (2019) considered “a theory is based on constructs (models and concepts) and refers to methods”. A theory will explain and/or predict a specific phenomenon and must have four basic criteria: conceptual definitions, domain limitations, relationship-building, and predictions (Wacker, 1998, p. 361), while Welch et al. (2011, p. 741) considered theory as “*a form of explanation that offers a coherent, examined conceptualization of a phenomenon*”.

Based on an existing theory, a model can be developed and then applied to accomplish or verify the theory. Welch, Piekkari, Plakoyiannaki and Paavilainen-Mäntymäki (2011) presented a matrix including four methods of theorizing from case studies as in Table 22. This matrix is proposed for these authors to imply the dilemma between the research based on causal claims (explanation), and the research based on context-sensitive knowledge (understanding).

Table 22: A Matrix to Identify Four Key Methods of Theorizing from Case Studies

EXPLANATION \ UNDERSTANDING	WEAK EMPHASIS ON CAUSAL EXPLANATION	STRONG EMPHASIS ON CAUSAL EXPLANATION
WEAK EMPHASIS ON CONTEXTUALIZATION	1/ Inductive theory-building	2/ Natural experiment
STRONG EMPHASIS ON CONTEXTUALIZATION	3/ Interpretive sense making	4/ Contextualized explanation

Source: Welch, Piekkari, Plakoyiannaki and Paavilainen-Mäntymäki (2011, p.750)

These four methods of theorizing from case studies have been analyzed with 199 case study articles and published by three international business and management journals including the Journal of International Business Studies (JIBS), the Academy of Management Journal (AMJ) and the Journal of Management Studies (JMS) from 1999 to 2008. These can be identified and explained as below:

Method of Inductive Theory-building

The method of inductive theory-building aims to research general laws and avoids mentioning the explanation-contextualization trade-off. The context remains neutral and is considered as a first step, meaning it is not intended to provide the explanation. In this method, causal explanations are not the central point, but some causal terms are used to run the flow of general laws, i.e. leads to; trigger; influenced, interacts with, etc. In Welch et al.'s (2011) research, forty-eight per cent of the analyzed articles used this method and the main advocates were Eisenhardt (1989) and Flyvbjerg (2011).

Method of Natural Experiment

The method of natural experiment focuses on non-contextualized causal explanations with the purpose of testing the theory. The context remains neutral and the explanation-contextualization trade-off is used in explanation. This method originates from experimental techniques such as pattern matching, time-series analysis, replication logic, etc. In Welch et al.'s (2011) research, fourteen per cent of the analyzed articles used this method and the main advocate was Yin (2014).

Method of Interpretive Sensemaking

The method of interpretive sensemaking focuses on interpretations, meanings and/or understandings, in which the context-sensitive is mainly converged. In addition, the explanation-contextualization trade-off is realized. In this method, discursive presentations and storytelling are used to be more persuasive and memorable than statistical demonstrations (Martin and Powers, 1983; and Cf. Dyer and Wilkins, 1991). In Welch et al.'s (2011) research, twenty-six per cent of the analyzed articles used this method and the main advocates were Stake (1994, 2006) and Merriam (2009).

Method of Contextualized Explanation

Among the four methods proposed, the contextualized explanation approach to theorize from case studies has been selected. The contextualized explanation method aims to establish contextualized causal claims rather than general laws. By utilizing this method, researchers realize that the conventional variables are too dichotomous. Ragin (2000) launches the concept of “fuzzy sets”, which are perceived as more empirically grounded and precise than conventional variables because they are “infused with theoretical and substantive knowledge” (p. 6). As a result, researchers have merged the theory and data analysis by combining qualitative and quantitative assessment into a single instrument (Ragin, 2000, p. 8). Furthermore, fuzzy sets reflect “a language that is half-verbal-conceptual and half-mathematic-analytical” (Ragin, 2000, p.4), thereby enabling dialogue between ideas and evidence in social research (Ragin, 2000, p.4), and “this dialogue is the systematic interplay between theory and data analysis” (Ragin, 2000, p. 4). In the end, Ragin (2000) has proposed three broad arguments to prove that fuzzy sets allow a better dialogue between ideas and evidence as follows:

- Homogenizing assumptions highlighting conventional quantitative analysis (e.g. correlation, interval and ratio-scale variables, etc.) should be discarded since these assumptions restrict the dialogue between ideas and evidence (p. 5), thus limiting discovery when relationships do not correlate.
- Fuzzy sets intensify diversity-oriented research which focuses directly on set-theoretic relationships (p. 13) and accepts heterogeneity and differences.
- Fuzzy sets enhance the connection between theory and data analysis because they adapt completely to theoretical concepts and design variables.

10.5 Exploration of a Paradigmatic Alignment

Paradigmatic alignment allows the comprehension of each method of theorizing from case studies (Milliot and Freeman, 2015). In order to verify the coherence of case study research, the characterization of paradigmatic alignment is based on the following points: (a) Epistemological project and inference(s); (b) Ontological perspective and case purpose(s); (c) Methodological protocol; and (d) case selection.

10.5.1 The Association of Epistemological Project and Inference(s)

The epistemological project instructs the selection of mental processes indicating logical conclusions (consequences) from premises (antecedent/proposition) which are known or assumed to be true: the inferences. Three options are deductive reasoning (theory inspired), inductive reasoning (data inspired), and abductive reasoning (Chalmers, 1987)⁸. Abductive reasoning develops a hypothesis from observations and later leads to a plausible explanation. The inference types could be combined in research.

For each method, Milliot (2019) proposes the following alignment:

- The *inductive theory-building* method refers to the nomothetic project (identification of generalities), in which the inference is inductive. Glaser and Strauss (1967) suggest using grounded theory as a research process. However, Glaser's (1978, 1992) approach is in conflict with Strauss (1987, 1990) and Corbin's (1990) in terms of the method to apply the theory. This argument is specifically interesting when the studied phenomenon has not yet been investigated, and the research reasoning derives from facts and observations for the outcomes such as generalities and law;
- The *natural experiment* method refers to the praxeological project. The objective is to identify causal relationships relating to human actions and decisions, where the primary

⁸ Abduction is also considered as retroduction. However, Danemark *et al.* (2002) classifies two types of reasoning.
 - Abduction: "To interpret and recontextualize individual phenomena within a conceptual framework or a set of ideas. To be able to understand something in a new way by observing and interpreting this something in a new conceptual framework" (p. 80).
 - Retroduction: "From a description and analysis of concrete phenomena to reconstruct the basic conditions for these phenomena to be what they are. By way of thought operations and counterfactual thinking to argue towards transfactual conditions" (p. 80).

inference is made from deduction. The research reasoning starts with generalities and laws in order to propose explanations and predictions;

- The *interpretive sensemaking* method refers to the idiographic project when the research focuses only on unique facts or events. Strauss and Corbin (Strauss, 1987; Strauss and Corbin, 1990) propose to use grounded theory in this method and Reichertz (2010) refers the research reasoning to induction and/or abduction inferences. For later researchers such as Anells, in Birks and Mills (2011, p. 7), Strauss and Corbin (1990), their method presentation is based on “constructivism with signs of post-positivism” (e.g., symbolic interaction foundations). Timmermans and Tavory (2012) refer to abductive reasoning to implement grounded theory, where the research reasoning starts with facts and observations leading to the outcomes of generalities and laws (induction) or explanations and predictions (abduction);
- The *contextualized explanation* method refers to the praxeological project, where the logical process of human action is concerned. When the research involves causal claims in a specific context, three types of inferences may then be used sequentially. This approach can refer to abduction reasoning as a key inference because it could explain anomalous, surprising or resisting phenomena (Paavola, 2004). For Bhaskar (1979), a perceived mismatch between an empirical observation and an existing theory leads to a re-description of the phenomenon. Bertilsson (2004, p. 385) indicates that Peirce (1931)’s idea about abduction has been adopted by critical realists as the third basic type of logical inference. In this method, the research could begin with facts and observations to suggest generalities and laws (induction). Researchers could put forward generalities and laws to use for explanations and predictions (deduction), or define them from facts and observations, to transform them into explanations and predictions (abduction).

10.5.2 The Association of Ontological Perspective and Case Purpose(s)

The ontological perspective determines the type of method for theorizing from the case study. How the reality is understood will impact the research questions, design, outcomes, and their presentation.

- The *inductive theory-building* method refers to the verification principle (Comte, Schlick, etc.) which makes sense to identify generalities or laws. In Glaser’s view (1978; 1992) of grounded theory, this method fits the neo-positivism ontological perspective based on inductive reasoning;
- The *natural experiment*⁹ method refers to the refutation principle (Popper, Carnap, etc.) which is implicitly considered when an explanation or a prediction is proposed. However, it is important to note that Popper (1934) is an opponent of the inductive inference. His argument is that it is not adequate to prove a theory to be truthful with converging observations and conclusions. This post-neopositivism posture and stance fits the idea of a natural experiment;

⁹ Yin (2014), in the last edition of his book, gives far greater attention to doing case studies under realist (method 1) and relativist (method 3) epistemologies. For example, he added, as analytic techniques, *explanation building*.

- The *interpretive sensemaking* method refers to the construction/interpretation principle (Bachelar, Toulmin, Piaget, etc.) which is central to this ontological perspective. The tenets of constructivism or interpretivism translate the philosophy of this method with the aim of exploring and describing a phenomenon from observations; and
- The *contextualized explanation* method refers to the critical analysis principle (Bhaskar, Outhwaite, Sayer, etc.) which is accepted. Reality is socially constructed, however, some of its elements are thought to have intrinsic truth. This transcendental method allows researchers to simultaneously study both contextualization and causal relationships.

The research's purpose is recommended for introducing the paradigmatic alignment because the ontological perspective determines the object which researchers are studying. Robson (2011, p. 72) proposes key questions about the case study research: "Are you seeking to *describe* something, or to *explain*, or *understand* something?" "Are you trying to *assess* the effectiveness of something?" Based on these two questions, four main purposes for case study research are identified:

- Descriptive ("describe") case study is used to portray precisely and rigorously a phenomenon. It is identified as a context sensitive approach in which the context can be deemed necessary in order to explore or explain. It is used when the generality of the phenomenon is of secondary importance;
- Explanatory or causal ("explain") case study is used to rationalize a situation. Obviously, a strong emphasis on causal explanation is proposed in this context. The goal is to justify a situation which is too complex for the survey or experimental research strategies;
- Exploratory ("understand") case study is used to seek new insights and generate new ideas and hypotheses for new research. This purpose is characterized by a weak emphasis on causal explanation. The aim is to better understand an emerging phenomenon and/or to propose new theoretical insights to develop new ideas and hypotheses. The interest is particularly strong when existing theories are incomplete or unable to provide a satisfactory representation of the studied phenomenon; and
- Confirmatory ("assess") case study is used to improve a construct or a theory. The context is much less important. The purpose is to evaluate the robustness or weakness of a clearly defined construct or theory¹⁰.

¹⁰ Other typologies, focusing on case study research objects, could be linked to the four purposes listed here, for example, Thacher (2006) distinguishes between types of cases also. The correlations with the four purposes listed previously are:

- The causal case to identify and explain the consequences of actions (explanatory).
- The interpretive case to study the subjective meaning that people's actions have for them (descriptive and exploratory).
- The normative case to contribute to the understanding of important public values (like 'courage') (exploratory).

Methods of theorizing from case studies can be mixed with case study research purposes. From the description of the four above main purposes and from Welch *et al.*'s matrix structure, Milliot (2019) proposes and offers the following associations:

- The *inductive theory-building* method concerns an exploratory and/or confirmatory agenda;
- The *natural experiment* method focuses on an explanatory and/or confirmatory agenda;
- The *interpretive sensemaking* method has an exploratory and/or descriptive agenda; and
- The *contextualized explanation* method combines an explanatory with a descriptive agenda.

10.5.3 The Methodological Protocol

Case study research primarily employs the qualitative method. For example, the 199 articles studied adopted a qualitative approach in the analysis proposed by Welch *et al.* (2011). Milliot (2019) considers the types of data and types of analysis as the distinction between four methods of theorizing:

- For the *inductive theory-building* method, Eisenhardt (1989) suggests using both qualitative and quantitative data in her statement: “the combination of data types can be highly synergistic” (p. 538). It is possible to use four types of analysis as mentioned above, including quantitative analysis of qualitative data, quantitative analysis of quantitative data, qualitative analysis of qualitative data, and qualitative analysis of quantitative data;
- For the *natural experiment* method, Yin (2014) believes case study research can involve qualitative data only, or quantitative only, or combine the both (p. 220). In this method, the employment of four analytical options is justified;
- For the *interpretive sensemaking* method, Stake (1995) focuses on qualitative research and qualitative data. Since quantitative data are of secondary importance in this method, the main type of analysis focuses on the qualitative analysis of qualitative data; and
- For the *contextualized explanation* method, Ragin (2000) develops the concept of a fuzzy set. This concept refers to categories of variables which are imprecise (e.g., low risk). For him (p. 8), “fuzzy sets combine qualitative and quantitative assessment in a single instrument” and can be tailored to fit theoretical concepts. According to Ragin (2000), it is a means of developing links between ideas and evidence, and to address varied interpretations of studied phenomena.

10.6 The Decision of Case Selection

Though the case selection is not directly connected to the paradigm; the number of selected cases partially determines the method of theorizing. The research's purpose(s) is a key element to decide if a single-case or a multiple-case design is a fitted option.

- For the *inductive theory-building* method, Eisenhardt (1989, p. 545) states: “While there is no ideal number of cases, a number between 4 and 10 cases usually works well. With fewer than 4 cases, it is often difficult to generate theory [...]. With more than 10 cases, it quickly becomes difficult to cope with the complexity and volume of the data”. In such an argument, some research may not fit into this range if researchers follow Eisenhardt's (1989) advice explicitly. In reality, while Beverland (2005) uses Eisenhardt's method, he examines the strategies of twenty-six luxury wine firms. As for Boyer (2010), he presents the notion of a *quantitative single-case research design* which is inductive in nature.
- For the *natural experiment* method, Yin (2014) refers to different options:
 - The single-case design is appropriate when the case is critical to test a specific theory with a clear set of propositions; when it represents an extreme or unusual phenomenon; when it is representative of a situation; when it reveals a situation; or when it is longitudinal;
 - Multi-case design is relevant for testing conclusions [replication]; avoiding extraneous variation; providing a larger picture of a complex phenomenon; and for comparing different studies.
- For the *interpretive sensemaking* method, it is accurate to focus on one or very few cases because the purposes are mostly exploratory and/or descriptive. Despite using this approach, Stake (2006, p. 6) presents a multi-case study as “a special effort to examine something having lots of cases, parts, or members”. According to this author, this group of cases allows one to understand what he calls a *quintain*¹¹. He defines a quintain (p. 6) as “an object or phenomenon or condition to be studied – a target”. It can be viewed as an umbrella or overarching means for studying several embedded cases, where multi-case research starts with a quintain and multi-case study should have between 4 to 10 cases (p. 22). The cross-case analysis should focus more on differences, less on similarities, to explore the complexity of the studied phenomenon and its context.
- For the contextualized explanation method, it is difficult to focus on multi-case studies because the purposes are simultaneously explanatory and descriptive, therefore it would be reasonable to focus on a single case or very few cases. These selected cases should be meticulously chosen in order to provide research congruence and homogeneity when the aim is to study causal relationships in a specific context. In order to establish a clearer presentation of each method of theorizing from case study research, Milliot et al. (2014) adapted the following matrix:

¹¹ Post used as a target for medieval military exercise.

Table 23: Paradigmatic Alignment Matrix for Each Case Study’s Method Theorization

EXPLANATION \ UNDERSTANDING	WEAK EMPHASIS ON CAUSAL EXPLANATION	STRONG EMPHASIS ON CAUSAL EXPLANATION
WEAK EMPHASIS ON CONTEXTUALIZATION	1/ Inductive theory-building <ul style="list-style-type: none"> • Nomothetic project <ul style="list-style-type: none"> - Induction • Positivism or neopositivism <ul style="list-style-type: none"> - Exploratory and/or confirmatory • Qualitative and (or) quantitative data/analysis <hr/> <ul style="list-style-type: none"> ○ Multiple cases (4 to 10 [Eisenhardt, 1989]) 	2/ Natural experiment <ul style="list-style-type: none"> • Praxeological project <ul style="list-style-type: none"> - Deduction • Post-neopositivism <ul style="list-style-type: none"> - Explanatory and/or confirmatory • Qualitative and/or quantitative data/analysis <hr/> <ul style="list-style-type: none"> ○ Single or multiple cases
STRONG EMPHASIS ON CONTEXTUALIZATION	3/ Interpretive sensemaking <ul style="list-style-type: none"> • Idiographic project <ul style="list-style-type: none"> - Induction and/or abduction • Constructivism or interpretivism <ul style="list-style-type: none"> - Exploratory and/or descriptive • Qualitative data/analysis (and quantitative data) <hr/> <ul style="list-style-type: none"> ○ Single or multiple cases (4 to 10 [Stake, 2006]) 	4/ Contextualized explanation <ul style="list-style-type: none"> • Praxeological project <ul style="list-style-type: none"> - Induction, deduction and/or abduction • Critical realism <ul style="list-style-type: none"> - Explanatory and/or descriptive • Qualitative and (or) quantitative data/analysis <hr/> <ul style="list-style-type: none"> ○ Single or very few cases

Source: adapted from Welch et al. (2011) by Milliot (cited in Milliot and Freeman, 2015).

Milliot (2019) suggests the above framework can help researchers to lay specific foundations for case study research. Based on this paradigmatic positioning, the method of contextualized explanation for theorizing from the case studies of Vietnam Airlines, Qatar Airways, Derry Air, NokScoot Airlines is fit to be employed for the analysis of this empirical research, and this contribution to the existing literature will be discussed in Chapter 9.

SECTION 11

CASES OF SELECTED FULL-SERVICE CARRIERS

This section presents the individual case reports, including their brief backgrounds and strategic developments, of selected full-service carriers, namely Vietnam Airlines and Qatar Airways. A full service airline typically offers passengers in-flight entertainment, checked baggage, meals, beverages and comforts such as blankets and pillows in the ticket price. The seats generally have more recline than a low-cost carrier as well as more leg room. Full service airlines offer passengers the choice of economy or business class travel and on some flights premium economy and first class. The airlines in this category will transfer baggage between flights and to alliance partners such as Sky Team or One World or Star Alliance, of which most full service carriers are a part of. Full service airlines often have a long history and are flag carriers for their countries of origin.

11.1 Vietnam Airlines

Being a full-service airline and a flag carrier of Vietnam, Vietnam Airlines is selected as a case study in this research. Compared to other airlines, Vietnam Airlines has been acknowledged as a major airline in the ASEAN region with its wide domestic as well as international networks. The choice of Vietnam Airlines as a case study since this airline might represent other large regional legacy airlines such as Philippines Airlines in The Philippines, Thai Airways in Thailand, Malaysia Airlines in Malaysia, and Garuda Airlines in Indonesia, though there are differences between each airline but the nature of their business models is relatively similar.

11.1.1 Company Background

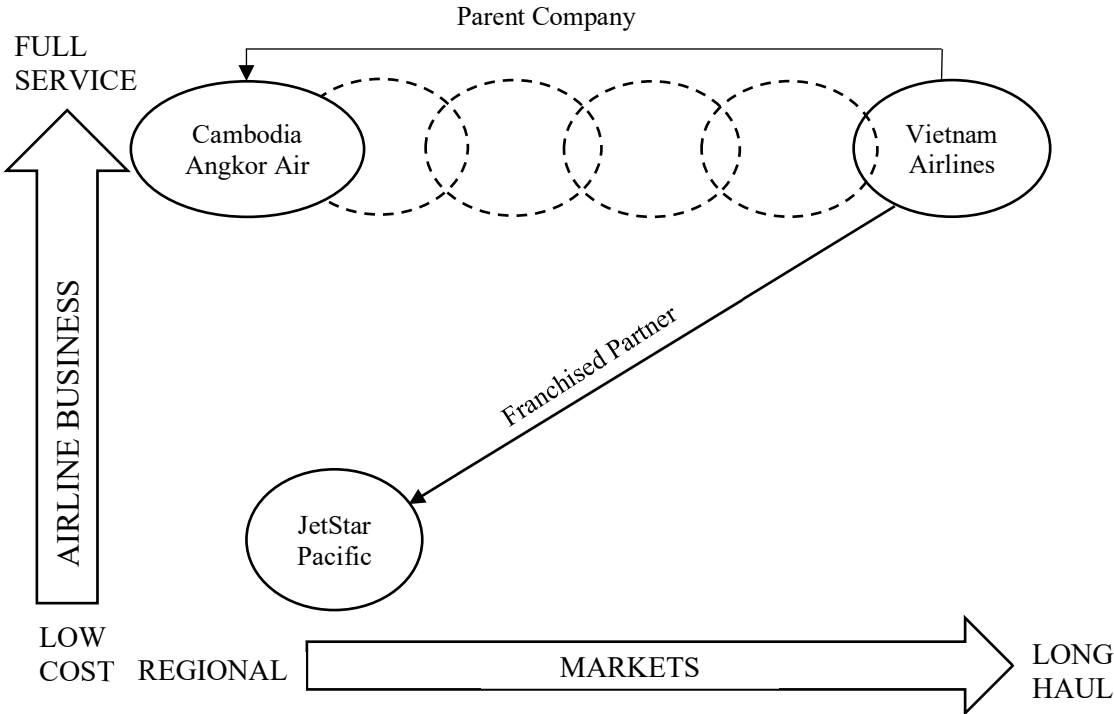
Vietnam Airlines (VN) was founded in January 1956 with the establishment of the Vietnam Civil Aviation Department. Vietnam Airlines is the Vietnamese national carrier operating 400 flights daily on 38 domestic routes and to 52 international destinations. Vietnam Airlines has been certified a 4-Star airline by Skytrax, the world's leading airline and airport rating organization. With over 20 years of development at a double-digit annual growth rates, Vietnam Airlines is a major force in Asia's aviation market. In June 2010, Vietnam Airlines joined SkyTeam Alliance. In 2015, the airline became the first in the world to operate both the Boeing 787-9 Dreamliner and Airbus A350-9XWB aircraft types simultaneously.

At the end of 2017, Vietnam Airlines' revenue increased strongly by 18.6%, while net profits rose by a marginal 0.03%. In the first nine months of 2017, impressive business performance resulted in a consolidated profit of over USD 101 million. Its 2017 profitability indicators were higher than those of 2016, due to greater operating revenues and profits. Liabilities decreased in comparison to same period of 2016 as a result of increased owner's equity. Liquidity indicators were higher without overdue debts as loan principals and interests were paid on time. In response to aviation trends, in 2017 Vietnam Airlines proactively reduced its operating frequencies on low performing routes and focused on the high-income customer segment. On its international routes, Vietnam Airlines placed new-generation aircraft into operation, including the B787 and A350 models, particularly on the highly important routes to Australia,

Japan, Korea and China. Vietnam Airlines had success in flexibly adjusting its products, seizing opportunities in high potential markets, and reducing impacts from increasing competition.

For domestic routes, Vietnam Airlines focused on core products on primary routes, and launched programs such as Upgrade Travel Option (UTO), UTO+, and Empty Seat Option (ESO). In addition, co-operation between Vietnam Airlines, Vietnam Air Services Company (VASCO) and Japan Airlines (JPA), in terms of resources, allowed Vietnam Airlines to extend its presence in 21 domestic destinations, indicating its domestic market share in terms of loading capacity accounted for 59%, a rise of 1.2 points compared to 2016. Currently, Vietnam Airlines has safely conducted over 1.6 million flights and served more than 200 million passengers. Vietnam Airlines connects the country’s provinces to each other through domestic flights, and the nation to the rest of the world through its international flights, seeing it awarded the prestigious “CAPA Asia-Pacific Airline of the Year” award by the Centre for Asia-Pacific Aviation (CAPA).

Figure 29: Managerial Profile of Vietnam Airlines



Source: Adapted to Singapore Airlines’ Managerial Profile

11.1.2 Strategic Developments

In order to retain its leading position, Vietnam Airlines has implemented significant development initiatives in the past 20 years. By November 2017, Vietnam Airlines had grown its fleet to 93 aircraft, including new models such as the Boeing 787 and Airbus 350. The airline uses modern aircraft to enhance performance, expand its flight network, and improve service quality, such as with the first Boeing 777-200ER being used for middle and long-haul flights, connecting Hanoi and Ho Chi Minh City to Paris (France) in 2003, to Russia (2004), Germany (2005), and the UK (2011).

Organizational Structure

Vietnam Airlines re-organized Flight Crew Division 919 and Flight attendants in order to adapt to market trends and the scale of its fleet development. The Market Service Board was changed to the Passenger Service Board, aiming to further improve service quality. Vietnam Airlines also harmonized the Central and Southern branches with the Northern branch so as to achieve a full synchronization across the system. In addition, Vietnam Airlines learnt organizational models from its strategic partner ANA and other international airlines in terms of engineering, trade, and services in order to improve and remain competitive with its rivals.

Talent Management and Training Activities

By the end of 2017, the Vietnam Airlines workforce stood at 6,708 people, with 60% possessing a bachelor or post-graduate degrees. In terms of pilots, 74% are Vietnamese and assigned to operate the new-generation B787 and A350 aircraft models. To improve service quality and sales capacity, Vietnam Airlines has trained over 12,000 flight attendants and sales staff in culture, style, customer care and soft skills. In addition, under the requirements of the IATA Operational Safety Audit (IOSA), the airline has delivered aviation regulations training for 8,040 staff including pilots, flight attendants, flight operators and ground staff.

Service Quality

Vietnam Airlines has initiated Customer Care Centres for Lotusmiles members, providing outstanding customer personalization services anytime, anywhere. Through the launching of new Lotus lounges in Noi Bai and Tan Son Nhat airports, Vietnam Airlines improved its services to provide convenience and comfort to passengers. With average departure On-Time Performance (OTP) at over 90%, Vietnam Airlines ranks as one of the highest OTP airlines in the world.

Technology Innovations

Vietnam Airlines has focused on developing its kiosk check-in service to boost the reduction in airport waiting time for passengers, while concurrently relieving pressure on its human resources. In 2017, the average passenger self-check-in rate witnessed impressive year-on-year growth compared to the same period in 2016. At Noi Bai Airport, self-check-ins reached more than a third, at 33.16%, surging 12.8% above 2016. At Da Nang Airport, it broached more than a quarter of all check-ins, 26.6%, growing by 10.5% compared to 2016. At Tan Son Nhat Airport, forged ahead 11.6%, again accounting for over a third of all check-ins, at 34.3%.

Engineering Strengths

In 2017, Vietnam Airlines took possession of its A350 and B787 aircraft models, following completion of the crucial technical training, equipment supply, and the deployment of engine and aircraft maintenance program steps performed by its major partners Rolls-Royce, Thales, SAFRAN, etc. This allowed Vietnam Airlines to effectively put these aircraft into operation. Aircraft maintenance quality and capacity were dramatically improved in 2017 when VAECO¹² was awarded with the EASA-145 certification by the European Aviation Safety Agency in April, thus becoming the first and only aircraft maintenance organization in Vietnam to be both FAR-145 (Federal Aviation Administration) and EASA-145 certified, two of the most crucial aviation engineering certifications. This in turn would facilitate the issuing of more approvals

¹² VAECO is a wholly owned subsidiary of Vietnam Airlines

to Vietnam by global aviation authorities, and garner greater trust from international passengers and aviation insurers in regard to the quality of aviation maintenance services in Vietnam.

Commercial Co-operations

Vietnam Airlines co-operated with its new Thai partner, Bangkok Airways, in 2017, increasing its total number of partners to 26, of which 25 are airlines and 1 is railway company in France. With bilateral co-operation, Vietnam Airlines flies to 90 destinations worldwide, crossing 5 continents. In particular, Vietnam Airlines has implemented a joint-venture agreement with Air France and established a joint-venture between Vietnam Airlines and Air France Executive Board in 2017, thereby sharing the strengths of each party in regard to air routes, sales networks, technical and financial infrastructure, regular customers, and lounges, etc. The partners' common goal is to bring practical benefits to consumers and the business community. Vietnam Airlines has also been involved in Skyteam's activities and projects to upgrade its service standards and systems. The airline has proactively participated in the activities of multilateral IATA organizations in order to promote its roles and influences over common policies in favor of Vietnam. 2017 saw a seminal new leap in the comprehensiveness of the co-operation between Vietnam Airlines and its strategic investor, ANA Holdings Inc. (ANA). This co-operation allows Frequent-Flyer Passengers (FFP) of the two airlines to add miles on codeshare routes instead of codeshare flights. General trade promotion activities in the form of tourism campaigns were launched to attract Vietnamese tourists to visit Japan and incentive programs for regular passengers were initiated. Both sides will continue to provide technical support, focusing on corporate governance, trade, operations, customer service, information technology and engineering.

Branding and Communications

From 2018 to 2020, Vietnam Airlines' focus is on brand development and preparing its long-term brand development strategy to comply with its capacity and resources. The objective is to maintain its domination of the Vietnamese market, become the largest ASEAN airline by 2020, and a preferred airline in Asia in terms of in-flight service quality.

Aviation Safety and Security

In 2017, Vietnam Airlines continued the assessment process for renewal of its Aircraft Operator Certificate (AOC) and IATA Operational Safety Audit (IOSA). Vietnam Airlines gradually incorporated the AQD scheme into its operations, mandating each employee's responsibility for their task performance, and each pilot's compliance with discipline and regulations during flights, that is, the Fatigue Risk Management System (FRMS).

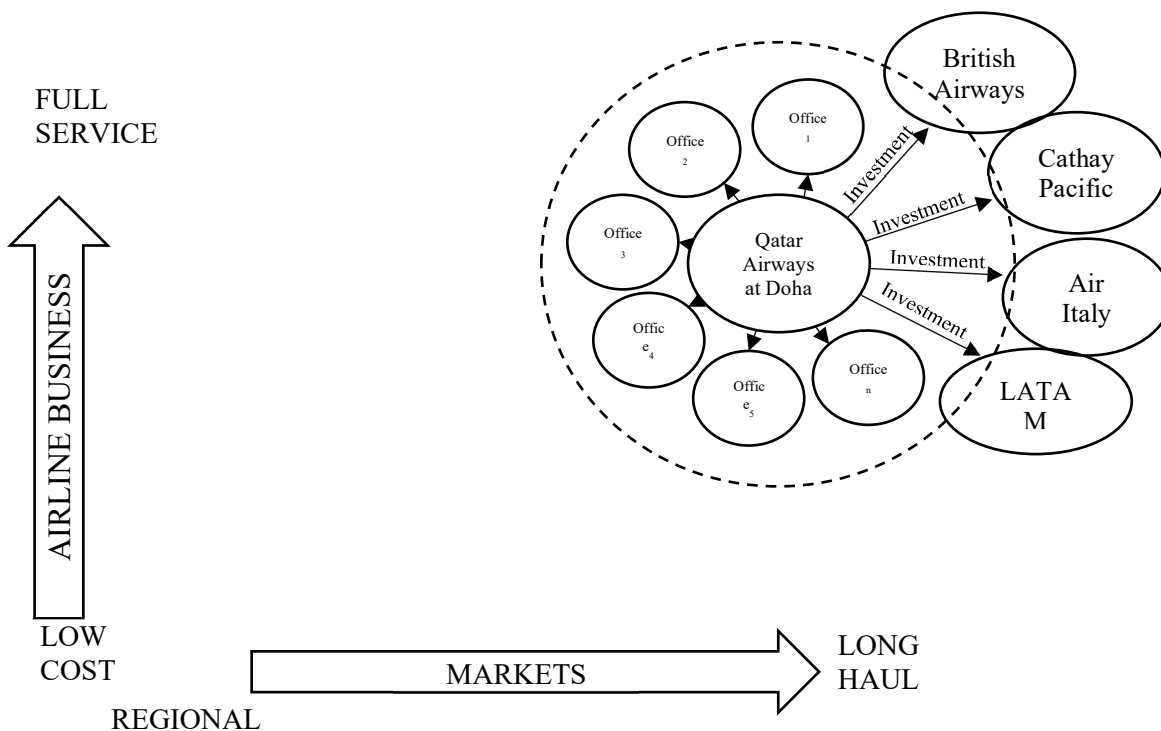
11.2 Qatar Airways

Qatar Airways is acknowledged as a national flag carrier of the State of Qatar and possesses a wide route network over 160 destinations. Being a global airline, Qatar Airways has set its strong operation in ASEAN, especially in Vietnam, Philippines, Thailand; and employed the fifth freedom right to transport travellers from Phnom Penh, Cambodia via Ho Chi Minh City, Vietnam to its hub in Doha, Qatar. With the similar business model as Vietnam Airlines, Qatar is opted for a case study for its larger operating scale, allowing us to understand diversified strategies from a global airline.

11.2.1 Company Background

Qatar Airways (QR) is the national airline of the State of Qatar and is known as one of the aviation industry's big success stories. The airline was re-launched in 1997 under the mandate of His Highness the Father Emir, Sheikh Hamad Bin Khalifa Al Thani, who outlined a vision to turn Qatar Airways into a leading international airline with the highest standards of service. Qatar Airways has since become one of the fastest growing carriers in the history of aviation, with unprecedented expansion averaging double digit growth year-on-year. Despite the challenging blockade over 18 destinations in 2017, Qatar Airways emerged victorious again, winning Airline of the Year at Skytrax 2018, the fifth time the airline has won this prestigious title, as well as scooping the Skytrax World's Best Business Class, Best Airline in the Middle East and World's Best First-Class Airline Lounge awards.

Figure 30: Managerial Profile of Qatar Airways



Source: Adapted to Singapore Airlines' Managerial Profile

11.2.2 Strategic Developments

Worldwide Network Expansion

Qatar Airways connects its passengers to the more exciting destinations across the globe in order to drive growth and development. During 2016 - 2017, the airline continued to build its global network, adding 10 new destinations: Adelaide (Australia), Atlanta (United States), Auckland (New Zealand) Helsinki (Finland), Krabi (Thailand), Marrakech (Morocco), Pisa (Italy), Mahé (Seychelles), Windhoek (Namibia), and Yerevan (Armenia). New destination launches from 2016 to 2018 were inaugurated to offset the loss of 18 regional destinations by sanctions imposed upon Qatar by its Middle East neighbors as retribution for Qatari geopolitical actions. When the blockade came into effect in June 2017, the airline responded rapidly to the situation by announcing new routes to Prague and Kyiv, which were in operation by the end of 2017. The airline increased flights to Oman by opening a new route to Sohar in the North of the Sultanate in August 2017. The inculcation of routes to Skopje, Sarajevo, Adana and St. Petersburg boosted growth in Eastern Europe. Further growth in 2018 in this region was expected, with the launch of operations to Hatay, Bodrum and Antalya in Turkey. Additional flights to Thessaloniki, adding to the existing thrice daily flights to Athens, were complemented by the opening of a seasonal route to Mykonos in May 2018. In 2018, the airline flew a total of 29 times weekly from Doha to Greek destinations.

In Southeast Asia, Qatar Airways has a strong operational presence in Vietnam, Thailand and The Philippines. In 2018, Qatar Airways opened the new destinations of Danang (Vietnam), Chiangmai and Pattaya (Thailand), Penang (Malaysia) and Davao (Philippines). The primary importance of these destinations was tourism market development. The principal operation in Phnom Penh (Cambodia) takes advantage of fifth freedom traffic rights to carry passengers from Phnom Penh to Doha via Saigon. Africa is also an important market for the airline, with increased flight frequencies to Nairobi, and a new route opening to Mombasa in Kenya. In 2019 – 2020, Qatar Airways will shift focus from many Asian destinations and look more towards Isfahan (Iran), Lisbon (Portugal), Santiago (Chile), Rio De Janeiro (Brasil) and Tallinn (Estonia) instead.

Commercial Co-operations

Qatar Airways set in place a joint business agreement with International Airlines Group (IAG) subsidiary, British Airways, over the course of the 2016-2017 year, with revenue sharing on the trunk London Heathrow-Doha route. The joint business enables the airline to co-ordinate commercial activities for the benefit of customers, whilst at the same time drawing the two companies closer together and thereby strengthening the relationship within the OneWorld alliance. Qatar Airways is the third largest member of the alliance, after American Airlines and British Airways. In July 2016, Qatar Airways increased its stake in IAG from 15.24% to 20.01%, strengthening its position as a shareholder in one of world's biggest airline groups and reflecting its continued support for IAG's ongoing strategy.

In 2016, Qatar Airways has acquired 10% of LATAM Airline Group, which is the leading airline group in Latin America and also a member of OneWorld. Qatar Airways also launched new codeshare partnerships with other airlines in the OneWorld alliance, such as Finnair, Iberia and Sri Lankan, Vueling, another IAG subsidiary, and with the independent Air Botswana, thereby expanding flight options for travellers wishing to travel to or from Southern Africa. In

2017, Qatar Airways made key investments with the acquisition of a 9.94% share of Cathay Pacific and a 49% stake in AQA Holding, the parent company of Meridiana. The Meridiana purchase has given Qatar Airways an opportunity to support the current stakeholder in rebranding and reshaping the airline under the new name of Air Italy, offering the Italian people a viable and attractive alternative when choosing an airline for their future travel plans. These MandA opportunities reinforce Qatar Airways' existing long term global investment strategy.

Fleet Focus

Qatar Airways' fleet is composed of 213 aircraft with an average life span of five years per aircraft, making it one of the youngest fleet in the industry. The key focus is to provide passengers with the most advanced, new generation aircraft, while delivering customer comfort and safety. Qatar Airways' growing fleet allows the airline to execute its route development strategies aggressively. The arrival of the A350-1000, with its light-weight carbon composite structure and fuel-efficient Rolls-Royce Trent XWB-97 engines, has turned Qatar Airways into a pioneer and champion of new technology and innovation in the aviation industry. In addition, the airline also welcomed seven A350-900, seven B777-300ER and two A380 aircraft to bolster its long-haul service capability and keep the airline's leading position in increasing route networks for the future. The Qatar Airways' fleet consists of the most modern and fuel-efficient aircraft, engine designs, and features. This includes aerodynamic designs and new combustion and cooling technology to increase engine efficiency, while lowering fuel consumption and CO₂ emissions. The efficient aircraft engines aim to be 15-25% more fuel efficient than previous generations. Qatar Airways is incorporating the B787 GE's Performance Improvement Package (PIP) which will reduce fuel burn by 2.7%. Qatar Airways supports the new ICAO CO₂ emissions standard for commercial aircraft, which will come into force in 2020, and will require CO₂ emissions from new aircraft meet a minimum baseline.

Product Innovation

Qatar Airways is recognized as an industry leader with product innovation. The airline launched a new Business Class concept, Qsuite, in 2017. This brought a First-Class experience to the Business Class cabin with the feature of a double bed in Business Class as well as privacy panels. In addition, this provided passengers with more choices, privacy and personalization in their travel experience. The signature sliding panels enable passengers to transform their space from single suites into a shared area customizable for groups of two, three or four, allowing them to work, dine or socialize in the air.

The first aircraft fitted with Qsuite was launched on the London Heathrow-Doha route in June 2017, signaling a step-change in passenger expectations and industry norms. This revolutionary concept was swiftly rolled out across the Qatar Airways global network from London and Paris to Washington and New York. Currently, Qsuite has been used to serve 23 global destinations across four continents, with more aircraft to be fitted and retrofitted each month. Qatar Airways also brings on-board Super Wi-Fi inflight connectivity, which is the fastest on-board internet offered globally from an airline in the Middle East and North Africa (MENA) region. With successful deployment beginning from the Boeing 777 fleet, and currently being rolled out gradually to the A350s, passengers can look forward to this efficient high-tech connectivity in 2018. Another innovative product upgrade was made to the in-flight dining aspect. The on-board dining proposition witnessed a host of product upgrades including the introduction of

Pre-Select Dining, enabling First and Business Class passengers to reserve their menu selections, on selected routes, before flying out of Doha, as well as the introduction of more local fresh ingredients within the menus, in consideration of sustainability and supporting local initiatives, which ensures the best quality products for the passengers.

World's Second Largest Cargo Operator

Qatar Airways is also well known as the second largest international global cargo operator with a fleet of 23 young aircraft, delivering its cargo service to more than 50 destinations. The cargo division of Qatar Airways continued to expand its global network in 2016/17 with the addition of six new destinations served by its air freighters, the launch of belly-hold cargo services to 10 new destinations and increasing its frequencies to many of the existing destinations on its route map. Qatar Airways Cargo began 2017 with the introduction of freighters to Buenos Aires, São Paulo and Quito in South America, and Miami in the United States, and making a significant contribution to the Qatar Airways Groups' overall success. In 2017, Qatar Airways put into operation with two Boeing 747-8F aircraft having 16% greater carrying capability than the B747-400F.

Qatar Airways Cargo introduced Online Services in 2016, called CROAMIS, to improve the customer experience and provide e-cargo solutions. This online service provides a web-based platform for customers to make bookings, manage accounts and other transactions. The QR Cargo mobile app provides customers with easy access to important information such as Qatar Airways passenger flight and freighter schedules, office contact details and product descriptions. Qatar Airways Cargo currently offers a wide range of products, including QR Pharma, QR Fresh, QR Charter, QR Live and value-added premium services to meet its customers' business needs. In 2017, the cargo carrier enhanced its QR Mail product features to cater to the growing e-commerce segment, while QR Express continued to serve the need for rapid delivery of time-critical shipments. Hamad International Airport is equipped with segregated temperature-controlled storage areas for different products such as pharmaceuticals, perishables, live animals, and security for high-value cargo. The facility processed 1.8 million tons of cargo in 2016/17 which will increase to 4.4 million tons annually when the second cargo terminal at HIA is completed.

Operation Centre System Improvement

Qatar Airways' Integrated Operations Centre (IOC), now in its second year of operation, has proven to be a significant asset in enhancing the airline's overall network performance. The concept demonstrated its superior ability to handle disruptions, of virtually any size or nature, during the blockade of Qatar which began in June 2017. In the new IOC, all relevant commercial and operational departments are represented by authorized decision-makers, who make real-time decisions during evolving situations, thereby eliminating any time delays caused by the need to refer elsewhere for decisions. This is a highlighted key differentiation between the former Operations Control Centre (OCC) and the new IOC, and the reason for its enhanced flexibility and effectiveness.

To support this, IOC invested in technology to refine the operational requirements. The resulting Total Operating System (TOPS) had been active for two years, with the second phase, which became active in mid 2018, set to optimize crew rostering and control for both passenger

and cargo operations. The overall IOC setup has enabled some significant improvements, such as assisting Qatar Airways to achieve On-Time-Performance (OTP) of 90.6% over the past 13 months, which is among the highest for airlines globally. One example of the flexibility of this new setup was that during mid-2017, IOC managed network requirements and assisted sister airlines, British Airways and Royal Air Maroc, with the wet lease of aircraft and crew, as well as providing aircraft to repatriate passengers stranded by the bankruptcy of Monarch Airlines.

Hub Focus

Qatar Airways has made Hamad International Airport (HIA) its hub in Doha, offering passengers an unprecedented level of comfort, services and five-star facilities. HIA continues to grow and became one of the fastest growing hubs in the world, in 2017/18, with 34,212,750 passengers and 211,658 aircraft movements. The airport leapt into the Skytrax “World’s Top 10 Best Airports” ranking and the “Best Airport in the Middle East”. The Skytrax World Airport Awards are the most prestigious recognition of quality for airports in the world and include the airport’s portfolio of shopping, food and beverage services. With Hamad International Airport in Doha, Qatar Airways’ hub became a destination experience in itself and transfer passengers to Europe and other continents by connecting its flights efficiently and conveniently. In this regard, HIA continues to provide a strong and unmatched competitive advantage for Qatar Airways, serving 50 million Qatar Airways passengers annually.

Qatar Duty Free

Qatar Duty Free (QDF) operates the retail experience at Hamad International Airport (HIA) in addition to an outlet at Doha Port. Launched in Qatar 15 years ago, the innovative, award-winning duty-free operator has enjoyed consistent double-digit growth year-on-year and is now the second largest duty-free operator in the Middle East. At HIA, QDF offers a holistic vision which encompasses retail, and food and beverage to create a truly seamless experience for passengers. With 40,000 square meters of combined retail, and food and beverage facilities, QDF is a premier airport shopping and dining destination, with more than 70 retail outlets in addition to the core duty free, offering a selection of designer boutiques, high street fashion labels, electronics and gadgets, gourmet foods, concept stores and home-grown brands. In addition, more than 30 cafés and restaurants offer a sumptuous selection of global and local cuisine.

Qatar Aircraft Catering Company (QACC)

QACC was launched in 2002 as the sole airline catering company at Doha International Airport in order to provide exclusive catering services to Qatar Airways, and other global airlines, as well as 15 Premium Lounges at Hamad International Airport. With a facility of 69,000 square meters equipped with the latest food preparation technology to ensure the widest possible range of catering options for customers and passengers, the catering facility at HIA produces 120,000-145,000 meals per day. With 46 loading bays, 22 off-loading bays and a fleet of more than 150 vehicles, QACC is able to deliver a fast and efficient service. In addition, an in-built monorail system forms the backbone of the technology-led facility and runs throughout the loading, sorting and cleaning stations. The automated system transports trolleys to and from aircraft, the system then automatically sorts and delivers the cutlery and crockery belonging to the different airlines with accuracy. The catering facility has specific areas to facilitate different cuisines including Asian, Arabic, Indian, Oriental and Western and even Japanese foods.

Qatar Aviation Services (QAS)

QAS provides ground services to 37 different airlines, serving both the passenger and cargo elements of the airport. The QAS team including 8,855 workers on the ground 24/7 delivering solutions from checking in and boarding passengers for all foreign airlines. QAS coordinated with the Operations Centre facility for resource management, operational monitoring and control to handle 38 million passengers, more than 250,000 aircraft movements and 30 million pieces of baggage at Hamad International Airport in 2016/17. QAS manages porter services, buggy operations, the terminal shuttle and VIP transportation at the airport, which counts over 130 passenger buses, 30 luxury limousines, 37 crew buses and 20 cars for cabin and deck crew transportation. QAS also operates and maintains an entire fleet of ground servicing equipment including more than 1,300 pieces for motorized pushbacks and more than 3,300 items of non-motorized equipment. The cargo division of QAS provides a cargo handling solution at the airport's 7,700 square meter cargo terminal, operating 11 freighter stands and handling 1.8 million tons of cargo in 2016.

Privilege Club

Qatar Airways's Frequent Flyer Programme allows its members to enjoy a wide range of exclusive privileges and benefits with four memberships tiers: Burgundy, Silver, Gold and Platinum. Members who earn Qmiles can use the services of OneWorld member airlines or its partners. Qmiles can be redeemed with complimentary flights to almost 1,000 destinations served by Qatar Airways, the OneWorld alliance and its airline partners, as well as cabin upgrades and excess baggage allowances with Qatar Airways. In addition, members can use Qmiles to redeem hotel stays at AccordHotels, purchases at Qatar Duty Free (QDF) and Oryx Galleria, Doha.

Global Sponsorships

Qatar Airways focuses on brand awareness strategy by spreading its name worldwide through sport collaborations. Football has been chosen because this sport brings people together across all cultures and countries. By co-operating with FIFA, the airline has become the official partner and the official airline of FIFA, and sponsor of the biggest sporting sponsorships in the world. The sponsorships cover all FIFA tournaments, including the 2018 FIFA World Cup Russia and the 2022 FIFA World Cup Qatar, giving Qatar Airways an opportunity for exposure to more than two billion football fans from over the world. Besides, Qatar Airways established a five-year platinum sponsorship of Bayern Munchen AG at ITB, Berlin in March 2018, with the airline's logo worn on the shirt sleeves of this group until June 2023. Qatar Airways also partnered with ABB FIA Formula E Championship electric street racing series in Paris and New York in 2017 and in Rome and Berlin in 2018.

Relationship Extension with European and US Partners

Qatar Airways is currently working with the European Union on a Comprehensive Air Transport Agreement in order to liberalise the aviation regime between the State of Qatar and the member states of the European Union. Qatar Airways has found commercial opportunities in the European market and strives to improve its connectivity to travellers and businesses in Europe. In 2017, Qatar Airways started its service to Nice, Prague and Thessaloniki and in 2018, the airline started operating to Cardiff, Mykonos and Malaga. For the US market, due to accusations by the big three US airlines that the Gulf carriers, including Qatar Airways,

Emirates and Etihad Airways, had violated the Open Skies agreements, Qatar Airways followed its government's decision to engage with its US partners and defended its business in order to comply with the Qatar-US Open Skies Agreement.

Industry Leadership

Qatar Airways has been positive in taking on a role as an industry leader and driving positive change and innovation in the aviation industry. As a committed member of the aviation community, the airline has enthusiastically contributed to the vision of the IATA by hosting the IATA AGM in 2014 and IATA Ground Handling conference in the Middle East in 2018. "At an industry level, Qatar Airways is represented at the International Air Transport Association's (IATA) Environment Committee and the Arab Air Carrier Organization's (AACO) Environmental Policy Group. We are also active participants in the Sustainable Aviation Fuel User Group and United for Wildlife."

SECTION 12

CASES OF SELECTED LOW-COST CARRIERS

This section presents the individual case reports of the selected low-cost carriers, namely Derry Air, a short-haul low-cost carrier, and NokScoot Airlines, a medium-haul low-cost carrier. A low-cost carrier operates with an especially high emphasis on minimizing operating costs, following with lower fares and fewer comforts. Low-cost airlines usually charge extra fees for extra options. The low-cost term originates within the airline industry referring to airlines with a lower operating cost structure than their competitors. This term does not apply to any carrier offering low ticket prices and limited services, regardless of their operating models. Low-cost carriers studied in this research do not imply regional or hybrid airlines that operate short flights without service or full-service airlines offering some reduced fares.

12.1 Derry Air

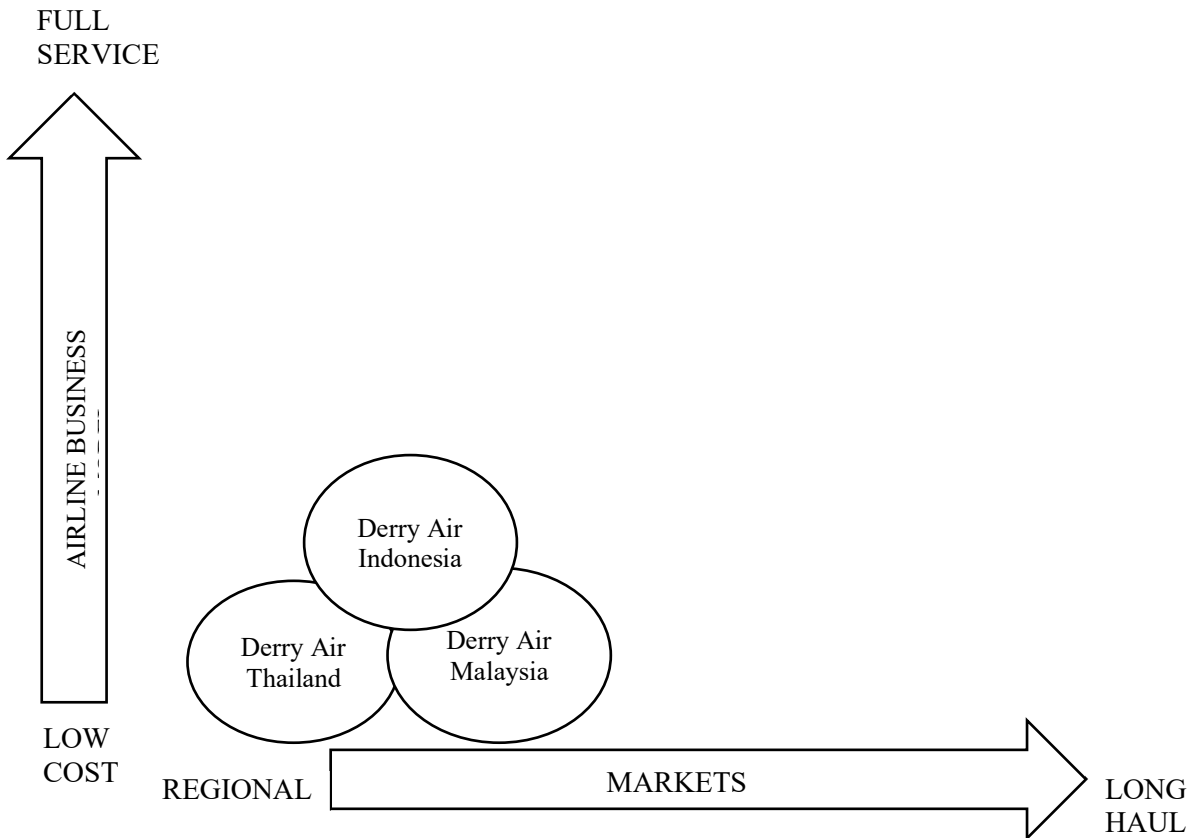
Being a largest short-haul low-cost airline in ASEAN region, Derry Air is selected as a prototyped case study to learn how its strategies responding to the environmental changes. Despite the differences and scales, Derry Air is able to represent other dynamic low-cost airlines in the region such as Cebu Pacific in The Philippines, Vietjet Air in Vietnam or Lion Air in Indonesia to reflect the low-cost sector within the airline industry.

12.1.1 Company Background

Derry Air (DR) is one of the leading low-cost carriers in Asia and consists of affiliates in Malaysia, Thailand, and Indonesia. Derry Air serves the ASEAN region's population of 600 million people from its hubs in three countries. Derry Air's hubs are located at Jakarta and Bali in Indonesia; Kuala Lumpur in Malaysia; and Bangkok and Phuket in Thailand. Derry Air focuses on technology innovations, online booking in particular. The airline created an IT platform to increase customer transactions as well as deliver cost savings at the same time, and allow customers to manage their online bookings. In a related realm, social media forums such as Facebook, Twitter and blogs have become tools customer interactions and the maintenance of customer relationships. Derry Air builds its brand image on youthful energy and a cheeky sense of fun, through the sponsorships of sports and entertainment events.

A new leadership team with great collaboration and heightened synergies were the key success factors for Derry Air, which helped increase its load factor to 80% from 2017, the equivalent of 30 million passengers. In order to satisfy its robust growth, Derry Air has expanded its narrow-body fleet to over 200 aircraft to bring new opportunities to all of their affiliates. Even though the worthy results were obtained, the airline also gained positively from numerous external factors such as lower fuel prices, Full-Service Carriers (FSC) focused more on offering premium service and exiting the Low-Cost segment, and an increased travel demand from a rising middle class in the region. In addition, when the global economic is not so brilliant, people choose to travel to ASEAN which is more affordable and value-for-money than flying to America or Europe.

Figure 31: Managerial Profile of Derry Air



Source: Adapted to Singapore Airlines' Managerial Profile

12.1.2 Strategic Developments

Having worked well with its LCC business models in ASEAN, the airline expects the positive upward trend for travel demand to continue the coming years. Derry Air sees good forward bookings, the introduction of new routes in the Indochina countries. In Thailand, the airline profits from the efforts to boost tourist arrivals, including a temporary visa fees waiver. In Indonesia, the airline's strategy is to increase aircraft utilization through increased frequencies and the opening up of new routes, particularly to international destinations.

Since the low-cost business model continues to evolve and keep a cap on costs, digitization is viewed across the company as an important efficiency tool in maintaining this model. Furthermore, the airline constantly strives to increase aircraft utilization by featuring lean and cost-efficient models. The group's business model focuses on the low-cost philosophy which require its operations to be lean, simple and efficient. Key strategies employed include (a) point to point network, (b) fleet expansion and increasing capacity, (c) growing ancillary income, (d) digitization. The airline complies with conditions as set by regulators in the countries where it operates, and safe operations are given the highest priority. Derry Air also partners with large maintenance service providers to ensure the available fleet is continually maintained in prime flying condition.

Point to Point Network

Derry Air operates non-stop for both short and medium flights in order to economize on the

need for human activity, physical infrastructure and facilities at transit locations.

Fleet Expansion and increasing capacity

Derry Air increased its fleet to 200 aircraft in 2017 and expects to receive 100 Airbus A321neo delivered from 2019 onwards. The fact that the A320neo can save 15% on fuel, extend its flying reach to 500 nautical miles and increase loading to a higher passenger capacity of 186 seats per aircraft compared to the conventional A320neo, can generate numerous cost benefits. The awaiting A321neo will boost its capacity with 236 seats per aircraft and reduce its fuel consumption by 20% per aircraft per annum. The aircraft improvement will leverage cost advantages leading to lower fares, and the increased capacity allows it to transport more customers to slot-constrained airports such as Jakarta, Bali, and Singapore.

Growing Ancillary Income

Derry Air's ancillary businesses accounted for 10% of total revenue and continued to grow 15% from 2016. To increase the customers' uptake, the airline has focused on a dynamic pricing strategy as well as more personalized communication based on data analysis of customer's past purchasing behavior. The airline's pricing mechanism for check-in baggage and seat selection has increased 20% and 15% respectively. Employment of big data analysis allows Derry Air to retrieve personalized communication with customers and increase the take up of a range of services from in-flight food to duty free purchases. Digital transformation is always concentrated for the sake of the airline, it continually captures passenger data and uses this to target the up-sell and cross-sell of ancillary products. In 2017, the airline used electronic point of sales devices for inflight transactions and recorded the data to its centralized platform, with the aim of updating passenger profiles and guiding the airline to serve its customers better.

Digitalization

Digitization is the key tool the airline uses to sell tickets and communicate with passengers, however, it does not stop with these two basic functions but moves forward by capturing and integrating data from every aspect of its operations into a single platform, where entire systems and processes are digitized. Furthermore, Derry Air employs Internet of things (IoT) solutions to process data for better business decisions, operational efficiency and customer service improvement. This technology helps upgrade the in-flight entertainment and install Internet of Things (IoT) sensors on the aircraft for real-time data recording based on aircraft physical condition and engine performance. In addition, Derry Air also negotiated with Airbus to install its aviation data system to serve as the core platform.

With the employment of digital technology, the airline is able to reduce the number of steps required for every transaction to gladden its passengers as well as to give them a more personalized flight experience. The airline's supreme objective is to optimize operational efficiency while enhancing the passenger experience. This investment can help increase Derry Air's conversion and ancillary revenue. Since the ancillary business is digitized, the take-up rate of products has improved by 6%, equivalent to USD 1.2 million per month in revenue generation. With the simplified payment process offered, the airline's booking conversion increased from 7.2% in 2016 to 8.3 in 2017, equivalent to revenue of USD 26 million per month.

12.2 NokScoot Airlines

NokScoot Airlines represents the new business model in the airline industry. This airline operates a medium-haul low cost flights of six to eight hours to fly to north-east asian region, and is selected as a case study to reflect the new aspect of co-operation in the airline industry. In this co-operation, due to the Thai statutory limits on foreign ownership, Nok Air owns 51% of NokScoot Airlines, while Singapore Airlines subsidiary Scoot owns the remaining 49%. The Singapore Airlines (SIA Group) considers NokScoot Airlines as an important component of a new diversified strategy which includes investments in airlines outside its home market. SIA Group had provided financial backing to help NokScoot Airlines expand its operation. Particularly, this is of paramount importance, considering the financial woes and management changes at Nok Air.

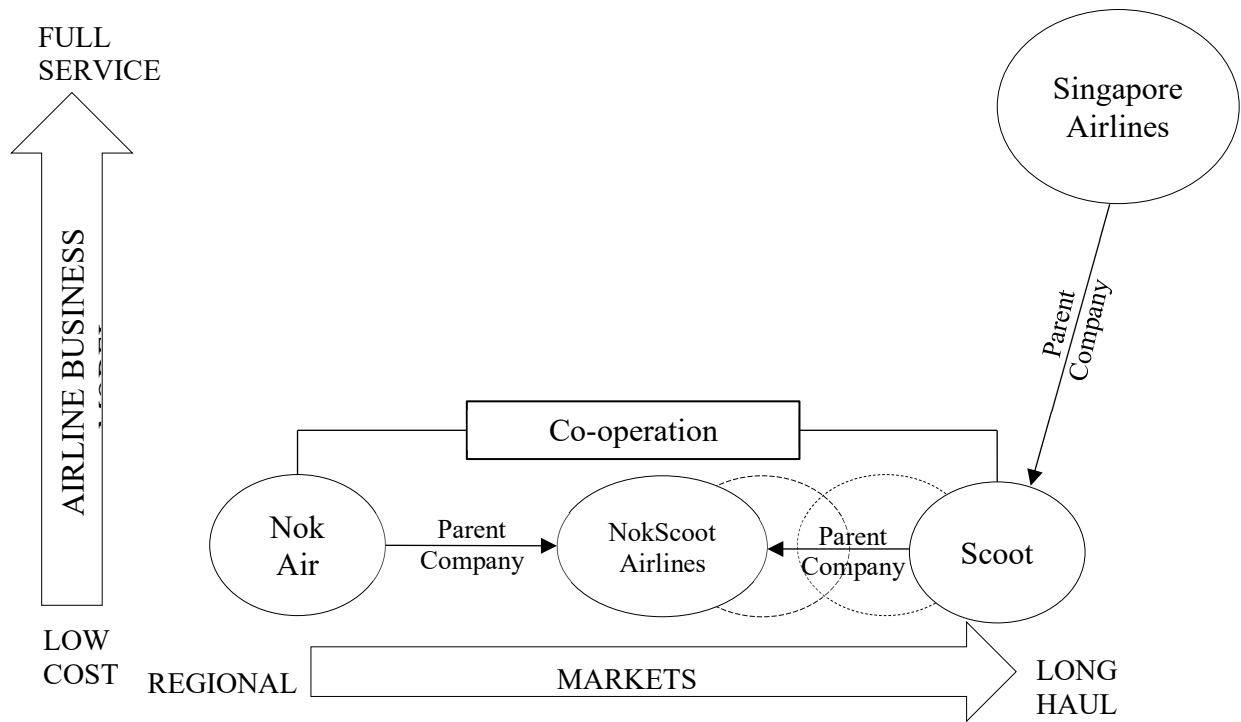
12.2.1 Company Background

NokScoot Airlines (XW) is a joint venture between Thailand's Nok Air and Singapore-based Scoot, with initial capital of 2 billion Thai Baht. The airline has operated commercial flights out of Don Mueang International Airport in Bangkok, Thailand since 2015. NokScoot Airlines provides a safe, reliable and contemporary travel experience. NokScoot Airlines operates medium to long-haul routes from Bangkok's Don Mueang International Airport utilizing Boeing 777-200 aircraft. It now flies to the Chinese destinations of Shanghai, Dalian, Nanjing, Qingdao, Shenyang, Tianjin, Tokyo and Osaka in Japan, New Dehli in India and to Taipei in Taiwan. The launch of NokScoot Airlines provides Nok Air the opportunity to expand, by bringing feeder traffic to their domestic LCC network, as well as benefiting Scoot's network through the interline agreement it has with Nok Air.

The removal of the International Civil Aviation Organization (ICAO) red flag for Thai aviation over safety concerns in October 2017 helped reignite NokScoot Airlines' growth plan. The airline carried 311,165 passengers in the first quarter, or 57,909 more than the previous quarter. NokScoot Airlines raised its flight tally to 883, up from 684 in the earlier period. For the whole of 2018, NokScoot Airlines was projected to carry 1.88 million passengers, 76% above its 2017 numbers.

Instrumental in the growth projection will be the airline's increased network, flight frequencies, fleet size, greater passenger volumes and revenue boost. With enhanced brand awareness, stronger marketing campaigns, and increased aircraft utilization rates, NokScoot Airlines now has an operating environment which is conducive to moving full-steam ahead and further improving its financial results. NokScoot Airlines was able to increase its average aircraft utilization rate to 11.5 hours in 2018, up from 9.4 hours the previous year. Seven additional aircraft are expected to be added to the NokScoot Airlines fleet in 2019, with the airline expected to take delivery of two additional wide body and five narrow body aircraft. The Thailand-based medium-haul low-cost carrier will continue its aggressive route expansion across Asia during 2019. Nine new services were planned for China, Japan, India and South Korea.

Figure 32: Managerial Profile of NokScoot Airlines



Source: Adapted to Singapore Airlines' Managerial Profile

12.2.2 Strategic Developments

Utilization of Boeing 777-200s

NokScoot Airlines' aircraft are operated in a two-class configuration, ScootBiz and Economy. For ScootBiz, there are 24 ScootBiz seats in the airline's B777 aircraft. Each seat has a footrest and in-arm trays which can be partially or fully unfolded. Similar to its parent airline Scoot, all ScootBiz seats have in-seat power outlets, while the airfare includes complimentary meals and a checked luggage allowance of 30 kilograms (66 lb). NokScoot Airlines is one of only two LCCs in the world operating the B777, with the A330 and B787 being the most popular aircraft for medium or long haul LCCs. Its parent airline Scoot transitioned to an all-B787 fleet in 2015, after initially operating six B777-200s.

Fleet Expansion

NokScoot Airlines is planning to accelerate its fleet expansion significantly in 2019. The airline has committed to taking two B737-800s in 4Q2018, which will be used to supplement its B777s on existing routes to China and Taiwan. NokScoot Airlines plans to add another four B737s in 2019 as well as two more widebody aircraft, resulting in a fleet of 13 aircraft at the end of 2018 compared to only five aircraft currently. It will be sensible for NokScoot Airlines to phase out B777s and transition to a smaller new generation widebody aircraft, either B787 or potentially A330neos, which are being acquired by the airline's competitors Thai Lion and Thai Arry Air.

Network Expansion to Northern, Southern Asia and Thailand

The Thailand-based-medium-haul carrier plans route expansion across Asia during 2019. Nine new services are planned for China, Japan, India and South Korea. NokScoot Airlines quickly developed its strong presence in China, after a previous focus on South Korea and Japan.

However, shortly after securing its AOC, ICAO raised a red flag on Thailand, leading to South Korea and Japan banning new services from Thai carriers, and China is never an easy market for a new foreign airline to enter because of the stringent local regulatory restrictions. Initially, NokScoot Airlines began scheduled operations with a service to Singapore, a highly unprofitable route it was forced to operate in order to accumulate sufficient hours to secure Chinese approvals. Bangkok to Nanjing was Scoot's first China route and second route overall, following Bangkok-Singapore, launching in June 2015. Qingdao was added in November 2015, followed by Tianjin in January 2016, Shenyang in April 2016, Dalian in September 2016 and Xi'an in December 2017. Nanjing, Qingdao, Shenyang and Tianjin were originally Scoot routes which were launched by the Singapore-based long haul LCC in Scoot's first year of operations. Dalian was added by Scoot in 2016; almost coinciding with the period NokScoot Airlines began serving Dalian. Xi'an was initially a Tigerair route, but Scoot had taken over Tigerair by the time NokScoot Airlines entered the Xi'an market.

Chinese regulations strictly limit and control the number of services a new airline can add, thus hampering NokScoot Airlines' aggressive expansion plans. NokScoot Airlines therefore suffered from very low average aircraft utilization, impacting profitability, until it was able to spool up the Chinese operation fully in 2016. Nanjing and Tianjin became Scoot's biggest China routes with flights daily. Nanjing from late 2016, and Tianjin from April 2018. Qingdao and Shenyang are currently served with four weekly services, Xi'an has three weekly services and Dalian two. A fifth frequency to Qingdao and a third frequency to Dalian are operated during peak periods. All inclusive, NokScoot Airlines currently operates 27 weekly services to China, generating 11,205 weekly one-way seats. NokScoot Airlines had been fortunate in that demand in the Thailand-China market surged just as it shifted its focus to the Chinese market. Chinese visitor numbers to Thailand have more than doubled since NokScoot Airlines entered the market. Chinese visitors to Thailand were up another 21% in the first seven months of 2018 as well. Japan now had emerged as another key market for NokScoot Airlines. Following ICAO lifting the red flag on Thailand in October 2017, Japanese authorities lifted their restrictions on Thai carriers, thereby finally enabling NokScoot Airlines to launch scheduled services into Japan. NokScoot Airlines started one daily service on the Bangkok to Narita route on 1 June 2018, shortly after taking delivery of its fifth B777-200. The airline announced on 29 October 2018 its launch date for the second Japanese route: a daily B777-200 service from Bangkok to Osaka Kansai. NokScoot Airlines is also adding four weekly Bangkok to Tokyo services in late October 2018 for a total of 11 weekly frequencies.

Singapore-based Scoot also plans to continue serving the Bangkok to Tokyo and Bangkok to Osaka routes, which it currently serves daily and three times weekly, respectively, using fifth freedom rights. Scoot launched Bangkok to Osaka in 2015 and Bangkok to Tokyo in 2016 (both flights originate in Singapore), providing NokScoot Airlines a back-door option for entering the Thailand-Japan market while Thai carriers were unable to add services to Japan. NokScoot Airlines continues to sell the Scoot-operated flights, resulting in a total of 28 weekly services and nearly 8,000 weekly one-way seats in the Thailand-Japan market from the end of October 2018. The routes Bangkok-Tokyo and Bangkok-Osaka are large enough to accommodate both NokScoot Airlines and Scoot. There are over 40,000 weekly one-way seats in the Bangkok-Tokyo market and nearly 15,000 weekly one-way seats for the Bangkok-Osaka route. Japan is the third largest international market from Thailand, based on seat capacity, and Thailand's fifth

largest source market. Japanese visitor numbers to Thailand increased by 7% in 2017 and 6% in the first seven months of 2018.

Unlike the Thailand-China and Thailand-South Korea markets, the Thailand-Japan market is relatively balanced as Japan has emerged as a very popular destination for Thai people, aided considerably by an easing of visa restrictions. Thai visitors to Japan increased by 10% in 2017 and have increased almost sevenfold since 2011. In 2017, 1.5 million Japanese travelers visited Thailand and just under 1 million Thai visitors travelled to Japan. Fukuoka will be NokScoot Airlines' planned third Japanese destination and could be launched by the end of 2018 using the airlines newly acquired B737-800 fleet. Nagoya and Sapporo are in the plans for 2019.

Ancillary Income

NokScoot Airlines has sub-classified the various classes of seating in its B777 aircraft as: ScootBiz, Standard Economy, Super and Stretch seats. Each plane was equipped with 24 BizScoot seats, as well as 391 Economy seats, arranged to provide 4 tiers of comfort. Full leather seats which offer at least 38 inches of legroom, plus a footrest and in-arm trays which can be partially or fully unfolded. Standard Economy seats have a pitch of 31 inches (79 cm); Super seats have a pitch of 35 inches (89 cm); and Stretch seats, located at the front of each section of the economy cabin, have a pitch of 36 inches (91 cm). Passengers may reserve seats for a fee, with Standard Economy being the cheapest, followed by Hot Seats and then Stretch seats. Passengers in Standard Economy may purchase meals and checked luggage attracts a fee.

Advertising Campaigns

NokScoot Airlines is known to be a fun, no fuss, no frills LCC. Their recent TVC campaigns focused on the routes to China and Japan. For China, two TVCs were created, with the first being "Mysterious Thing in the Middle of Siam" showcased a "Terracotta Army" outside Siam BTS terminal in Bangkok, where curious locals and tourists took pictures with them, as well as getting some "scares from them". The second TVC, "Travel China is Unique", showcased the vibrancy of NokScoot Airlines' Chinese destination cities and their lifestyles. To promote NokScoot Airlines in Japan, the airline produced two TVCs, "Going to Japan. Do you have to do this?", and "Rapper Osaka Launches Big Bird". The first aimed to promote Japan as a travel destination, while the second promoted Osaka as a hip and fun place to travel to.

Conclusion of Chapter 5

In regard to methodology, this study is elaborated under a critical realist view and based on human perception and experience, which is acknowledged as a praxeological project. We adapt the research design from COSMOS Corporation to prepare, collect and analyze the data. The research approach is qualitative, explanatory-descriptive and contextual. The qualitative analyses of qualitative data and quantitative data are processed with the collected data under the forms of in-depth interviews, observations and questionnaires. The analytical technique used is “Explanation Building”, aiming to analyze the case study by building an explanation. Thus, the method of contextualized explanation for theorizing from the case studies of Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines is fit to be employed for the analysis of this empirical research.

The illustrative case studies from four selected airlines reporting different managerial profiles and strategic developments, which represent the large picture of the airline industry in the ASEAN region. Under the managerial classification of Perlmutter (1969), Porter (1986) and Milliot (2013), Vietnam Airlines is categorized as ethnocentric, Qatar Airways as holicentric, Derry Air as polycentric and NokScoot Airlines as geocentric¹³. These individual reports provide and allow to access in-depth information available about an individual airline. We create the managerial profile models reflecting four above airlines’ structure in terms of ownership, subsidiaries and affiliates based on Singapore Airlines’ ones. Therefore, the cross-case analysis across four case studies for the benchmarking is conducted in the next chapter. This analysis will identify common features and conditions between four airlines, thus to sum up common groups of strategies that airlines are currently implementing for their survival and growth.

¹³ How four selected airlines’ managerial profiles being classified is explained in Chapter 9

CHAPTER 6

QUALITATIVE ANALYSIS WITH FOUR SELECTED CASE STUDIES AND QUANTITATIVE ANALYSIS OF PASSENGER SURVEYS

This chapter consists of two sections, in which Section 13 presents the cross-case analyses of four selected airlines, thus to propose seven propositions guiding for the findings in response to two researched questions. Section 14 presents the method of collecting primary data, including in-depth interviews and passenger surveys, and secondary data; thus followed by the two-step cluster analysis based on collected surveys. This quantitative analysis reveals the customer service assessment from passengers in Cambodia and Vietnam towards any airline operating in the ASEAN region, allowing to further understand the reaction and the influence of the Customer stakeholder heading for these airlines.

SECTION 13

CROSS-CASE ANALYSIS AND PROPOSITIONS

The cross-case analysis method involves in-depth exploration of similarities and differences across cases to support empirical generalizability and theoretical predictions. The cross-case analysis was conducted with the MaxQDA software using a clustered matrix. Hence, we review coding procedures, using empirical data for descriptive, interpretive and pattern codes, to formulate generalizations within cases. In practice, much case study research has in fact put forward empirical generalizations (Hammersley, 2000). However, having different business models, scales of operation, managerial profiles, countries of origin, and customer segments, each airline is naturally focused on different strategies in response to its existing influenced environment; we identify common features and conditions between the airlines to benchmark and configure the similar strategy groups.

For the next stage, a case-ordered meta-matrix was used to search for similarities and associations across case outcomes. Based on strategic developments presented in individual case study reports which are referred to the airlines' latest published annual reports, their key strategies are benchmarked in Table 24 below. Additional strategies have also been confirmed with each case's top executives through in-depth interviews to supplement strategies stated publicly in the official annual reports and increase the reliability of further results and conclusions. With the assistance of the MaxQDA software, Environment, Strategy and Organization elements are coded, organized and analyzed from documents including the individual case reports mentioned in Sections 11 and 12; and each top executive's interview transcription attached in section Annexes with Annex 3, 4, 5, 6, 7, 8. This cross-case analysis examines themes, similarities, and differences across these four cases.

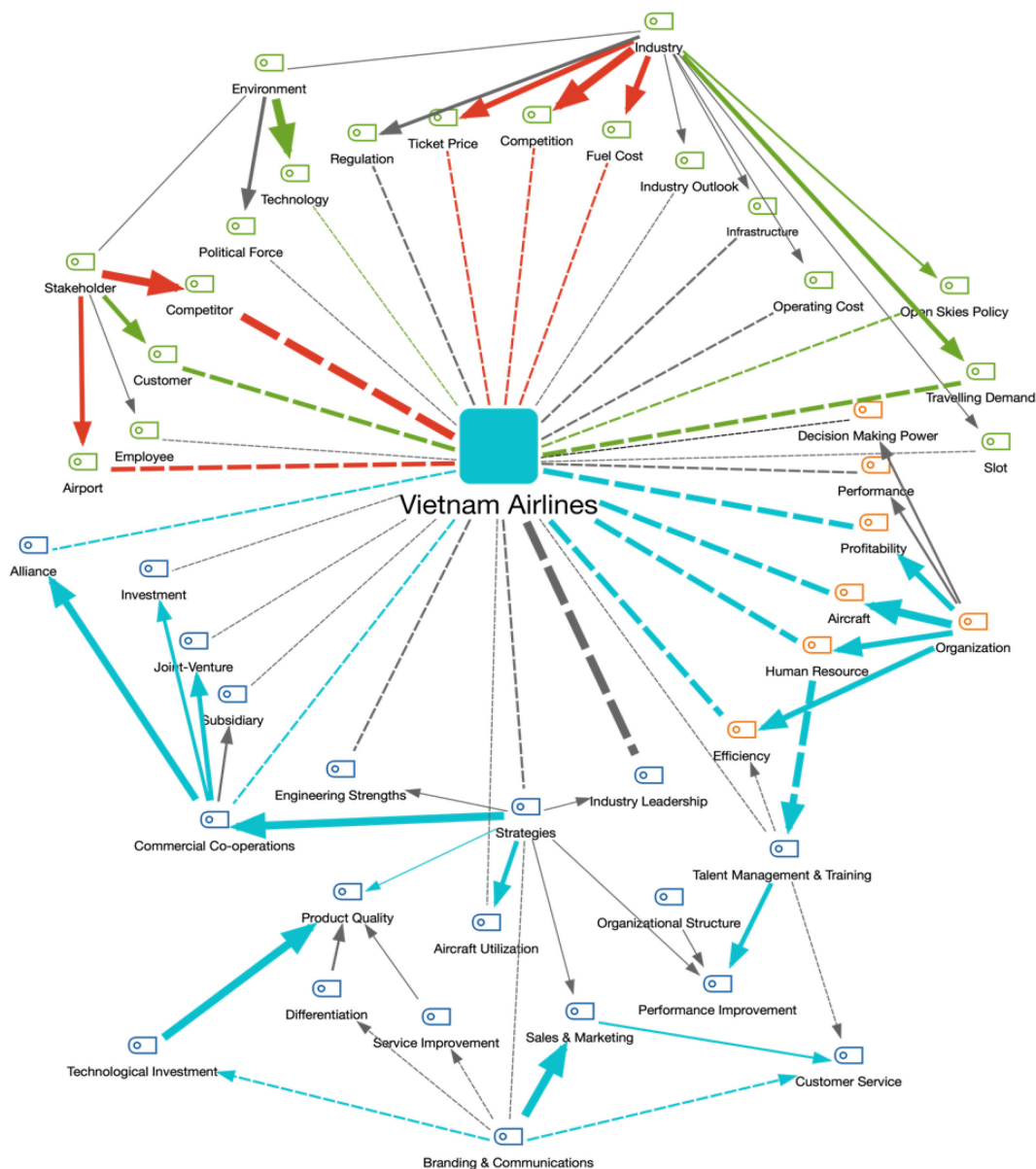
After analyzing and finding causal relationships between elements, which can be understood as variables, of each case study, the synthesis of these four case studies is conducted in order to build a body of knowledge from individual cases and assist in formulating propositions in order to satisfy the research question. The synthesis method has existed for at least four decades (Larsson 1993; Lucas 1974; Newig and Fritsch 2009) and allows systematic and rigorous

synthesis of previous case-based research by generating findings and conclusions based on rich troves of case materials created by different researchers, contexts and study designs. With the empirical evidence, case studies have a special ability to provide deep understanding of the phenomena under study from direct observations of practice through rich, longitudinal and multi-sourced data. Thus, the synthesis must take into account the flexible nature of the case study, the qualitative and mixed characteristic of the data, and the number and types of cases in each primary study.

13.1 Analysis of Vietnam Airlines

In Figure 33, red arrows indicate the threats, and the green arrows indicate a favorable environment for Vietnam Airlines, while the aqua blue arrows indicate the airline's capabilities and strategies in responding to the threat factors. The figure shows the external stakeholder environment is the key element impacting Vietnam Airlines both positively and negatively. The key stakeholders who impact Vietnam Airlines are customers, competitors and infrastructure suppliers, while the Open Skies policy does not have a strong impact on the airline's operations. The positive impacts consist of a hungry travelling demand and trust from local customers toward their national airline, its safety reputation and long-term presence in the market. However, the customer element can become somewhat negative when customers are dissatisfied with the airline or being fascinated by its competitors in terms of prices or promotions. As such, Vietnam Airlines is challenged to be forthright in everyday interactions with customers in order for them to perceive its values and thus for the airline to be successful. The negative impacts are the influence of domestic competitors and the limitations which infrastructure has on the airline's operations.

Figure 33: Environment Elements Which Influence to Organization and Its Strategic Responses – Vietnam Airlines



Domestic competitors include low-cost airline such as Vietjet Air and ‘infant’ airline such as Bamboo Airways, who critically share the lower customer segment, leading to the decrease of Vietnam Airlines’ margin interests and monopoly status. The fact that Vietjet Air has strongly expanded its network to both domestic and international routes has exerted extreme pressure on Vietnam Airlines. Vietjet Air and Derry Air are its key competitors for the lower customer segment in the ASEAN region when good prices offered by those competitors and the waivers of entrance visas for ASEAN citizens have facilitated travel by the majority of low-income Vietnamese to ASEAN for tourist purposes. On the other hand, Vietnam Airlines also faces competition from other large international airlines for international long-haul routes. Large Middle Eastern Airlines such as Qatar Airways, Emirates and Etihad Airways have taken customers from Vietnam Airlines when they have opened their route networks to connect cities in Europe and Asia through their hubs in the Middle East.

Vietnam Airlines' network growth is currently influenced by the country's limited infrastructure where Tan Son Nhat and Noi Bai airports in Vietnam are becoming overloaded, leading to its increase in operating costs. For example, there are over 700 flights landing at Tan Son Nhat airport per day and the runway currently endures 44 flights per hour, meaning time allocated for each landing and taking off is only 1 minute 20 seconds. Despite Tan Son Nhat airport having two parallel runways, only a single aircraft take off or landing is permitted at any one point in time. The airport's fish-bone layout design is a further limitation on aircraft movements, with terminal entrance and parking spaces being adjacent to each other. In addition, Vietnam's airport layout design barely affords new aircraft models of larger sizes and loads.

Meanwhile, airports worldwide which have high flight densities of over 200,000 flights per year, such as Hartsfield-Jackson Atlanta, Chicago O'Hare, Los Angeles airports in the U.S., Beijing Capital, Shanghai East airports in China, Charles de Gaulle airport in France, and Heathrow-London airport in the UK, were designed with a mid-passenger terminal model and side-by-side operational lines independently of the two sides. This airport model can optimize capacity and ensure flexibility of aircraft movement. This overload problem in Vietnam can be solved if the country's infrastructure is moving towards a positive condition. The Vietnamese Ministry of Transport favors, as an alternative solution to overloading, plans to develop 23 airports including Long Thanh, Tan Son Nhat, Can Tho, Noi Bai, Van Don, Cat Bi, Da Nang and Phu Quoc to host an annual air traffic of 144 million passengers by 2020 and 308 million by 2030, and thereby spread flight operations more evenly across Vietnam's airports.

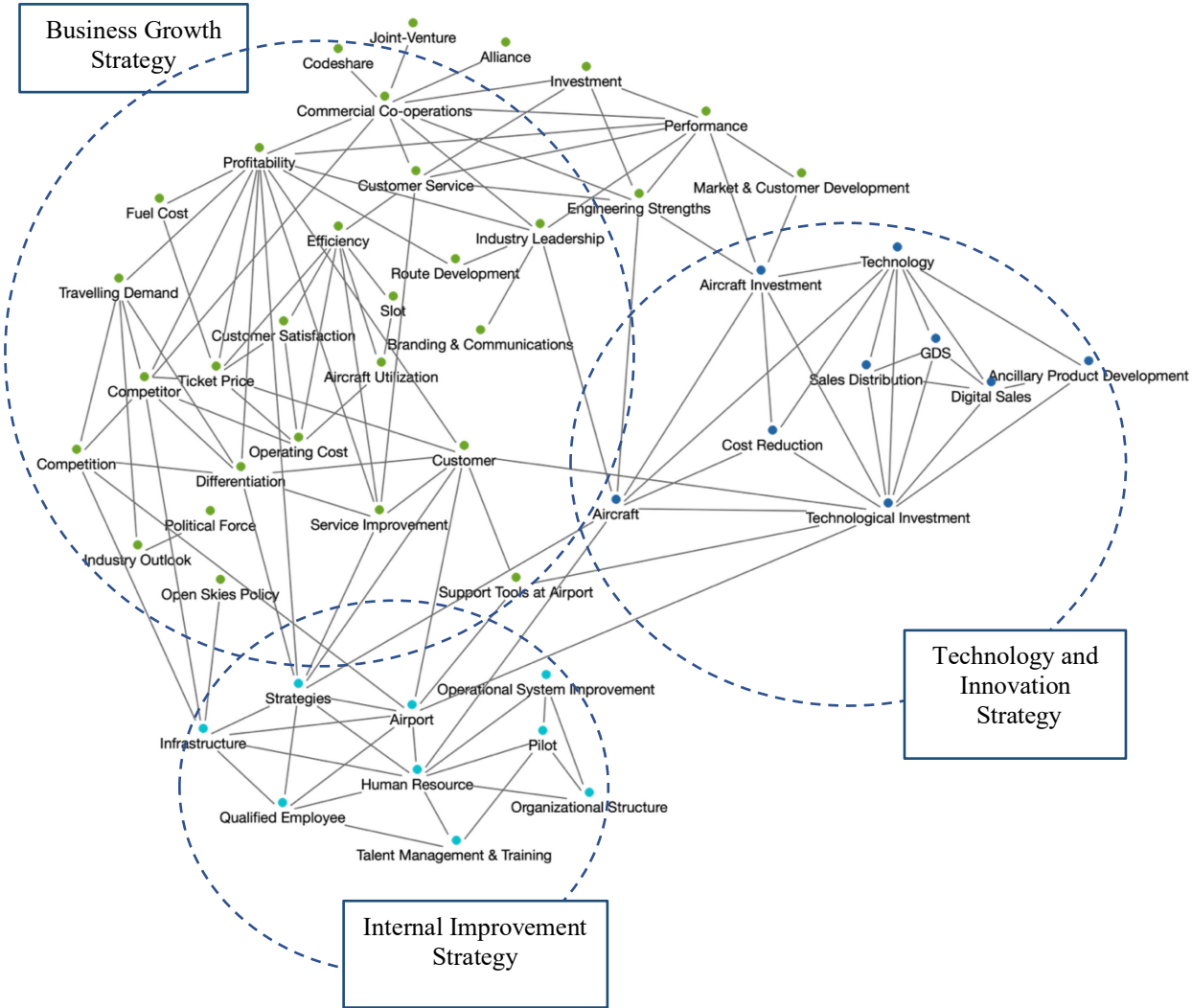
Aiming to become one of the largest airlines in the ASEAN region, with its resources and capabilities, Vietnam Airlines focuses on strategies for safety, branding, commercial co-operation, engineering, technological investment, service improvement, talent management and organizational structure to strive for efficiency and profitability. The human resource element is given attention, with Vietnam Airlines' investment in talent and management training in order to improve its performance. Technological investment, including the purchase of new aircraft models and check-in kiosks at the airports, has leveraged the position of the airline over its domestic rivals in terms of product quality and service improvements. Vietnam Airlines is growing stronger with its fleet and network expansion in order to service huge travelling demand in the domestic market and to increase the connectivity in the regional and global arenas. In addition, Vietnam Airlines's co-operation with other airlines by joining the SkyTeam alliance, undertaking joint ventures with Cambodia and obtaining investment from ANA, has facilitated its route network expansion. The airline promotes its branding, communication, sales and marketing to retain its competitive position, and subsequently become an industry leader in Vietnam and the ASEAN region as well.

Figure 34 below indicates the tripolar relationship between environment, strategy, and organization of Vietnam Airlines. The relationships between these elements are classified into three clusters presented in green, aqua blue and ocean blue, indicating the airline's responses to its respective environment. The first largest green cluster, labelled as Business Growth Strategy, includes a series of strategies such as undertaking commercial co-operation, differentiating its products and services, improving customer satisfaction, pushing branding and communication, expanding market territories and route networks, achieving efficient performance, and striving for industry leadership. The second ocean blue cluster, labelled Technology Innovation

Strategy, focuses on the investment in aircraft and digital sales distribution channels. Aircraft innovation actually ameliorates the consumption of fuel, which eases the greatest cost drain for most airlines, and digital technology helps the airlines' approach towards sales to end-user customers. The third aqua blue cluster, labelled Internal Improvement Strategy, primarily focuses on the human resource factor, and operational systems improvement. This strategy is crucial to keeping pace with the two other mentioned strategies in order to synchronize an entire strategic thrust when the airline is facing increased complexity and multi-faceted decisions to develop realistic and viable long term plan and annual operating plans which support strategic business growth and profitability objectives.

In short, Vietnam Airlines employs the three primary strategies of a business growth strategy, a technology innovation strategy and an internal improvement strategy, in response to its external stakeholder's influence, those being primarily its customers, competitors and infrastructure service providers, all being truly important and having a direct influence on the airline's survival and success.

Figure 34: The Relationship between Environment, Strategy and Organization Elements – Vietnam Airlines



13.2 Analysis of Qatar Airways

Figure 35 indicates the environment favored towards Qatar Airways, and its strategies and capacities to exploit international markets. Favored stakeholder elements include customers, sales distributors, airport operators, and aircraft providers. Qatar Airways has been voted the world's best airline for customer service since 1999, proving that the airline is much loved by the majority of worldwide customers. Additionally, worldwide sales offices have leveraged close connections to the airline's sales distributors, including physical and online travel agents, thereby providing prompt and convenient assistance to customers for flight-related and other information.

Compared to Vietnam Airlines, Qatar Airways possesses the competitive advantage of a modern, international standard airport in Qatar, allowing the airline to achieve efficient performance. Hamad International Airport (HIA) served 38.2 million passengers, managed 250,419 aircraft movements and handled 1.8 million tonnes of cargo in 2018¹⁴. In this regard, HIA continues to provide a strong and unmatched competitive advantage for Qatar Airways, supporting 88.4% on-time departures and among the top airports globally able to support international connections under 60 minutes. As already noted, Qatar Airways operates one of the world's youngest and most technologically advanced fleets, and the airline considers this point an operational advantage. Moreover, having built a good co-operative relationship with both Boeing and Airbus, Qatar Airways has its aircraft delivered on time, allowing it to improve the value and efficiency of its existing airplanes, stand out in the marketplace, and keep its fleet at the forefront of global aircraft performance capabilities.

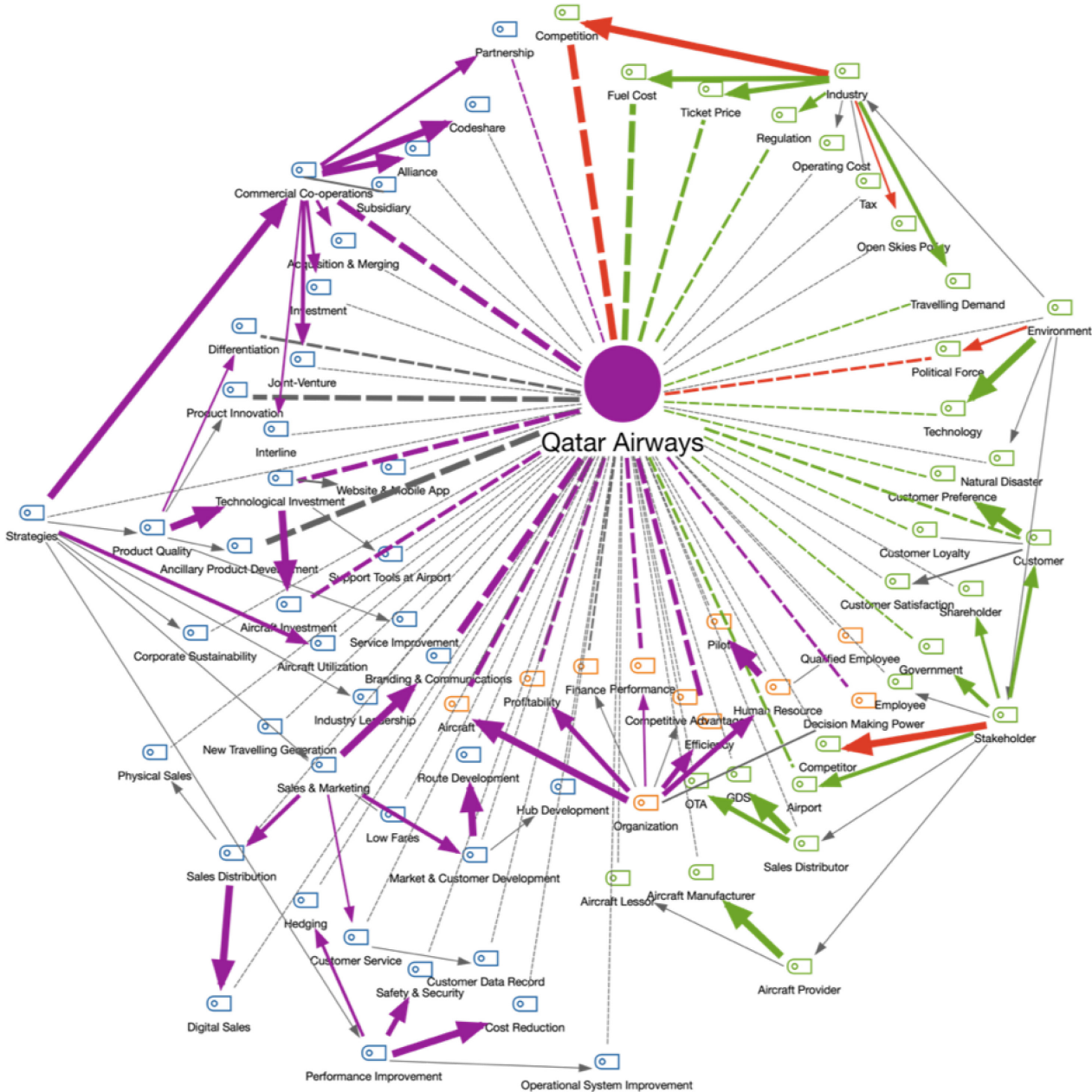
Adversely, Qatar Airways also must cope with threatening environmental elements such as competition and the geo-political situation. Firstly, although Qatar Airways is extremely competitive against many airlines, operating across five continents, its global and national competitors, namely the airlines in the ASEAN region, i.e. Singapore Airlines, Vietnam Airlines, Philippine Airlines, etc., ceaselessly improve their long-haul routes to Europe, and garner patriotic support from their national passengers. In addition, Qatar Airways does not gain totally from the Open Skies Agreements, although it is supposed to, due to the protection of the governments in US and within the EU as well. While the U.S-Qatar air services negotiations were mostly focused on fifth freedom rights and market capacity, the negotiations for Open Skies between the EU and Qatar are rather concerned with the fair competition clause.

Agreements between the EU and Qatar are difficult to achieve because the three major Gulf carriers, Qatar Airways, Emirates and Etihad, are direct competitors to European airlines and they face strong opposition within Europe. A coalition of European workers, passengers and companies, known as Europeans for fair competition, has campaigned against Qatar Airways as well as Emirates and Etihad. The movement argues that European airlines cannot compete with state-subsidized carriers who do not play by the rules, and thus threaten European jobs. What the coalition takes into account is that any negotiations over international air services include not only traffic rights, but also important issues such as safety, job security and environmental protection. Finally, the State of Qatar and the EU are edging closer, after many years of negotiations to finalizing a comprehensive edge to carriers from both EU and Qatar.

¹⁴ Source: Qatar Airways' annual report

Confirmed by the CEO of Qatar Airways, the airline has taken bold steps by agreeing to articles on fair competition, business practices, transparency, environmental and consumer protections, as well as other social aspects. The principle of fair competition is simple: fair access to markets, competing for market share based on products and services of what the customer wants and is willing to purchase.

Figure 35: Environment Elements that Influence to Organization and Its Strategic Responses – Qatar Airways



Concerning the Open Skies Agreement in the U.S market, Qatar Airways has encountered severe opposition from the three legacy airlines, American Airlines, Delta Airlines and United Airlines. To ease tensions, the Qatari government has signed deals with the U.S. committing to increased financial transparency from their carriers desist from launching new fifth freedom

flights, assuring the U.S. it would only operate direct routes from Qatar with no third country stops enroute. However, with its investment strategy, Qatar Airways consolidated a 49 percent stake in Meridiana in September 2017, and became a new shareholder when the airline itself was rebranded as Air Italy, leading to accusations of it using the new Air Italy as a Trojan horse to expand into the U.S. The fact is, however, that the U.S. has an Open Skies Agreement with the EU, allowing any U.S. airline to fly anywhere into Europe, and vice-versa, any European airline may fly anywhere into the U.S. As a result, the U.S. airlines, and their related unions, claim Air Italy is being used as a proxy for Qatar Airways' expansion into the U.S., is not a legitimate a European carrier, and represents a grave threat to American jobs and the health of its airline industry.

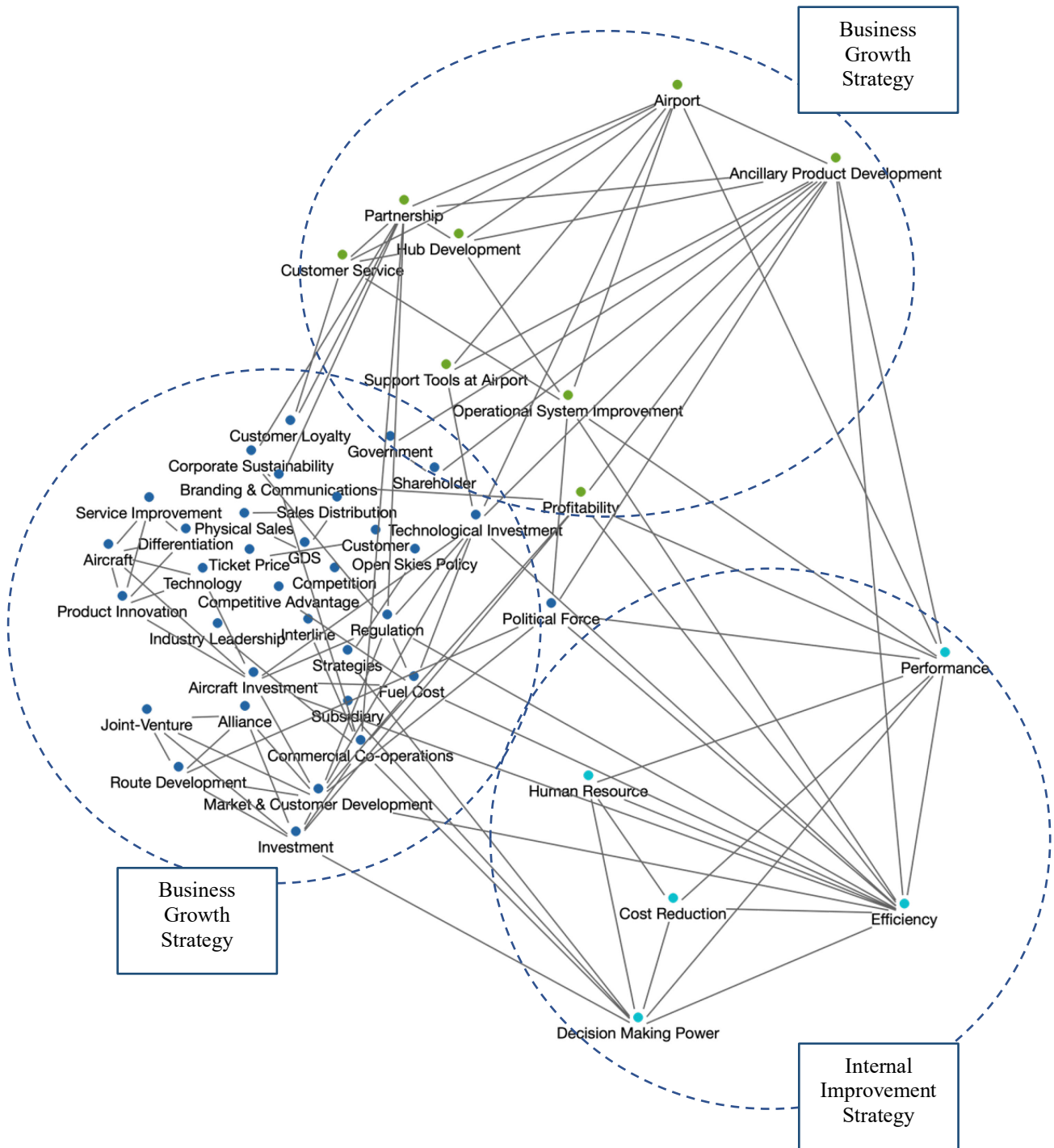
On the other hand, JetBlue Airways Corp, Atlas Air Worldwide Holdings Inc and FedEx Corp hold the opposing view, proposing the US government not restrict Qatar Airways or Air Italy from flying into the U.S. as doing so may lead to the unraveling of other aviation agreements globally, unleash potential retaliation against U.S. carriers. The possibility of retaliation could have a devastating impact on the ability to obtain authority to operate in the EU under the U.S. – EU Open Skies agreement, which would have a crippling impact on U.S. passenger carriers seeking new services to the EU. Furthermore, closing access to global markets will be a punishment bringing higher prices and fewer choices for American travelers, consumers, and shippers because Qatar Airways determines its stake in Air Italy as being fully compliant with the 2018 U.S.-Qatar Understandings, an additional pact which accompanied the U.S.-Qatar Open Skies Agreement. The debate from these three airlines states both the Italian Civil Aviation Authority and the European Commission have certified Air Italy as a European carrier, therefore, its new flights into the U.S. are perfectly legal per the US-EU Open Skies Agreement. These airlines also accuse their counterparts at Delta, American and United of hypocrisy because Delta owns a 49 percent stake in Virgin Atlantic. Then the question becomes “*Virgin Atlantic’s London-Dubai flight is similarly a proxy for Delta to serve Dubai from Europe, is it not?*” In fact, Delta, American and United have many investments and joint ventures around the world, including China and Latin America, in addition to Europe, and therefore their objections to Air Italy’s expansion is illogical and would turn aviation law on its head. However, the U.S. government has not settled this issue and has committed it to study in order to, at least temporarily, shield these signature airlines from competition.

Secondly, geo-political forces come into play as a significant factor heavily influencing any global airline, such as Qatar Airways. The aero-politics of the Qatar blockade-imposed challenges on Qatar Airways in July 2017, with the airline banned from entering the airspace of Saudi Arabia, the UAE, Bahrain and Egypt. These countries claimed legitimacy for this action by citing Article 1 of the 1944 Chicago Convention on International Civil Aviation, which assures the sovereign right of states under international law to take any precautionary measure against parties threatening their national security. As a result, Qatar Airways was forced to cancel 18 regular flights to Egypt, Saudi Arabia, Bahrain and the UAE, significant routes for Qatar, given their shorter flying distances to North Africa and Europe, leading to the loss of its two main markets. In response to the threatening blockade, the Qatar Airways’ strategy was to seek out alternatives and set-up another important partner, this being Iran, because flights for North Africa and Europe have had to fly over Iran, Iraq and Jordan, and longer flights to the north and west use Turkish airspace, and thus flight safety was assured,

delivered a boost to Iran's air traffic by 20 percent as well as its increased revenues from fees for using Iranian airspace. The Qatar-Iran partnership in the aviation market is a bilateral arrangement which benefits the Iranian economy and enables flight from Doha to reach most of the world, albeit at a greater cost. Iran's co-operation provides Qatar with a significantly stronger position in the aero-politics of the blockade. Qatar Airways currently flies to more than 160 destinations daily and provides visa-free entry for passport holders of 80 countries in order to counter the economic effects of the blockade. Larger aircraft have added to the airline's capacity to cater for new routes, including 42 brand-new Airbus A350-1000s, one of the largest and most fuel efficient, carbon-composite aircraft in the market. Qatar Airways takes its leadership role in the international aviation community very seriously by continually improving its use of aviation fuel through its fuel optimization programme, in reducing weight, route optimization, aircraft on ground operations, and technical performance. In fact, Qatar Airways was able to cope with the challenges thanks to the country's wealth from its natural resources and its own citizens' approval for its foreign policy post-blockade.

Figure 36 classifies three clusters of strategies which Qatar Airways uses to respond to its respective environment. The largest blue ocean grouping and the green grouping, labeled Business Growth Strategy, include a series of strategies such as product development, market development, customer service, partnerships, commercial co-operation, technological investment, sales distribution and branding. The aqua blue cluster grouping signifies the Internal Improvement Strategy, focusing on human resources, cost reduction, performance, decision making power, and efficiency. For Qatar Airways, the airline uses just two groups of strategies, Business Growth Strategy and Internal Improvement Strategy, to run its operational process.

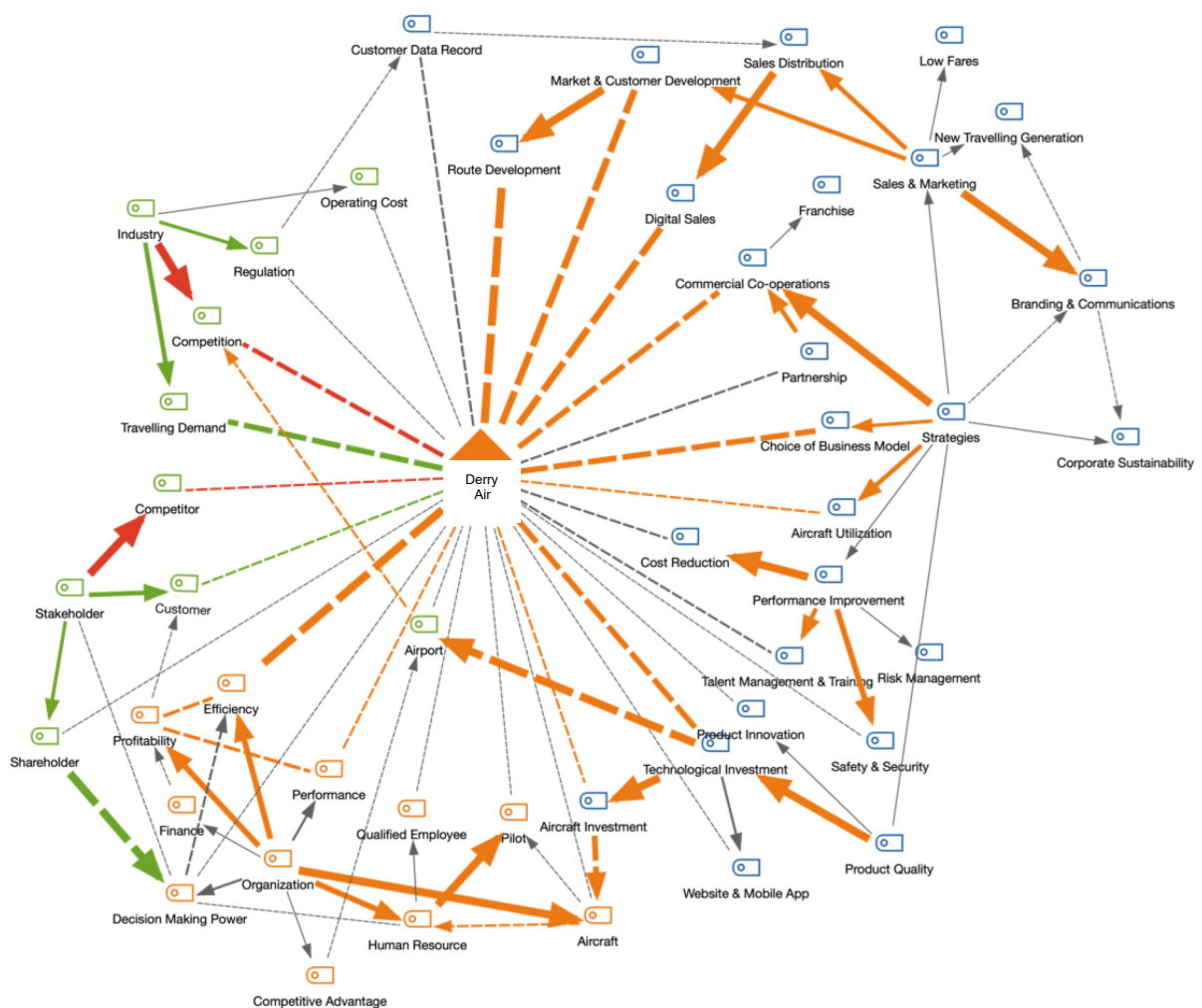
Figure 36: The Relationship between Environment, Strategy and Organization Elements – Qatar Airways



13.3 Analysis of Derry Air

In Figure 37, the only threat factor influenced Derry Air is the Competitor factor, while the favorable environment factors are Customers and Regulations. In possession of strong capabilities, Derry Air has set out a wide range of strategies, shown with orange arrows, which not only respond to the threat factor, but also turn the threat to advantage and help the airline sustain its competitive position in the market. Similar to Vietnam Airlines, the stakeholder environment is the key element which influences both positively and negatively on Derry Air and the Open Skies Agreement does not have a significant impact on the airline's operations.

Figure 37: Environment Elements Which Influence to Organization and Its Strategic Responses – Derry Air



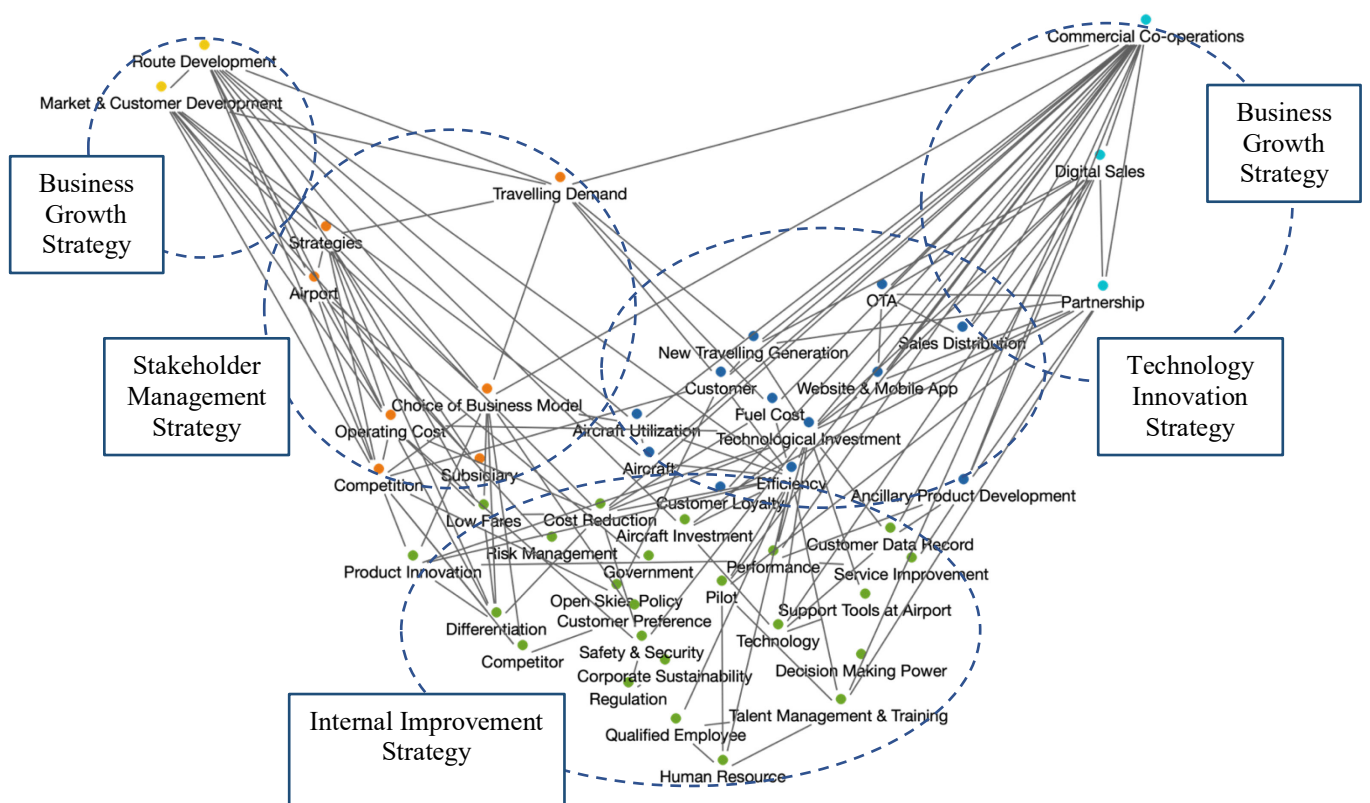
For Derry Air, positioning itself as a regional low-cost airline in ASEAN, its strategies have been entirely focused on low fares, high aircraft utilization, ancillary products, network expansion, hub development, commercial co-operation, risk management, corporate sustainability, safety, technological investment and talent management. Looking at Figure 37, the five main strategies Derry Air is currently carrying out to achieve its profitability can be identified as Talent Management and Training, Technological Investment, Market Growth, Branding and Communication, and Commercial Co-operation. The airline considers its human

resources comprising everyone from pilots to all other employees as one of the most significant success factors it has, and provides them with regular training and personal development programs. The investment in technology innovation, including the automatic check-in kiosks and self-drop baggage system at the airport, the digital sales distribution system and the single aircraft model A320 fleet, have leveraged the airline's performance improvement and scale. In fact, an investments in new technology can result in reduced costs and improved profitability (Mithas, 2012). Furthermore, Derry Air has proven to be an efficient airline thanks to its generic strategy of leaning toward cost leadership by lowering all operating costs. Operational effectiveness and cost leadership are two principal elements which help this airline achieve success in competing with rivals in the region.

Derry Air does not need to cope with the challenges brought on by the Open Skies Agreement as well as its regulations. To the contrary, the airline does not even need to engage its operations with these regulations. Derry Air grows its markets and achieves its freedom by stretching its affiliates over the ASEAN regional market. In fact, this strategy is carried out successfully thanks to the airline's strong potential, core competencies and capabilities. With a decent level of admiration from customers in the ASEAN region for its low fares and friendly services, and by offering travel opportunities to low-income passengers within the asian region, Derry Air has moved forward to entering into partnerships to sell all types of travel-related services through its own website. With its customer database, the airline believes it can cater to its customer's demands better than any other online travel agent. Currently, Derry Air offers travel services, including car rentals, tour packages, hotel and apartment accommodations globally, to a million travelers. This strategy makes Derry Air the best service provider to interact directly with customers, ahead of its business partners, thus the airline is able to understand its customer's purchase behaviours and emotions in advance, turning this to its competitive advantage. The last essential strategy the airline has a focus on is to enhance its brand image across the region and communicate with customers to seek greater patronage, compared to other low-cost competitors in the region such as JetStar, Cebu Pacific or Vietjet Air.

Figure 38 below classifies five clusters, indicating the linkage between groups of strategies, which Derry Air manipulates in reaction to its respective environment. The heaviest green grouping, labelled Internal Improvement Strategy, consists of a series of strategies focusing on the issues of human resources, safety, product differentiation and innovation, service improvement, aircraft investment, and cost reduction. The second ocean blue grouping, labelled Technology Innovation Strategy, consists of the focus on technology investment in the sales distribution system through the airline's website and mobile application. The other focuses, aircraft utilization and ancillary product development, aim to optimize performance and profitability. Derry Air has surpassed Vietnam Airlines with the launch its Stakeholder Management Strategy, shown by the orange grouping, in managing influences derived from affiliators, service providers, competitors and customers. Over and above its key foundations and internal capabilities, Derry Air develops its Business Growth Strategy with a focus on route and market expansion, and commercial co-operation partnerships to boost digital sales. In conclusion, Derry Air's four groups of strategies are its Internal Improvement Strategy, Technonology Innovation Strategy, Stakeholder Management Strategy, and its Business Growth Strategy.

Figure 38: The Relationship between Environment, Strategies and Organization Elements – Derry Air



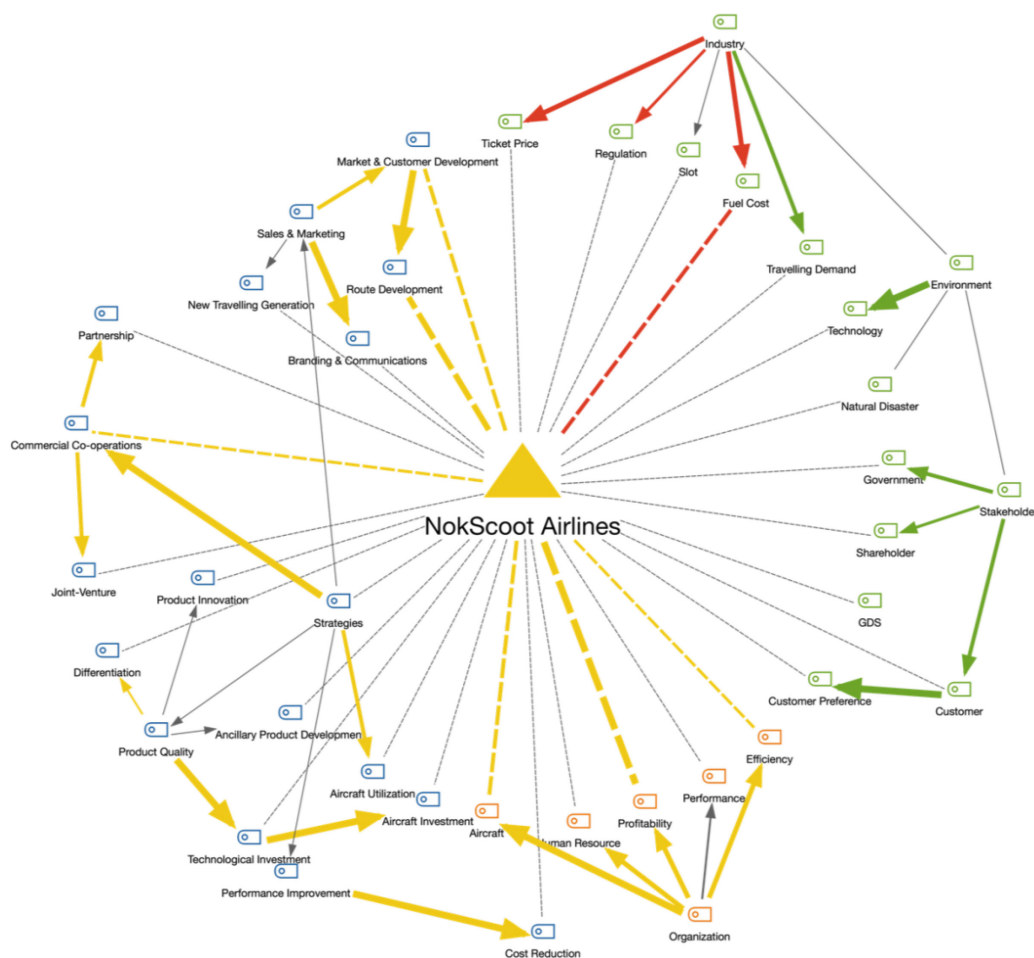
13.4 Analysis of NokScoot Airlines

In Figure 39, the influence factors for NokScoot Airlines are primarily the competition, fuel costs and the regulatory ones. While competition with other LCCs is quite intense, NokScoot's routes are mostly competitive to others. NokScoot currently competes against both Thai Lion, Thai Air, and Thai Vietjet, due to rapid expansion of the number of Thai LCCs. In addition, NokScoot Airlines' performance was impacted by very low aircraft utilization due to regulatory delays and by the red flag on Thailand imposed by ICAO, which delayed NokScoot's initial business plan to fly to Japan and Korea. With its business model, market segment and strategies, confirmed by its CEO, NokScoot Airlines is not influenced by the Open Skies Agreement.

For NokScoot Airlines, the favorable environmental factors are its customers, technology, and shareholders. NokScoot Airlines has been fortunate in the Thailand-China market when the Chinese travelling demand has risen from 4.6 million visitors to Thailand in 2014 to 9.8 million visitors in 2017. However, China is not an easy market for a new foreign airline to enter because of local regulatory restrictions. Therefore, NokScoot Airlines had to begin temporarily scheduled operations with a service to Singapore, which is an unprofitable route, in order to build up sufficient hours to secure Chinese approvals. Another huge and fast growing international market for Thailand, based on seat capacity, and Thailand's fifth largest source market is Japan. When Japanese authorities subsequently lifted their restrictions on Thai carriers, this enabled NokScoot Airlines to launch scheduled services to Japan. Japanese visitors to Thailand increased by 7% and reached 1.5 million visitors in 2017, and 6% in 2018.

As part of the Singapore Airlines (SIA) family, and considered an important component of SIA, NokScoot Airlines has been financially bankrolled by its strategic shareholder – SIA. On the other hand, NokScoot Airlines naturally has an extremely close relationship with Scoot, its parent company, as well as an SIA subsidiary. The two airlines have interlinked since NokScoot Airlines' inception and are both founding members of the Value Alliance. NokScoot currently sells Scoot-operated flights from Bangkok to Osaka, Tokyo and Singapore, as well as flights beyond Singapore. Vice-versa, Scoot has particularly helped NokScoot Airlines in China. NokScoot Airlines has leveraged Scoot's strong Chinese distribution network, all six of NokScoot Airlines' Chinese destinations are also served by Scoot, which has made it easier for NokScoot Airlines to build up local points of sale. NokScoot Airlines has also been able to leverage Scoot's ground handling contracts at Chinese airports, providing benefits for both airlines.

Figure 39: Environment Elements Which Influence to Organization and Its Strategic Responses – NokScoot Airlines

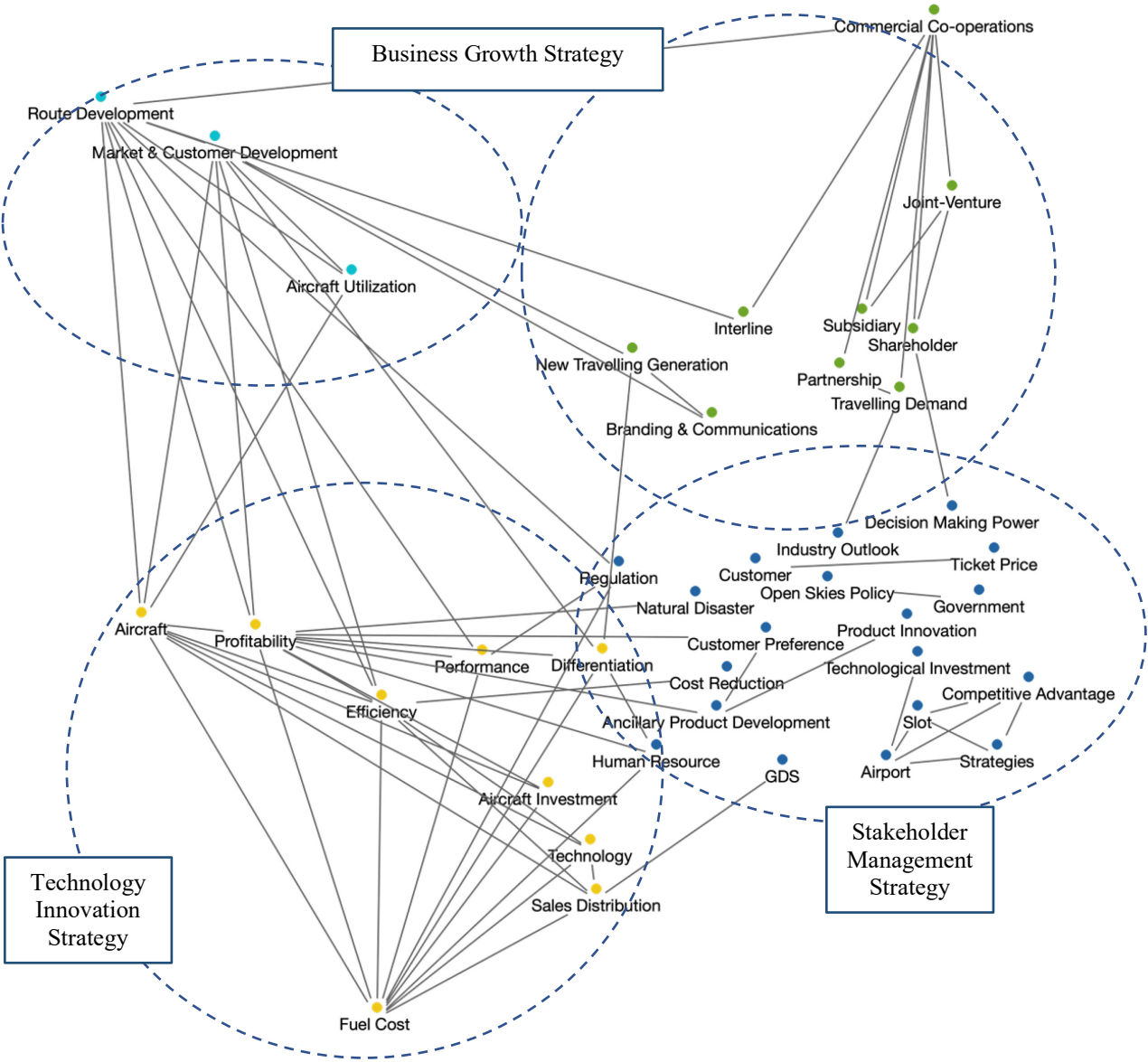


Compared to Vietnam Airlines and Derry Air, NokScoot Airlines was a new-born in the market in 2013, conceived through the co-operation of SIA and Nok Air. This joint-venture offers NokScoot Airlines a competitive advantage in inheriting aircraft and route networks granted by Thailand’s Nok Air and Singapore’s Scoot. Figure 39, illustrates NokScoot Airlines’ strong capabilities as being its aircraft, finances and human resources. The airline’s first strategy is to focus on technological investment, namely aircraft and product innovation. The second strategy is to focus on route and market expansion, therefore the airline enhances advertising for those markets in order to attract tourists. These two primary strategies aim to reach efficient performance and profitability, despite the airline’s losses during the initial stage.

Figure 40 classifies four clusters of strategies which NokScoot Airlines uses in response to its respective environments. The heaviest blue ocean grouping represents the Stakeholder Management Strategy, indicating the airline is striving to deal with its stakeholder environment, those stakeholders being governments, regulators, customers, competitors, GDS, airports, and employees, to maintain its operation. The second yellow grouping, is labelled Technology Innovation Strategy, centres on the aircraft investment and sales distribution system aiming to performance efficiency. The green and aqua blue groupings, labelled Business Growth Strategy, focuses on route and market development, aircraft utilization, commercial co-operation and branding and communications. In short, NokScoot Airlines is using three groups

of strategies to deal with its current situation, those being a Stakeholder Management Strategy, a Technology Innovation Strategy, and a Business Growth Strategy.

Figure 40: The Relationship between Environment, Strategies and Organization Elements – NokScoot Airlines



13.5 Set of Propositions

Though every airline has different strategies for its growth, Table 24 shows that four airlines employed as case studies are using common strategies focusing on advertising/ branding, ancillary product development, fleet focus, network expansion, commercial co-operation, technological investment and talent management. Vietnam Airlines’ strategies are used to focus on high income customer segment and seize opportunities in high potential markets in order to reduce impacts from increasing competition. The airline follows the organizational model from its strategic partner ANA in terms of engineering, trade and services to improve and remain its competitive position. Qatar Airways’s strategies are used to maintain its competitive position as an industry leader and deal with geo-political forces to prevent losses. Under the geo-political impact, the airline switches to open new routes to Eastern Europe to offset the loss of 18 regional destinations. Derry Air’s strategies are used to grow and expand its operations to regional and international. In Indonesia, the airline creates secondary hubs in new cities and connects them to the capital Jakarta. In Thailand, the airline profits from the government’s effort to boost touris arrivals. In Malaysia, the airline’s strategy is to increase aircraft utilization and the opening up of new routes to international destinations. Nokscot Airlines’ strategies are use to grow internationally and the tools for its business growth are increased networks, flight frequencies, fleet size and greater passenger volumes.

Table 24: Benchmark of Focused Strategies Employed by Case Studied Airlines

Focused Strategies of Case Studied Airlines	Vietnam Airlines	Qatar Airways	Derry Air	NokScoot Airlines
Hub Development		√	√	
Industry Leadership		√		
Corporate Sustainability		√	√	
Advertising		√		√
Customer Service		√		
Operation Improvement		√		
Ancillary Products		√	√	√
Product Innovations		√		
Fleet Focus		√	√	√
Network Expansion		√	√	√
Safety and Security	√		√	
Branding and Communications	√		√	
Commercial Co-operations	√		√	
Engineering Strengths	√			
Technological Investment	√		√	
Service Improvement	√			
Talent Management	√		√	
Organizational Structure	√			

From the above cross-case analyses, we extract the similarities among four case studied airlines and classify them into four groups of strategies as in Tables 25 and 26 below, which are being a Business Growth Strategy, a Technology Innovation Strategy, an Internal Improvement Strategy and a Stakeholder Management Strategy. The business growth strategy focuses on products and services differentiation/ innovation, route and market expansion, customer service, branding and communication, sales distributions and commercial co-operations. The technology innovation strategy focuses on the investments of aircraft and digital sales

distribution system. The internal improvement strategy focuses on human resources, operation system improvement, and cost reduction. The stakeholder management strategy focuses on the management of different types of stakeholders influenced to the airline's business.

Table 25: Classification of Strategies Employed by Case Studied Airlines

	Vietnam Airlines	Qatar Airways	Derry Air	NokScoot Airlines
Business Growth Strategy	<ul style="list-style-type: none"> ▪ Products and services differentiation ▪ Route and market expansion ▪ Customer satisfaction improvement ▪ Branding and communication ▪ Commercial co-operations 	<ul style="list-style-type: none"> ▪ Products development ▪ Customer service ▪ Market expansion ▪ Sales distributions ▪ Branding ▪ Commercial co-operations 	<ul style="list-style-type: none"> ▪ Products differentiation and innovation ▪ Ancillary product development ▪ Service improvement ▪ Route and market expansions ▪ Commercial co-operations 	<ul style="list-style-type: none"> ▪ Route and market development ▪ Aircraft utilization ▪ Branding and communication ▪ Commercial Co-operations
Technology Innovation Strategy	<ul style="list-style-type: none"> ▪ Investment of aircraft ▪ Digital sales distribution 	<ul style="list-style-type: none"> ▪ Investment of aircraft 	<ul style="list-style-type: none"> ▪ Investment of aircraft ▪ Digital sales distribution 	<ul style="list-style-type: none"> ▪ Investment of aircraft ▪ Digital sales distribution
Internal Improvement Strategy	<ul style="list-style-type: none"> ▪ Human resources ▪ Operation system improvement 	<ul style="list-style-type: none"> ▪ Human resources ▪ Operation system improvement ▪ Cost reduction 	<ul style="list-style-type: none"> ▪ Human resources ▪ Operation system improvement ▪ Cost reduction 	
Stakeholder Management Strategy			<ul style="list-style-type: none"> ▪ Affiliators ▪ Service providers ▪ Competitors ▪ Customers 	<ul style="list-style-type: none"> ▪ Government ▪ Regulator ▪ Customers

Table 26: Benchmark of Group of Strategies Employed by Case Studied Airlines

	Vietnam Airlines	Qatar Airways	Derry Air	NokScoot Airlines
Business Growth Strategy	√	√	√	√
Technology Innovation Strategy	√	√	√	√
Internal Improvement Strategy	√	√	√	
Stakeholder Management Strategy			√	√

First, the Business Growth Strategy is the most important strategy which every airline needs to carry out in order to grow. Growth is crucial for any airline to compete and survive, and this strategy would be equally countable for a national airline such as Vietnam Airlines, a regional airline such as Derry Air, a newly established airline like NokScoot Airlines, or a global airline such as Qatar Airways. Depending upon its business scale, each airline's business growth would combine a different set or series of strategies. A Business Growth Strategy can be achieved either by boosting the top line or revenue of the business with greater product sales or service income, or by increasing the bottom line or profitability of the operation by minimizing costs.

Second, we live in a world where technology is constantly increasing its relevance in our daily lives, and its existence in organizations. Technology nowadays is something no longer circumscribed to those firms operating in the so-called “high-tech” industries but is also affecting organizations which historically did not deal directly with technology. External environments are becoming more turbulent than ever, and if we look at some of the most successful companies in the world, 15 years ago they simply did not even exist. The Internet has dramatically changed ways of doing business, bring together many opportunities, but also many threats. However, this has just been the beginning: Big Data, AI, IoT, Blockchain Technology are just some examples of phenomena which will radically change our world in the future. Like any other industry, the aviation industry is trying to accustom itself to these technologies. Big data is a major area in which every airline is working so they can improve their product offerings and services and can wipe out contenders by using those data prudently. Big data will help gain deeper insights into their customer’s behaviors, and identify areas in which they need improvement, in order to stay competitive, thus airlines are embracing big data and improving their services and offerings because of it. Airlines also need to implement chatbots, which will understand the needs of the customers through artificial intelligence, to point the customer in the right direction. This will also allow airlines to reduce the costs associated with call centers, and they can assist the customers in a better way. As the technology penetrates further every sphere of life, new aircraft are also being launched into the market. The number of variants being introduced by the manufacturers has made the situation more complicated. The 737Max family of aircraft, for example, has five variants, more than any other product grouping in history. The Airbus A320/1 family is less stratified, but this may change if Airbus launches a re-engined A321, dubbed the A322. The aviation industry, then, is facing a huge challenge in getting accustomed to these new products. As a result, average and small scale airlines such as Vietnam Airlines, Derry Air and NokScoot Airlines, continue focusing on technological investment, including both aircraft and product innovation, sales and operational systems, and customer service, in order to remain competitive in the marketplace, whereas Qatar Airways has embedded this strategy into its Business Growth Strategy thanks to its wealth and strong capabilities, and being an industry leader, Qatar Airways considers technology investment as a key tool in growing its business.

Third, the Internal Improvement Strategy is another significant strategy for all airlines to employ in enhancing their performance. This strategy is defined as any policy or process within a workplace which aids in keeping the focus on improving the way things are done on a regular basis. This could be through regular incremental improvements or by focusing on achieving larger process improvements. The organization’s whose capabilities focus on continual and perpetual improvement become more competitive over time and can maintain their advantages in their industry for longer, but only if the improvement efforts are carried out correctly. As a result, average and large scale airlines such as Vietnam Airlines, Derry Air and Qatar Airways, must focus on internal improvements, especially to human resources and operations systems, in order to strive for efficient performance within their heavily mechanical systems, whereas a newly established airline such as NokScoot Airlines, would focus more on the Stakeholder Management Strategy in order to deal with stakeholders, settle current problems and maintain its new position in the market. As a small scale, new-born airline, where its organizational structure is still simple, NokScoot Airlines has not yet reached to the stage requiring to process

the internal improvement as the other three airlines have, from being present in the market for 20 years or more.

Fourth, a Stakeholder Management Strategy is also employed by Derry Air for its physical expansion and development because the airline has outlined the importance of stakeholder engagement when developing new markets. This strategy includes the processes required to identify the people, groups and organizations which could affect, or be affected by, its development, to analyze stakeholder expectations and their impact on Derry Air, and to develop appropriate strategies and tactics for effectively engaging stakeholders in a manner appropriate to the stakeholders' interest and involvement in Derry Air's growth. Tourism markets can only be developed when all stakeholders work collaboratively, and most importantly, Derry Air aims to connect second tier cities in the future. In addition, the airline's future-centric focus will be second tier to second tier, and second tier to third tier, at which time the airline will focus on its relationships with local stakeholders wherever the airline stretches its legs to. In comparison with Derry Air, Vietnam Airlines and Qatar Airways are not under significant growth pressure from stakeholders as they are the national airlines, which are backed by the legitimacy and finances of their respective governments.

Therefore, in regard to the key environmental elements concerning the impact of the Open Skies Agreement, competition, technology, and customers, and with the above-mentioned cross-case analysis, we formulate seven propositions for the impacts and the strategies addressing the research questions, which are constructed as follows determining the common strategies employed by the ASEAN region airlines.

1) *What are the business environment impacts on the strategies developed by ASEAN-region airlines?*

- *Proposition 1:* The Open Skies Agreement has stimulated increased competition among the regional airlines and set a positive impact on ASEAN airlines' strategies.
- *Proposition 2:* Technical innovations strongly affect the development of the airline industry, in which airlines adopting updated technological innovation will get more competitive advantage than their non-adopting or slower adopting competitors.
- *Proposition 3:* Customer demographics directly impact an airline's growth as the traveling public diversifies in nature.
- *Proposition 4:* Brand reputation plays an important role in identifying an airline's market position.

2) *What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*

- ➔ *Proposition 5:* Airlines must engage with all parties to sell flights in order to optimize sales despite their preference for a direct distributor channel.

- ➔ *Proposition 6*: Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to transform themselves in order to compete.
- ➔ *Proposition 7*: Dynamic capabilities are needed for an airline to combine multiple growth strategies to achieve transformations and maximize profitability.

The results for these seven propositions are presented in Chapters 7 and 8. Two questionnaires formulated into compact and full versions attached in Annex 1 and Annex 2 were aimed at finding confirmations from airline industry experts in the region. The empirical data extracted from the in-depth interviews are synthesized to confirm or reject the propositions underpinning this study.

SECTION 14

DATA COLLECTION AND MANAGEMENT

This section explains the data collection methods used for this study, after the research design and method of theorizing have been determined. Different methods can be employed to gather data for a research project, and the appropriate strategies to collect data will support managing and analyzing data after collection (Yin, 1989). This section explains how we have employed a case study as an all-encompassing research strategy covering research design, data collection, and analysis (Yin, 2003).

In order to validate results from case studies, as mentioned above, we conduct qualitative analysis with primary data collected from aviation industry experts and travelers who use airways as a means of transportation within ASEAN region. The empirical data gathered for this dissertation is used as evidence for the case studies of Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines. The analytical framework developed in Part One enables to gather relevant data and analyze the results of the case studies in the meantime. Furthermore, the information collected to address the research model proposition is characterized by primary data in the form of interviews with industry specialists and complementing data collected from secondary source such as articles, books, web sites and reports. Since interviews are argued to be an essential source of case study information (Yin, 2003), we describe this data source as followings.

14.1 Primary data: In-depth Interviews and Surveys

The first source of data collection derives from interviews with participants who have been involved in a specific experience (Nachmias, 1996). This type of interview should allow the interviewees to express their views and give the interviewer some control (Robson, 1993). The questions are structured for all participants who are “given considerable liberty in expressing their definition of a situation that is presented to them” (Nachmias, 1996, p.235). Nineteen interviews were carried out with regional specialists working in the aviation industry in the ASEAN region in order to obtain a broad perspective. The discussions were aimed at seeking agreement or disagreement from the interviewees on the issues, namely the strategies of the airlines responding to the impacts of the business environment. The empirical data, attached in the ANNEXES section, was obtained through email responses, phone conversations or in-person interviews lasting at least one hour. Most of the interviews, conducted either in English or Vietnamese, were recorded with an audio recorder to capture the information or note-taken with the consent of participants, and these were later transcribed and translated into English for analyzing with the MaxQDA qualitative data analysis software. This software helps to code and reveal the relationships between the elements reflecting seeking results. In return for their contribution, an executive summary of this research will be shared with the interviewees after publication.

The second source of primary data is the collection of opinions from 444 Cambodian and Vietnamese passengers who reside in Cambodia, Vietnam, and other countries, about their experiences with ASEAN airlines when travelling in the region. Apart from the qualitative

analysis based on the aviation industry players' points of view, this small survey was conducted to learn how passengers of these two countries assess the services of ASEAN-region airlines. This survey was analyzed with the SPSS quantitative data analysis software to identify the behaviors of different travelling groups towards airlines, and thus validate the expectations of these customers from the two ASEAN member states. Cambodia consists a population of 15 million people and its airline market has boomed from a single major national airline to seven foreign invested airlines, each with a tiny fleet, over the period of 2009 – 2018, providing extra options for both domestic and foreign travelers. Meanwhile, Vietnam is known as an emerging market with a population rapidly approaching 100 million people, with a much higher airline travel ratio than neighboring Cambodia.

14.2 Survey Sample of Passengers

Self-completion questionnaires and electronic surveys were employed as methods for collecting primary data from Cambodian and Vietnamese travelers. Self-completion questionnaires can offer respondents complete anonymity, meaning some respondents who may be reluctant to agree to a personal interview, are likely to be more forthcoming anonymously. However, to prevent a low response rate, electronic surveys were employed for quicker responses, and the surveys were hosted on social networks such as LinkedIn and Facebook. Private communication to schoolmates and public invitations offering prizes for responding to the surveys were made through the author's private business website where a call for responses was also hosted. Internet surveys were completed at the time of the website visit and most people responded quickly online.

All responses were assessed on the seven-point Likert scale ranging from 1 (extremely bad) to 7 (excellent). The seven-point Likert scale was chosen because this method can reduce the probability of obtaining extreme answers (Yuksel, 2001). From web or email surveys, data can be exported instantly into analysis software, e.g. SPSS. Probability sampling is defined as a technique for drawing a sample in which non-zero probability is included in the sample. Since part of the surveys were conducted through electronic means, one might argue that the respondents answering the questionnaire may have different characteristics than those who did not participate. As a consequence, this research implements, non-probability, self-selected surveys, meaning everyone under the defined sampling can participate.

The target population, the group of people to which questions would be put, or observations made, to obtain the desired information (Hair, Bush, and Ortinau, 2009, p. 52), for this research is defined as the entire populations of Cambodia and Vietnam, aged from 20 to approximately 65, and living in urban areas. At this age range, travelers have air travel demands and their own desire and ability to provide mature appraisals of an airlines' services. Furthermore, the respondents' diversified occupations and monthly incomes reflect differing travel needs.

Table 27 shows 159 Cambodian and 222 Vietnamese people participated in this survey. A further 63 Cambodian and Vietnamese in other locations such as Singapore, Malaysia and New Zealand, also supported the survey.

Table 27: Sample Population by Demographic

Demographic	Frequency	Valid Percent
Cambodia	159	35.8
Vietnam	222	50
Other locations	63	14.2
Total	444	100

Among 444 respondents, 51.8% are female and 48.2% are male, as shown in Table 28. The female respondents in Vietnam dominate those in Cambodia and other locations, whereas male respondents in Cambodia dominate those in Vietnam and other locations.

Table 28: Sample Population by Gender

Gender	Cambodia	Vietnam	Other locations	Total	Valid Percent
Female	49	144	37	230	51.8
Male	110	78	26	214	48.2
Total	159	222	63	444	100

The majority of survey respondents are from 20-35 and 36-50 years old, accounting for 46.4% and 45.5% respectively, as shown in Table 29.

Table 29: Sample Population by Age

Age	Cambodia	Vietnam	Other locations	Total	Valid Percent
1 – 19	3	2	1	6	1.4
20 – 35	68	96	42	206	46.4
36 – 50	72	112	18	202	45.5
51 – 65	16	11	1	28	6.3
66 – 80	0	1	1	2	0.5
Total	159	222	63	444	100

The majority of respondents are working in the government and private sectors shown in Table 30, which accounts for 23.4% and 38.5% respectively. More government officials in Cambodia participate in the survey than those in Vietnam because government officials in Cambodia are travelling more often for international conferences or workshops while 90% of Cambodian population does not hold passport to travel abroad. On the contrary, there are more private enterprise officers in Vietnam to participate the survey. Firstly, with a larger population, the working environment in Vietnam is also vaster than in Cambodia in terms of size. Secondly, the working force who joins the private sectors are stronger, especially in the south of Vietnam where the administrative bodies are less than in the north.

Table 30: Sample Population by Occupations

Occupations	Cambodia	Vietnam	Other locations	Total	Valid Percent
Government Official	76	22	6	104	23.4
Enterprise Officer	43	119	9	171	38.5
Professional	17	50	11	78	17.6
Student	15	12	29	56	12.6
Other	8	19	8	35	7.9
Total	159	222	63	444	100

Table 31 shows the monthly income ranges of participants to the survey. The majority of respondents earn from USD 500 – 1000, accounting for 29.3%. The next income groups are under USD 500 and from USD 1000 – 2000, accounting for 28.6% and 20.5% respectively. From this small sample, we can see that the popular incomes from ASEAN countries varies from USD 300 – 2000 while there are less people who earn from USD 3000.

Table 31: Sample Population by Monthly Income

Monthly Income	Cambodia	Vietnam	Other locations	Total	Valid Percent
USD 1 – 499	73	42	12	127	28.6
USD 500 - 1,000	40	74	16	130	29.3
USD 1,001 - 2,000	22	51	18	91	20.5
USD 2,001 - 3,000	15	24	9	48	10.8
USD 3,001 - 4,000	5	16	1	22	5.0
USD 4,001 - 5,000	2	8	3	13	2.9
USD 5,001 – 8,000	2	7	4	13	2.9
Total	159	222	63	444	100

In Table 32, passengers in Vietnam often fly with Vietnam Airlines, Vietjet Air or Derry Air, while passengers in Cambodia commonly fly with Bangkok Air, Thai Airways, Cambodia Angkor Air, Derry Air, or Singapore Airlines. Since the respondents are from two countries, they obviously choose to fly with the stronger airlines operating in their local markets. In general, 32.7% of respondents often fly with Vietnam Airlines, 14.2% often fly with Vietjet Air, and 13.5% commonly choose Derry Air.

Table 32: Airline that Passengers Flying within ASEAN

Airlines	Cambodia	Vietnam	Other locations	Total	Valid Percent
Vietnam Airlines	7	120	18	145	32.7
VietJet Air	1	47	15	63	14.2
Derry Air	20	28	12	60	13.5
Bangkok Air	32	0	2	34	7.7
Thai Airways	30	4	0	34	7.7
Singapore Airlines	20	8	5	33	7.4
Cambodia Angkor Air	28	0	0	28	6.3
Malaysia Airlines	5	0	2	7	1.6
Other airlines	16	15	9	40	9.0
Total	159	222	63	444	100

Table 33 shows a near unanimous 92.1% of respondents choose to fly economy class. Only 4% take business class, and despite some airlines offering deluxe economy class for more comfort, the majority of passengers still choose to fly economy class for the lowest price as possible.

Table 33: Frequent Class of Travel

Class of travel	Cambodia	Vietnam	Other locations	Total	Valid Percent
Business Class	12	5	1	18	4.1
Economy Class	142	205	62	409	92.1
Deluxe Economy Class	5	12	0	17	3.8
Total	159	222	63	444	100

Table 34 presents the respondents preferred method for order their airline tickets. The majority of Vietnamese respondents prefer to book air tickets directly through the airline’s website, while the majority of Cambodian respondents prefer to purchase their tickets at a ticketing agent or travel agency. The reason behind this is because using credit card usage for online payments by individuals in Cambodia has just recently been developed and promoted by local banks, and thus is a relatively new purchasing method. Credit card use has not yet become popular with consumers compared to cash.

Table 34: Mean of Ticket Reservation

Ticket reservation	Cambodia	Vietnam	Other locations	Total	Valid Percent
Through the airline's website	20	125	42	187	42.1
At ticketing agent/ travel agency	67	47	11	125	28.2
I have other people to reserve	35	22	6	63	14.2
At the airline's ticketing office	24	12	1	37	8.3
Through travelling websites	13	16	3	32	7.2
Total	159	222	63	444	100

Table 35 shows 52.7% and 47.3% of the respondents choose full-service airlines and low-cost airlines respectively. Compare to Vietnamese respondents, around 50% of them take a full-service airline, such as Vietnam Airlines, with the remaining half choosing low cost airlines such as Vietjet Air or Air Asia. However, it can be seen that around 30% of Cambodian respondents take low cost airlines as a result of there being more full services airlines than low cost airlines presently operating in Cambodia.

Table 35: Type of Airline’s Service

Type of Service	Cambodia	Vietnam	Other locations	Total	Valid Percent
Full-service airline	101	112	21	234	52.7
Low-cost airline	58	110	42	210	47.3
Total	159	222	63	444	100

14.3 Application of Two-step Cluster Analysis in Clustering of Passengers

Two-step cluster analysis creates sub-clusters using hierarchical methods. Since this database consists of 444 respondents who are Cambodian and Vietnamese passengers, two-step cluster analysis is employed, as well in situations when the categorical variables are included. The analysis was performed with statistical software SPSS 21 giving significant output, as well as variable importance chart. The dataset consists of 444 respondents, and the purpose of this analysis is to define clusters of passengers using airlines in ASEAN countries on the basis of the following categorical variables: passenger location, passenger occupation, and passenger monthly income. There is one continuous variable, price.

Four clusters have been created based on two primary criteria: location and occupation. Since the majority of respondents are government officials in Cambodia and private enterprise officers in Vietnam, these have been clustered together based on the monthly income criteria in order to be valid in comparing the behaviour of each cluster towards their assessment of ASEAN airlines’ services. Thus, the respondents are two-step clustered within different locations and occupations, common income, and age range as shown in the analysis at Table 42. The interpretation of the four cluster profiles are presented in Tables 36, 37, 39, 40 and 41 below.

Table 36 below presents the distribution of the observations in the cluster, or the number of observations in each cluster. This is the first indicator of cluster size. The number of excluded observations is also given, or in Table 36, four observations are excluded as they do not have sufficient data for the chosen variables in order for them to be grouped in one of the clusters.

Table 36: Cluster Distribution

		N	% of Combined	% of Total
Cluster	1	80	18.2%	18.0%
	2	57	13.0%	12.8%
	3	63	14.3%	14.2%
	4	108	24.5%	24.3%
	Outlier (-1)	132	30.0%	29.7%
	Combined	440	100.0%	99.1%
Excluded Cases		4		0.9%
Total		444		100.0%

Table 37 represents descriptive statistics for the continuous variable. The mean values for the continuous variable for each cluster are presented. The first step in the analysis is to examine the data and make necessary transformations. The starting point is standardization of the variables. The two-step analysis performs standardization of the continuous variables shown in Table 37, yet the final results are given in original values of the variables. The question about the outliers is solved by the Mahalanobis D² distance measure (Hair et al. 2005). This measure indicates that 132 respondents are potential outliers, as shown above in Table 36.

Table 37: Cluster Centroid

		Price	
		Mean	Std. Deviation
Cluster	1	4.825	.8535
	2	4.860	.9899
	3	5.048	1.4857
	4	4.778	1.3066
	Outlier (-1)	4.530	1.5504
	Combined	4.761	1.3157

Tables 38, 40 and 41 use the descriptive statistics for categorical variables. A separate table is created for each variable. Table 37 clearly shows that in the first and second clusters, the number of passengers located in Cambodia is dominant and accounts for 45.2% and 29.9% respectively within their common location group. In the third and fourth clusters, the number of passengers located in Vietnam dominates and accounts for 28.5% and 43% respectively within their common location group. The frequencies reflected at the outlier line are not presented in the observed database, or are excluded because of missing data.

Table 38: Location

		Cambodia		Vietnam		Other locations	
		Frequency	Percent	Frequency	Percent	Frequency	Percent
Cluster	1	71	45.2%	9	4.1%	0	0.0%
	2	47	29.9%	6	2.7%	4	6.5%
	3	0	0.0%	63	28.5%	0	0.0%
	4	10	6.4%	95	43.0%	3	4.8%
	Outlier (-1)	29	18.5%	48	21.7%	55	88.7%
	Combined	157	100.0%	221	100.0%	62	100.0%

Table 40 below shows four clusters with five types of occupations including private enterprise officers, government officials, professionals, students and other occupations such as technical workers or housework. The first cluster comprises 55 government officials, 10 private enterprise officers, 4 professionals, 10 students and 1 worker, accounting for 5.9%, 53.4%, 5.1%, 17.9% and 3% respectively within their common occupation group. The second cluster comprises 38 government officials, 10 private enterprise officers, 2 professionals, 4 students and 3 workers, accounting for 5.9%, 36.9%, 2.6%, 7.1% and 9.1% respectively within their common occupation group. The third cluster comprises 37 private enterprise officers, 18 professionals, 2 students and 6 workers, accounting for 21.8%, 23.1%, 3.6% and 18.2% respectively within their common occupation group. The fourth cluster comprises 91 private enterprise officers, 3 government officials, 9 professionals, 1 student and 4 workers, accounting for 53.5%, 2.9%, 11.5%, 1.8% and 12.1% respectively within their common occupation group. The outlier comprises respondents who do not belong to the observed database or are excluded because of missing data.

Table 41 below shows four clusters with seven income ranges varying from USD 1 – 499, USD 500 – 1000, USD 1001 – 2000, USD 2001 – 3000, USD 3001 – 4000, USD 4001 – 5000, to USD 5001 – 8000. The first cluster comprises 80 respondents who earn under USD 500, accounting for 64.5% within their common income group. The second cluster comprises 50

respondents who earn between USD 500 - 1000, 4 respondents who earn from USD 1001 – 2000, 1 respondent who earns between USD 2001 – 3000, and 2 respondents who earn over USD 5000, accounting for 38.8%, 4.4%, 2.1% and 15.4% respectively within their common income group. The third cluster comprises 63 respondents who earn USD 500 – 1000, accounting for 48.8% within their common income group. The fourth cluster comprises 6 respondents who earn less than USD 500, 63 respondents who earn USD 1001 – 2000, 16 respondents who earn between 2001 – 3000, 12 respondents who earn 3001 – 4000, 7 respondents who earn between USD 4001 – 5000, and 4 respondents who earn over USD 5000, accounting for 4.8%, 69.2%, 33.3%, 54.5%, 53.8% and 30.8% respectively within their common income group. The outlier comprises of respondents who do not belong to the observed database or are excluded because of missing data.

Table 42 below presents the two-step cluster analysis of these four above mentioned clusters, notably based on common location, occupation, and monthly income. Clusters 1 and 2 explore the consumption behavior of the majority of respondents located in Cambodia, working in the government sector, and often flying with Bangkok Airways. Clusters 3 and 4 explore the consumption behavior of the majority of respondents located in Vietnam, working in the private sector, and often flying with Vietnam Airlines. We will explore the different behaviors of the respondents at two age ranges: from 20 – 35 and from 36 - 50 on the basis of the benchmark between the common location, occupation and airline. The evaluation upon the airline services comprises elements such as website, price, marketing/advertising, reputation, check-in time, check-in staff, business lounge, aircraft conveniences, cabin crew, food, in-flight entertainment and preference towards low-cost airlines. The results are interpreted below:

The correlation matrix shown in Table 39 calculates the Pearson coefficient of correlation between the variables and confirms the correlation exists. This analysis does not have a situation where several variables represent a factor, where if multicollinearity exists, it is necessary to reduce the variables for each factor or set correlation variables. Because of this, the analysis can be continued, without fulfilment of assumption.

Table 39: Correlation Between Factors

		Website	Price	Marketing	Reputation	Queuing Time	Check-in Staff	Business Lounge	Aircraft Convenience	Cabin Crew	Food	In-flight Entertainment	LCC Preference
Website	Pearson Correlation	1	.254**	.522**	.571**	.455**	.467**	.499**	.438**	.491**	.460**	.431**	.116*
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.017
	N	429	426	429	428	425	428	405	428	427	428	427	426
Price	Pearson Correlation	.254**	1	.255**	.106*	.070	.133**	.107*	-.016	.094*	.110*	.074	.201**
	Sig. (2-tailed)	.000		.000	.027	.145	.005	.030	.741	.049	.022	.124	.000
	N	426	440	439	439	436	439	414	438	437	439	438	437
Marketing	Pearson Correlation	.522**	.255**	1	.547**	.366**	.397**	.433**	.362**	.411**	.382**	.373**	.040
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.400
	N	429	439	442	441	438	441	416	440	439	441	440	438
Reputation	Pearson Correlation	.571**	.106*	.547**	1	.473**	.525**	.582**	.540**	.539**	.491**	.482**	-.022
	Sig. (2-tailed)	.000	.027	.000		.000	.000	.000	.000	.000	.000	.000	.651
	N	428	439	441	442	438	441	416	440	440	441	440	438
Queuing Time	Pearson Correlation	.455**	.070	.366**	.473**	1	.673**	.571**	.559**	.517**	.422**	.483**	-.004
	Sig. (2-tailed)	.000	.145	.000	.000		.000	.000	.000	.000	.000	.000	.939
	N	425	436	438	438	439	438	414	437	436	438	437	435
Check-in Staff	Pearson Correlation	.467**	.133**	.397**	.525**	.673**	1	.636**	.557**	.638**	.523**	.504**	.048
	Sig. (2-tailed)	.000	.005	.000	.000	.000		.000	.000	.000	.000	.000	.316
	N	428	439	441	441	438	443	416	441	440	442	441	438
Business Lounge	Pearson Correlation	.499**	.107*	.433**	.582**	.571**	.636**	1	.636**	.585**	.520**	.535**	-.012
	Sig. (2-tailed)	.000	.030	.000	.000	.000	.000		.000	.000	.000	.000	.811

Aircraft Convenience	N	405	414	416	416	414	416	417	416	414	417	416	413
	Pearson Correlation Sig. (2-tailed)	.438**	-.016	.362**	.540**	.559**	.557**	.636**	1	.667**	.607**	.663**	-.108*
Cabin Crew	N	428	438	440	440	437	441	416	442	439	441	440	437
	Pearson Correlation Sig. (2-tailed)	.491**	.094*	.411**	.539**	.517**	.638**	.585**	.667**	1	.600**	.555**	-.033
Food	N	427	437	439	440	436	440	414	439	441	440	439	437
	Pearson Correlation Sig. (2-tailed)	.460**	.110*	.382**	.491**	.422**	.523**	.520**	.607**	.600**	1	.680**	.009
In-flight Entertainment	N	428	439	441	441	438	442	417	441	440	443	442	438
	Pearson Correlation Sig. (2-tailed)	.431**	.074	.373**	.482**	.483**	.504**	.535**	.663**	.555**	.680**	1	-.055
LCC Preference	N	427	438	440	440	437	441	416	440	439	442	442	437
	Pearson Correlation Sig. (2-tailed)	.116*	.201**	.040	-.022	-.004	.048	-.012	-.108*	-.033	.009	-.055	1
	N	426	437	438	438	435	438	413	437	437	438	437	439

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 40: Occupation

		Private Enterprise Officer		Government Official		Professional (e.g. doctor, lawyer,...)		Student		Other (e.g. technical worker, housework)	
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Cluster	1	10	5.9%	55	53.4%	4	5.1%	10	17.9%	1	3%
	2	10	5.9%	38	36.9%	2	2.6%	4	7.1%	3	9.1%
	3	37	21.8%	0	0.0%	18	23.1%	2	3.6%	6	18.2%
	4	91	53.5%	3	2.9%	9	11.5%	1	1.8%	4	12.1%
	Outlier (-1)	22	12.9%	7	6.8%	45	57.7%	39	69.6%	19	57.6%
	Combined	170	100.0%	103	100.0%	78	100.0%	56	100.0%	33	100.0%

Table 41: Monthly Income

		USD 1 - 499		USD 500 - 1000		USD 1001 - 2000		USD 2001 - 3000		USD 3001 - 4000		USD 4001 - 5000		USD 5001 - 8000	
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Cluster	1	80	64.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	2	0	0.0%	50	38.8%	4	4.4%	1	2.1%	0	0.0%	0	0.0%	2	15.4%
	3	0	0.0%	63	48.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	4	6	4.8%	0	0.0%	63	69.2%	16	33.3%	12	54.5%	7	53.8%	4	30.8%
	Outlier (-1)	38	30.6%	16	12.4%	24	26.4%	31	64.6%	10	45.5%	6	46.2%	7	53.8%
	Combined	124	100.0%	129	100.0%	91	100.0%	48	100.0%	22	100.0%	13	100.0%	13	100.0%

Table 42: Two-step Cluster Analysis

Cluster	Importance	1	2	3	4
Label		Cluster A	Cluster B	Cluster C	Cluster D
Size		26% (80)	18.5% (57)	20.5% (63)	35.1% (108)
Location	0.42	Cambodia (88%)	Cambodia (82.5%)	Vietnam (50.9%)	Vietnam (88%)
Occupation	0.36	Government Official (38.2%)	Government Official (66.7%)	Enterprise Officer (58.7%)	Enterprise Officer (84.3%)
Monthly Income	1.00	< USD 500 (100%)	USD 500 – 1000 (87.7%)	USD 500 - 1000 (100%)	USD 1001 – 2000 (58.3%)
Age	0.03	20 - 35 (52.5%)	36 – 50 (52.6%)	20 – 35 (66.7%)	36 – 50 (62%)
Q1 Airline	0.18	Bangkok Airways (18.8%)	Bangkok Airways (22.8%)	Vietnam Airlines (52.4%)	Vietnam Airlines (49.1%)
Q2 Reason of airline’s choice	0.01	It’s the cheapest airline (6.2%)	It provides convenient flight departure/arrival time (8.8%)	It’s the cheapest airline (11.1%)	It’s the cheapest airline (13%)
Q3 Class of travel	0.00	Economy class (90%)	Economy class (94.7%)	Economy class (93.7%)	Economy class (91.7%)
Q4 Reason of travelling	0.04	Attending Conference/ workshop (22.5%)	Attending Conference/ workshop (22.8%)	Leisure/ Tourism (31.7%)	Leisure/ Tourism (26.9%)
Q5 Mean of reserving ticket	0.06	At ticketing Agent/ Travel Agency (30%)	At ticketing Agent/ Travel Agency (42.1%)	Through the airline’s website (58.7%)	Through the airline’s website (49.1%)
Q17 Aircraft type	0.00	I do not pay attention, or I don’t know the aircraft type (30.1%)	I do not pay attention, or I don’t know the aircraft type (19.3%)	I do not pay attention, or I don’t know the aircraft type (31.7%)	I do not pay attention, or I don’t know the aircraft type (19.4%)
Q6 Website	0.00	5.05	5.18	5.10	4.99
Q7 Price	0.00	4.82	4.86	5.05	4.78
Q8 Marketing/ Advertising	0.02	4.84	5.18	4.79	4.45
Q9 Reputation	0.01	5.15	5.21	5.25	4.95
Q10 Check-in time	0.00	4.86	4.95	4.95	4.68
Q11 Check-in staff	0.01	5.06	5.14	5.21	4.87
Q12 Business Lounge	0.02	4.94	5.18	4.75	4.57
Q13 Aircraft Convenience	0.02	5.09	5.09	4.77	4.59
Q14 Cabin Crew	0.02	5.10	5.23	5.16	4.77
Q15 Food	0.04	4.95	5.09	4.79	4.27
Q16 In-flight Entertainment	0.06	4.74	4.64	4.27	3.81
Q19 Preference towards low-cost airline	0.00	4.42	4.25	4.62	4.27

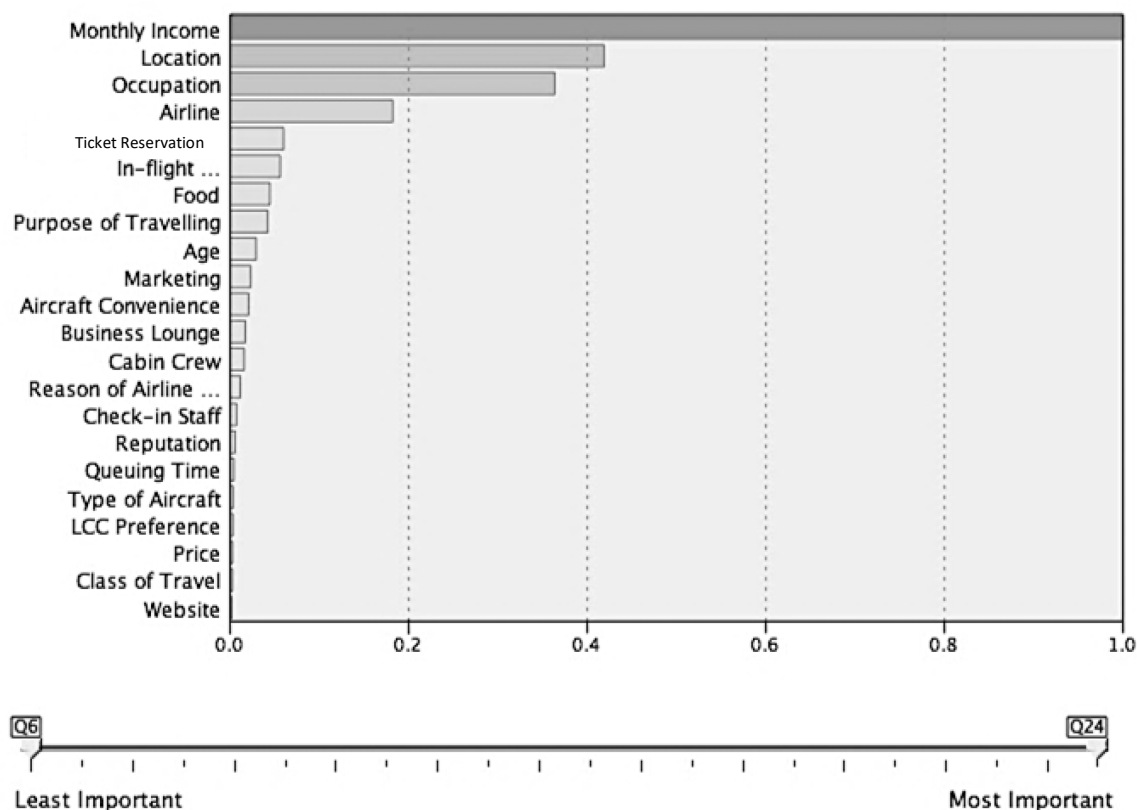
The first cluster, labelled Cluster A, has 80 passengers aged from 20 to 35 with the majority located in Cambodia, and a monthly income of less than USD 500. These passengers often fly with Bangkok Airways mainly to attend international conferences or workshops for their professional needs. Bangkok Airways is strongly supported in Cambodia because it offers a certain level of credibility compared to other airlines operating in Cambodia. For those passengers in this cluster, they assess that Bangkok Airways offers the cheapest price and they often reserve tickets at ticketing agents or travel agencies. They also do not pay much attention to the aircraft type when they fly with Bangkok Airways. For their assessment of Bangkok Airways' services, these passengers are quite satisfied with the airline's reputation, website, check-in staff, aircraft and cabin crew.

The second cluster, labelled Cluster B, has 57 passengers aged from 35 to 60 with the majority located in Cambodia, and monthly income in the USD 500 – 1000 range. Similar to Cluster A, these passengers also often fly with Bangkok Airways to attend international conferences or workshops for their professional needs. These passengers like Bangkok Airways because the airline provides convenient departure and arrival times for them. This cluster also reserves tickets at ticketing agents or travel agencies and they too do not pay much attention to aircraft type when they fly with Bangkok Airways. For their assessment of Bangkok Airways' services, these passengers are quite satisfied with the airline's reputation, marketing, website, check-in staff, business lounge, aircraft, cabin crew and in-flight food.

The third cluster, labelled Cluster C, has 63 passengers aged from 20 to 35 with the majority located in Vietnam, and a monthly income in the range from USD 500 - 1000. These passengers often fly with Vietnam Airlines for their travelling needs. Vietnam Airlines is mostly strongly supported in Vietnam because it is the national airline and offers a wide range of route network destinations domestically and internationally. For those passengers of this cluster, they assess that Vietnam Airlines offers the cheapest price and they often reserve tickets on the airlines' website. They also do not pay much attention to the aircraft type when they fly with Vietnam Airlines. For their assessment of Vietnam Airlines' services, these passengers are quite satisfied with the airline's reputation, website, price, check-in staff and cabin crew.

The fourth largest cluster, labelled Cluster D, has 108 passengers aged from 36 to 50 with the majority located in Vietnam, and having a monthly income from USD 1000 - 2000. These passengers often fly with Vietnam Airlines mainly for their travelling needs. For those passengers of this cluster, Vietnam Airlines offers the cheapest price and they often reserve tickets on the airlines' website. They too do not pay much attention to aircraft type when they fly with Vietnam Airlines. For their assessment of Vietnam Airlines' services, these passengers are slightly satisfied with all services.

Figure 41: Predictor Importance



SPSS offers a chart as an outcome in the two-step cluster analysis as shown in Figure 41 above, displaying the importance of the categorical variables for the four clusters. Bar lines which are longer than the critical value show the variable is statistically significant in the differentiation of the clusters. The most important variable is the categorical Monthly Income, which is statistically significant for differentiation of the clusters, followed by the Location, Occupation and the choice of Airline to fly with. Applying the cluster method to the data, we have identified four customer profiles. The most important profile is cluster D, containing the majority of elder customers in Vietnam who are less satisfied with the airline’s services. For clusters A and B, the passengers primarily fly for their professional purposes, the ticket fees should be borne by the government or their private enterprise organization and price is not an important factor to these clusters. For clusters C and D, those passengers whose income varied from USD 500 – 2000 still prefer to fly with Vietnam Airlines for the cheapest prices though they are not totally happy with the airline’s services.

This cluster analysis is used to validate some of the findings presented in Part Three. We will explore whether or not the assessment of the aviation industry players toward the customers aligns with the assessments of the customers toward the airlines’ services. Findings of the analysis are useful because they mainly provide customer profiles and insights to which airline managers may refer.

14.4 Secondary Data

In addition to the primary source data from interviews and surveys, secondary data is also exploited for this research. There are two different sources of secondary data - internal, proprietary data belonging to, and only used by, the organization, and external data from resources outside of the organization (Zikmund, 1997). Common sources of secondary data include censuses, information collected by government departments, organizational records and data that was originally collected for other research purposes. In this section, these two sources are briefly explained to show their respective relevance to this research project.

Beyond the qualitative data collected from the interviews with senior executives of the four airlines employed as case studies, and other industry experts and specialists, we have employed additional documentation (Yin, 2003) published by Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines in the form of financial and annual reports, together with other public sources such as articles published in digital magazines. Information gathered from these sources are actual and have been carefully evaluated to triangulate and confirm their accuracy, reliability and validity.

Conclusion of Chapter 6

In the cross-case analyses, we embed specific environmental factors affecting to each individual airline in order to provide explanations to the strategic responses from airlines. The strategies are benchmarked and synthesized to obtain four key groups of strategies including Business Growth Strategy, Technology Innovation Strategy, Internal Improvement Strategy and Stakeholder Management Strategy. Four propositions on the key environmental impacts and three propositions on the strategic responses from airlines toward environmental impacts are set to answer to the research questions 1 and 2 respectively. The results for seven propositions are presented in the next Chapters 7 and 8.

The cluster analysis has generated four main clusters of passengers based on common location, occupation and monthly income. Clusters A and B, comprising of Cambodian passengers, select Bangkok Airways to fly from Cambodia to Thailand for their business purpose. In general, Cambodian passengers are quite satisfied with this airline's reputation in terms of service, staff, cabin crew, aircraft, business lounge and in-flight food. Clusters C and D, with the majority of passengers located in Vietnam, select their national flag carrier, Vietnam Airlines, to fly with. Cluster C with the passengers aged from 20 – 35 is quite satisfied with the airline's services whereas Cluster D with the passengers aged from 36 – 50 and having higher income is less satisfied with all services due to their higher expectation. This analysis of passenger surveys facilitates to illustrate some of the industrial findings presented in the next Chapters 7 and 8 as well.

Conclusion of Part Two

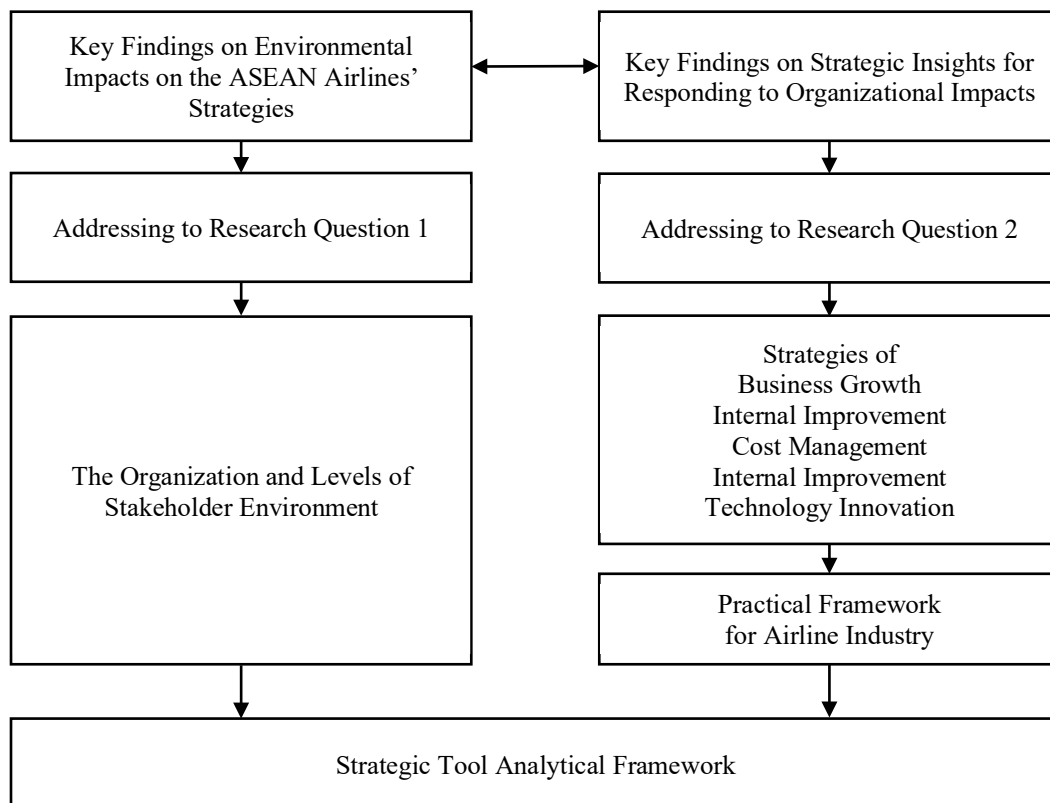
Part Two presents the research context and research method with a qualitative approach employed as a main method for data analysis. The qualitative analysis is mainly based on the empirical data retrieved from 19 in-depth interviews. This data analysis reflects the ASEAN airline industry and the airlines' strategic decisions in responding to the fast changing environment, which is mainly influenced by stakeholders. A small quantitative analysis which analyzes the passenger surveys mostly collected from two countries, Cambodia and Vietnam, reflects a moderate customer behavior towards Bangkok Airways and Vietnam Airlines, two airlines that are chosen to fly by most of Cambodian and Vietnamese passengers relatively. This quantitative analysis validates some of the findings presented in the qualitative analysis and the result in the quantitative analysis is sufficient for airlines to understand customer's expectation, and therefore to generate respective measures to adapt.

PART 3

RESULTS, DISCUSSION AND THEORETICAL CONTRIBUTION

The research problem and questions critically address the relationships shown by each of the major findings and the relevant results from other authors' works in the airline industry presented in the Annexes 23 and 24. The following discussions will address two research questions: “*What are the business environment impacts on the strategies developed by ASEAN-region airlines?*”; and “*What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*”. From the conclusions, this study explores the generation of a practical model for the airline industry, and thus, seeks to construct an analytical framework which contributes to existing theories and business practices, as illustrated by the following diagram.

Figure 42: Process of Building an Analytical Framework



This part consists of three chapters. Chapters 7 and 8 present seven findings generated by analyzing 19 in-depth interviews, in which the respondents are labelled from [R1] to [R19]¹⁵ to confirm their subordinated opinions listed in Table 43 below, from aviation industry specialists working in the Association of Southeast Asian Nations (ASEAN). The in-depth interviews take place for at least one hour to five hours via telephone calls and direct meetings

¹⁵ Respondent 1 to Respondent 19

in Thailand, Indonesia, Cambodia and Vietnam, depending on the sharing interests of the interviewees, adhered with the transcriptions numbered from 3 to 21 presented at the Annex Section. In order to avoid sensitivity, we merely mention the interviewees' designated levels, in which Senior Executive Level signifies Presidents, Vice Presidents and CEOs (Chief Executive Officer). Director Level signifies Chief Commercial Officer, Chief Operation Officer, Operation Director and Strategy Director. Manager Level signifies the managers working at the Customer Service, Sales, Business Administration and Commercial Departments.

Each result is also emphasized by the opinions of senior level executives from the four airlines employed as case studies: Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines. Actual examples of relevant airlines used to illustrate the statements have been cross-checked with secondary resources for the validity.

Table 43: List of High Profiled Aviation Industry Experts Partipating in This Research

	Designations	Duration of Interviews
R1	Senior Executive Level, Vietnam Airlines in Vietnam	1 hour
R2	Senior Executive Level, Derry Air in Indonesia	1 hour
R3	Senior Executive Level, NokScoot Airlines in Thailand	1 hour
R4	Senior Executive Level, Y2International Aviation Consulting in Cambodia	2 hours
R5	Director Level, Qatar Airways, Cambodia	5 hours
R6	Manager Level, Qatar Airways in Vietnam	1h10 minutes
R7	Director Level, Aviation Management Training Center, Kent International College in Vietnam	1h15 minutes
R8	Manager Level, Cathay Pacific in Vietnam	1h10 minutes
R9	Director Level, Cambodia Angkor Air in Cambodia	4h30 minutes
R10	Director Level, Hong Yi Travel in Cambodia	1 hour
R11	Manager Level, Cambodia Angkor Air in Cambodia	1 hour
R12	Senior Executive Level, Vietnam Aviation Academy in Vietnam	1 hour
R13	Manager Level, Vietnam Aviation Academy in Vietnam	1h15 minutes
R14	Chief Air Safety Investigator, Safety Investigation Authority in Finland	1 hour
R15	IOSA Auditor at Aviation Compliance Solutions (ACS) Pty Ltd in Australia	1h20 minutes
R16	Aviation Magazine Editor in Asia - Founder of Aviation in Asia E-Magazine	1h30 minutes
R17	Director Level, ATR – Airbus in France	1 hour
R18	Manager Level, Cambodia Airports in Cambodia	1 hour
R19	Senior Executive Level, Fubong Bank in Hong Kong Industry Evaluation – Aircraft Leasing	20 minutes

The discussion for these results presented in Chapter 9, with the aim of exploring the linkages between the elements which reflect the relationships between the environment, strategies and the organization guided by the ESO framework, these to be cross-checked and added to the existing theories studied in Part One. Chapter 9 describes and interprets the significance of seven findings presented in Chapters 7 and 8, and the linkage of these findings to the core theories, including Stakeholder (Freeman), Co-operation (Axerold), and Social Regulation (Reynaud), and the two key concepts of Dynamic Capabilities and Strategic Fit, which are used to fill previously unexposed gaps in the literature.

CHAPTER 7

KEY ENVIRONMENTAL IMPACTS ON THE ASEAN AIRLINES' STRATEGIES

Chapter 7 consists of Sections 15 and 16, presenting the stakeholder environmental impacts and the airlines' strategic responses. Key stakeholders are defined as the Open Skies Agreement, Technology, and Customer Demographics. Section 15 reflects the broad environmental impacts, exploring and explaining how the Open Skies Agreement and the technology influence to the airline's business and how the airlines utilize creative measures to confront with the regulations and keep up to date with the technological demand. Section 16 explores the customers' impact and their perception toward airlines, in which price's impact and safety's impact are the most decisive influenced factors to both customers and airlines. After the presentation of the synthesized primary data obtained from 19 in-depth interviews, we formulate a conclusion for each finding in order to gratify the research question 1.

SECTION 15

BROAD ENVIRONMENTAL IMPACTS

The development in the aviation industry must involve several complex interactions in a network of stakeholders (Timmis, 2015). New challenges are always on the horizon. In the business environment, change can be sudden, overwhelming, gradual or unnoticed; and it is hard to manage changes, and sometimes these turbulences are fatal for organizations if they are not actively preparing for it. Technology is a common source of disruption, however drivers of change can be political, social and economic forces, including other environmental factors and policies designed to address them (IATA, 2018). In this section, the twin forces of technology and geo-politics/ regulations are featured and presented with the subordinated opinions from regional experts working in the aviation industry.

15.1 Open Skies Agreement's Impact and Airline's Strategic Responses

The Association of Southeast Asian Nations (ASEAN) is a unique association which has developed its own methods of achieving economic integration by deepening economic links between its member states. In recent years, the focus on economic integration has included introducing and strengthening a common aviation market, the ASEAN Single Aviation Market (ASAM). The purpose of ASAM is to improve air transport links and maximize the potential for trade and commerce, foreign investment, tourism and travel. Each having significant economic as well as socio-cultural benefits for the ASEAN member states. Therefore, an Open Skies Agreement established by the member states facilitates a unified, single aviation market within the ASEAN region and replaces existing bilateral and multilateral air services agreements between the member states, many of which are inconsistent with ASAM's provisions.

The ASEAN airline industry is currently categorized into two groups of countries which share common strengths in airline management [R13]. The strongest group consists of Thailand, Singapore, Malaysia, Vietnam and The Philippines. The less competitive group comprises Cambodia, Laos, Myanmar and Brunei; which are most vulnerable to the Open Skies Agreement [R3, R13]. The current disparities between the ASEAN economies and their airlines are simply too vast to reach the common goal of integrating the region into a single aviation market [R3, R13]. The success of a single aviation market requires similar conditions among all participants. The 10 ASEAN member states are geographically dispersed, stretching from the Pacific to the Indian sub-continent, and Australia to the doorstep of north Asia, have differing population numbers and are at different stages of economic development. This leads to a lack of equivalence among the member countries [R3, R13]. As a result, Laos, Cambodia, Myanmar and Vietnam have not signed any agreements with each other, despite having been at the negotiating table for 20 years, because the potential benefits to the airlines of these four nations are not equivalent [R13].

With the airlines in the region not being equal, airline managers are attempting to find their own solutions to respond to the changes in the aviation environment, through the proposition of Open Skies regulations within the ASEAN region [R3]. It is difficult for an economically weaker country to enter the aviation industry and compete successfully [R3]. Cambodia and Myanmar, for example, lag behind in promoting some level of Open Skies regulation because both lack competitiveness and suffer from weaknesses in aviation management [R3]. Comparing Laos to Thailand, the differences between the airlines and aircraft of the two countries are vast and stark, reflecting the level of economic disparity between those nations [R3].

“Having the assumption that every country should have the same rights, the same strengths and equal opportunity, is not really right, because it does not reflect the reality.”

(Senior Executive Level - NokScoot Airlines)

Less economically developed nations and their smaller airlines will be disadvantaged by signing the Open Skies agreement, despite being granted the same rights as other participating nations, because their competitive power is much weaker [R4]. The primary barrier will be their difficulty in procuring slots to fly to the stronger countries, which constantly draw higher traffic loads, because those countries will prioritize allocation of slots for their own airlines [R4, R9]. Vietnam Airlines, for example, can employ fifth freedom rights to fly Hanoi – Vientiane – Phnom Penh – Saigon since Laos and Cambodia are smaller countries and are naturally inclined to offer slots as their airports are under-utilized and have surplus capacity [R4]. However, it is virtually impossible for any Cambodian airline to use fifth freedom rights to fly a route such as Phnom Penh – Jakarta – Singapore – Phnom Penh [R4]. Firstly, they will encounter a dearth of slot availability, and secondly, they will not be able to prevail over the airlines of those countries, which are larger and branded [R4, R9].

“It’s the same as the Open Skies. You can claim it’s opened, but it’s not opened.”

(Senior Executive Level - NokScoot Airlines)

In addition, weaker airlines are threatened with elimination by stronger airlines if they do not seek the protection of their Governments in order to gain some measure of equivalent strength [R5]. This is evidenced by some ASEAN countries, Indonesia and The Philippines for example, not joining the Open Skies agreement in totality because their Governments aspire to protect their national carriers [R5]. For a nation such as Cambodia, should Thailand's airlines be permitted to operate routes from Cambodia to China and vice versa, the national carrier Cambodia Angkor Air, will face almost certain death because this airline cannot compete with the Thai airlines who provide better aircraft, services and cheaper prices [R9]. Similarly, what has kept Vietnam Airlines developing domestically for over 20 years is a prohibition on Thai Airways flying domestically within Vietnam. If not for this restriction, Vietnam Airlines would have lost out for being less competitive in terms of overall airline strength [R9].

“In Thailand, the foreign shareholder cannot be more than the Thai shareholder. And it's there for a reason, because they are protecting the local carriers. When you don't have any mechanism of this kind, then it is possible for foreign carriers to use the traffic rights of another country and take full advantage. That is something that those who are strong are usually promoting, and those who are weak are trying to protect themselves from. It's a very normal situation.”

(Senior Executive Level – NokScoot Airlines)

The fact that some country's governments actively work to protect their airlines is not a peculiarly ASEAN concern [R5]. The North American market is similarly extremely protective of its local airlines, especially the U.S. and Canada [R5]. In ASEAN, the countries who are not willing to implement the full Open Skies Agreement, and only adopt it selectively, include The Philippines and Indonesia, who protect their national carriers Philippine Airlines and Garuda Airlines respectively [R5]. Increased competition is not the actual reason for countries refusing to adopt the entire ASEAN Open Skies Agreement, they decline for their own national interest reasons as well [R5]. Malaysia, for example, does not participate in the agreement because the Malaysian government wishes to protect its national airline, Malaysia Airlines, following its restructuring as a result of the crashes of MH370 and MH17. This is a politically motivated decision because only Malaysia Airlines would benefit from not adopting the Open Skies Agreement [R5]. Meanwhile, in contradiction, Derry Air favors the Open Skies Agreement and this airline has established affiliates in Southeast Asia, including Indonesia, Malaysia and Thailand as a strategically alternative way to benefit from the agreement [R5].

Though the Open Skies Agreement is counteracted by most countries that have a weaker aviation industry, stronger countries such as Thailand, Singapore and Malaysia have managed to reach out to other regional countries by establishing co-operation in the form of subsidiaries or franchises [R4]. Due to the restrictions on operating domestic flights in another country, the parent airlines use their subsidiary or franchise airlines to act as their branches in order to benefit from fifth freedom rights [R4, R6]. This results in the Open Skies Agreement creating an advantage for a certain aviation group to develop, then stimulate a franchise business model in the ASEAN aviation market [R4]. Derry Air is, in fact, currently the outstanding airline in the ASEAN region that has created an airline franchise network in other countries by providing aircraft as its capital contribution [R4].

Franchising is a common practice in many industries (Price, 1997) but it was not common in the aviation industry until the mid 1980s in the U.S., and 1990s in Europe, when airlines used this approach as a strategic response to the deregulation of the air transport industry. Applying the franchise business model, Derry Air supports its partners with brand development including aircraft livery and interior, crew uniforms, customer service, flight designator code, access to the sales system and all additional support and training (Pender, 1999), together with other intellectual property and know-how (Denton and Dennis, 2000). Similarly in the Asian region, Jetstar, a subsidiary of Australia's Qantas Airways, has franchised its brand in three countries: Jetstar Asia in Singapore; Jetstar Pacific in Vietnam; and Jetstar Japan [R15]. A further example is Indonesia's Lion Air, a strong regional airline group, which has franchised its brand in Thailand as Thai Lion Air and as Malindo Airlines in Malaysia [R15]. The Open Skies Agreement has actually been leveraged by Derry Air to construct franchise co-operations in order to benefit from fifth freedom rights and avoid the protections imposed by other countries [R15]. From the Derry Air perspective, the airline believes that competition is allowing it to grow and helping it to open markets and create a level of efficiency that benefits passengers [R2]. The airline is always a strong supporter of the Open Skies Agreement because it allows them to turn a potential threat into a crucial opportunity to liberalize air travel and accessibility [R2]. As a result, Derry Air has developed its route network to serve three countries in the region and become the dynamic airline in ASEAN. The Derry Air strategy is to engage all necessary bodies within ASEAN in order to boost its growth along with exploring all possibilities to liberalize the industry.

"We think that's one of the reasons why we are a proponent of the Open Skies, is because we see the opportunity and Open Skies will allow everyone, not only Derry Air, to progress and grow, anyone else will benefit from this."

(Senior Executive Level – Derry Air)

"The airlines that are the strongest in the region promote the Open Skies the most because they have the most to gain. You will see the likes of Derry Air being the biggest promoter of Open Skies for ASEAN, but you will not see the same level of enthusiasm from any Myanmar carrier or Cambodian carrier."

(Senior Executive Level – Nok Scoot Airlines)

Southeast Asian countries have recently been extremely aggressive in expanding their aviation industries with new airlines appearing in Thailand, Cambodia, Vietnam and The Philippines [R4, R5]. This has led to more routes opening to China, Macau, Japan, and Korea [R4]. These new airlines include Bamboo Airways in Vietnam; Lan Mei Airlines, JC International Airlines and Bassaka Air in Cambodia; New Gen Airways in Thailand; and Pan Pacific Airlines in The Philippines [R5]. This raises the question: “*Will these small airlines be able to survive?*” The Open Skies agreement does not necessarily translate into a larger market [R5]. Despite the annual growth increase in the size of the middle-class populations in Southeast Asia, those who can afford the purchase of airline tickets, this growth is not keeping pace with the growth of new airlines [R5].

The primary threat to these small airlines, therefore, is not derived from the Open Skies Agreement forcing competition between small and large airlines, but rather the competition between those small airlines themselves [R5]. With investment from China, Cambodia’s aviation landscape changed rapidly between 2015 and 2018, with five new airlines entering the market [R5]. This obviously means limited opportunities for those airlines to grow and co-habit in such a small market. Furthermore, these airlines operate flights on the same routes, which makes very little sense. In actuality, there is no certain threat to small airlines from their bigger competitors in Japan or China because passengers who can afford to fly with ANA, Japan Airlines, China Southern Airlines, etc. will continue to fly with those airlines for their expansive route networks, and the small airlines will continue to be appealing to backpackers and VFR traffic [R5].

The Open Skies Agreement encourages competition among airlines through the lowering of ticket prices [R5]. A tough price war has now erupted in Southeast Asia. For example, JC International Airlines in Cambodia flies to Macau for U.S. \$120, which is half the cost of an equivalent Cathay Pacific Airways’ fare. This prompts the question “*How long will a price war be sustainable for the smaller airlines?*” How long will JC International Airlines endure the losses because profits are not possible on such low fare prices [R5]. Without feeder traffic, the small airlines are Origin/Destination (O/D) airlines flying point to point with no other mandate. The larger ASEAN carriers, however, are hub and spoke airlines. While they may take a loss on the first leg, they have the opportunity to earn a profit on the second leg. An illustrative example would be if someone flies Phnom Penh-Hong Kong with JC International Airlines. The travel will terminate in Hong Kong and JC International Airlines can only earn from that single leg, regardless of any onward journey. However, Cathay Pacific Airways has the potential to earn from those passengers flying Phnom Penh-Hong Kong as well as any later onward journey out of Hong Kong [R5].

Thus, a price war can only be sustained for a short period of time and would not contribute to better quality of service because most new airlines appearing on the landscape are low-cost carriers [R5]. Their unique selling point is price and not quality of service. Another factor which illustrates that lowering prices cannot be sustained over the longer term is operating costs, which in large part are a factor beyond the control of the airlines [R1, R5]. The most significant factor influencing operating costs is the price of aviation fuel [R1, R4, R5, R9]. This is a cost that airlines are unable to control but attempt to mitigate and manage through hedging [R4, R5, R6, R9]. With the current price of a barrel of oil predicted to increase, there must be a point at

which flying at a very cheap price on medium-haul routes will not be possible. That also raises queries as to whether the new airlines, or the bigger airlines operating them, are running with an agenda other than transporting passengers [R5, R9]. Thus, for as long as the market players can sustain a price war, the single aviation market policy will encourage only marginally higher traffic growth, will not increase service quality, and will not produce lower ticket prices in the short term [R5].

Concerning the major airlines, the Open Skies Agreement has not fundamentally changed or affected the national carriers such as Vietnam Airlines, Thai Airways, and Singapore Airlines [R4, R5, R9]. As national carriers, these airlines can regulate the effects of the Open Skies Agreement to operate at whatever times they choose, given that their Governments will negotiate, or at least attempt to negotiate, favorable bilateral agreements for their benefit [R4, R5, R9]. In other ASEAN countries, Philippine Airlines and Garuda Airlines of Indonesia are also not threatened by new entrants [R5]. In fact, Philippines Airlines and Vietnam Airlines are the most profitable airlines in ASEAN today [R5].

From the Vietnam Airlines point of view, as a national carrier, it supports the Open Skies Agreement because this encourages more tourists to visit the country, which is profitable for the national economy overall [R1]. With more competitors in the market, the airline aims to improve itself through better service provision [R1, R4]. However, infrastructure is a barrier in some ASEAN countries such as Vietnam, The Philippines, Cambodia, Myanmar, and Laos. The Vietnam Aviation Authority will consider opening the market significantly in order to fit into the development plans set out for the Vietnamese aviation industry. The quality of the Vietnamese aviation services industry will be diminished severely if the infrastructure has not been fully prepared to adapt to the Open Skies regulations [R1].

“On one hand, it is good, on another hand, it will not be good if we do not know how to fit the infrastructure with the Open Skies policy.”

(Senior Executive Level – Vietnam Airlines)

The fact that the Open Skies Agreement can facilitate major Airlines taking advantage of fifth freedom rights to operate in secondary cities, e.g., Qatar Airways has used this right to fly Doha – Saigon - Phnom Penh – Saigon – Doha. Emirates uses these rights to fly Dubai – Yangon – Phnom Penh – Dubai. This is done to fill market gaps where nobody operates flights and does not threaten any other airline in the region. They do not gain any significant market share in those countries because these routes are considered supportive routes to their main routes transporting passengers between larger and smaller markets. They gain their profits from the primary routes only [R5, R9].

As a global airline, Qatar Airways supports fair competition to access the markets they have targeted for development. With its strength in finance, technology and fuel supplies, Qatar Airways is competing for customers based on product, service and price. Similar to Derry Air, it is able to benefit from a liberalized and more open aviation market not only in Asia, but also in the EU and the U.S. Greater liberalization in the airline industry and Government deregulation have made air travel accessible to millions of people in both mature and emerging markets alike, and those airlines wish to maintain that trend into the future [R5].

The Open Skies Agreement, in fact, does not guarantee a pure competitive environment as per the aim of the policy [R3]. In the U.S. market, Qatar Airways is competing with strong airlines such as Delta and American Airlines, two of the largest U.S. airlines in terms of scale. Despite their position of strength, these two airlines have forced the U.S. Government to re-regulate because they are losing market share to the Middle East airlines, even on their home turf [R5, R6]. Under pressure from the geo-political forces surrounding the relationship between the U.S. and the Middle Eastern nations, Qatar Airways did not compete vigorously in the U.S. market [R6]. In order to maintain good diplomatic relations with the U.S., Qatar Airways turned instead towards the EU and Asia as key markets [R6]. Nevertheless, the Middle East airlines such as Qatar, Emirates and Etihad have still profited from Open Skies to expand their presence in the U.S. for the benefit of customers who have limited choices under the monopoly of the U.S. airlines [R6]. Furthermore, Qatar Airways has prepared a backup plan, after having signed the Open Skies Agreement, by purchasing shares in weaker airlines [R6]. This strategy is designed to enable co-operation from the alliances thus established, in the event that flights to the U.S. are cut or are not supported [R6].

From these data, we can conclude as following:

→ *The Open Skies Agreement has mostly a positive impact on ASEAN airlines' strategies, despite stimulating increased competition among the regional airlines, and the active opposition of some ASEAN member states through Government regulation.*

15.2 Technology's Impact Reducing Competitive Advantage

The International Civil Aviation Organization (ICAO) plays a crucial role in addressing aviation's impacts on the environment. Its standards and policies ensure that aviation's environmental impacts, in terms of noise and carbon emissions, are addressed in a coherent manner, and guarantee a high degree of uniformity in the regulatory regime [R12, R15]. ICAO's environmental standards allow the security of technological improvements and the creation of a level of regulatory predictability for airlines [R12, R15]. However, implementation of ICAO's Environmental regulation regime has threatened the airline business. Airlines opposed the environmental levy, which increases the overall cost of air transport, and rapidly transferred this cost to customers through their ticket pricing. This has been seen as having a negative impact on the airlines, their customers, both domestic and international trade, and local economies. Therefore, the airlines ultimately responded to this regulatory imposition by investing in new, more environmentally friendly aircraft to meet the carbon emission standards and save on related costs [R5]. As a matter of fact, the airline industry has always been at the forefront of technology creation and innovation [R1, R5, R7]. There have always been large numbers of advancements, most of which have recently centered around fuel efficient engines, in order to reduce operating costs [R1, R4, R5]. Current aircraft models are especially fuel efficient compared to previous models, affording fuel savings of 18-20%, according to aircraft manufacturers, thus greatly assisting the airlines in reducing costs [R1, R5]. Pioneering airlines such as Qatar Airways and Singapore Airlines always purchase newer aircraft and upgrade to newer technologies in order to save operating and maintenance costs [R6].

Thanks in part to its financial strength, Qatar Airways invariably uses the latest aircraft models for fuel efficiency and to assist its brand recognition of being a clean, green and environmentally friendly airline [R6]. The airline is equipped with the most modern aircraft models, such as the A350-1000, in keeping with its commitment to environmental sustainability [R6]. Furthermore, Qatar Airways also focuses new aircraft investments in noise reduction and cabin air quality aimed at minimizing passenger discomfort and fatigue [R6]. With these new technologies, new aircraft innovations reduce air quality-related symptoms such as dry eyes or dry skin during long-haul flights [R6]. Modern aircraft also usually provide personal in-flight entertainment systems instead of common shared screens, with the majority of passengers being happier when they have access to personal in-flight entertainment. By possessing the world's latest aircraft models, Qatar Airways is always strong on these points [R6].

“Qatar Airways’ aircraft fleet usage is around 5.5 years on average; then our aircraft fleet is dreadfully new compared to that of other airlines. The oldest aircraft model that is still used for the Saigon market is the A330. However, we also make use of newer and more modern models such as the Boeing 787 Dreamliner for day flights, and Boeing 777 for night flights.”

(Manager Level – Qatar Airways Vietnam’s Station)

The second technology type impacting the air travel industry is product distribution, which has been revolutionary for the airlines. By its nature, the airline industry is dependent on strong distribution networks and was one of the first industries to computerize distribution [R1, R5]. Until the 1980s, only travel agencies had direct access to airline seats. That changed when the airline industry was able to take full advantage of the Internet [R5]. It was then that direct connectivity was made, not just between the travel agencies and the airline reservation systems, but between the consumers themselves and the airline reservation systems [R1, R2]. This marked a significant advancement for the airline industry. The time of the low-cost carriers had arrived. Taking full advantage of this technological leap measurably lowered ticketing costs by bypassing all the various intermediaries embedded in the previous product distribution models [R5].

Airlines currently utilize the Global Distribution System (GDS) model which Amazon also uses [R1]. At the time when people in general did not yet have any notions of E-commerce, it was being applied in the aviation industry [R1]. It is believed aviation is the first industry to use E-commerce as a distribution system [R1]. Beginning in 2000, Derry Air was determined to employ technologies to their distribution system [R2]. The airline established its initial online ticket sales model, even as internet accessibility and penetration in Indonesia was very limited [R2]. The areas that the technology covers, in general, are ticket sales through websites and mobile applications which empower customers to purchase tickets quickly, at times of their own convenience, and as easily as possible [R2].

“When it comes to technology, one thing we can highlight is that Derry Air has always embraced technology from the day of its inception... And we have evolved to the point that our reliance on technology is seamless in terms of our day to day operations.”

(Senior Executive Level – Derry Air)

Nowadays, airlines sell and distribute tickets primarily through websites and E-commerce platforms as direct, or semi-direct, low-cost ticket revenue streams [R1, R2, R4, R5]. However, there is another significant aspect to this distribution channel, that is ancillary revenues [R1, R5]. Upselling and the sale of ancillary products have become significantly easier than was previously possible. Examples include the airlines offering a range of ancillary or related on-demand services, such as taxi pick-up, in-flight meals, access to hotel bookings or seat upgrades [R1]. All of these are carried out through the application of the technologies applied in the distribution system, greatly assisting the airline to increase revenues at minimal cost [R1]. Therefore, the sales organization is also considerably simpler and more progressive [R1].

A further significant motivation for the low-cost carriers to employ technology for their distribution systems is the large domination of major airlines which have exerted control over the traditional distribution channels [R4]. Major carriers will cease to co-operate with any travel agency which supports other airlines [R4]. For example, under direct competitive pressure from Vietnam Airlines, VietJet Air would not have become successful if there was no innovative technology applied to its distribution system [R4]. When VietJet Air applied technology for online sales, the proportion of its customers booking online was increased [R4, R7]. There have also been changes to the interactions the customers have with the online technology. The proportion of customers interacting with the technology has increased 25% to 30% annually, including online ticket purchases and check-in, or buying add-on packages such as in-flight meals, additional luggage allowance or seat selection [R1, R4, R7]. Online distribution systems also aid the low-cost carriers by reducing the cost of commissions to travel agents. Commissions are currently paid at approximately 7% - 9%. [R4, R9] The technology has a major influence on the airline's profits, and hence their growth.

Referring to the conducted survey with 444 respondents, this finding is proved with 49.3% of respondents in Cambodia and Vietnam booking their air tickets on the airlines' websites directly or through agency's websites. When the credit card market develops stronger in Cambodia, this booking online proportion is expected to increase, benefitting customers to reduce booking fees and airlines to reduce commissions to travel agents as well. Online sales technologies also assist in enhancing the traveler knowledge [R5]. Previously, consumers would think only of going to a 'bricks and mortar' physical agent to buy air tickets [R5, R9]. In this model, the airline call center would answer all customer queries. Nowadays, however, customers are more knowledgeable and do not need to go to the check-in counter unless they check-in luggage. Customers simply pass through security, immigration, using a barcode, and proceed directly to the boarding lounge [R5, R9].

A third type of technology employed in the aviation industry relates primarily to the airport side, the use of biometric technology for immigration management [R2, R3, R5]. At large airports, such as in the U.S. or at Changi International in Singapore, biometrics and artificial intelligence are replacing elements of the human workforce [R5]. A new flying experience happens when a passenger does not have any human interaction during check-in, a process that was previously completely humanized [R5]. This passenger can arrive at the check-in area and interact only with the computer technologies, a system which is presently employed by Singapore Airlines at Changi Airport [R5].

In the race to enrich the passenger experience, Singapore's Changi Airport continues to invest heavily in boosting overall operational efficiency and enhancing the passenger's flying experience. New self-service check-in and luggage tagging facilities were introduced for passengers of Singapore Airlines and SilkAir as part of the ongoing Fast and Seamless Travel (FAST) initiative initiated by Changi Airport. Changi Airport also stresses the important fact that "self-service does not necessarily mean poorer service, nor does it mean lower service standards". This is a vital point for an airport which prides itself on its positive customer service reputation. According to this airport, "self-service alleviates the amount of manual processing work done by check-in agents today, freeing them up to provide higher value-added services such as addressing whatever other queries passengers' may have pertaining to their travel journeys."

The adoption of facial recognition technologies at the self-baggage-drop machines, integrated border control lanes and self-boarding gates allows for security checks to be fully automated. Today, departing passengers are required to verify their identity at three locations: luggage check-in; border control; and when boarding, all previously performed manually by ground handling staff or immigration officers. By leveraging technology, all clearances through these touch points are expected to be speedier, thereby enhancing operational efficiency while reducing the reliance on manpower and the associated costs [R5, R7].

An imaginative scenario in the near future can be explained by describing a passenger's travel experience. The passenger can check their baggage by themselves, give their biometric information to connect them with their air ticket, then place their luggage on the belt. The passenger can pass through immigration control where they encounter biometric technologies again. Another potential scenario could see the eradication of air tickets altogether, even saved in a phone, for boarding the aircraft. Nothing would be required beyond the passenger's finger or face for scanning. In this scenario, the passenger arrives at the check-in counter, their finger is recognized biometrically and this recognition links to passport validity; travel class; baggage allowance; etc. The passenger then proceeds through security and immigration, again with biometric checks. When the passenger boards the aircraft, their seat is unlocked using biometric recognition again [R5, R9].

Another technology holding significant potential benefits for airports and airlines is wearable technology. Japan Airlines and Spring Airlines at Tokyo Haneda Airport have deployed this publicly. When wearable technology is integrated seamlessly with mobile services, the passenger experience can be significantly enhanced. For instance, this technology will deliver timely and relevant notifications to passengers concerning their flight status, guiding them in finding or highlighting events or promotions around them. This will give passengers not only an astonishing 'WOW' factor, but also the extra personal touch that a mobile application alone cannot deliver. In short, while self-service bag drop and self-tagging are simplifying passenger processing, the widespread use of biometrics has revolutionized the customer's overall airport experience [R5].

"In getting passengers themselves to check-in at the counter, we have self-service kiosks, we also have self-baggage drop systems for them. Everything has got a technology behind it, but to make it simpler and to make it easy, we are encouraged to see that passengers are very much more comfortable with technology now. Other than

that, in terms of the experiences of the passengers themselves, from the operational point of view, we obviously utilize many more areas in terms of technology, in terms of support.”

(Senior Executive Level – Derry Air)

The question inevitably raised when these technologies become involved is: “*Are we replacing humans with machines?*” Robots, in fact, already assist greatly in many areas of aviation services [R2, R5]. Manpower numbers can be significantly reduced through the use of robots to carry out check-in procedures, and act as security agents at airports [R7]. In reality, the interaction between ground staff and passengers is approximately 2.5 minutes for a domestic flight, and 5 minutes for an international flight [R7]. Greater employee interactions with customers are encouraged, while repetitive manual jobs are consigned to robots, which can work more accurately [R7]. The primary reason to favor robots over humans in some key areas is because humans tend to make mistakes [R7]. It could be in checking travel documents to enter the correct country; recording incorrect baggage data, either the number of items or the total weight, not to mention the myriad of potentially negative issues that may possibly occur at the counter [R7]. Therefore, robots can reduce flight safety risks. However, though a machine is intelligent to a certain degree, it is still a machine which requires at least some human input, direction and or control. The aim of employing machines and technology is to assist the human to operate more efficiently and more cost effectively in many differing ways [R2]. Today, humans are living in a new era in which the human, capital aspects and technology combine to bring out the best for the organization. More importantly, at the end of the day, for the greatest passengers experience possible [R2].

“Technology is embraced fully in Derry Air. We see it as an advantage. Obviously, we never shy away from anything that allows us to get better in the form of technology, and we think this is something everyone has embraced, from the philosophy and culture perspective in the organization, and we now see the results of it and we are going to continue to enhance, we will continue to improve as we go on to the years.”

(Senior Executive Level – Derry Air)

At present, small airlines in the ASEAN region are not necessarily able to afford all of these technologies described above [R5]. In actuality, small airlines do not need to own the software or equipment, but only to pay for what they are able to cover [R5]. Contrarily, technology is a commercial advantage for large airlines because it is easier for them to interact with their customers. Thus, these airlines’ marketing departments have become smarter in ways of selling additional services. They tailor their communication approach to customers and undertake big data analysis through the retrieval of customer information [R5].

Despite it being a commercial advantage for large airlines, however, the purchase of a ticket based on a price decision will continue to drive customers in their airline selection [R1, R3, R5]. Nevertheless, whether these airlines provide highly technology or not, the technology does not lead to greater customer loyalty in the airline industry [R5]. For instance, if Emirates’ air tickets are cheaper than those of Qatar Airways, people will continue to fly with Emirates and vice versa. Even though airlines strive to equip themselves with the newest technologies or to

polish themselves with beautiful furnishings, for as long as the purchase decision is overwhelmingly based on price, travelers will ultimately care only about the cheaper ticket to fly from point A to point B [R5]. When the aviation industry reshapes itself and the airlines restructure their offerings, it is vitally important the changes are based on price. Then, technology will be a differentiating factor and will be useful because the market has become more captive [R5]. At the moment, the market is quite homogenous. For as long as consumer behavior is based on price a decision, and despite the best efforts of the marketers to play up the importance of technology, customers give little thought to the technologies the airlines use to deliver their services to their passengers [R5].

From the data collected, we can conclude as following:

→ *The adoption of technical innovations relating to aircraft convenience and comfort, online ticket purchasing, the check-in process, and mobile integration will deliver advantages over non-adopting or slower adopting competitors.*

SECTION 16

CUSTOMER IMPACT AND PERCEPTION TOWARD AIRLINES

According to previous researchers such as McCollough, Berry and Yadav (2000), there is an exaggeration of customer service imposed by airlines to the general public perception since 1999. Airlines advertise their services unrealistically to the general public compared to the reality (Hunter, 2006) and there is a divergence in passenger expectations of service that they actually receive onboard (Wang, 2001). In this section, we explore the diversified base customers and how will their attitudes change in terms of social travel, aging population placing on the industry, increased demands for authenticity and personalized experiences, budget conscious and safety expectation.

16.1 Travelling Public Nature and Airlines' New Evolution Strategies

Demographics are a core subject of discussion in the aviation industry, and airlines must distinguish themselves to a variety of different demographic segments. An airline must be perceived at least neutrally, if not favorably, by different types of customers, i.e. a 50-year old businessman and a 19-year-old gap year millennial. There are three key demographic elements which impact the airline industry: disposable income, age, and lifestyle [R5].

The leading global traffic growth factor nowadays, and particularly in Asia, is disposable income. The middle class in Southeast Asia is growing relatively quickly, thereby growing the availability of disposable income along with it. Here, disposable income is defined as money not relating directly to survival. With greater disposable incomes and increased internet access, Asian people have begun travelling, even if not too far from their home locations. This is having a positive effect on airlines' sales. It was previously estimated that the travelling public was comprised primarily of North Americans and Europeans because these were the vast majority of people seen travelling the world. These people also constituted almost the entire global middle class, whereas the middle class in Asia was still extremely small in the decade of the 1990s. However, the estimates now indicate that by 2030 only one third of the population that can travel will be made up of Europeans and North Americans, and two thirds of the worldwide travelling public will come from developing countries [R5].

The second demographic factor impacting airline travel is age. As people age, on the whole, they rise to more senior positions, with a commensurate increase in disposable income, and acquire more refined tastes in most aspects of life. People seek a little more comfort, more and better on-board services, and are more willing to pay to access a category of travel comfortable for them. There is also a level of social status recognition when people choose to fly with a branded airline, i.e., flying to the U.S. on EVA Air, even in economy class, has a certain cachet. Another example demonstrating this phenomenon is Qatar Airways striving to attract the "Oknhas" of Cambodia. These are individuals who contribute U.S. \$500,000 or more to infrastructure or development projects in order to be bestowed with this honorific political title. Qatar Airways actively courted them to fly with the airline. However, "Oknha" customers were reluctant as this demographic group preferred Singapore Airlines to Europe, or EVA Air to the

U.S., in order to display and confirm their social status by choosing to fly with prestige airlines. At present, Taiwan's EVA Air is highly considered and favored by passengers worldwide. The lustre of Singapore Airlines has faded in terms of service provision. As the young of today become the old of tomorrow, and the numbers of the elderly continue growing into the future, so airlines must adapt. Thus, those elderly able to travel will be seeking greater on-board comfort, leading to the airlines providing increased services. As a result, this element can become a favorable means for airlines to manage their differentiation [R5].

The third demographic factor to impact the airlines is lifestyle. When U.S. carriers wished to appeal to millennial customers and compete with the low-cost carriers, they rolled out basic economy fares. Millennial customers represent the generation born in the 1980s up to the mid-1990s. The internet, social media, smartphones and apps, tablets, etc. are baseline technologies in their lives. The millennial consumer has serious concerns about global issues such as climate change, human rights, organic and GMO foods, etc. They are unassuming of new knowledge and sensitive to the way they consume products and services. In Europe, the major airlines must compete with the likes of Ryanair, Norwegian Airlines and WOW for this lifestyle sub-demographic. Air France has targeted the fickle millennial flyer with Joon. Joon was created to initiate a trend specifically designed to appeal to millennials and is as much a brand as it is an airline. The name was chosen to illustrate a positive state of mind. Joon is a fashion brand, a rooftop bar, an entertainment channel, a personal assistant and Joon is an airline as well. Moreover, Joon is slated to become an Air France priority in its offensive efforts to claw back market share [R5].

Some airlines believe they should devise products which appeal to particular demographic categories. Thus, Joon targets the millennial lifestyle which revolves around digital technology. Joon's in-flight entertainment gives customers access to in-flight entertainment that can stream to smartphones, tablets and laptops. For the phone-obsessed millennial, all seats are equipped with U.S.B ports to facilitate in-flight charging of electronic devices. What millennial customers want is a cheap fare and services which strongly match their electronic needs, their values and their ethics [R5].

“To create Joon, we worked together to define a new offer in the air transport industry, in a spirit of creativity, innovation and agility. Joon is Air France's little sister, who breaks with tradition and takes inspiration from the new expectations of travelers. To offer an experience that goes beyond the aircraft doors.”

(CEO – Joon)¹⁶

NokScoot Airlines is a case similar to Joon, in that it targets a very specific demographic age group. The airline aims to target young customers and create a desire for adventure. To encourage the young to test and try new experiences. The airline encourages more Thai people to discover China, with its cheeky and fun outbound services, while it transports Chinese visitors to Thailand with inbound traffic [R3].

¹⁶ Quote is extracted from <http://us.media.france.fr/en/node/6444>

“We are positioning our airline more to the younger generation, ages between 25 to 44 to get the more courageous people who are still looking for adventure.”

(Senior Executive Level – NokScoot Airlines)

In addition, the technologies chosen to be applied to websites and mobile applications in the airline industry also depend on the demographics of the consumer market [R5]. Young consumers, millennials and regular travelers find websites and mobile applications an important avenue for purchasing air tickets [R5]. Mobile applications facilitate young consumers with information, however, older generations still prefer to engage with printed materials for their convenience compared to a small mobile screen [R4, R5]. Other consumers tend to rely on the airline’s website rather than a mobile application. This group believes the website provides more accurate and adequate information than the application. Consumers from numerous countries worldwide, who prefer human interaction, continue purchasing air tickets directly from agents or airline boutiques. Another Internet-based method of purchasing air tickets is through search engines, with many consumers relying on such websites for price comparisons and the opportunity to locate cheaper fares independently [R5].

The quality of an airline’s website is not a key driver for customers, and sufficient website features are not important for every airline, unless the airline wishes to make their website professional and interact more intimately with customers [R5]. Today, many small airlines offer only basic website functionalities of flight information and ticket sales, improving their websites by iteration rather than pre-determined design. When customers purchase air tickets through channels other than the airline’s website, such as a search engine, that airline’s website becomes irrelevant. The customer will fly on the airline they have chosen without interacting directly with the airline until they begin check-in procedures. The customer does not talk to the airline service agent or ever need to go through the airline’s website. They book their seat through the search engine website without experiencing the quality of the airline’s website. As a third-party selling air tickets, search engines may upload incorrect information or lack information about prices, ticket changes, re-booking, cancellations, etc [R5]. The above phenomena are reflected in a survey of 444 air travelers in Cambodia and Vietnam. 41.7% of the passengers reserved air tickets through the airline’s website. 27.9% reserved through ticketing travel agents. 14.2% relied on others to reserve their tickets. 8.3% purchased at the airline’s ticketing office, and 7.2% reserved their tickets through search engine websites. 49.4% of the survey respondents were aged 20-30, and 45.5% were aged 35-50. It is clear that this group of customers displayed flexibility towards online distribution by accessing the airline’s website or a search engine for reserving air tickets.

However, there is always a cohort of customers who are willing to endure an inconvenient online customer experience to obtain a cheaper ticket [R5]. These customers place a low value on their purchasing experience and will demur at paying slightly more for a better experience. Therefore, people will continue with this approach for as long as their purchase decision is based on the price factor, and despite how much effort the airline may expend in having a great website, beautiful on-board products, new aircraft, joining Skytrax 5 Star, etc. Qatar Airways, an example of this phenomenon, is the only airline in the world to receive the “Airline of the Year” award four times. It possesses a modern fleet, including A350 and A380 models, installs flash beds in the entire fleet, and covers a broad network of 160 destinations

globally. Yet customers still fly with competing airlines, such as Emirates, for the cheaper price [R5]. While this rejection of quality in favor of price may seem ridiculous. Price is the decisive factor driving customer behavior in the ASEAN airline industry [R1, R3, R5].

“I find it really sad to work for airlines these days, because no matter how much effort you put into having a great website; having a beautiful onboard product; having new aircraft; having Skytrax 5-star, Qatar Airways is the only airline in the world which has had “Airline of the year” four times. Now it’s getting more and more expected because the travelling public is more educated and more tech savvy. Yes, I really see so much with Qatar Airways. Again, the buying decision is a price-based decision.”

(Director Level - Qatar Airways Cambodia’s Station)

As every single customer is a different entity in terms of purchasing behavior, big data is becoming a very important analytical tool which can be utilized to predict new trends [R4, R5]. At present, big data has not yet reached its full scale of potential development in the airline industry. The airlines’ understanding of all customer preferences can be expected to be achieved within the next ten years. Airlines can employ dynamic pricing to offer their customers rebates or special offers, once their system can recognize each customer’s unique behavior at each time of their ticket purchase [R5]. For example, a passenger might purchase extra luggage allowance for every booking. The smart airline, using big data, will recognize this behavior and offer dynamic pricing for that customer whenever they login to the airline’s system. This allows the airline’s ancillary services to immediately facilitate their passenger’s journey. The airline’s system can thus suggest the customer purchase extra luggage at the first step and offer rebates without requiring the customer to discretely complete each step of the purchase process. The use of big data is to understand a customers’ preferences and deliver them the most comfortable experience when travelling. A passenger can receive an email wishing them a happy birthday; can be greeted on-board via a digital display in economy class or tablets in business class. Airlines can recognize regular passengers via their names, status, favorite food or favorite movies and the like. All recorded in the system database. This information can be correlated with data from the inflight, commercial, and IT departments. When the passenger boards the aircraft, with an on-screen message: *“Welcome on board Mr.XYZ. We are suggesting a selection of movies for you.”* However, this scenario is currently not enacted in reality, since there are co-ordination constraints between those departments in terms of time limitations, preparation of in-flight systems, employee practices, software acquisition needs, and financial requirements for implementing the processes [R5].

Big data can also help in creating more work opportunities within the tourism sector as a whole, not just for the aviation industry. For example, when someone travels, they will obviously need accommodation. Information from various industries can be used to supplement and enhance information from another industry [R4]. Many Online Travel Agents (OTAs) such as Agoda, Skyscanner, Klook or Grab car rental are able to share their big data with the airlines, enabling data combination, analysis, and co-operation on services provided to customers [R4]. Previously, customers have been required to contact separate agents or use discrete channels to purchase tickets, accommodation and tour packages. Currently, it is increasingly simple for travellers to access information from several different service providers through the same platform or channel [R4]. Therefore, the travel industry as a whole grows through the co-

operation of the various related industries; airlines; accommodation providers; tour operators; car rental firms; etc. However, big data is not only a most difficult issue for the airline industry, but also for the travel industry as a whole [R4]. As a result, some airlines attempt to maintain legacy systems due to their usage familiarity. Nevertheless, yet other airlines are thinking towards the future and now employ big data analysis to explore their customer's different preferences [R4]. For instance, airlines need to employ different models and strategies to approach different customer age and lifestyle demographics [R4]. To posit an example, if Korean Air continued promoting its mobile application system to its primary customer demographic, the 50 to 70-year-old age bracket, this group would switch to a different airline because they are not as familiar or comfortable with new technologies when compared to younger passengers. Similarly, in the food service industry, some restaurants reduce labor costs through the use of automated systems to record orders. Long-term customers may no longer patronise them without the human element. Customers are not only searching for food but for some human touch as well; pressing buttons via a machine may lead the customer to reject that establishment because they did not feel familiar or comfortable with the emotionless machine [R4].

Currently, customer data is collected on every operational activity and at every possible opportunity in the airline industry. However, few airlines have developed ideas, aside from those obviously necessary, on how to use this data in practice. Big data is a new term, and most airlines are not yet aware of its full potential or limitations [R4, R5]. It is truly possible to employ big data to predict new customer trends. However, this requires large investments in data analysis programming to filter relevant data into usable information [R5]. Data, on the one hand, brings benefits. On the other, it also brings organizational problems [R5]. Overwhelming quantities of data being collected can overburden analysis processes, leading to confusion in the processing of the data which in turn can hamper the preservation of vital information and the rejection of less useful information [R5].

In the 21st century, daily processes are more systemized and use of mobile and digital technology is more pervasive among the younger generations. This trend will continue to crystalize in the near future [R4]. However, in relation to mobile technology usage, airlines will find themselves in a more difficult situation than the banks are currently facing [R4]. Airline managers have no choice but to create separate strategies and approaches for different marketing plans. These strategies will all depend on the target consumer demographic and how those people are using technology [R4]. A good example is Derry Air. This airline's strategy is to turn its website into an online travel marketplace, providing a full range of services from selling air tickets and car rental, to room reservations. This airline's website has helped the airline sell travel services better than other online travel agencies. Derry Air is recognized as being part of a digital travel industry that has profited from available data to understand customers and their consumption habits, and thereby predict purchasing behaviours. The airline has essentially acted with significantly more attention to consumer habits and digitalization than it has acted like a traditional airline. Since many airlines continue operating in a traditional way, Derry Air has secured a competitive advantage and found success with the more than 650 million ASEAN citizens using their mobile phones and the Internet to reserve online accommodation.

“It is the spectrum, in terms of the passengers’ demographics, which is very comforting for Derry Air. So, we have from one end to the other end. The job here is to continuously enhance what we do, and encourage the young generation to come with us, but also not to ignore the older generation that is very comfortable with us. But most of the time, we look for the efficiencies in terms of scheduling, timing, and all services at the end of the day, which we are getting to as well.”

(Senior Executive Level – Derry Air)

From this presentation, we can conclude as following:

→ *Customer demographics directly impact the airlines, as the traveling public diversifies in nature. However, airlines are able to create new generations of travelers, and drive the travelling public to follow the airlines’ new evolution strategies.*

16.2 Price’s Impacts and Pricing Strategy upon Demands

Brand reputation in the airline industry comes with a customer expectation of good service and safety. Customers will no longer remain loyal to an airline if that airline does not maintain a good brand name [R5]. Customers have many different choices in the air travel industry, and if an airline loses its reputation or has its reputation tarnished, as has recently happened to Malaysia Airlines and to a lesser extent Aeroflot, customers will be less loyal to that airline [R5]. However, this does not mean they will be more loyal to another airline because they still have a smorgasbord of airline choices to fly with. Thus, if an airline vanishes from the market, that airline’s loyalty will be spread among the remaining players [R5]. As a result, no airline actually benefits from customer loyalty because it has a stronger brand reputation in the industry. If a passenger chooses not to fly with one airline, it does not imply that the passenger will switch loyalty to another airline. A passenger can be a member of multiple airline loyalty programs. However, no matter how many loyalty member cards the passenger may possess, they will still purchase the cheaper ticket, even though they may not be a loyalty member of the airline they actually fly with. In fact, customers who are loyal to only one airline, and have the desire to upgrade membership levels, are predominantly business passengers whose travel is sponsored by their corporations [R5].

Today, it is relatively easy for a single person to affect the brand reputation of an organization. A passenger can post videos on Youtube, write on travel blogs or travel advice websites, publish articles or tweet negative comments about an airline. This person can spread their dissatisfaction through their social media networks on platforms such as LinkedIn, Facebook, Twitter, etc. It is true that the sheer volume of information one person receives on a daily basis is so huge that the longevity of word can be very fleeting indeed. However, the rumor mill can still work well in a small market, but it has less affect in a large market. Customer behavior is not overly affected by word of mouth, but moreso by benefits covering the individual’s needs or desires. For example, a person watches a video about an airline receiving bad publicity for losing a passenger’s luggage. This passenger complains bitterly on their Facebook page and to their Twitter network. People sympathize with the passenger. However, the audience will move on

from sympathy when they have a demand to travel. Seeing a promotion from this airline, the reader might think: “Well, airlines do lose baggage everyday, and this can happen to anybody. I don’t want to miss this promotion because it is U.S. \$200 cheaper than the other airlines.” Thus, the reader will fly with this airline despite what happened to the first passenger’s luggage [R5].

“The buying decision is based on price. Qatar Airways flies out of Phnom Penh, but people are going to fly Emirates if they are cheaper. They don’t care if Emirates flies with a Boeing 777 or whatever, and Qatar Airways fly with A330.”

(Director Level - Qatar Airways Cambodia’s Station)

Being a savvy traveler with a need to fly, firstly the passenger will compare the ticket prices of different airlines [R5, R8]. Secondly, the passenger will consider the scale and the brand reputations of the various airlines [R5, R8]. Thirdly, the traveler will check the routes provided by those airlines to identify the routes suitable their intended travel itinerary [R8]. Finally, the passenger will select the most suitable route at the cheapest price which matches their itinerary [R8]. As a result, airline managers should carefully match suitable prices with the routes offered and aim to provide customers with more options by opening more route networks [R8]. Customers definitely compare prices among the airlines to choose which carrier they fly with. Thus, the two key elements of “best price” and “suitable route” which match the customer’s demand will be the basis for selecting which airline to fly with [R8]. In addition, two other elements come into play: “customer service” and “convenience” [R8]. These relate to speed and efficiency of the ticket purchase, the speed of check-in procedures, punctuality of boarding and flight times, in-flight meal service, seat comfort, after flight customer care, luggage handling and collection, etc. All are important factors for airlines to consider in their attempts to retain customers and induce a level of loyalty or repeat purchases [R8]. In addition, the passenger survey indicates that a near unanimous 92.1% of 444 respondents in Cambodia and Vietnam choose to fly economy class. Only 4% take business class, and despite some airlines offering deluxe economy class for more comfort, the majority of passengers still choose to fly economy class for the lowest price as possible.

“Price is mostly concerned by the majority. Whereas, rich people will be concerned about the quality. People will look up prices firstly and see how much it is. The reason why many people purchase air tickets from Derry Air is because their prices are low. In general, in the airline industry, air ticket price is the number one factor to impact to the consumer purchase behavior.”

(Senior Executive Level – Vietnam Airlines)

For the majority of the ASEAN population overall, and each country in particular, the customer purchase decision is still based on price [R1, R3, R5, R8]. This is mostly confirmed by aviation leaders in the region. However, there is a minority who are more selective and concerned with criteria other than price when selecting airlines to fly with [R4, R7, R9, R12, R13, R15]. There are several causal factors which will determine whether the passenger puts the price as the top priority or prefers convenience. Dominant among these factors are appropriate flight schedules, purpose of travel, and frequency of flying [R4, R7, R9, R15]. For example, a traveler flying only once or twice a year will be most concerned about the price, whereas those who are flying

every week would be more concerned with convenience and comfort [R3, R9]. They are not going to be pleased by standing in long queues, sitting in cramped seats or having to endure discomfort during the journey [R9]. For those who travel only once or twice a year, they are unlikely to be able to compare airline comfort [R3]. When there is no ability or necessity to compare convenience or comfort, customers will revert to focusing on price [R3].

In reality, most customers who fly for business purposes are less concerned with the price than they are with the airline flight schedules and options [R4, R9]. When asked: *“How would you rate the price offered by this airline compared to others with the same itinerary?”* 393 respondents, in a survey of 444 travelers in Cambodia and Vietnam rated price at 4.7 on a scale ranging from 1 to 7, with 1 meaning less and 7 meaning more competitive. The results of the survey conducted for this research indicate that the level of price sensitivity from this group of customers is not high and the price does not need to be ultra-competitive to be acceptable. However, there is a sample bias in the survey as most responders were government officials, enterprise managers or students. These travelers will not normally pay for their own flights. On the other hand, if the customer is traveling for tourism purposes, they will likely not choose a flight arriving at night in order to avoid additional accommodation cost, and importantly, the nervousness of personal security in a new location. When someone travels for tourism, they prefer to fly during the day in order to be able to enjoy more perceived time at the destination [R9]. Tourists generally feel happy to start enjoying their holiday after checking into their accommodation [R9].

Therefore, airline managers will set their pricing strategy on different situations derived from customer demand [R4, R9]. Depending upon the target customers, the price will affect tour, conference or business itineraries [R9]. It is human nature for people to choose the cheapest option as money matters in a human life [R4, R5]. However, price effects are only seen when the difference is quite large [R4]. For example, the price of a direct flight is always much higher on international long-haul routes than flights with a stopover. Then, depending on disposal income, one customer may opt for the cheaper price with the stopover experience while another customer may prefer the direct flight despite the higher price [R4, R9].

In terms of ‘price for service’, when a customer is comparing different airline’s ticket pricing for the same route, it is unreasonable to expect a customer to appraise the services of the airlines based on an assumption made from an online comment declaring that a particular airline offers better services [R8]. The customer’s perception must be based on personal experience with a particular airline because, as with ticket price sensitivity, each passenger’s service requirements are different [R8]. If a passenger is more affluent, they will likely focus more on services and comfort [R4]. A full-service airline would be their choice, and the price may be ignored. To the contrary, if the passenger is less affluent and only considers the airline as a transport tool, then elements such as service, aircraft type, entertainment, etc. do not matter as much as the price [R4]. An LCC will be the appropriate airline for this passenger. As the price factor will depend on the targeted travelers, the full-service and low-cost carriers will aim to target their separate segments to boost their business [R4].

“Definitely price is one of the strongest factors. I wouldn’t say it is always the only one, but it’s definitely a decisive one and it depends a lot on the target group that you are having.”

(Senior Executive Level – NokScoot Airlines)

“Qatar is still the key choice when agents send quotations to corporate customers to choose from. All companies now are in the pressure to reduce costs, not only airlines, and they need to take the quotation from the best airlines. Then how to be on top of those quotations? We always have to offer the best prices.”

(Manager Level – Qatar Airways Vietnam’s Station)

16.3 Safety’s Impact on Customer Perception

The third decisive factor is concern over safety and security [R5]. These have a strong impact on the airlines. A carrier’s safety reputation is very easily lost, and extremely difficult to rebuild [R5]. An obvious recent example is the loss of Malaysia Airlines flight MH370. This caused an immediate lack of trust in passengers. Another example is the safety image of Aeroflot. Although it has been voted as the premium airline in Europe, in 2018, the majority of people still thought of it as the old airline from the days of the former Soviet Union. Actually, Aeroflot is a four-star Skytrax airline which connects Asia to Europe. It provides impressive service with its recently purchased fleet of Boeing and Airbus aircraft [R5]. However, Aeroflot’s image, so painstakingly recovered after the fall of the Soviet Union, again suffered great harm in May 2019 when a Sukhoi Superjet-100 caught fire on landing, killing 41 of the 78 people on board.¹⁷ It is widely acknowledged that airline safety is commonly affected by external elements such as natural disasters or terrorism. Natural disasters including tsunami, volcano, typhoon and snowstorm events are beyond human control. Often unpredictable, they can impact the airline business leading to ceased operations or flight delays due to affected airport infrastructure. In 2011, tornados, fire, tsunamis and volcanic eruptions occurred in Asia and Europe, disrupting travel and devastating airport operations around the world. Earthquakes are the most destructive natural disasters for airports and aviation facilities. Older structures are more vulnerable to major earthquake damage, newer structures may avoid collapse but still suffer permanent damage, leading to the blockage of air traffic [R5].

The second important environmental factor is terrorism [R5]. This has a more damaging impact on airlines than any other safety element. For instance, an individual in Japan may be reluctant to fly when they learn about a terrorist attack in Brazil. The individual will be hesitant about any upcoming travel plans, even though the incident happened on the other side of the world. This thinking is due to the aviation industry being a prominent and global industry. When a disruptive incident occurs at point A, it will have a flow-on impact on points B, C, D, E, F, etc., even though those points may have no direct relationship with the incident at point A. The 9/11 attacks in the U.S. catapulted airline security concerns to the forefront of the global psyche, thus greatly affecting the airline industry in ways incomparable to other industries. As a result, airlines and security services worldwide remain constantly vigilant, causing security screening procedures to become increasingly stringent. This has resulted in longer checkpoint waiting times and complaints from the travelling public [R5].

¹⁷ Secondary source: <https://www.bbc.com/news/>

The International Safety Regulatory regime has important control over the entire airline industry, where safety is considered the most influential factor [R5, R12, R15]. Though the commercial aspects currently impact strongly on the success of the airline business, the investment in safety from the airlines bring much value and benefit in terms of enhanced reputation and potential long-term commercial profits [R12]. As a result, airlines are encouraged to adopt the International Operation Safety Audit (IOSA) from the International Air Transport Association (IATA). The IOSA is internationally recognized and accepted [R15]. Despite the safety issue currently being difficult to measure, most ASEAN consumers are not actively aware of this factor [R12]. For the reputation of an airline, the carrier will look towards safety in regard to the long-term [R15].

“And more important is the crucial aspect of engineering. We invest our capital heavily, mostly in terms of operational expenditure on a yearly basis. This is also to ensure that people are flying in a very safe environment, and safety is very important to us, regardless of what business we are running.”

(Senior Executive Level – Derry Air)

The configuration of aviation safety regulations in some ASEAN countries is not as strict as is necessary [R12]. In theory, airlines in Vietnam must reach the most stringent standards set by the Civil Aviation Authority of Vietnam (CAAV) or the International Air Transport Association (IATA). Similar safety regimes are applied to airlines in the other ASEAN nations. However, safety configurations are not sufficiently strict when it is clearly evident that the low-cost carriers demand more flight hours per day from each of their aircraft than do the traditional airlines in the region [R7, R13]. Currently, the majority of customers pay more attention to ticket price than to safety because, given the hundreds of aircraft flying each day, and the thousands of flight hours every day, accidents are quite rare [R12]. If there is sufficient difference in ticket prices, people will switch to the cheapest fare [R5, R12]. The safety of air travel may be evidenced by the tendency for Europeans, for example, to be less cautious when there is an air crash in Asia or Africa, only being influenced when an incident occurs relatively close to them [R5]. Therefore, for commercial purposes, airlines extract the maximum hours possible out of the aircraft and pilots. Aircraft on ground time and pilots non-flying time are becoming severely reduced [R7, R14]. Finnair is an example. It operates its A350 aircraft for 18 hours per day on long-haul flights, leaving only 6 hours per day for the aircraft on the ground [R14].

The above notwithstanding, safety threats will happen when crew rest times are reduced, and the risk of mistakes increases as crews grow more fatigued [R7, R14]. Crew rest time does not begin when they leave the aircraft. The crew still must debrief, sign off, and make their way home or to their accommodation [R7]. Though pilots have the right to take a micro sleep of 20 minutes when the aircraft is on autopilot, this requires excellent co-ordination between pilots in the cockpit to ensure aircraft safety [R14]. As a result, when an incident occurs, pilot fatigue and training are closely scrutinized [R14]. Specialist experts investigate the human factors as these are very important in the context that flying duties are inevitably rostered up to the maximum allowable limit. Long-term fatigue is also considered a potentially dangerous cause of air incidents. Thus, airline managers continually urge their airlines to secure sufficient pilots

to crew all required shifts and lessen the issue of duty limitations. This is particularly so if that airlines' business is growing through intensification of routes and the subsequent increase in flights [R14].

Following the crashes of an Indonesian Lion Air and Ethiopian Airlines B737 Max 8 aircraft within six months of each other, that aircraft model was grounded worldwide. The reason for the suspension was deemed as a precaution to ensure flight safety from the new technology designed for this aircraft¹⁸. At present, with more aircraft in the air and a global pilot shortage, pilot recruitment has become an important factor in regard to safety [R12]. Since this is a critical job, pilots must regularly pass psychological tests and continue training on new technology [R14]. It is vital for pilots to prepare for next generation aircraft, through simulators to a certain extent, and with the training provided by the aircraft manufacturers [R16]. Recent aircraft innovations not only save fuel but have introduced automated safety features as well. The collision avoidance system alerts pilots to other aircraft in their vicinity. It is also now mandatory for new aircraft to be equipped with a ground proximity warning system. This alerts pilots to mountains and potentially hazardous terrain [R14]. Thus, aircraft innovations, and there are many excellent innovations in place, aid in reducing mistakes [R14]. Pilots must continually be trained well to use the new innovations as they arrive [R14, R16]. For example, pilots no longer use laptops or iPads in the A350 as the cockpit itself is actually designed as a computer [R14]. Whereas previously it was challenging for pilots to taxi at the large airports, the A350 now uses a map display. The pilots can track the exact location of the aircraft despite low or previously unsafe visibility. This significantly improves the ground safety of the aircraft as it helps reduce the risk of runway incursion. It is considered a latent potential danger when an aircraft is located in an unauthorized position on the taxiway or hardstand [R14].

The national safety regulations may also place limits on the airline's operations in terms of aircraft. NokScoot was affected by Thai regulations restricting importation of aircraft over 15 years old. This led to losses for the first few years of operation and slower business growth than expected. The life span of an airframe can be up to 25 years, and much more in some cases [R14]. Restrictions on operating used aircraft may differ for each country and the issue presents pros and cons to the airlines. It is not a major concern for airlines to purchase used aircraft. However, they should carefully consider the maintenance history and ensure all technical checks are in compliance with the safety regulation. In itself, ensuring technical and regulatory compliance may be a longer and more costly process than acquiring a new aircraft [R14].

From these analyses, we can conclude as following:

➔ ***Brand reputation plays an important role in identifying an airlines' market position, with the carrier's pricing strategy and safety being the most decisive factors influencing both customer perception and the airline's business.***

Conclusion of Chapter 7

¹⁸ Secondary source: <https://edition.cnn.com/world/live-news/>

The key finding analyses presented in Sections 15 and 16 generate conclusions that correlate basically with the propositions 1, 2, 3, and 4 in addressing to the research question 1: “*What are the business environment impacts on the strategies developed by ASEAN-region airlines?*”. However, each conclusion supplements and adds up more details to clarify its respective proposition as followings.

Proposition 1: The Open Skies Agreement has stimulated increased competition among the regional airlines and set both positive and negative impacts on ASEAN airlines’ strategies.
➔ *The Open Skies Agreement has mostly a positive impact on ASEAN airlines’ strategies, despite stimulating increased competition among the regional airlines, and the active opposition of some ASEAN member states through Government regulation.*

Proposition 2: Technical innovations strongly affect the development of the airline industry, in which airlines adopting updated technological innovation will get more competitive advantage than their non-adopting or slower adopting competitors.
➔ *The adoption of technical innovations relating to aircraft convenience and comfort, online ticket purchasing, the check-in process, and mobile integration will deliver advantages over non-adopting or slower adopting competitors.*

Proposition 3: Customer demographics directly impact an airline’s growth as the traveling public diversifies in nature.
➔ *Customer demographics directly impact the airlines, as the traveling public diversifies in nature. However, airlines are able to create new generations of travelers, and drive the travelling public to follow the airlines’ new evolution strategies.*

Proposition 4: Brand reputation plays an important role in identifying an airline’s market position.
➔ *Brand reputation plays an important role in identifying an airlines’ market position, with the carrier’s pricing strategy and safety being the most decisive factors influencing both customer perception and the airline’s business.*

The findings in Chapter 7 are summarized and categorized under the form of stakeholders’ influences in Chapter 9 – Section 19, including the technological change, global political forces, legal forces and government’s protection, shareholders, suppliers, competitors, distributors, customers and employees. In response to existing environmental impacts, we present key findings on strategic insights obtained from the empirical data in the next Chapter 8.

CHAPTER 8

KEY STRATEGIC RESPONSES TO ORGANIZATIONAL IMPACTS

Chapter 8 consists of Section 17 presenting the combination of business growth strategies and Section 18 presenting the combination of internal improvement strategies. The business growth strategies mention about the sales distribution channels, co-operations and route development whereas the internal improvement strategies mention about the aircraft operation, human resource development, finance resource strengthening and decision-making power leveraging. Both types of strategies are the key tools to assist airlines to counteract with organizational impacts. These are the strategic management instruments which determine where the airlines go, improve operations and meet their goals.

SECTION 17

COMBINATION OF BUSINESS GROWTH STRATEGIES

The organization needs to grow its business to increase sales and profits. There are certain methods to implement a growth strategy, which are largely contingent upon the organization's financial situation, the competition and even government regulation. Some common growth strategies include market expansion, product diversification and acquisition (Suttle and Seidel, 2019). In this section, we present the strategic findings on the sales distributions that airlines are employing and how are their strategies to deal with different distributor stakeholders. Another important growth strategy is the co-operation with various types stakeholders, varying from business partners, suppliers to competitors; in which cooperation is widely used in the airline industry. The last growth strategy is the market expansion reflecting through the route development. Air carriers use many programs and tools to perform their route studies by looking at passenger demand forecasts, hub connectivity, aircraft availability, and other competitors (Bernier, 2017).

17.1 Optimization of Sales Distribution Channels

Nowadays, an airline's website can be a profitable distribution channel favored by airlines and passengers alike [R2, R5]. Another digital distribution channel is called a GDS (Global Distribution System). Abacus, Sabre, Amadeus and Galileo are the most profitable players in the entire airline industry [R5]. This is because GDS is an intermediary which provides an online platform for both online travel agents and physical travel agents to sell tickets on behalf of the airlines through that GDS platform [R5, R9]. That these intermediaries charge USD \$7 to \$15 per ticket has prevented airlines from spending on third parties [R5]. In reality, airlines are gradually easing away from GDS [R5]. Full-service carriers will still use GDS as significant numbers of their customers will purchase multi-leg tickets when they take long-haul flights [R5]. Though the trend is a reduction in the use of GDS, airlines still use the channel to take advantage of GDS' agents [R5]. If the airlines cease using GDS immediately, they would exclude a certain market segment [R5, R9]. For example, VIP customers often buy tickets through travel agents. The travel agents buy from GDS. Those customers often pay a premium

ticket price and the airline will prefer not to lose this customer segment as it makes an important contribution to their overall sales [R9]. Furthermore, with the advantage as a member of an airline alliance and having codeshares with many other airlines, an FSC will be obliged to use a GDS to codeshare and share the profit from IATA [R4]. Therefore, FSCs, though not totally satisfied with GDS', can only limit using GDS to save costs and will not cease to use their GDS business partner altogether [R1, R4, R5, R9].

“Another strange point to note. Whereas technology is developing at a much faster rate, but the vendor rates for GDS is not decreased, and in fact, this year’s price is higher than the previous year! In my opinion, this is the unreasonable point, and airlines should consolidate to challenge this.”

(Senior Executive Level – Vietnam Airlines)

IATA has employed NDC (New Distribution Capability) to curb the problem of GDS technologies becoming cheaper and more efficient while the savings realized are not passed on to the airlines [R1]. Unfortunately for the airlines, NDC does not yet seem to be efficient. If GDS vendors do not reduce prices, their system will disappear in five to ten years because the airlines will not accept such expensive distribution channel and will seek alternatives [R1, R5]. The majority of low-cost carriers do not pay GDS costs either and the only way for passengers to book tickets from these airlines is through their own websites [R5, R9]. Another factor is that customers prefer to buy one-way point to point tickets from low-cost carriers’ websites. However, there are some exceptional cases where LCCs sell through GDS to expand ticket sales, in addition to selling through their own websites [R4]. At first, Derry Air did not wish to utilize the GDS channel. However, the airline’s website could not reach all customer segments [R4]. There remain customers who still prefer purchasing tickets from physical agents, especially Asian customers in the 60-70 years age bracket. These customers have both time and money for travel [R5].

Another remarkable intermediary involved in the sales distribution system of the airline industry is the OTA (Online Travel Agent) [R9]. OTAs differ from the traditional Travel Agent (TA) in terms of both business structure and perception. Customers can become confused about TAs and OTAs if they are not able to recognize the different nature of each agent type. While a TA simply posts information on their website for customers to book tickets. They then print the booking requests and manually book on the airline’s booking or GDS to reserve tickets for customers. The GDS software is specially programmed for travel agents with technical terms which are understood by the agents only. OTA is a sales system attached directly to the airline’s reservation system. This enables the transfer of flight information to the remote screen. Departure and arrival destinations, times and dates, flights from different airlines, etc. are all accessible. Filter functions allow the OTA to locate flights according to specific criteria, i.e. cheapest or earliest. The OTA interface is user friendly, allowing customers to book tickets on-screen and update changes immediately in accordance with any changes from the airlines. When this technology has exerted sufficient influence over consumer behavior, airlines may realize greater profits by replacing GDS with OTA. OTA takes a lower commission than either GDS or traditional travel agents [R9].

“Right now, we sell direct from our website, and we do have some agents we work with that are OTA (Online Travel Agents). We do not get rid of the OTA because in some of the countries there are limitations, and they are still there and the passengers and consumers of those countries utilize OTA as their only way to buy tickets because technology can only reach so far, and some OTAs still play a part so we will still work with them.”

(Senior Executive Level – Derry Air)

Over time, airlines have begun attempting to draw passengers to their own websites as a direct ticket sales channel [R5]. For example, Qatar Airways in Cambodia has allowed travel agents to access its inventory system directly to reserve air tickets, bypassing GDS [R5]. This strategy prevents GDS from block booking seats, allowing the airline to wrest back greater control over their ticket distribution by interacting directly with travel agents and passengers instead of via GDS [R5]. Furthermore, online customers love to receive promotions and are reluctant to part with USD \$15-\$20 per ticket to the agents [R6]. Should a traveler buy tickets for the entire family, they must pay a very high fee to the agent [R6].

Despite the fact that most airlines worldwide would greatly prefer to distribute their tickets through their own websites, much depends on the maturity of the target market [R6]. Airlines must continue to employ third parties to sell flights, especially in small and less developed markets where online payments may not be popular or widespread [R5, R6]. In Southeast Asia, Cambodia is a case in point. The country is overwhelmingly a cash-based economy. The direct distribution channel for airline tickets accounts for only 20%, while 80% of bookings are through travel agents [R5]. In this market, airlines employ a strategy of allowing customers to book and reserve their seats online, then the airline holds that seat for at least 48 hours in order for the customer to pay cash through an agent [R5].

“I don’t think it will happen in the Vietnamese market because currently 70-75% of the revenues of major airlines are gained through agents. For LCCs, they will sell through their online portal and they do not use GDS. Our market is still new and not mature. The number of customers who are confident to buy tickets by credit card is still limited. Currently, it is easier to call the travel agent to help you to buy an air ticket, except those people who have time to search online, but we prefer online customers because we will sell directly to them.”

(Manager Level – Qatar Airways Vietnam’s Station)

From the data, we can conclude as following:

- ➔ Sales through digital distribution channels will increase markedly and become the key customer service channel. However, airlines must still engage third parties to sell flights in order to optimize sales, despite their preference for a more direct distribution channel.**

17.2 Co-operations in Competitive Environment

The LCC business model affords more people, from broader demographic groupings, more opportunities to travel by air more often. The LCC's have an impact as a means of driving national economic growth through increased tourism, as well as enhancing diplomatic ties and people-to-people relationships between countries [R6]. The low-cost carrier model is shining brightly, and that light shows no signs of dimming [R6]. There are, in fact, more low-cost carriers entering the market or growing stronger through mergers [R6]. Well known names such as EasyJet in the UK, Spirit in the U.S., Derry Air in Indonesia, Scoot in Singapore, NokScoot in Thailand, and VietJet in Vietnam are enjoying a period in the spotlight [R6]. The explosion of new LCCs in India; North East Asian countries such as China, the Republic of Korea and Japan; and South East Asian nations such as in Malaysia and Indonesia, has had such an impact that they have become an intimidation to the major airlines [R6].

Nevertheless, there is a misperception of the LCC model, with the majority of customers rendering the term “low-cost carrier” to mean “cheap-priced airline”, in accord with the dictum that “*you get what you pay for*” [R13]. The profit model of a low-cost carrier is based upon up-selling and the sale of “add-on” products and services [R2, R13]. In essence, the core air ticket product is sold at a standard price and other options are added to that price according to customer demand [R13]. Those options, for instance, additional luggage weight over the 7kg carry-on allowance, or the choice of a meal served in-flight, are add-ons which not only provide a profit margin for the airlines, but also avoid passengers receiving services for which they have no demand [R13].

“Nothing is forced, you choose what you want, and the option is yours.”
(Senior Executive Level – Derry Air)

In reality, we see that Cebu Pacific, a low-cost carrier from The Philippines, is systematically more expensive than the national carrier, Philippine Airlines [R5]. Currently, there is a perception that it is cheap to buy an air ticket in advance from a low-cost carrier at a very minimal expense. However, this may only be true if the customer purchases a basic ticket at the early bird rate. If not, the ticket may not be as cheap as expected [R5]. Tickets from LCCs and FSCs are generally sold for the same or similar price. However, LCC customers will then be required to buy all the add-ons and ancillary services such as baggage allowance, seat selection, meals, priority queuing, lounge access, etc., [R5]. This misperception of LCCs also influences the customer mind-set in that they suppose they are taking a greater risk because they chose to fly with a low-cost carrier [R9, R13]. On the contrary, it sets higher demands on full-service carriers because their customers expect a higher quality of service [R13]. In reality, the price structure for the core product from a low-cost carrier and a full-service carrier is comparable [R13]. Therefore, the value of LCCs and FSCs must be considered as being at the same level in terms of safety, quality, timeliness and information accuracy [R13].

“Low-cost doesn't mean low quality. That is something we must emphasize. People always assume low-cost means low quality. It is totally opposite for us here. We invest a lot in terms of people and their development as well.”
(Senior Executive Level – Derry Air)

When there are more LCC competitors, the full-service carriers, primarily the major airlines, will view this as an opportunity to improve their service quality and adapt to changes in the market [R1, R12, R13]. Major airlines nowadays are offering more classes of air travel. Some airlines even break their cabin configurations into four classes; Economy; Premium Economy; Business; and First Class [R5]. Economy class offers basic services included in the price, while Premium Economy enhances the in-flight experience by offering more privacy, space and comfort in a small, secluded cabin compartment. Business Class services offer lounge access, delicious meals and beverages, extra space for work or relaxation, and flat beds on long-haul flights. First Class is ranked above Business Class by offer dedicated services, exceptional comfort, luxurious lounges and on-board fine dining. It astonishes many to have four different classes in a cabin. Indeed, even as other airlines are beginning to abolish their First-Class service, British Airways continues to roll out new travel classes. Airlines are now upgrading Business to First Class; Premium Economy to the Business Class standards of 20 years ago. The standard Economy Class is now furnished with better screens, or delivered with better food quality or special foods ordered in advance [R5]. For instance, Korean Air removed First-Class seats on 27 international routes in June 2019, leaving customers with only two options on 76 of its 111 routes: Economy or Prestige. The airline does not offer a First-Class option on most of its short-haul flights to cities in China, Japan and Southeast Asian countries, but does so on major routes to Beijing, Osaka, Hong Kong, Taipei, Bangkok, Singapore, Manila, Jakarta and Hanoi. The change became necessary when the airline decided to increase efficiency and maximise flight profitability.

"We decided to apply two class seat options for flights to tourism destinations where there was low demand for First Class. We will do our best to minimise the inconvenience of First Class passengers and maintain quality service for Prestige Class passengers,"

(Official Representative - Korean Air)¹⁹.

Meanwhile, the LCC model supposes only one class in order to allow passengers to economize on their air ticket expenses as much as possible, and yet, with rising competition, the LCCs began to upgrade their seats by offering more options to passengers [R2, R5]. For example, NokScoot Airlines offers seats in a Business Class called 'ScootBiz', which can be achieved because the cabin configuration of its wide-body aircraft was originally designed for Scoot and Singapore Airlines. To conform with the objectives of its business model, Derry Air does not configure business class seats inside its A320 fleet, because:

"If we put in business class seats, that will take up space and our aircraft needs to fill with people."

(Senior Executive Level – Derry Air)

The major airlines classify their cabins into classes in order to broaden and diversify the air ticket price range, even though they will have a very low price economy class with no amenities on short-haul flights [R5]. For example, United Airlines in the U.S. does not allow a passenger to include baggage unless they have paid for it; or the cheapest priced tickets are available only

¹⁹ Secondary source: <https://www.straitstimes.com/asia/>

for the least desired seats, i.e. near the restrooms [R9]. In fact, FSCs cannot sell all seats at a low price because they cannot reduce the standard cost of in-flight meals, or the cost of ground handling either, in order to compete with the LCCs [R9]. FSCs, however, will reduce economy class airfares on certain routes and markets in order to attract more customers [R5, R9]. Therefore, it is generally seen that LCCs are gradually moving towards the full cost model, while full-cost carriers are steadily moving in the opposite direction, towards to low-cost model [R1].

“I don’t see much difference between low-cost and full-cost carriers, which means that low-cost carriers add-on additional services, with the feeling of being like full-cost carriers, whereas full-cost carriers reduce airfares more to compete.”

(Senior Executive Level – Vietnam Airlines)

However, full-service carriers will not shift their strategy completely towards the low-cost model in order to reduce costs or prices, meaning they will not turn themselves into fully-fledged low-cost carriers purely to compete [R5]. While there are two general categories in the aviation industry, certain airlines tend to follow a more hybrid business model, which is a merging of the full-service and low-cost models [R4, R5]. For example, JetStar was initially established on the low-cost model. However, the airline has profited from the benefits of codesharing because it is the subsidiary of Australia’s Qantas Airways, a premium airline [R5, R7]. On the other hand, the major airlines are attempting to mimic the low-cost carriers by offering entry-level ticket prices as explained above. Other hybrid options include devising a more low-cost structure or creating a low-cost subsidiary outright because the major airline’s FSC model cannot thrive in the LCC space [R5].

The trend for FSCs to imitate low-cost carriers has existed for the last five years and the strategy does not seem to have worked well for the major airlines as a whole [R5]. Major airlines who have attempted to compete directly with the low-cost carriers have generally failed [R5]. For example, Malaysia Airlines offering FireFly in Malaysia; Thai Airways operating Thai Smile and Nok Air in Thailand; Philippine Airlines launching Philippine Express; etc. The major airlines which have launched low-cost subsidiaries do not completely confront the genuine low-cost carriers head to head, e.g. Lufthansa with German Wings in Germany; Air France with Transavia and Joon in France; Qantas Airways with Jestar Pacific in Vietnam; Singapore Airlines with TigerAir in Singapore; etc. [R5]. In fact, major airlines cannot metamorphose themselves into low-cost carriers, and the shareholders should identify the airline’s core business model right from the moment of inception [R5, R13]. Hence, major airlines must differentiate themselves from low-cost carriers instead of trying to emulate them because they cannot apply the same concept to different levels and in different markets for both low-cost and legacy airlines [R5]. Full-service carriers can, however, gain from the experiences of the low-cost industry by leveraging important sources of ancillary service. Passengers pay more for seat selection, carry-on cabin luggage, extra leg-room, a better or wider range of meals, etc. Major airlines can reproduce these ideas from low-cost carriers, and this does not mean they themselves will become low-cost carriers. Thus, differentiation will be a crucial factor for major airlines for at least the next five years [R5].

With the increase of low-cost and hybrid airlines, it is obvious that major airlines will lose numbers of low-budget travellers as well as a slice of the cheaper end of the market [R4, R5]. After experiencing LCCs for short-haul flights, these passengers will shift to long-haul low-cost carriers like AirAsia of Malaysia and Cebu Pacific of The Philippines [R5]. It is a sign of a sophisticated market when major airlines are launching long-haul low-cost subsidiaries to cover all market segments and to offset any losses at the budget end of the market [R5]. The strategy is to re-brand themselves to capture this market segment. Scoot and Joon, low-cost subsidiaries of Singapore Airlines and Air France respectively; or NokScoot Airlines, a long-haul low-cost carrier joint venture between Scoot of Singapore and Nok Air from Thailand, are examples of this re-branding strategy [R5].

Low-cost air travel has become an ongoing and growing trend over recent years [R5, R6]. Discounting corporate travel, more people are taking more flights, based largely on ticket price decisions [R5]. Low-cost long-haul travel is a new trend, although very few low-cost carriers provide long-haul flights, and to date most have failed after only a short period of operations [R5, R6]. In the ASEAN region, there are only Singapore Airlines' Scoot and AirAsia from the Derry Air Group, operating long-haul flights on the low-cost business model [R6]. The operating margins and the regulatory environment for long-haul flights are tougher on a low-cost carrier than they are on a major airline [R6]. Airline specialists agree somewhat that low-cost carriers running long-haul flights have possibilities to increase competition for the major airlines [R5].

“From the perspective of Derry Air, we believe in competition. We think competition allows us to grow. Competition opens our market, and creates a level of efficiency that would benefit the passengers.”

(Senior Executive Level – Derry Air)

In fact, the market is segmented according to the demands of the travelling public [R5, R9]. Competition among LCCs and FSCs really only occurs in the low-budget market segment [R5, R6, R9]. For instance, Singapore Airlines and Qatar Airways only serve customers on international long-haul flights into and out of Vietnam. Bamboo Airways, a new Vietnamese airline which has adopted the hybrid model, focuses on the Vietnamese average customer segment, while true LCCs like Derry Air and VietJet focus on the low-budget customer segment in the region [R6].

“Qatar Airways’ business model in Vietnam, in particular and in Asia in general, are long-haul flights and we have different customer segments and profit targets. Therefore, LCCs are not our direct competitors.”

(Manager Level – Qatar Airways Vietnam’s Station)

In such a dynamic industry, depending on their business models and their own respective competitive positions, both FSCs and LCCs will have different strategies, beyond the price factor, to compete and grow their business [R4]. For major airlines, the first strategy is to establish their own LCC subsidiaries to prevent their market share being poached by genuine LCCs [R4, R7, R9]. Second, FSCs can leverage their advantages in terms of financial strength, better service provision and most desirable slots to overcome the threat from LCCs [R4, R9].

For example, Vietnam Airlines, the state-owned national carrier, can interchange good slots for their hundreds of flights in order to compete with LCCs such as VietJet or Derry Air in the Vietnamese market [R9]. The latter thus being obliged to accept fewer desirable slots and they receive less Government support than Vietnam Airlines [R9]. Third, FSCs will find advantages in a crucial strategy of establishing mutual co-operation in various forms with other airlines or partners in order to grow or even merely survive in tough markets [R4].

The first type of co-operation to consider is the merger or consolidation strategy [R5, R6]. This is a suitable means by which to strengthen the airline industry in Southeast Asia. Some small airlines have been operating successfully under current market conditions, whereas others should be fully absorbed by a stronger airline [R5]. For example, there has been an explosion of small local airlines in Cambodia in the last two years. Chinese investment brought seven airlines into existence in this small Southeast Asian country. The reason several Chinese-backed airlines such as Lan Mei, JC, KC, Bassaka, Apsara, etc., exist in the Cambodian market is not derived from any increase in the national population, an increase in the number of travelers in the region, or the growth in numbers of Chinese tourists visiting Cambodia. In fact, a different agenda can be implied as being behind the transport business based on the Cambodian Government's policy of encouraging and attracting foreign investment [R5]. In reality, when consolidation of airlines is occurring slowly, weaker airlines will disappear gradually, eliminated by market forces [R5]. This proved to be the case for many smaller LLCs: Asian Spirit Airlines of The Philippines; Royal Air Cambodge of Cambodia; Mekong Air of Vietnam. Then there are the recent cases of Joon in France; Jet Airways in India; and Wow Air of Iceland. All disappeared after only a few years of operations. As a matter of fact, if airlines are not able to thrive in such a tough competitive environment because of financial crises or any other reason, they will be merged or disappear from the market through natural attrition within the first five year of operations [R5].

Second, paralleling the growth of the airline industry, FSCs began connecting more closely with each other over time, before eventually grouping themselves into clusters of commonality and formulating alliances for collaboration and sharing for mutual interests [R4, R5]. Currently, there are three primary alliances in the global aviation industry: One World, Sky Team, and Star Alliance [R5]. While Star Alliance is extremely rigorous in applying its strict regulations to its members, One World is more flexible in encouraging its member airlines to co-operate with each other [R5]. The principal aim of these alliances is to grow global aviation by getting more FSCs to join in order to create more flying opportunities for passengers through combining their airlines' routes [R4]. While FSCs tend to focus on long-haul flights and strive to expand to a global route network, LCCs focus on point-to-point flights [R5].

For the ASEAN full-service carriers, Singapore Airlines, Thai Airways, Philippine Airlines, and Vietnam Airlines, they do not even apply the Open Skies Agreement since they can co-operate in different ways among themselves and codeshare with members of the alliance they join [R1, R4, R5, R9]. Currently, airlines participate in their own alliance so customers can accrue benefits with other airlines of the same standard in that alliance [R8]. Customers can accumulate mileage points not only with the airline, also but with other airlines in the same alliance [R5, R8]. In the past, if a customer is a frequent flyer with one airline, they would be considered a VIP customer of that particular airline only. The customer would not be considered

a VIP of another airline. In order to provide greater benefits to customers, the airlines will seek to join an alliance [R8].

Similar to the FSCs, LCCs are now forming their own alliances to co-operate on profit sharing, codeshare and interline agreements [R4, R5]. Though LCCs are very competitive, the time has arrived for them to co-operate and connect schedules into a single market [R4]. If LCCs only work on their own point-to-point routes, there can be no new market beyond those points [R4]. They would require enormous capital to join the GDS to achieve a similar system, leading to requirements for human resources to handle the auditing and operations [R4]. Instead of spending capital for this investment, LCCs can choose a beneficial solution by codeshare or interline agreements with other airlines in order to expand their markets [R4]. In addition, there is also co-operation between FSCs and LCCs which is evidenced by major airlines of One World alliance co-operating with low-cost carriers to optimize their profits in local markets [R5]. For example, Qatar Airways signed an interline agreement with the Vietnamese low-cost carrier VietJet Air, to operate certain routes to Nha Trang, Da Nang and Hue; or partnered with WestJet Airlines and Jet Blue, low-cost carriers in Canada and the U.S. respectively, to operate its flights in the North American market [R5, R6].

“The interline agreement allows passengers to book online. For example, if they want to travel from Frankfurt to Phu Quoc, they can book the destinations directly and VietJet will be displayed on the system screen showing that they operate the domestic flights.”

(Manager Level – Qatar Airways Vietnam’s Station)

Airlines are free to choose which alliance they wish to join [R4, R5, R8]. Vietnam Airlines chose to join Sky Team alliance. Airlines in the same alliance can conduct marketing activities or codeshare by selling seats to each other [R5, R8]. For example, Vietnam Airlines can co-operate with other airlines of the alliance in order to sell tickets. This aims to provide passengers with greater options [R8]. The alliances, Star Alliance, One World and Sky Team were originally established to reward their customers. Customers could enjoy more benefits from the airlines and alliances allow airlines to sell tickets to each other through their codeshare co-operation. Codeshare means customers can purchase tickets from Vietnam Airlines and fly with Air France, or they can buy tickets from Cathay Pacific and fly with Vietnam Airlines. In essence, Vietnam Airlines is selling Cathay Pacific tickets [R8]. This is one form of co-operation.

“We codeshare with Air France and interline with whoever we can work with. The strength of being a full-service airline is that we can do co-operation together and our systems are ready to co-operate.”

(Senior Executive Level – Vietnam Airlines)

The airline industry can be said to be one in which there are no enemies and no friends [R4, R5]. In general, airlines are constantly pre-occupied with themselves, whether trying to survive, or to grow [R3]. This is because the markets are extremely competitive by default. An airline will thus be more proactive in seeking co-operation whenever it detects an opportunity to solve an internal problem it has identified [R3]. Otherwise, airlines focus only on themselves [R3].

Derry Air is a case where it does not need to co-operate externally as its internal systems are strong enough to compete successfully in the regional market. Furthermore, numbers of passengers who fly with legacy airlines and then enter an LCC's network is very minimal. The airline is therefore forced into focusing on expanding its own network organically.

“We don't have code sharing, no interlines either, because right now our network is expanding enough that we can accommodate, while it allows us to focus directly, and the focus is in Derry Air. Yes, we are an LCC in Thailand, Indonesia, Malaysia, but we all work as one and that's our code sharing among us and we don't see the need to share with other airlines; we need to cater to our needs here first.”

(Senior Executive Level – Derry Air)

Co-operation in the airline industry will never completely disappear, but will instead morph from one form into another, whether externally or internally, to ensure that the co-operating parties each gain a benefit [R1]. However, it is difficult to distinguish matters in a transparent manner when there are many varying issues involved, such as the environment, aircraft types, human resources, training, maintenance, etc [R4]. The necessity to co-operate in solving a common problem arises when the co-operation benefit factor is judged to have become more important than the competition factor. Only when the co-operative conditions can no longer exist, within the regulations, in the case of bankruptcy or other such severe business factors, for example, will the co-operation cease [R1, R4]. When an airline identifies a beneficial opportunity for itself, it will never refuse any co-operation that can realize that benefit, regardless of whether it is co-operating with a direct competitor or not [R1, R4]. The very key element of two airlines co-operating together is mutual benefit. For instance, Korean Air and Lufthansa co-operated in a codeshare whereby Korean Air flew to Frankfurt, ignoring the objections of other Star Alliance's members. Those members objected to co-operation with a competitor. With the Lufthansa co-operation, Korean Air was able to develop a hub in Europe and bring considerable numbers of passengers to Europe via Lufthansa's network. However, succumbing to sustained pressure from other Star Alliance members, Korean Air switched its European co-operation to Czech Airlines by purchasing shares in that airline and moving its hub to the Czech Republic, thereby nullifying the objections of its fellow Star Alliance members. In this co-operation, Korean Air provides wide-body aircraft to Czech Airlines to distribute passengers from its hub in Prague. Similarly, on the Vietnam – Japan route to Narita, Vietnam Airlines and ANA are competitors [R4]. However, they co-operate by buying seats from each other through a codeshare and ANA even holds an 11% shareholding stake in Vietnam Airlines as a strategic investor and partner [R15].

“It is no problem to co-operate with our competitors. Even Vietnam Airlines and VietJet Air can co-operate if we both can gain benefit. People co-operate for benefits only. When two persons sit down to co-operate, they will discuss: ‘What will I get, what will you get? Then I will get this, you will get that’ and both will come to a compromise and sign a contract for the co-operation.”

(Senior Executive Level – Vietnam Airlines)

While some airlines will strive to achieve all the standards for membership of an alliance in order to have the opportunity to co-operate with other member airlines and improve their market position, other airlines will focus their collaboration efforts on whomever they consider can provide a closer business opportunity and commercial relationship rather than joining an alliance. Airlines who never intend to join an alliance wish to retain their independence and freedom of choice to collaborate with any partner they so desire in order to achieve mutual benefits without the constraints placed on alliance members [R5]. For instance, Hawaiian Airlines and Alaska Airlines in the U.S. are both independent of any alliance and have both been profitable and successful airlines since their creation [R5]. However, an emerging phenomena in recent years has seen member airlines of an alliance switch to another alliance seeking greater profits, or withdrawing from alliances altogether in order to collaborate directly with any other airlines [R5].

It is predicted that membership of large alliances will decline as airlines begin to prefer to collaborate based on directly and mutually beneficial relationships [R5]. This may be considered an excessive move, but the trend has begun in recent years, with the numbers of new members joining these alliances slowing [R5]. Some airlines have switched alliances, i.e. LaTam Airlines in Brazil. switched from Star Alliance to One World. A second example which illustrates the profit nature of the alliance relationships is the case of China Southern Airlines and China Eastern Airlines, both members of the Sky Team alliance. Following its share purchase, commercial, sales, airport facilities and codeshare co-operation with American Airlines, China Southern Airlines quit the Sky Team alliance to join One World where American Airlines is a member [R5]. Some larger alliance members will establish relationships with competitors of other members within their common alliance. For example, both Malaysia Airlines and Qatar Airways are members of the One World alliance. However, Malaysia Airlines has partnered with Emirates, which is not a member of any alliance, to fly to Europe instead of signing any partnership agreement with Qatar Airways to do the same. Australia's Qantas Airways has established a strategic partnership collaboration with Emirates, instead of British Airways or Qatar Airways who are fellow One World alliance members, to fly the lucrative Australia – Europe routes [R5].

Thus, the reflective question becomes: *“Is this behavior a form of betrayal?”*. It is understandable that the majority of airlines are currently more opportunistic in seeking commercial benefits. Airlines will ignore the sensitivities of other members in the common alliance and are not abashed to collaborate with partners outside of their alliance [R5]. The fact that airlines choose to co-operate with others outside their particular alliance is the effect of different crucial elements comprising the situations of the airlines themselves; their region of origin; sources of their investments; and the identification of their shareholders [R4, R5]. To explain this phenomenon, being a member of an alliance does not guarantee or restrict co-operation among members. For instance, enmity between the two prevents any collaboration between Turkish Airlines and Lufthansa. American Airlines no longer collaborates with Qatar Airways because of their country's differing geo-political stances on various issues in the Middle East region. In fact, geo-politics is the single greatest determinant of the U.S. airlines' relationships with all the Middle East airlines, whether they are members of the same alliance or not. Co-operating with competitors beyond any alliance membership is a new trend in the aviation industry, driven by actual need. For airlines, joining an alliance is ideal for marketing

purposes and the alliance definitely does possess power over airlines with its regulations. However, airlines will not attach themselves to any alliance which prevents them from expanding their opportunities to do business with other airlines or in other markets simply because they are members of those alliances and being restricted from doing so [R5].

“We can co-operate within our alliance or externally with the aim of gaining benefits. Two persons to perform a task are always better than one; except during a dispute, the co-operation will bring win-win situation in any case.”
(Senior Executive Level – Vietnam Airlines)

“When airlines co-operate with other airlines or with other partners, they are still very airline-centric. The first thing that comes into airline’s mind is who can I partner with that allows me to get more money out of my customers.”
(Senior Executive Level – NokScoot Airlines)

A further co-operation form in the airline industry is the joint-venture investment between an airline and a country, or between airlines. For example, after the bankruptcy of Royal Air Cambodge in 2001, the Cambodian government established a joint venture with Vietnam Airlines for the purpose of launching a new national flag carrier. Cambodia Angkor Air came into existence in 2009. It is an extreme exception for one national carrier, through a joint venture, to establish the national carrier of a neighboring country. Cambodia exhibits a lack of experience in operating an airline efficiently and has had a very close relationship with Vietnam for decades, leading to considerable co-operation initiatives in a wide variety of key economic sectors. A second case is that of NokScoot Airlines. This is a joint venture between Nok Air from Thailand and Singapore’s Scoot, a subsidiary of Singapore Airlines. The premise behind this co-operation is incredibly simple: each has what the other desires. Nok Air is primarily known as a domestic Thai carrier, with narrow body aircraft, aspiring to reach out beyond the Thai borders [R3]. For international flights, it needs to operate wide body aircraft. Scoot was found to be an appropriate partner to accommodate this desire with its international expertise and wide-body fleet. As a result, NokScoot was formed to fly internationally [R3].

“We are looking to have the right partner for the longer distance, and that’s why we have the co-operation with Scoot.”
(Senior Executive Level – NokScoot Airlines)

However, there will rarely be mergers between national carriers since these airlines relate heavily to national pride, identity and interests, and the skies are regulated by nations, not airlines [R5]. The national airline has to take great care of its image as the carrier of the national flag and its national interests [R3]. Despite low-cost carriers pushing the major airlines and keeping them on their toes, meaning they exert sufficient pressure on major airlines to retain reasonable prices, it is believed that the development of low-cost carriers will have far less impact on the number of major airlines in the region [R5]. A primary factor in this reduced impact is due to the nationalistic pride of the nations involved, especially within ASEAN. ASEAN consumers are proud of their national airlines and with the unique exception of Cambodia Angkor Air-Vietnam Airlines as cited above, no ASEAN country will surrender its national carrier to another nation [R5]. The torment of losing their national airline, a symbol of

national pride the world over, would be simply too awful for even the most unpatriotic citizen to bear. If Thai Airways were to acquire Vietnam Airlines, the Vietnamese people would raise their voices so severely and vociferously that their government would fight by fair means or foul, to prevent such an affront. This nationalism in Southeast Asia also plays a role in hampering the merging of all ASEAN member states into a single market, whether it be trade, monetary union or aviation [R5]. In the event that a national airline fails, national pride drives governments to prefer a natural demise rather than allow the national carrier to be subsumed by another country [R5]. Malaysia Airlines²⁰ is an illustrative case. News of the potential demise of the country's national carrier, Malaysia Airlines made the headlines in April 2019. The news prompted reactions from Malaysians from all walks of life including music artistes. Sasi The Don, a pop star musician, wrote a song "Keep Flying" with his fellow musicians to express their love for Malaysia Airlines and called on Malaysians to "keep flying" for what matters most to them and thanking the national carrier for being an inspiration.

"We wish to dedicate this song to MAS because we all can't imagine losing our national airline, our national pride and joy."
(Sasi – Song Producer)²¹

Malaysia Airlines has encountered well documented troubles in recent times, with one aircraft vanishing over the Indian Ocean while en route from Kuala Lumpur to Beijing and another shot down over eastern Ukraine. Though being taken over by a sovereign wealth fund, Khazanah Nasional, the airline has been restructured and still suffered losses for years, leading to the Malaysian government considering the future of their flag carrier of being invested, sold or closed. However, the airline's management team continues improving by code-sharing with Qatar Airways to cover the Middle Eastern airline's service between Penang and Doha as well as from Doha to North America. A collaborating joint-venture has been established with Japan Airlines allowing passengers to fly between Japan and Malaysia, as well as between Southeast Asia and North America via Japan. The joint-venture co-operation between the Japan Airlines and Malaysia Airlines is in the form of sharing flights and tying-up²² in order to strengthen the network of international flights for both airlines. Though Qatar Airways sees this an opportunity to acquire Malaysia Airlines and set foot firmly in the rapidly growing Southeast Asian market, the sale of the airline will create potential hurdles in terms of political issues for both airlines. Entering into the joint venture with Japan Airlines did not require them to take a stake in Malaysia Airlines as Japan Airlines is prevented from making investments and flying new routes by conditions placed on its bailout by the government in consideration of All Nippon Airways. Furthermore, Malaysia Airlines, which is a premium and national airline, cannot be merged or acquired by Derry Air, a low-cost carrier. Thus, though there are several foreign companies including from Europe, Asia and the Middle East, keen on acquiring a stake in

²⁰ Secondary sources:

<https://simpleflying.com/qatar-airways-malaysia-airlines-acquisition/>

<https://www.theedgemarkets.com/article/>

<https://asia.nikkei.com/Business/Companies/>

²¹ Secondary source: <https://www.malaymail.com/news/>

²² In the aviation industry, the tie ups allow partners to share income like a single company as well as adjust flight and fare schedules.

Malaysia Airlines, Khazanah Nasional would sell part of the national carrier's interest only for the sake of the national interest.

Significantly greater co-operation in the airline industry is required as the business environment becomes ever more difficult. Apart from joining an alliance or forming joint-ventures, other services are being shared among airlines as well. Areas such as human resources and maintenance can be a win-win situation for all involved. Airlines are urged to share the common suppliers and infrastructure as a simple yet effective way to cut costs [R4]. In this area, there is no price war between airlines, but rather, they are allies in the main war against their common enemy, "costs" [R1, R4]. Prices cannot be set lower than the current common rate in the market and managers can find no further ways to reduce costs unilaterally [R1, R8]. Moreover, prices in the airline industry are not fixed over time but fluctuate according to market supply and demand [R1, R4, R9]. An airline can only defeat its rivals if its managers can maintain good service quality at a reasonable cost and sell with a price that brings the highest monetary efficacy [R1, R4].

"The important point is that, to make people feel justified when flying with an airline, the rendered services and monetary values must match. This is the success factor of an airline."

(Senior Executive Level – Vietnam Airlines)

In order to implement efficient cost management of fuel consumption, close co-operation between pilots and the operational control center is required [R7, R14]. For each flight, the pilot must adjust his actions flexibly to balance the fuel concern. This assists the airline to save fuel, a heavy burden on operating costs. Fuel-related savings does not automatically mean attempting to consume less fuel. For example, a pilot normally cannot save much fuel on short-haul flights, but savings can be made on long-haul flights [R14]. Sometimes they must burn extra fuel to meet the arrival time so passengers can make connecting flights. This suggestion is made to the pilot by the operational control center through the airline system when they calculate that the expense of a late arrival will be greater than burning more fuel than required by the maximum economic speed. Therefore, it is a matter of co-ordination within the internal human resource system. The pilots can manage the extra fuel before departure on the proviso that a 20-minute delay in arriving is acceptable [R14, R17].

Fuel consumption increases in proportion to aircraft weight. In Japan, executive managers even employ a special type of lightweight paint for the aircraft in order to reduce fuel consumption [R14]. The maximum take-off weight will depend on the aircraft type and the distance of the route. Thus, airlines must balance the customer and luggage load over the total weight load of the aircraft and calculate the appropriate fuel consumption. When a cost cutting program is carried out, pilots are even required to fly at a certain speed and maintain a certain altitude to save fuel. The pilots will not add power during the descent until landing [R17]. This cost cutting measure can be applied in normal weather. Fuel consumption increases in turbulent weather because the pilot needs to fly evasion patterns. However, with computer assistance to calculate a fuel-efficient approach, nowadays the air traffic control system and procedures are in place to support pilots in saving fuel [R17].

“Jet fuel used for aircraft is different from normal fuel. It is very easy to vaporize and lightweight in order not to increase costs. The luggage carried by the aircraft are heavy, that’s why the fuel should be light to balance that.”

(Manager Level – Qatar Airways Vietnam’s Station)

Fuel prices not only affect the aviation industry, but also the entire economy across numerous industries including maritime, cargo, motor vehicle, plastics, etc [R5]. Depending upon the airline, fuel costs can range from 25% to 35% on average, or approximately one third of all operating costs [R1, R11, R12]. When fuel prices double, triple or quadruple, airlines will be severely affected because ticket sales can only recover the total cost and generate no profits [R6]. If the fuel price rises 10 cents per liter, the big airlines will incur costs potentially amounting to billions of dollars [R9]. As a result, airlines are meticulously careful in fuel purchasing and refueling locations. For example, if fuel is cheaper in Phnom Penh than Bangkok, the airline will take on surplus fuel in Phnom Penh for the return flight to Bangkok, despite the additional weight increasing fuel consumption [R14]. Airlines also calculate the seats carefully to balance costs in attempting to fly with surplus fuel from a cheaper fuel location. Vice-versa, if fuel is cheaper in Bangkok, the airline will refuel in Bangkok and fly two or three more routes before a final arrival in Bangkok [R14].

“The fuel price impacts terribly because the fuel cost accounts for 25% - 30% of the airline’s costs. When the fuel price goes up, it accounts for 35% and when the fuel price goes down, it accounts for 25%.”

(Senior Executive Level – Vietnam Airlines)

Airline managers will adjust fares according to fuel price decreases or increases and depending upon market demand. When fuel prices decrease, some airlines will decrease fares accordingly in order to treat their customers fairly. Some airlines, however, will take this opportunity to increase profit by maintaining ticket prices at levels prior to the fuel price decrease. Vice-versa, if the fuel price increases, it is not always a certainty that ticket prices will increase in line with fuel prices because of airlines’ attitudes towards their customers and their perception of the market situation as mentioned [R1]. As a national carrier for almost 100 million people with wide route networks, Vietnam Airlines gives its customers a benefit by absorbing higher fuel prices [R1]. For a dynamic LCC such as Derry Air, the airline has been able to manage costs even with fuel price fluctuations [R2]. Most importantly, the management team always maintains a very positive outlook and is creatively proactive in managing the airline’s costs. This has been the airline’s approach and the management team maintains that discipline despite fuel price fluctuations.

“In general, airlines expect the fuel price is about USD \$70-80 per barrel Jet A-1. If the fuel price is higher, it will be a problem, and there is no way to cover the loss. We cannot push up the ticket prices because if the ticket prices are too high, passengers cannot afford to buy them. So, airlines expect a stable fuel price for their business, as this is the main factor of cost.”

(Senior Executive Level – Vietnam Airlines)

“We are always very positive. Even if the oil price goes up, we will find ways to manage it, and we think a good example we did with the fuel prices going high, we didn’t put a fuel surcharge on anybody.”

(Senior Executive Level – Derry Air)

In a country such as Cambodia, fuel is considered a big issue as the country imports 100% of its fuel requirements and there is a small cabal of fuel companies who operate as a monopoly cartel [R4]. If an airline flies from Phnom Penh to Bangkok, then Bangkok to Singapore and return, the costs will be different for each leg. Cambodia’s fuel companies commonly purchase fuel from Singapore as this country offers a larger and cheaper Jet A fuel market, including refineries. While the fuel price in Cambodia after importation is essentially high, the cost of human resources is quite low. However, if an airline chooses to refuel in Singapore, where fuel-only prices are lower, it must consider the cost of the human resources which is much higher than in Cambodia. Therefore, the increase in cost depends on a wide variety of factors, and the percentages of the total costs are different in each country. Thus, the airlines must maintain their operations in line with each country’s unique characteristics [R4]. On the other hand, fuel prices impact the route development plan of an airline because the costs endured at each destination are different while the fuel price may remain the same. Thus, airlines must define destinations which bring greater profits [R4].

The totality of fuel prices is even more woven into the fabric of the aviation industry than most others as airlines will undertake fuel hedging. Fuel hedging is a contractual tool to help major airlines, who consume large volumes of fuel, to stabilize their costs over the long term in an attempt to ameliorate the impact of high fuel price volatility [R4, R5, R6, R7, R9]. Hedging is not a tool used by every airline. It is more suitable to major airlines as they can contract big fuel hedging suppliers, whereas an LCC, a small airline or a new airline cannot do so [R1, R4, R5, R6, R7, R9]. Regardless, many airlines hedge badly. It is difficult to estimate the level of hedging [R5, R9]. Whether or not to hedge at all, or to hedge too much is a constant issue for airlines. The example of Air France illustrates a hedging failure where the airline hedged too aggressively in expectation of falling oil prices. The caution in hedging led Air France to losses within two years, yet the losses did not actually reflect an unhealthy performance, lack of passengers or bad yields. In the aviation industry, even though an airline’s yields are good, they may not be able to profit from that because all benefits can be completely annihilated by their hedge coverage [R5]. For state-owned airline companies in ASEAN, the management team hedges more conservatively because of the risk of being held legally responsible and liable [R7, R9].

There are both short and long term reasons for why airlines may not benefit from oil price drops over the next five years. In the short term, oil prices continued rising in 2018 and became unpredictable [R5]. Oil price fluctuations are notoriously difficult to foresee in the long term and people have no idea how much prices may rise or fall. Even the most experienced, knowledgeable experts working in the oil and gas industry are unable to make accurate predictions [R5, R9]. Normally, fuel prices increase when economies are flourishing and there is a commensurately greater energy demand. This leaves some margin for the airlines to pass on to their passengers. In addition, when the fuel issue becomes an obstruction, the aviation technologies must improve or change [R5]. The aviation industry will either trigger the

improvement of more fuel-efficient aircraft technology or look to alternative options such as electric or solar power which might come into operation in the future when the planet's oil reserves have been fully depleted [R5]. Firstly, if the fuel price is high in an airline's home country, that airline must invest in fuel efficient aircraft. The savings are not apparent on a monthly basis but can be seen as a huge accumulation over a longer timeframe, such as a decade [R5]. If an airline loses 15% on aircraft efficiency, it will pay more on leasing fees. Contrarily, some airlines are supported by their governments, such as those countries where oil is cheaper than water. In the Middle East, airlines care little about fuel efficiency. Their concentration is on the size of their aircraft, the number of seats, flights and passengers [R4, R9]. Secondly, when the oil price rises, the faster new technologies will be innovated. Industrial companies will be motivated to invest in electric engines in order to come up with solutions quickly [R5]. When the oil price is stable at a low level, airlines tend to purchase less aircraft and reserve available aircraft for utilization over the long term. As a result, research and development teams at the aircraft manufacturers are not required to innovate urgently. However, as soon as the oil price rises again, innovation becomes an essential and the first priority of focus [R5].

Beyond fuel consumption savings, mutual co-operation is required for airlines to share maintenance services at their hubs in order to minimize the huge costs [R4, R9]. It is extraordinarily difficult for airlines to procure a full suite of spare parts, or to construct and undertake their own line maintenance at every hub. A massive financial capital investment is required. Therefore, maintenance companies are strategically located across many different hubs, making it beneficial for airlines to join those hubs [R4, R9]. Furthermore, airlines cannot anticipate in advance when technical problems may occur. Though an aircraft engine may be designed to operate for more than 10 years, it can in fact shut down at any moment [R9]. For example, once an aircraft becomes unserviceable, it is necessary to locate the replacement parts immediately at the hubs. If not, it can take years to order the spare parts. This leads to a business loss as the aircraft will remain grounded awaiting repair. The example in Cambodia demonstrates this co-operative maintenance approach. Each airline operates a fleet of only four or five aircraft [R4]. The airlines swap spare parts because prices to acquire all possibly required spare parts are simply too high for any single airline to bear [R4].

Additionally, local airlines attempt to share the same suppliers as a further cost saving measure [R4, R9]. They negotiate to invest in a bigger aircraft fleet in order to have more options and make more efficient use of the same systems [R4]. A major saving is made on the cost of labor, as pilots and engineers are licensed to operate and maintain a single aircraft type, and parts [R4, R9]. Therefore, airlines co-operate with each other to contribute to a mutual pool of spare parts for the same type of aircraft, even though any particular airline may not be in need of the parts it has in inventory at any particular time [R4, R9]. Airlines in the same alliance may use those spare parts and then have a duty to replace what they use without delay in order for the other airlines to have that part available as may be needed. As a result, even as competitors, airlines must also be partners in some respects, i.e. sharing common warehouses and parts, for the sake of their own business and ultimately for their customers as well [R4, R9].

“Airlines are always trying to reduce costs, but that applies to other business as well. You are trying to improve efficiencies. You are trying to improve the ratio between the number of people and the number of aircraft that you have, and

everybody is trying to find ways to operate more effectively.”

(Senior Executive Level – NokScoot Airlines)

“So, effectiveness is all managed in many pockets. At the end of the day, to give the result that we want, a cost-effective business, but more importantly, the ability to allow passengers to fly at low fares.”

(Senior Executive Level – Derry Air)

From this presentation, we can conclude as following:

→ *Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to differentiate themselves and seek co-operative arrangements with rivals in order to develop and save costs, instead of focusing their efforts on price competition.*

17.3 Route Development for Growing and Surviving

The third strategy to gain profit is to develop the market by opening new routes [R1, R4, R5, R6, R7, R9]. In the ASEAN market, the number of travelers increases 15% - 20% annually, leading to new airlines' and chaotic competition [R5]. The stability of the U.S. market, after 20 years of massive growth, has facilitated the U.S. airlines reaching profitability [R1]. The profitability of the ASEAN airline industry can only be maximized if airline numbers are consolidated and the market categorizes itself as in the U.S. market with constant numbers of travelers and route networks [R1]. However, in a market currently as competitive as ASEAN, it depends on the airlines' qualification, fleet condition and ambition to expand the market [R1]. For instance, Vietnam Airlines' objective is to become a favorite and top three airline in Asia, and the airline Vietnamese people love to work for. Thus, it will set out its own criteria and objectives for the next five to ten years in order to have a direction to follow [R1]. Meanwhile, other airlines try to obtain profits by maintaining their fleet and a yearly profit of 10%, significantly higher than the industry profit of 4% [R1, R5].

All strategies focusing on gaining market share, growth and profitability depend on the will of each airline's shareholders [R4, R5]. Airline managers must balance the issues of whether they desire to grow by putting in more investments and flying more with the commensurate risk of unprofitability because they can possibly gain profits if they fly less [R1, R4]. On the contrary, if they limit their scale of operations, they will atrophy and become smaller by losing market share and gradually being overwhelmed or swallowed up by other major airlines [R1]. An unfortunate issue in the airline industry is the constant pressure to grow because there is always pressure from rising costs [R3]. When the pressure to grow becomes critical, the airline has to either open routes to new destinations or operate flights at a higher frequency [R3]. When an airline opens a route to a new destination, it will have to develop that destination as well [R3]. The airline cannot expect the new destination to return a profit in a short time because it must endure the initial start-up costs, including the station's setup process, the personnel structure and lower frequency of flights in the initial stages [R3]. Airline managers should divide the number of flights by the same number of people to maximize efficiency [R3].

“That takes time. It’s not something that people are just operating a bigger network for the sake of having a bigger network. I am not saying that people are not doing so, but most of the airlines will have to grow at least for certain percentage to keep up the rising cost structure”

(Senior Executive Level – NokScoot Airlines)

For Derry Air, the airline has sufficient studies to head its new destinations. The population factor is extremely important because the airline is not supposed to conduct one-way movements but needs to facilitate reciprocal movement, otherwise it will suffer cost penalties [R2]. Therefore, it is important, in preparation for the launching of new destinations to work closely with the local governments, the destinations’ agencies, tourism agencies and operators, and all levels of local councils to encourage a two-way traffic flow [R2, R13]. The Derry Air management team has sensitively considered its new route development because it is crucial from the level of the services rendered, in terms of scheduling and most importantly in terms of cost [R2]. The mission of the airline is to ensure the best facilitation for passengers and the opportunity to fly at low-cost [R12]. It is believed that strategic thinking is always essential for an airline to develop its market, while cost is a factor, however, that most airlines continue to keep a focus on [R2]. Being an efficient operator, Derry Air not only reduces costs for the airline itself, but also allows passengers to benefit in terms of purchasing and flying to their destinations of choice [R2]. Derry Air is rather adept at being, to a certain degree, different to its competitors. The airline began its business by flying into second-tier cities and has always explored new destinations [R2, R13]. One recent destination is the resort and holiday island of Phu Quoc, in Vietnam, which no other Indonesian airline had previously targeted [R2]. Derry Air was encouraged to make Phu Quoc, where there is a natural beach to be enjoyed, a surprise tourist destination for Indonesian customers by opening high frequency direct flights [R2].

“We fly to Phu Quoc. But if we only fly there once a week, it won’t work, right? Because no one will stay there one week and wait for our aircraft, which will only arrive one week later.”

(Senior Executive Level – Derry Air)

With a transparent strategy, Derry Air can develop healthily in the tough and competitive ASEAN market, and continue growing while other LCCs are not able to catch up with them [R13]. The airline’s strategy is to focus on niche markets, destinations where few people currently travel, and which are currently not served by other airlines [R13]. Secondly, Derry Air’s proactive strategy is to transform those niche markets into established markets by investing in those locales as their destinations [R13]. As the number of passengers to that destination increases, with less competition, the airline obviously becomes the principal carrier serving that destination [R13]. Any particular airline is not limited to flying into second, third or even fourth-tier cities, however, issues relating to availability and the standard of airport infrastructure, which are external factors, can serve to dissuade airlines from developing routes to those destinations [R13].

Aviation infrastructure in some ASEAN countries, such as Cambodia, Myanmar, Laos, and Vietnam, are not yet fully developed [R1]. At this period in time, many airlines are discouraged from making their presence felt in these countries because the existing infrastructure is already

overloaded, especially at the international airports in main cities such as Ho Chi Minh City and Hanoi in Vietnam [R12, R13]. As a result, new airlines entering the market should seek to find a niche market destination to fly from airports in other cities in which unexploited capacity currently exists, i.e. Bamboo Airways is setting up its hub in Thanh Hoa province; the future Vietravel Airlines will establish its hub in the city of Hue [R13]. In Vietnam, there are over 20 civilian airports located throughout the provinces, 11 are designated as ‘International’, yet the infrastructure quality at these provincial airports still does not adequately meet international standards and much spare capacity remains because most airlines operate, for both domestic and international flights, out of Tan Son Nhat International in Ho Chi Minh City and Noi Bai International in Hanoi [R13].

“Vietnam Airlines has encountered a problem with the infrastructure of the country, which means that the airports are not modernized. People are not familiar with the latest technology trends, and we do not have time to prepare and implement as we are short of highly qualified personnel.”

(Senior Executive Level – Vietnam Airlines)

As a matter of fact, in order to reduce the overload at the major airports, ASEAN member states such as Thailand and Malaysia have built separate airports for low-cost carriers [R15]. Thailand has been able to develop its airline capabilities very aggressively thanks to the two airports located in the metropolis of Bangkok, being Savarnabumi International Airport and Don Mueang International Airport [R15]. In the past, Don Mueang International Airport served as the main international airport, then was closed for two years, before being re-opened as a base for low-cost carriers to operate from [R15]. Similarly, Kular Lumpur in Malaysia is also served by two airports, KLIA1 and KLIA2, for full-service and low-cost carriers respectively [R15]. In Cambodia’s young and dynamic airline industry, airport infrastructure has been upgraded to double the national capacity to over ten million passengers annually in an effort to support the economic growth of the country [R18].

In regard to positive aspects of route development, airports will provide favorable conditions for the airlines with marketing, tourism promotion support, or even kickbacks, with the aim of attracting airlines to open or operate a route to the destination that airport serves [R5]. For example, an airline could decide to only operate into airports that eliminate landing taxes for the first two years of operation, or they may agree to fly to airports that invest US 150 thousand annually in marketing funding to promote that airline, or the country destination in their own city [R5]. Though it is illegal, it can be seen as a form of co-operation between the airlines and their service providers, for example Ryanair only flies to airports which pay them to fly to that airport, for the Ryanair reputation can help with an airport’s marketing efforts [R5]. Similarly, Cambodian Airports encourage new foreign airlines to fly into the country by supporting them with marketing promotions [R18]. For Derry Air, with its solid experience and significant growth widely known throughout the region, the airline has surmounted this issue by cultivating close collaboration with many airports, states or cities in terms of the benefits surrounding it flying to those destinations [R2, R13]. Derry Air has, in fact, been warmly welcomed and established good partnerships in the countries that it is flying to [R2].

“What we are getting at, is, Derry Air has always been adventurous and willing to take calculated risks, in terms of going to new places, and that is a strategy that we will still continue, and this strategy has built us into what we are today”
(Senior Executive Level – Derry Air)

Qatar Airways is highly renowned as the Middle Eastern airline having the highest flight frequencies in Vietnam [R6]. Qatar now has over 160 destinations world-wide, which is very important because there is no other international airline flying and operating to so many international destinations around the world [R6]. This is its key strength because the presence of Qatar Airways in ASEAN will stimulate tourism worldwide to visit Vietnam, especially from Europe and America, which are two of Qatar Airway’s principal markets [R6]. As a strong global airline, Qatar Airways opened a new destination route to Danang in Vietnam, in 2018 [R6]. The fact that it is operating routes into Vietnam’s three largest cities is to prove the airline’s commitment to a strong presence in Vietnam [R6]. The importance of the new destination is not only to develop the tourism market, but also to develop the economic and commercial markets, from which jobs will be generated and the disposable incomes of the local citizens will increase as well [R6].

“In addition to Danang, Qatar Airways opened 2 new destinations in the ASEAN region last year. They are Chiang Mai (Thailand) and Davao (Philippines). The importance of these destinations is mainly to develop the tourism markets. However, we do not only develop Danang as a tourism market, but also as an economic and commercial market.”
(Manager Level – Qatar Airways Vietnam’s Station)

At present, all airlines are undoubtedly conducting similar research and flying similar profitable routes [R9]. Airlines will not hesitate to immediately jump into profitable routes that their competitors are already operating [R9]. The competitors will not allow any single airline to enjoy those profits for the long-term when the load factor of the route is pushed up to 80% [R9]. Therefore, that original airline, as the pioneer in exploring and opening up a new route, must attempt to prevent competitors from sharing the market by either remaining above a 60% of load factor to make the route unattractive, or conversely, trying to dominate the market by monopolizing the most desirable slots and driving customers toward its products [R9]. The most dangerous competitors are those who have under-utilized aircraft capacity and strive to fly on others’ routes to share the market while their fixed cost will not increase [R9]. Therefore, most airlines will release a decision on opening a new route destination based on observing their competitors’ route network and the competitor’s performance on those routes [R2, R9].

“Sometimes, people as humans, are like that. Who goes first, and after a while they see good business then they go. One example is Bandung, we were the only international carrier that flew into Bandung, Indonesia. Small airport at that point, and as of now we have 13 international flights from different carriers daily then. So, it’s something that we started and then I guess when people see that ‘Ah, Derry Air is doing OK’ that’s why we come, and everyone benefits.”
(Senior Executive Level – Derry Air)

SECTION 18

COMBINATION OF INTERNAL IMPROVEMENT STRATEGIES

In today's fast-paced world, innovation and growth are key to business success. Technological advancements, mentioned in Section 15, act as a need to do more with less and ever changing customer expectations are all having a significant impact on operations. As a result, organizations need the ability to quickly adjust their strategies and develop new ones in order to streamline operations and take advantage of new opportunities (Berkowski, 2018). In this section, we present the airlines' strategies used to strengthen their internal resources in order to improve their operations and create their own competitive advantages. Within these strategies, airlines are dealing with other groups of stakeholders including aircraft manufacturers, employees, shareholders, activist groups, associations and government. The internal improvement strategies are the process that need to define and deploy with the engagement of the organization's all employees in a valuable way by aligning internal business processes to deliver better external outcomes (Joe, 2017).

18.1 Optimization of Operation with Aircraft Investment and Utilization

Nowadays, airlines need to enlarge their scale of operations or achieve special competitive advantages in order to compete [R4]. When airlines are small in scale, they will normally incur higher costs, particularly in relation to aircraft acquisition, financing, and maintenance [R4]. These costs are considered relatively high when compared to airlines of a bigger scale [R3, R4]. Additionally, significant or unique competitive advantages for an airline may make it completely immune to competition [R4]. The most impressive example of this is illustrated by Bangkok Airways, which owns its own private airport on the Thai resort island of Koh Samui [R4]. Bangkok Airways may not need to rely on other strategies because this advantage is, in all likelihood, the premier option [R3, R4]. The second advantage the airline can profit from is having unlimited traffic rights through control of its own airport, an advantage which very few airlines can ever hope to possess [R3, R4]. The third advantage is having priority of choice over the most desirable slots, something no other airline can have, regardless of the existence of Open Skies [R3]. It is assumed that the Open Skies will assist the airlines to liberalize the regional market, however, Open Skies without access to profitable slots will be of no great help to other airlines [R3, R4, R9]. Thus, the strategy is basically dependent upon the strength of the airline itself [R3, R4].

In fact, there is no single strategy for any airline to use in order to reach the optimum profitability, but there is a requirement for both combination and contribution of elements drawn from the airline's resources and strategies [R1, R2, R3, R4, R5, R9]. The airline's resources include aircraft, finances and human resources, whereas the key strategies can be product differentiation, service improvement, marketing and market development [R1, R2, R3, R4, R5, R9]. A single factor cannot stand alone to underwrite the airline's profitability because, for example, if an airline strives to spend a large budget on marketing, yet its services are not as good as advertised, then it will not be profitable [R4, R9]. In another scenario, if an airline can provide good service, marketing and sales, but its operations are badly managed, for

example, with flight delays due to maintenance issues, then that airline will not be profitable either [R4]. In the past, Vietnam Airlines was not highly appreciated by consumers because their aircraft were old and their services were unpleasant, while now, however, the reason the airline is currently certified with a 4-star Skytrax rating is because it has striven to attain this goal by implementing different strategies, including brand new aircraft such as A350, A380 and B787; improvements to in-flight and cabin crew services; the improvement of the operations team; and punctual boarding times [R4]. When these four factors coalesced, the image of Vietnam Airlines improved, and the airline is internationally recognized as a 4-star airline [R4]. As a result, the airline's Senior Executive Level and the management team must know how to balance all the elements, and resolve as a whole, the combination of multiple strategies from various areas [R4].

In regard to generating profits, this is not entirely up to the airline itself as there are circumstances which are beyond the airline's control [R3]. Profitability also depends on external factors such as economic impacts, competition levels, customer demand, unexpected influences, etc. [R3]. For instance, the ASEAN airlines must endure major expenses, which account for over 60% of total operating expenses, denominated in foreign currencies, such as aircraft leasing, acquisition, maintenance costs, insurance premiums, and fuel costs [R6]. Currency fluctuations inevitably affect airlines' expenses because they cannot be controlled or forecast accurately due to the influences of both domestic and global economic conditions [R3, R5]. Another example illustrating an unexpected influence is when a boat accident occurred in Thailand involving Chinese travelers, which had a flow-on effect that impacted strongly on the local tourism market as Chinese visitors cancelled or postponed their trips [R3]. Though it was no fault of the airlines, it had a huge impact on the Thai airline industry as almost every Chinese customer coming to Thailand travels by air [R3].

“When you have an airline, then you have to apply for traffic rights. Then you have to comply, you have to fly, otherwise you are losing the right to fly. There are so many unexpected factors that takes a bit away of the flexibility from the airline to handle situations.”

(Senior Executive Level – NokScoot Airlines)

In the airline industry, profits can be generated from different sources depending on the airlines' strategies [R6]. The airlines do not profit greatly from passenger transportation, but instead, air freight transport will be a growing business for the airline industry into the future, as the passenger carriage business is nearing saturation [R6]. The profits generated from passengers are derived primarily from changing dates or seats, and overweight luggage penalties [R6]. However, this type of profit cannot compare to the profits able to be generated from cargo and airfreight, which are now a focus for most airlines [R6]. Other sources of profit can come from ancillary services, including overweight luggage charges, duty free, aircraft leasing, catering services, line maintenance, and ground services [R4, R6, R9]. For example, when Singapore Airlines replaced its fleet with new aircraft models, it generated a huge source of income from selling and leasing aircraft, which have been in use for nine or ten years, to low-cost carriers or to airlines in less developed countries [R6]. Similarly, Qatar Airways also generates profits from aircraft leasing and other ancillary services, which helped it to cover its business

performance when the airline was not performing strongly in the passenger segment during the blockade period in the Middle East [R6].

“Qatar Airways has a catering service subsidiary to supply in-flight meals to more than 200 airlines in Doha. This subsidiary was just established, but it was invested correctly, and this is a very important point.”

(Manager Level – Qatar Airways Vietnam’s Station)

The investment in aircraft, and the utilization of aircraft types are essential elements in optimizing an airline’s operation and influence its profit generation [R4, R5, R9]. The point of view of the airlines is totally different to that of the passengers, for while the airlines must set strategies to increase profits, customers always demand the best comfort, facilities and price [R5]. If a passenger has a choice in selecting the aircraft they would prefer to board, of course, they would choose the larger aircraft [R5]. However, 95% of travellers have no idea of the aircraft model they are going to board, though this information is available on the air ticket [R5]. Most air travelers have no notion of the differences between an Airbus A320 and a Boeing B777 because there is a lack of aviation knowledge in the community in general [R5]. This fact is also been proved with four clusters’s behaviour in the quantitative analysis section, revealing the passengers do not know or notice of the aircraft models while they are on-board. Despite how much passengers may love to fly in wide body aircraft, airlines only use wide body aircraft on long-haul flights, or short-haul flights on routes where there is huge and consistent market demand [R5, R9]. The most successful commercialized aircraft models, which are utilized for both long-haul and short-haul flights, are the Boeing B747, Airbus A350, A320 and ATR 72-500/600 [R5]. While passengers may be hesitant to fly in the turbo-prop ATR, this is a very popular aircraft in terms of use and sales success [R5]. Thus, it can be shown that airlines do not care what aircraft type their customers prefer, but only about the appropriate aircraft for their operations in terms of being suitable for the route, the frequency, the time and the yield [R4, R5, R9].

In line with customer preference, there is a new trend for airlines to differentiate their on-board products on narrow body aircraft [R5]. SilkAir is an example clearly demonstrating this trend by reconfiguring the cabin with four flash beds as a business class in its narrow body aircraft, a phenomenon which is quite rare, when it returns to Singapore Airlines and operates Singapore Airlines’ flights [R5]. Philippine Airlines is also following this trend, with the A320 on order, and many narrow body aircraft models are now equipped with on-board TV systems similar to those found on wide body aircraft [R5]. Business class passengers can find full flash beds in the B737 fleets of Malaysia Airlines, Philippine Airlines and SilkAir, and even Qatar Airways in its A320 fleet [R5]. Thus, whereas previously only passengers flying in wide body aircraft had access to this kind of on-board product, now, narrow body aircraft passengers can experience the same type of product [R5]. In addition, it is true that customers prefer new aircraft and airlines do communicate with the public about their aircraft orders and purchases and conduct more marketing around new aircraft deliveries today than they did in the past [R5]. Loyal customers, regular travellers and the loyalty program members are the ones most interested when an airline introduces a new aircraft model [R5, R6]. However, as discussed above, the majority of the travelling public will not be influenced by this factor as long as their ticket purchase decision is based on price, and the majority will not care that Singapore Airlines

or Derry Air will fly the B777 or the B737 [R5]. It is not possible to require customers to pay more to fly with a certain type of aircraft [R5]. Even though a traveler may clearly know the type of aircraft, it will not make any difference because this factor does not have any real impact on their consuming behaviour [R5]. Some people might pay a premium, if they are a member of the airline, because they simply want to accumulate miles for future usage, but this element obviously does not relate to the aircraft type [R5].

Some technical annoyances of an aircraft model, such as noise, may stimulate negative impressions, or involvement in a crash can be an element which affects consumer behaviour, in turn leading to the undesirability of flying with that aircraft type [R5]. For example, in order to restore its good image, Malaysia Airlines removed the B777 200-ER aircraft model from its fleet shortly after the crash of MH370, despite this aircraft being considered one of the best aircraft in the world [R5]. Another example is the negative image of the MA60 aircraft model, which has generated a bad reputation, and many customers do prefer not to fly with an airline operating the MA60 despite the fact this aircraft model is basically sound [R5]. In reality, the MA60 has been involved in an unusual number of crashes or incidents compared to the numbers produced and operating around the world [R5]. However, all of the various causes of the incidents and accidents should be examined, including pilot error [R5, R14]. Since there are four main factors investigators examine, technical, human, climate and criminal, if the cause did not derive from the aircraft itself or the two other external threats, weather or criminal interference, then only pilot error remains [R5, R14]. Should pilot error be identified as the cause of the incident or crash, the aircraft itself is rendered blameless, whether it be the MA60 or any other aircraft [R5].

Another example to prove that consumer behaviour does not change with the improvements of an aircraft model is the case of ATR 72-500 [R5]. The aircraft ATR 72-500 operates with quite higher engine noise penetration into the cabin compared to the ATR 72-600 [R5]. However, under the same outfit design, the travelling public barely notices the significant differences between the two models, nor the advances to be found in the ATR 72-600, but continue to think: “Oh, I don’t like to fly with the ATR because this aircraft is noisy, slow, small and cramped [R5].” Yet, in the airline’s view, a small aircraft such as the ATR would be suitable for exploratory flights when opening new routes which have less customers [R9]. The airline would then switch to larger aircraft when it has accumulated sufficient customers, and most importantly, it has been strengthened to cover the whole market, since to do otherwise, would entice rivals to use large aircraft to fly the route and poach customers who may otherwise have flown with the exploring airline [R9].

With regard to aircraft utilization, because of the many influential factors involved, it is quite difficult for airlines to fix utilization of small aircraft with higher flight frequencies or large aircraft with lower flight frequencies yet utilize the aircraft in a flexible way [R1, R4, R5, R9]. Firstly, the distance between the origination and destination points will largely determine whether the airline will use small or large aircraft, noting that a large aircraft can always fly a short distance, but a small aircraft may not be capable of flying a long distance [R4]. In Cambodia, KC International Airlines uses the ATR 72 to fly three to four times per day to carry its 200 passengers domestically, instead of flying an Airbus A320 twice per day, a carrying capacity which is almost the same [R4]. In regard to the efficiency factor, the ATR 72 costs less

in terms of fuel and handling charges and facilitates the airline with more flight frequencies which give more options to passengers [R4]. However, some other airlines will replace the ATR with an Airbus for short distance flights because the cost-per-seat of operating the Airbus will be cheaper than the ATR, while the leasing cost for both is similar [R4]. In another utilization complexity, the ATR is presently becoming less common in the market, leading to difficulties in locating spare parts and, furthermore, those spare parts which are available for the ATR 72 cost three times more than those for the A320 [R4]. Another important issue is that when the airline operates two or more aircraft types, it will incur additional costs to employ engineers and pilots qualified and certified for those different types of aircraft [R4, R9]. In the event that the ATR requires maintenance, the airline must substitute the A320 to fly the ATR's flights, thereby incurring a double cost [R4]. Conversely, the ATR cannot fully substitute for the A320 because of its range limitations compared to its engine power [R4]. Therefore, most airlines will choose the A320 over the ATR, to increase the flexibility of their available options, as they can utilize the A320 for longer destinations to cover the costs, while the ATR 72 cannot fulfil this function even though the leasing fee may be the same [R4].

Second, having a sufficient number of customers is a decisive factor in determining whether or not an airline will use the larger aircraft [R9]. Profitability will be generated from efficient performance because the operating costs for office leasing, staff, pilots, crews, etc. will remain constant, regardless of whether the aircraft flies or remains on the tarmac [R3, R4, R9]. If the load factor is 70% for both smaller and larger aircraft types, then airline managers would utilize the larger aircraft for its greater profitability [R9]. If an airline can achieve a huge number of customers for a certain market, the airline can use the greater capacity of the B747 or B777, since the cost-per-seat will be much lower [R9]. For example, on the high-demand Tokyo to Osaka route, Japan Airlines always utilizes the B747 to carry 500 passengers per flight; similarly, Korean Air uses the B747 from Gimpo to Jeju to carry its passengers [R4, R9]. Geography is also a factor in determining how an airline will utilize its larger aircraft, for example, Ho Chi Minh City and Hanoi in Vietnam are around 2 hours flight time, or 2,000 km apart, Vietnam Airlines has used the A380 and the B787 to fly domestically for added capacity compared to the A320 [R1, R4]. With the larger aircraft, the airline is able to save costs and reduce the operational workload on pilots and crews [R4, R9]. Thus, in order to operate the larger aircraft, airline managers need to ensure an 80% load factor for profitability, and vice versa, smaller aircraft would be a more optimal choice [R4, R9]. The strategies would relate to many elements that airlines would utilize small or large aircraft for their operation [R1, R4, R9].

Another important factor is that airlines incur greater landing and take-off costs for larger aircraft [R1]. Scheduled and preventative maintenance of the undercarriage, landing gear and other equipment is a safety regulations requirement after a maximum number of usages [R1]. For example, if Vietnam Airlines uses a large aircraft to fly only the Hanoi-Saigon route, then the amount of landings and take-offs per flight hour increases, because of the relatively short distance, so the undercarriage and landing gear will undergo maintenance or change-out more frequently, thus leading to an increase in costs [R1]. Compare this to flights from Vietnam to France, which depart at 23:00 and arrive at 7:00 the following day, the latter has considerably more flight time between take-offs and landings, therefore the cost of operations and maintenance will certainly be lower [R1]. On the return leg, the aircraft is scheduled to depart

France at 10:00 and arrive in Vietnam early the next morning [R1]. To optimize aircraft utilization and reduce landing and taking-off frequency in order to minimize maintenance costs, the airline's strategy is to utilize larger aircraft for a combination of international and domestic routes [R1]. Thus, the aircraft returning from France is not grounded for the remainder of the day, but it is scheduled to fly two more domestic flights, e.g. Hanoi – Saigon and return [R1].

Further to the above, the allocation of slots is another crucial factor in determining aircraft utilization [R1, R4, R9]. The airline must ensure it has sufficient slots for all of its passenger demand because the airport may prevent it from flying too frequently within a day [R9]. If the airline has been offered four slots per day, its' strategy is to reserve the domestic slot for international flights and utilize the larger aircraft to carry the same number of passengers due to the difficulty in getting slots [R9]. When Vietnam Airlines found it difficult to apply for a slot to fly from Vietnam to China, where the airports are the busiest in the world, the airline should utilize larger aircraft, to carry all customers on one flight, rather than operate two flights [R1]. This strategy will resolve the issue of the airline not being able to apply for a second slot for an additional flight, while the management team wants to increase the passenger capacity from Hanoi to Beijing [R1]. Therefore, the method for gaining profitability, through the utilization of smaller or larger aircraft, with greater or lesser flight frequencies, depend on the impact of external factors, competition, financial resources, business structure and fleet structure of each airline [R1, R4, R9].

“We cannot say that the utilization of small or large aircraft has its pros and cons. Each is dependent on the situation. We have to utilize large aircraft in certain conditions. It is not only good to use just small aircraft. Flying a lot does not mean flying good. Flying many aircraft or flying just one aircraft does not mean good either.”

(Senior Executive Level – Vietnam Airlines)

At a time when airlines prefer frequency over aircraft size for utilization, the new wide body aircraft, that are replacing the older wide body designs, tend to offer less seats for three reasons [R5]. The first is because the airlines currently tend to assign priority to frequency over capacity [R5]. In order to offer greater flight frequencies without disrupting the market, the aircraft should have fewer seats [R5]. The second reason is because airlines seek differentiation by splitting their cabins into more classes, such as Economy, Premium Economy, Business and First Class [R5]. The more classes the airline offers, the fewer seats it has on-board the aircraft because the seat designs for classes above Economy occupy more cabin space per seat [R5]. The third reason is that the new aircraft, on the whole, are smaller than the aircraft they are replacing [R5]. For instance, Philippine Airlines replaced the A340 with the A350, which is fitted-out with less seat space in the cabin [R5]. The airline chooses to operate the A350 to Europe and the U.S., with less seats and better yield, in preference to more seats at a lower yield [R5]. Similarly, EVA Air phased out the B747-400 in October 2017 and replaced it with the B777, which has less seats [R5]. The trend is also seen with the A320 and A321, where these aircraft trade off less total seat numbers in exchange for bigger seats in Business Class [R5]. In a further example, Philippine Airlines' newly ordered A321 aircraft will be fitted-out with 168 seats by the manufacturer, a figure considered quite small in terms of the number of seats possible for the A321 aircraft type [R5]. However, in order to join the program and gain Skytrax

award, voted by passengers worldwide rating their customer satisfaction, the airline is not at liberty to freely increase economy cabin seat density [R5]. At the other end of the spectrum, low-cost carriers provide only one class and attempt to increase the cabin seat density as much as physically and safely possible, e.g. Cebu Pacific configures its new A321 with 230 seats, an increase of 62 seats over what Philippine Airlines has chosen to offer on the same aircraft type [R5].

The final reason airlines offer less seats per aircraft, or operate smaller aircraft, is because they are seeking profits from niche markets [R5]. Previously unprofitable destinations may be re-opened because airlines can now find these routes profitable with more economical aircraft and higher yields now available to them [R5]. It is the commercial benefits that the airlines will use to set their strategy for employing suitable aircraft for each route and market [R2, R4, R5, R7, R9, R15]. Some airlines, such as Emirates and Singapore Airlines, previously only operated wide body aircraft in their fleets, yet now they are looking more at narrow body aircraft [R5]. Singapore Airlines has operated wide body aircraft for the last 30 years, and with the integration of Silk Air, the airline has understood the important presence narrow body aircraft in their fleet have in addressing either smaller markets, or large markets at high frequencies [R5]. For Derry Air, the airline has only ever used one aircraft family, equipped with the latest aerodynamic designs and fuel efficiency innovations [R2, R5]. The airline's effectiveness is managed in several "pockets", with the ultimate objective being to deliver the desired commercial results, including being a cost-effective business, and providing the ability for passengers to fly at low-cost [R2].

"My aircraft are just a bit standard at the moment. All my aircraft are A320s. The only difference would be some newer ones having additional hot seats, 168 or 180 seats. The efficiencies are on the basis of standardizing the aircraft model, so when it comes to servicing to pilot training, it's the same standard."

(Senior Executive Level – Derry Air)

18.2 Focus on Human Resource Development for Service Improvement

Sir Richard Branson, the well-known Senior Executive Level and founder of Virgin Group, in which Virginia Atlantic Airlines is one of a number of airline industry subsidiaries, mused in his book "Finding My Virginitiy": *"The way you treat your employees is the way they will treat your customers"* [R5]. In fact, his contention is not only particularly important to the airline industry, but all industries and commercial enterprise as a whole [R5]. Currently, the airline industry is facing serious challenges in recruiting new employees, especially for technical jobs, where there is an enormous and ongoing shortage of pilots, and qualified and accredited aircraft engineers [R1, R2, R4, R5, R7, R12, R14, R16]. One of the causes behind this dearth of potential employees is that engineers and young people no longer find an airline career appealing, particularly in the wake of the aviation crises and global economic downturn in 2008, where many in the U.S. and in western countries particularly, shunned an aviation career [R5]. It is obvious that a pilot who flies an ATR turbo-prop aircraft will earn less than the pilot flying an A320 jet aircraft, and people who hold other ground positions do not receive higher salaries than those working in other industries [R5]. Therefore, it is quite challenging to find motivated

people to work in the airline industry because the salaries are not that great, and so as a consequence, the people who have ended up working in the airline industry recently are not overly passionate or motivated [R5, R14]. Since the demographic of airline employees has changed in recent times, the lack of passion for work in the airline industry has given rise to greater levels of dissatisfaction from customers, in turn leading to a downturn levels of service, at least in the public's perception [R5]. Hence, airlines who invest heavily in training programs for their employees tend to be more successful than those who simply recruit and replace because of their high personnel attrition rates [R5].

“We cannot do anything if there are no talents. Then we need to care for and enhance the existing manpower by training, providing more knowledge to employees, and this is one way.

(Senior Executive Level – Vietnam Airlines)

“The differentiation possibilities between the various airlines are fairly limited. You still have to strive for as much differentiation, within that limited spectrum, that you can do, and you still have to go for it. To go for it, you need the human resources to do that. It's not the aircraft doing it simply for yourself. You need the best human resources in order to make that small differentiation window become big, otherwise it's too small. So, the humans are the key factors to any kind of success.

(Senior Executive Level – NokScoot Airlines)

However, with some ASEAN societies remaining relatively underdeveloped, the airlines find it difficult identify and hire qualified employees locally [R1, R7]. The airlines can only attract sufficiently qualified personnel when the quality of the airline's education efforts have been greatly improved [R1]. On the flipside, as the society develops further, the cost for employees will also rise [R1]. Therefore, paying more for talented employees leads to an increase in the airline's operational costs, causing them to face the dilemma of how to maintain a balance in the proportion of talented and average employees in order to develop the business [R1]. Otherwise, if the airline hires only talented personnel, the labor costs will essentially be too high. While labor costs account for 15% to 20% of the overall operating costs, airline managers need only save a fraction in balancing this resource to save on payroll costs [R1]. Therefore, there are two issues the airline CEO should consider carefully: firstly, how to attract and acquire good, qualified personnel; and secondly, how to retain those talented employees at a reasonable cost [R1]. As a result, Derry Air's strategy is to focus on developing its employee's individual talents, and in so doing, make the airline an attractive place for them to work, grow and progress in terms of corporate culture and career progression [R2].

“We also promote internally in terms of their career progression and experience, because it is not a dead-end job in Derry Air, and as we grow, opportunities will grow, along with that of our people as well.”

(Senior Executive Level – Derry Air)

In regard to cockpit crews, the huge shortage of pilots is a very serious issue, not only in the ASEAN region, but for all airlines globally [R1, R2, R4, R5, R12, R14]. The job of being a

commercial airline pilot is a special profession, with cadet and trainee pilots compelled to meet certain compulsory criteria which require long training times [R1, R14]. Therefore, pilots cannot become qualified in an instant to meet the demands of the current market, nor when there are more aircraft purchased in the future [R1]. Even in Europe, LCCs always encounter pilot shortage problems during peak flying seasons. Because of insufficient pilot numbers, an airline may only be able to schedule flights for eight aircraft, despite having 10 aircraft available [R4, R9]. Therefore, the regulations and the minimum number of flight hours required for pilots and crews to attain qualification, have been reduced in order to provide more pilots to the market in a shorter space of time [R4]. For example, before the growth of Derry Air, people in ASEAN find it difficult to travel internationally as the air tickets were too expensive compared to their incomes [R4]. At present however, with Derry Air, with promotion tickets at U.S. \$30 to fly within the region, people are inspired to travel further, and new markets are created. After the success of Derry Air, many new LCCs were created in the region and the markets become larger, leading to a bustling aviation market which has exacerbated the pilot shortage problem within the ASEAN region [R4].

“How can we train pilots in a hurry? Each aircraft needs a couple of pilots, which means that one aircraft will consist of 4 to 5 crews, so how many pilots to be trained for 100 aircraft? In the future, the cost for pilots and technicians will be much higher than present.”

(Senior Executive Level – Vietnam Airlines)

In addressing pilot shortages, airlines may loan or exchange pilots with each other in order to cope up with temporary shortage situations or employ foreign pilots on higher salaries [R4, R9]. Due to differing weather and demand, airlines will have low and peak seasons for their business [R9]. For example, Cambodia’s low and peak seasons differ from those of Vietnam. The winter season in Cambodia, which is dry, is the peak flying season, while the rainy summer months are the low season [R9]. However, passenger demand in Vietnam is high in the summer season, from May to July, due to tourism and school holidays [R9]. As a result, airlines in Vietnam will co-operate with airlines in Cambodia to balance the number of pilots each has access to for both seasons in both countries, otherwise, the airlines would have to pay a huge amount of wages to pilots sitting idle for much of the low season [R9]. Similarly, European pilots are also recruited to fly in Asia during the low demand winter season in Europe. When the European summer returns, these pilots head back to Europe to fly in more comfortable weather rather than remain and endure the hot tropical summer season in Asia [R4, R9]. However, it is a strategic danger if the ASEAN airlines depend only on foreign captains and do not have a long term strategy for developing their own human resources [R12]. For foreign captains, the airlines cannot accurately measure or compare the quality of the pilots because the standards among these foreign pilots may be vastly different [R12]. When the market fluctuates, as it is projected to do with an increased shortage of pilots in the Arabic countries and the Pacific region, airlines will have little recourse other than to compete with each other by paying higher wages for pilots [R4].

In Vietnam, the government does not really invest in the aviation industry, so cadets must finance themselves, and accept the risk of a possibly unstable future, with no financial support or assistance from the government [R12]. Therefore, those who have the desire and passion for

becoming a pilot may not have sufficient funds to accept the risk that only if they can pass the cadet examinations, or if they can apply for a suitable job, will they be successful, and yet they must endure the cost regardless of the eventual outcome [R12]. In countries such as Japan and Australia, the airline industries and governments have recognized this problem in recent years, and have developed a strategy to build up a strategic pilot team for the country, with financial contributions from the states and the airlines [R12]. Those who attend the cadet program have been selected equitably in order to establish the base pilot team [R12]. The Japanese aviation schools test the cadets very strictly, and the student cadets are sponsored, with the government contributing one-third of the budget, and the airlines covering two-thirds when they receive candidates [R12]. For example, if the Japanese airlines plan to receive 50 cadets this year, they need to provide tuition fees for that number to the aviation schools, which is done transparently, in order to have a strategic pilot team becoming available each year [R12]. As a result, the Ministry of Transport in South Korea has followed this model and developed a strategic pilot training program for South Korea, after a period of drifting prior to recognition of the problem [R12]. In Vietnam, it will take a long time to stabilize the pilot force because of the current dependence on foreign pilots, and the situation will continue deteriorating as new airlines are created and enter the market [R12]. Since Vietnam does not set any regulations on strikes, the airlines are not cautious about the heavy impacts pilot strikes cause, most obviously flight reductions or cancellations [R12]. This will be a crucial issue, and even apply qualified core pilot teams as well [R12].

In response to this common dilemma, airlines such as Vietnam Airlines and Derry Air have established their own programs and sponsorships for young pilot cadets. For Derry Air, the airline implemented a cadet program in 2017 in order to create a steady supply of pilots for itself because this is an extremely competitive environment where there is a limited supply of pilots being sought by a strong market demand [R2]. In addition, the airlines also seek the cooperation of the aviation schools to obtain sufficient talented personnel, including pilots, maintenance engineers, middle and senior managers, for the industry because having unqualified or underqualified people will certainly lead to detrimental results [R2].

“The world right now faces a real shortage of pilots and we have on our side, a cadet program, and in 2020, we will have the first batch of 200 cadets who will become pilots. What we have realized over the years, the consistency of supply in terms of pilots into the system, was not really there.”

(Senior Executive Level – Derry Air)

In terms of pilot-related technology developments in the airline industry, some airlines are negotiating with aircraft manufactures to explore the idea of having only one pilot on board, or even no pilot at all, meaning the aircraft will be flown automatically and the shortage of pilots would immediately disappear as an issue [R5]. Technically, 90% of flight can be achieved successfully without pilots, and Boeing has even done testing on automated landings and take-offs [R4, R5]. However, this is a dangerous strategy because instead of addressing the human resource problem, the airlines are attempting to eliminate the problem, but not address it head-on [R5]. While a career as a pilot in the airline industry is not as appealing as it once was, and many pilots are unhappy, there are not yet sufficient compelling reasons to eliminate pilots from the flight-deck altogether [R5].

18.3 Strengthening Finance Resource for Sustainable Development

Finances play a crucial role in the development of the airline industry as well, and one which may severely affect the performance of an airline. The nominal cost of an aircraft is incredibly high and has increased over the decades [R5]. Airlines are required to inject more capital when acquiring aircraft to cover the costs of the advanced technologies developed and included by the manufacturers [R5]. The publicly listed price of an Airbus A380 is stated at around U.S. \$300 million, although airlines may pay less than this figure depending upon their negotiations, but nevertheless, the cost to acquire a new aircraft to rejuvenate the fleet every ten, twenty or thirty year has increased exponentially [R5]. As a result, the airline industry is not a profitable business when the profitability margins are compared to the cost of running the airline's operations and the ridiculously low-cost of acquiring materials [R5, R9].

Over the last 40 years, the airline industry worldwide has been unprofitable as a whole or has been profitable by a margin of 0.1% [R5, R9]. Therefore, it makes little sense to run airline as a business model, meaning it is quite difficult to find investors, and it is almost impossible to find an airline wholly self-financed or financed entirely by debt [R5]. In fact, the running costs are constantly unpredictable in the setting of a turbulent environment. For example, hostilities in the Middle East will lead to rising and unstable global oil prices, airlines will find it more expensive to operate because of the increased fuel prices. New technology has enticed airlines to invest hundred millions of dollars in new aircraft models, which consume less fuel, in an effort to mitigate the problem of unpredictable oil prices. Hence, airlines circle around in a vicious cycle of complicated acquisitions with limited financial capacity and the confrontation of generating profitability in a renewal process [R5].

On another level, this phenomenon not only affects the airlines, but the aircraft manufacturers, like Boeing, Airbus, ATR and Bombardier, as well [R5]. Due to the excessive costs involved in developing an entirely new airframe model, the trend among manufacturers is to be conservative in terms of research and development, and thus it takes longer for new models to be introduced to the market [R5]. The innovation and introduction of new aircraft types now comes much later than it did in the past, when manufacturers, primarily Airbus and Boeing, would publicly snipe at each other over the other's tardy production and deliveries, and even delay the development of new families of aircraft. One example to illustrate this conservatism is the existence of the continued use of the Boeing B737 aircraft, a model that has been in production since 1967, in which upgrades to the wings, engines, avionics and internal computer systems have been made, yet it remains basically the same airframe model right up to this day. It takes a long time for aircraft manufacturers to innovate and improve a family of aircraft, i.e. the Airbus A320 has been in use since 1997 and remains a widely utilized airframe [R5].

Further proof is given by the United State Navy (USN) requesting Boeing launch a study into a medium-haul utility aircraft, called the Multimission Maritime Aircraft (MMA), yet Boeing continually delayed this program in favour of launching the Boeing B787 Dreamliner and developing the B777, both of which were refinements of existing Boeing aircraft models, instead of working on an entirely new aircraft model [R5]. The reason behind this is that Boeing must be conservative in taking on the risk of investing in a new aircraft model which is not

100% guaranteed to be successful. Canada's Bombardier, the world's third largest aircraft manufacturer in terms of aircraft delivered, offers an illustration of the manufacturer's risks with the failure of its new CRJ aircraft. Despite the CRJ being an excellent aircraft, and extremely proficient at completing its designed mission purpose as a regional jetliner, this type of aircraft has generally been unsuccessful, in terms of sales, outside Canada and the U.S. The production line was shut down in 2006. The failure to achieve adequate sales led Bombardier to co-operate with Airbus in order to save the company, valued at billion of U.S. dollars, because Bombardier had invested too much finance into developing the new aircraft model with no certainty it could achieve sufficient customer sales [R5].

Aside from the manufacturers and airlines, aircraft leasing companies also have a role to play in support of airlines, by offering an additional aircraft financing option, and these companies do not endure the same manner of risk as stated above for the aircraft manufacturers [R5, R19]. Airlines can always purchase directly from the aircraft manufacturers, however, the acquisition is not guaranteed to be 100% successful, based on the airlines' reputation, operational history and the financial capacity [R19]. Sometimes, airlines should shelter under the umbrella of the financial leasing companies to purchase or lease aircraft under a leasing agreement, despite the finance leasing costs being higher than outright purchase [R5, R19]. The aircraft leasing company negotiates in advance for the airline to take possession of the aircraft as soon as it is delivered to the leasing company from the manufacturer, and aircraft ownership will transfer outright to the airline, generally after twelve years or in accordance with the contract [R5]. Other than in some exceptional cases, the aircraft leasing company will not purchase an aircraft and then shop around to find a lease airline [R5]. Previously there were many aircraft lessors in the market, however, numbers of these companies have merged recently to strengthen their financial capacity to acquire aircraft [R5, R19]. The example of the financial role of leasing companies involves the recent Airbus A380, a huge aircraft in terms of both size and acquisition cost, although, it seems, an unsuccessful aircraft model because of its inflexibility [R5]. Thus, no aircraft lessor is inclined to purchase this aircraft for lease since they have no commitments from the airline industry to take the aircraft [R5]. Therefore, financial resource pressures, caused by ever increasing aircraft acquisition costs, may prevent airlines from growing and innovating, and the need to identify and access new financing options may derail the airline industry if unsuccessful [R5].

18.4 Strong Decision-Making Power Rationalizing Failures

The Asian airlines are owned by a number of different shareholding models, e.g., Vietnam Airlines is owned by the Vietnamese government; Cathay Pacific belongs to a specific group, namely Air China. In Singapore, Singapore Airlines is majority owned by Temasek Holdings, the national sovereign wealth fund. While Philippine Airlines is the national carrier, it is a completely privatized airline belonging to Lucio Tan group. There are also many low-cost carriers in Southeast Asia, with none of them government owned or controlled, e.g. VietJet Air in Vietnam is controlled by HDB Bank, Derry Air is controlled by Tony Fernandes and other different investors in Malaysia. It is apparent that airlines are commonly owned or controlled by governments or groups of stakeholders. In other Southeast Asian countries, some airlines such as Vietnam Airlines and Garuda Airlines from Indonesia have sought to partially privatize,

but the process was not proven successful. In fact, governments are quite heavily involved with the destinies of the national carriers in Southeast Asia, even if they are not the key proprietor of those airlines. Therefore, ownership is not expected to open to public shareholders in the future [R5].

A foreign airline can become a shareholder of other weaker airlines by acquiring a stake [R6]. The questions are: “*What is the investor going to do with those airlines after the acquisition? Is the acquirer able to help the airlines to recover or is their stake too weak to raise disagreements against the board of directors when needed?*” In most ASEAN countries, as well as a number of others, foreign shareholders are restricted to a minority stake of up to 49%, meaning the acquirer does not have sufficient voting power on the board to change or restructure the airline, thus any losses may continue to accrue [R3, R6]. Compare Etihad Airways’ disastrous investments²³ attempting to revive the airlines it acquired, Air Berlin and Alitalia, to Qatar Airways investments in LATAM, Cathay Pacific and IAG, the parent company of British Airways, which are all well-developed partners. Etihad believed it could simultaneously restructure their investment partners and make them profitable by demanding changes to routes, schedules and even to take control of the airline altogether. However, Etihad was met with stiff resistance to change, and staff unwilling to comply, leading to the bankruptcy of both Air Berlin and Alitalia in 2017. On one hand, Etihad hoped by investing in these airlines it would make inroads in hostile nations and build feeder traffic for Abu Dhabi to become a hub to rival Dubai. On the other hand, these airlines thought their investor would simply keep pumping in money while everything else would remain the same, thus sparking the conflict and the eventual demise of both airlines.

“It is also risky to invest on the loss-making airlines. We will not only inject money, but also consider their management team, and whether that airline deserves for us to put in all of our efforts.”

(Manager Level – Qatar Airways Vietnam’s Station)

In the airline industry, shareholders may either have a strong influence on the airline’s operations, or they may choose to remain as a passive investor and not be directly involved in the carrier’s operations [R4, R5]. Government shareholders, however, are rarely passive investors and they may exert a positive or negative influence on the airline’s operation [R5, R9]. In Thailand, the Senior Executive Level of Thai Airways is appointed by the government and the person holding that position has been changed every single year for the last 15 years [R5]. When the company becomes too political, it causes problems for the management team because decisions may not necessarily be based on best management practices, but may be for political acquaintances or benefits, leading to negative effects. In other Southeast Asian countries, Malaysia Airlines in Malaysia and Garuda Airlines in Indonesia, for example, are becoming better at restructuring their operations as they become less politicized than they were in the past [R5].

At present, airlines are not only owned or controlled by government shareholders, but also by private shareholders, who are mostly large corporations or conglomerates [R5]. The trend

²³ Secondary source: <https://simpleflying.com/etihads-airline-investments-have-been-a-disaster/>

among these private shareholders is to leave the management teams of the airlines to run operations free of interference, rarely intruding into their operations [R5]. In Asia, Cathay Pacific and its subsidiary, Dragon Air, now rebranded as Cathay Dragon, belong to the Swire Pacific Group in Hong Kong; Air China and Qatar Airways, although government owned, have the right to run the airlines independently. Another example, EVA Air from Taiwan, belongs to the Evergreen Group - specializing in maritime and cargo services, is never micro-managed by the Evergreen Group at the operational level. Similar to Singapore Airlines, Temasek Holdings only becomes involved when they are required to, i.e. for purchasing new aircraft and are not really engaged in the operational flow of the airline. In Vietnam, the CAAV (Civil Aviation Authority of Vietnam) and the Ministry of Transport do not get involved or interfere overly much with how Vietnam Airlines, the national flag carrier, manages its operations. In the Philippines, Philippine Airlines belongs to Lucio Tan Group, which is no longer under government administration [R5]. Thus, moving forward to a single aviation market in Southeast Asia, operational independence from shareholders will be a new trend, where airlines freely confront either in competition or co-operation within their strategic thrusts.

In competition with low-cost carriers, major airlines have established budget airline subsidiaries to fly short-haul routes and cover the lower customer segment, i.e. Air France with Joon; Singapore Airlines with Scoot and Tiger Air; Vietnam Airlines with JetStar Pacific; Korean Air with Jin Air; etc. [R1, R4, R5, R6]. However, these subsidiaries are not as successful as the truly independent low-cost carriers in the region, such as Derry Air, VietJet Air and Cebu Pacific, which are the strong models [R1, R4, R5, R6]. For example, Singapore Airlines' Scoot has struggled for almost 10 years to generate profits, with a route network and new destinations accommodated by Singapore Airlines, while in return, Scoot will assist Singapore Airlines by covering all small airports that it does not fly to [R6]. The key reasons behind the failure of these subsidiaries is defined by most airline industry experts as being derived from the influence of the shareholders, and the dependence of those airlines in terms of management [R1, R5]. When there is a feeling of protection, it is natural to depend upon, and live under the coverage of, the parent company [R1]. In such circumstances, the decision-making power concerning human resources or the fleet, for example, will be slower, for the process must go through intermediate levels. For example, JetStar Pacific needs permission from its parent company, Vietnam Airlines, to acquire an aircraft, thus a decision cannot be made quickly [R1]. Compared to the CEO of state controlled JetStar Pacific, the CEO of VietJet Air has total control of the airline, leading to much faster decision-making on matters such as purchasing aircraft or hedging [R9]. The legal responsibilities to the private shareholders are governed by business regulations only, with no political considerations whatsoever [R9]. Once the airline cannot be creative and proactive, the decision-making process is slowed, creating one of the reasons why LCCs operating under the umbrella an FSC parent are often not successful [R1].

Mergers and acquisitions have recently become a global trend in the airline industry [R6]. In addition, the management systems between the major airline and its subsidiaries is not sufficiently transparent, leading to ineffective mechanisms which cause mergers to be carried out as a solution [R6]. The reason why airlines operating under the umbrella of major airlines will have a tendency to merge is because this business model cannot stand alone [R6]. It acts like a branch to support the major airline, and in the event that the major airline does not realize any profits, they will absorb this airline, as is the case with SilkAir now being merged into

Singapore Airlines to create a stronger entity [R6]. The core issue of the merger is to cut personnel and costs and re-utilize the resources of the major airline. It is a method of reducing personnel numbers when the teams from two airlines are merged, and this is a natural process without objections from any sides [R6]. When there is cost cutting in terms of human resources, Singapore Airlines will gain a huge profit because its personnel costs will be reduced. Previously, two managers would be required for the two stations, post-merger only one manager is needed for the entire team [R6].

In a large organization such as Qatar Airways, there are several barriers to realizing a common strategy because the departments are fragmented, as a result, a specific top-down strategy should be implemented from the central headquarters [R6]. As a multinational airline having offices worldwide, the airline has realized a common standard for staff to comply with. However, this is also considered a limitation in a large corporation when the tasks must be achieved within the framework of co-ordination among different departments [R6]. In the event that the co-ordination is not sufficiently close, it is difficult to assess whether the environment is effective, or the strategy is successful or not. In fact, there are many hiccups and layers through the reporting lines, commonly leading to tardiness of approvals [R6].

“Whenever we have any project, we are calling all departments involved in order to get the best result, but the process would be slow.”

(Manager Level – Qatar Airways Vietnam’s Station)

“In short, we are under the subsidy mechanism that prevents us from being creative and holds us up to deliver decisions at the right times.”

(Senior Executive Level – Vietnam Airlines)

From these analyses, we can conclude as following:

→ *The dynamic capabilities of an airline, including aircraft, human resources, financial resources and decision-making power, are needed for airlines to combine multiple growth strategies to transform and maximize profitability.*

Conclusion of Chapter 8

Chapter 8 reflects strategic responses that correlate to propositions 5, 6 and 7; and correspond to the research question 2 “*What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*”.

Proposition 5: Airlines must engage with all parties to sell flights in order to optimize sales despite their preference for a direct distributor channel.

➔ *Sales through digital distribution channels will increase markedly and become the key customer service channel. However, airlines must still engage third parties to sell flights in order to optimize sales, despite their preference for a more direct distribution channel.*

Proposition 6: Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to transform themselves in order to compete.

➔ *Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to differentiate themselves and seek co-operative arrangements with rivals in order to develop and save costs, instead of focusing their efforts on price competition.*

Proposition 7: Dynamic capabilities are needed for an airline to combine multiple growth strategies to achieve transformations and maximize profitability.

➔ *The dynamic capabilities of an airline, including aircraft, human resources, financial resources and decision-making power, are needed for airlines to combine multiple growth strategies to transform and maximize competitiveness.*

The findings in Chapter 8 are summarized and classified into five groups of strategies presented in Chapter 9 - Section 20. The adapted strategies are namely Business Growth Strategy, Internal Improvement Strategy, Cost Management Strategy, Stakeholder Management Strategy and Technology Innovation Strategy; which are proposed as processes for strategic fit in the ASEAN airline industry.

CHAPTER 9

STAKEHOLDER ENVIRONMENTAL IMPACTS AND STRATEGIC FIT IN A DYNAMIC INDUSTRY

Sections 19 and 20 in Chapter 9 summarize and restructure seven key findings described in Chapters 7 and 8 by stakeholder impacts and key types of strategies. These seven findings expose the extreme environmental impacts from regulation, technology and customer stakeholders; and the strategic insights in terms of distribution channels, co-operations, employment of internal resources such as aircraft, human resources, financial resources and decision-making power. These summaries are referred to previous researches relating to the airline industry in ASEAN as well as in other regions in order for the author to discuss on this research's subordination or difference compared to others. The research's findings facilitate to theorize from facts and phenomena obtained from case studies and in-depth interviews, thus later to contribute to the literature's gaps and new proposals presented in Section 21.

SECTION 19

STAKEHOLDER ENVIRONMENTAL IMPACTS

The airline industry is challenged by existentially unrelated occurrences, such as industrial action and improved technology, as well as from external sources (e.g. government directives, regulatory bodies, the environment and terrorism) (Doganis, 2006). Referring to the work of Harrison and John (1998) on three-zone stakeholder environment, these findings reveal that the ASEAN airline industry is most acutely vulnerable to the primary types of stakeholders, including: Technological Change and Global Politico-legal Forces segmented in the Broad environment; Government, Competitors, Suppliers, and Customers segmented in the Operating environment; and Employees segmented in the Organization environment. The findings confirm the statement of previous researchers, such as Wright and Ferris (1997), Scholes and Clutterbuck (1998), Rodgers and Gago (2004), and Sharma and Henriques (2005), that the influence of external stakeholders over the organization has intensified noticeably in recent years, particularly in the airline industry (Koistinen et al., 2019).

19.1 Technological Change

The technology stakeholder impacts positively on the airline industry. It is crucial for Airlines to regularly invest in their fleets for fuel efficient engines to save operating and maintenance costs. Another type of technology employed in the airline industry relates to the airport side, that being the increased usage of self-service check-in, self-baggage-drop off and biometric technology for immigration management. Second, airlines need to smoothen interactions with their customers through leveraging online distribution systems and mobile services, thereby enhancing traveller knowledge and the passenger experience. Additionally, online distribution systems greatly aid low-cost carriers in cost savings by reducing or eliminating the cost of commissions paid to third parties, i.e. travel agents. The findings relating to the customer interactions aspect confirms the work of McIvor et al. (2003), showing how airlines are using

the internet to provide innovative exchange mechanisms and transaction structures with customers. These researchers confirm that exploitation of the internet at the customer interface level has become a key catalyst in the transformation of the airline industry, leading to higher levels of sophistication in increasing the expectations of the customers on what and how the organization offers its products and services. Additionally, the employment of big data has become a new trend for any organization wishing to research different purchasing behaviours, therefore, airlines can analyze big data to predict new customer trends in order to enhance their customer service and compete effectively with their opponents. According to the research of Kasturi et al. (2016), based on the Meta-Heuristic algorithms method, big data analytics on aviation data assists in varying routes, shifting passengers, freight, speeds, total distances and amounts of departure fuel, from which an effective flight plan can reduce fuel costs, route distances, overflight costs, time-based costs, and lost revenue from payloads which cannot be carried. However, it also requires large investments in data analysis programming for filtering relevant data into usable information, and then processing the data.

The study from IATA (2018) indicating that airlines should innovate customer service to meet the needs of an increasingly demand public with short attention spans. Based on new technologies, companies nowadays have mastered the art of prediction, resolving or offering solutions before consumers realize problems exist. Artificial intelligence dominates frontline service but people still value the personal touch to have the opportunity to interact real people, which is in line with the findings in this research. The world is increasing multi-cultural but the rapid growth of middle-classes around the world has put pressure on overcrowded infrastructure, and we consider that infrastructure is one of the stakeholders giving constraints to airlines. New technologies and data have helped improve the operations of major cities while severe gridlock is still a challenge to keep transportation moving. At the same time, airlines need to use digitization to enhance and optimize operations to reduce costs while improving service, which is employed by large airlines such as Qatar Airways and Derry Air. The findings are in line with the study of Bohlman (2017) stating that airlines *need to put technology to work in predicting and preventing equipment failures, in optimizing processes and productivity on the ground, and in providing better and timelier information to employees.*

All these technology innovations can assist airlines in enhancing efficient performance relating to cost savings, accuracy and competitive advantages over rivals. Technological investments in aircraft, digital distribution systems and customer service, together with customer support equipment installation at airports, urges investment by the majority of airlines. Regional scale airlines such as NokScoot Airlines, Vietnam Airlines or Derry Air are required to organize a huge budget if they choose to focus on the Technology Innovation Strategy as a separate strategy to improve their products and services. Vice versa, global airlines such as Qatar Airways or Singapore Airlines take the embedding of a Technology Innovation Strategy into their Business Growth Strategy for granted, thanks to their strong financial capacity. As in the findings, regardless of how much airlines invest in highly technology, customers currently still seek to fly with airlines offering the cheapest prices. As long as the purchase of a ticket is based on a price decision, technology does not lead to greater customer loyalty in the airline industry because it cannot drive customers airline selection. However, airlines are not able to ignore technological advances because these can differentiate them in the currently tough competitive environment, and customers will seek out those airlines who bring them added value while also

maintaining competitive prices. This trend should become clearer in the next few years when technology penetrates deeply into every aspect of human life and becomes indispensable to daily routines and habits. This conclusion is in line with Al-Hashimi and Fuad (2018)'s research stating that the evolution of technology has enabled the airline to provide an efficient service, the portable innovative technologies have become very important to gain the customer loyalty and maximize the satisfaction. Their results prove that the majority of the respondents would make their decision based on the innovative technology available in the chosen carrier, however, customers also highly take into consideration the ticket prices and fare regulations.

19.2 Global Political Forces

Following their review of the various “push” and “pull” factors affecting demand in terms of the aviation industry, Addepalli et al. (2018) conclude that the airline industry continued to grow despite a variety of extrinsic and intrinsic variations, then established itself as an independent transport mode representing a growing global community. The airline sector continues to grow despite huge political and economic disturbances. It is resistant to all those changes, in other words, it is predominantly a “resilient” industry. This conclusion does not totally accord with the findings here from interviewing 19 aviation experts in the ASEAN region. Despite the ASEAN Aviation Industry Outlook showing potential for the ASEAN airline industry to develop, grow and welcome new entrants, the political situation should be viewed as a matter of potential concern because it can become unstable and unpredictable when conflicting national interests collide. The South China/East Sea maritime dispute between China and the littoral ASEAN countries is considered a latent risk for the ASEAN aviation industry. Even though most aviation experts agree the ASEAN airline industry is growing and booming, volatile fuel costs, airlines ceasing operations, etc., will become extreme issues, as will control of the skies when territorial or maritime disputes arise, and obviously, ASEAN airlines are strongly affected because they must fly the skies in these areas²⁴. In reality, there exists a school of thought which posits that war will never happen again in the ASEAN region, despite the continuing existence of some serious international tensions, because the people of ASEAN have experienced and suffered the ravages of wars within living memory and the people will avoid war at very considerable cost. Since the physical geography of their locations cannot be changed, it is incumbent upon all neighboring countries in the region to maintain at least amicable political relationships with each other for the common good. However, it cannot be predicted exactly what happens in the future and potential actions generated by countries, especially when confronting the domination of China within the ASEAN region, thereby measuring the effects of the political environment factor to the airline industry is not possible.

²⁴ For instance, the knock-on effect was seen recently during the India and Pakistan border confrontations in early 2019, when 5,000 passengers were stranded at Bangkok's Suvarnabhumi Airport after many flights were cancelled for safety reasons, without advance notice to passengers, due to the emergency closure of Pakistani airspace; or the air blockade imposed by Gulf countries and Egypt in 2017 which heavily impacted Qatar Airways' markets and revenues.

19.3 Legal Forces and Government's Protection

Legal forces generate both positive and negative impacts on the airline industry. Greater liberalization of the airline industry and Government deregulation through the Open Skies Agreement have made air travel accessible to millions of people in both mature and emerging markets alike. In reality, the Open Skies policy will not be truly achievable when there is a lack of equivalence or relative parity among member countries because the success of a single aviation market requires similar conditions among all participants. Less economically developed nations and their smaller airlines are taken at a disadvantage by signing the Open Skies Agreement, despite being granted the same rights as other participating nations, because their competitiveness is much weaker. Weaker airlines encounter difficulties in procuring slots to fly into stronger countries because those stronger countries will prioritize allocation of slots for their own airlines. For stronger airlines, they can take the deregulatory opportunity to penetrate deeper into other markets and create competition through the lowering of ticket prices. In such a competitive contest, some airlines will see an opportunity to improve themselves through better service provision while some will be demanding protection from their government in order to ameliorate their opponents' robust competition. National Carriers demand their governments negotiate favorable agreements to their benefit, and can regulate the Open Skies Agreement at whatever times they prefer. This finding appreciably clarifies the analysis of Laplace and Latgé-Roucolle (2016) when they conclude that the economics of air transport liberalization are not insignificant for the ASEAN countries. Given the magnitude of the estimated effects, the benefits would certainly outweigh the negative effects of competition on their flag carriers.

In fact, the Open Skies Agreement does not guarantee a pure competitive environment, as per the aim of the policy, and it is a challenge to take advantage from the air transport liberalization. Concerning the commercial aspects, the procedure for establishing a new airline are not easy in some of the region's countries, in particular, Vietnam. The process can take up to one and a half years to complete and before launch of the inaugural flight. Local enterprises who may wish to invest in the airline industry must have access to capital amounting to billions of dollars and a sound business plan for acquiring aircraft, both not insignificant barriers for new market entrants. Qatar Airways is not able to fully exploit the U.S. market to its capability under major opposition from U.S. airlines and the pressure brought to bear on their government for protective actions.

These findings are attendant to the conclusion reached by Tan (2015) when he states there is a lack of a supranational mechanism through which to prioritize regional interests above individual or national interests, and ASEAN's individual member states' interests and levels of development are too disparate for such to currently exist. Since ASEAN's SAM objective is not strictly required to be adopted among the individual member states, reluctant states can filibuster the entire project if they do not see it as being in their interest to participate. According to Tan (2015), E.U. airlines can now merge among themselves,²⁵ given the market freedoms, but this is impossible for the ASEAN airlines. All these market imbalances can only be corrected if the ASEAN states begin to treat their own backyard as a true single market, yet this

²⁵ For example, Air France-KLM, British Airways-Iberia and Lufthansa-SWISS

will take years to be realized (Tan, 2010). However, this finding adds to the point of explaining why it is impossible to merge national airlines between different countries in ASEAN, as these airlines and their governments also confront objections from Southeast Asian people due to their nationalistic and patriotic nature, an important element which Tan (2015) overlooks in his studies on the regional aviation industry. Furthermore, the conclusion reached by Oum et al. (2010) supports the affirmation by Tan (2015) when these researchers conclude that protection and regulation did not lead the airline industry to efficiency and profitability as expected by policy makers. They believe countries leading deregulation and liberalization scored a variety of benefits for their aviation industry as well as overall economy. Therefore, it is important for first mover countries to maintain their leadership in liberalization, and it is urgent for countries still practicing tight regulation to launch themselves onto the liberalization wave.

19.4 Shareholders

Airlines in Asia are owned by different shareholding models, in which national carriers are commonly owned or controlled by their governments and low-cost carriers are owned by private investors. Though national airlines such as Vietnam Airlines (Vietnam), Garuda Airlines (Indonesia) and Malaysia Airlines (Malaysia) are partially privatized, stake ownership is not totally open to public shareholders at present, and into the near future, since Southeast Asian governments are heavily involved with the destinies of their national airlines. With the restriction of ownership stakes set at 49%, foreign shareholders when buying a stake in an airline do not have sufficient seats on the Board of Directors to change or restructure the airline for profitability as may be their wish, thus losses may continue to accrue. This finding is in line with Tan's statement (2015) revealing that new airlines in ASEAN have continued to be established using the traditional model with local interests owning more than 50% of shares and foreign investors typically holding 49% or less. This is still seen as being the preferred and more sustainable model for airline operations (Tan, 2015) and confirms Hooper's (2015) conclusion that there is fidelity in ASEAN to the "substantial ownership" requirement in that the foreign partner does not have the right to enjoy a majority shareholding.

On the other hand, when the local shareholders lead their organization for political purposes or for private benefits rather than based on best management practices, the airline is definitely vulnerable to negative effects. The failure of major airlines' low-cost subsidiaries derives from the influence of the shareholders and the dependence of those airlines in terms of management. Once the airline cannot be creative and proactive, the decision making process is slowed, creating one of the reasons why these subsidiaries, living under the umbrella of their parent airlines, are often not as successful as pure low-cost carriers. The finding supports Pearson and Merkert's (2014) work in revealing that the key factors for the failure of airlines-within-airlines are ill-defined strategy, excessive management control, higher costs and lower efficiency compared to true low cost airlines. These researchers propose a strategic factor based on the analysis of failure factors as follows: considerable effective autonomy from the parent, market dominance, decisive leadership, and less deviation from the pure LCC model. The study from Raynes and Tsui (2019) confirms the Pearson and Merkert (2014)'s research by concluding that the high level of autonomy allowed to major airlines' subsidiaries in making their own decisions affects their operations, thereby ensuring their interests and requirements are met, as well as

enabling them to offer the most suitable products, services and aircraft to their respective markets. Therefore, the new trend is for government or private shareholders choosing to remain passive and not to be directly involved in the carrier's operations, allowing for further efficient independence, where airlines freely confront either in competition or co-operation for their moving process to a single aviation market in Southeast Asia.

19.5 Suppliers

The key supplier stakeholders in the airline industry consist of airports, aircraft manufacturers/lessors, and fuel suppliers. The airport stakeholder impacts negatively on the airline's flight operations in terms of horrific infrastructure and slot allocations. The airport infrastructure is obviously a barrier in some ASEAN countries such as Vietnam, the Philippines, Cambodia, Myanmar and Laos. The quality of the aviation services industry in these countries will be diminished severely if the infrastructure is not fully prepared to adapt to the opening market. In the event of destructive natural disasters, airlines' operations cease or flights are delayed due to the affected airport infrastructure. Secondly, the restriction of slots from airports influences aircraft utilization, while airlines must ensure sufficient slots to meet their passenger demand. This finding supports the study by Choi et al. (2016), when the airport has authority in slot allocation, they should also consider allocating favorable slots to those major airlines serving transfer passengers as a way of enhancing the airlines' hub-and-spoke network and the airport's overall connectivity. Tan (2015) also indicates that although Singaporean carriers have had unlimited rights into London Heathrow, and all points in the U.K. since 2007, the real problem here is the lack of slots at Heathrow which an E.U.-ASEAN agreement does not cure. Therefore, this impact becomes more severe when dealing with busy airports in stronger countries.

The aircraft manufacturer and lessor stakeholders can affect the airlines' operations and profitability. Due to the excessive costs involved in developing an entirely new airframe model, aircraft manufacturers now delay development of new families of aircraft and introduce innovations of new aircraft types much later than in the past. Airlines are urged to invest hundred millions of dollars in new aircraft models in their efforts to consume less fuel and reduce costs. In regard to aircraft innovation, pilots are required by the aircraft manufacturers to train continually in order to keep up with the new aircraft innovations and ensure safety, otherwise, accidents may become unavoidable such as in the case of the B737 Max 8. Airlines can shelter under the umbrella of the financing leasing companies to purchase or lease aircraft with higher costs when they do not meet the purchase criteria from aircraft manufacturers. Airlines circle around in a vicious cycle of complicated acquisitions with limited capacity and the confrontation of generating profitability in a renewal process. Therefore, the increasing aircraft acquisition costs may prevent airlines from growing and innovating, and the need to access new financing options may derail the airline industry. This finding concerns the costs incurred by airlines when dealing with aircraft manufacturers and lessors for the new technological introduction while the Urgo et al. (2018) study indicates the impact of demand for new aircraft from different airlines to aircraft manufacturers, have pressured them to comply with the delivery times, which affects the airline's operational plans.

The fuel supplier stakeholder affects the airlines severely when they increase fuel prices. Airlines will incur costs potentially amounting to billions of dollars and their ticket sales in such a situation can only recover total cost and not generate profits. Airlines are forced to source fuel from cheaper locations despite the aircraft having to endure additional weight while flying, which increases fuel consumption as well. However, cheaper fuel locations do not guarantee the airlines can reduce costs if the human resource costs for refueling at each destination are different. When fuel prices remain the same in some countries, the airlines' route development plan would be influenced because the costs endured at each destination are different, thus airlines must define destinations which bring greater profits. As a result, the increase in cost depends on a wide variety of factors and the percentages of the total costs are different in each country. Airlines can seek to hedge as a tool to secure the stability of the fuel prices for their long-term operations, but this is a risky financial tool and not suitable for every airline. Oil price fluctuations are notoriously difficult to foresee over the long term, leading to hedging failures conveying losses and even legal responsibility in ASEAN countries. On the other hand, when the fuel issue becomes an obstruction, the aviation industry will look to technological improvements or change, including alternative options such as electric or solar power to operate the aircraft instead. At this point in time, research and development teams at the aircraft manufacturers are not required to innovate urgently but this job will be considered as the first priority when oil prices continue rising. The findings here support the research by Thorbecke (2019) in indicating that oil price shocks affect many industries, either positively or negatively, which implies that oil price swings increase uncertainty for many firms. Adopting energy-saving technologies would reduce this uncertainty by reducing a companies' exposure to oil price changes. Oil prices are likely to continue fluctuating in response to geopolitical events and supply changes. To increase energy security and to shield their industries from volatile oil prices, countries in the region should diversify from fossil fuels into renewable energy sources. On a further point, research by Rodrigue (2017) confirms fuel costs are the airlines' largest expense. Higher oil prices raise ticket prices and reduce the number of travelers. Higher prices for air travel and other forms of transportation in turn deter tourism.

19.6 Competitors

The competitor stakeholder dramatically influences the airline industry, especially with the robust growth of LCCs which have become an intimidation to the major airlines. The finding shows that the concept of the LCC model has been wrongly perceived as "cheap-priced airline" in the Asian market. In fact, the price structure for the core product from a low-cost carrier and a full-service carrier is comparable. The profit model of a low-cost carrier is based upon upselling and the sale of "add-on" products and services. The core air ticket product is sold at a standard price and other options are added to that price according to customer demand. Therefore, the value of LCCs and FSCs must be considered as being at the same level in terms of safety, quality, timeliness and information accuracy.

With the rising competition, both LCCs and FSCs have to improve their service quality and adapt to changes in the market with their differentiations. Major airlines are offering up to four classes of air travel, being Economy, Premium Economy, Business and First Class. LCCs also have begun to upgrade their seats by offering more options such as "Biz Class" to passengers,

despite this model supposing only one class in order to allow passengers to economize their air ticket expenses as much as possible. Since LCCs can only compete with FSCs for the lowest customer segment, FSCs will reduce economy class airfares on certain routes and markets in order to attract more customers. Then the new trend shows that LCCs are gradually moving towards the full cost model while full-cost carriers are steadily moving in the opposition direction, towards the low-cost model. This finding is in line with the findings by Hanaoka et al. (2014) indicating that passengers enjoy decreases in disutility as a benefit of LCC's entry through airfare reductions by FSCs and the low fares of LCCs. This benefit spreads through the entire network as well as into corresponding markets.

Another competitor, such as a hybrid business model carrier, a merging of full-service and low-cost models, will take a slice of the cheaper end of the market from major airlines as well. Therefore, major airlines have launched low-cost subsidiaries to confront the competition with low-cost and hybrid carriers. However, the results indicate that major airlines' low-cost subsidiaries have generally failed due to the lack of decision-making power. In fact, major airlines cannot metamorphose themselves into low-cost carriers and the shareholders should identify the airline's core business model right from the moment of inception. Major airlines must differentiate themselves from low-cost carriers instead of trying to emulate them because they cannot apply the same concept to different levels and in different markets for both low-cost and legacy airlines. The result indicates that full-service carriers will not shift their strategy completely towards the low-cost model in order to reduce costs or prices, meaning they will not turn themselves into fully-fledged low-cost carriers purely to compete.

According to Oum et al. (2010), the fast growth of LCCs leads to increased competition and reduced fares, this is a significant stimulant to traffic. Development of LCCs in domestic markets can promote liberalization policy by increasing the competitiveness of a nation's aviation industry (Oum et al., 2014). The findings here show that low-cost travel has become a growing trend over recent years, and after experiencing LCCs for short-haul flights, travelers will shift to long-haul low-cost carriers when their journeys are based largely on a ticket price decision, which correlates with his statement. However, no previous researchers mention low-cost long-haul travel, which has become a new trend to date with low-cost carriers running long-haul flights, though they encounter tougher barriers, they have possibilities for increasing competition with the major airlines such as Air France and Scoot. Similarly to the major's low-cost subsidiary business model, major airlines cover all market segments and offset losses at the budget end of the market by launching a re-branding strategy, which is to launch long-haul low-cost subsidiaries. Nau and Larget (2018, p. 6) conclude in their report "The rise of the long-haul low-cost carriers: what does it mean for airports?" that "*long-haul low-cost carriers serve as a catalyst for the transformation of airport involving a definitive change from the role of operator to that of a provider of services and solutions, optimized ground operations and a richer customer experience.*" Their statements show that long-haul low-cost is a continuation of the development and a new consumption habit from passengers indirectly encouraging airports to create competitive service offerings, which supports to this mentioned-above finding.

19.7 Distributors

The sale distributor stakeholder impacts significantly on the airline's revenues or, generally speaking, its survival. The current trend shows that most airlines worldwide prefer to distribute their tickets through their own websites in order to reduce third parties' unpleasant intermediary costs. However, the fact that both FSCs and LCCs' websites could not reach all customer segments, leads them to take advantage of multi-legs from third parties such as the GDS, OTA and physical travel agents, to approach customers in order to optimize their sale productivity. Furthermore, airlines should continue to employ third parties to sell flights in less-developed markets where a cash-based economy is dominant and online payments are not widespread. The findings here support the study results from Alamdari and Mason (2006) where they evaluate the impact of changes on key stakeholders such as the airlines, travel agents, global distribution system companies and corporate travellers. These researchers conclude that global distribution systems deregulation will lead to the fragmentation of airline inventories across different distribution channels. Airlines will seek to increase the proportion of sales they make directly through their own website, thereby reducing their costs. Travel management companies will need to clearly demonstrate their value to corporate clients. Corporate clients are most concerned about ensuring access to the widest possible range of airline products and tariffs, at the same time as distribution costs are removed from the value chain. The results from Shon et al., (2003) also indicate that virtual channels are good enough to dominate the market but the traditional channels also have their own niches in some specific segments. As a result, our conclusion is that a good co-operation with all types of sales distributors are crucial for the airline's revenue growth, despite further costs being incurred. This conclusion is supported by (PwC, 2017) stating that airlines need to incorporate the best of what these so-called channel consolidators do and offer holistic and attractive travel distribution programs in order to capture top-line growth in the competitive environment. Airline must combat ticket commoditization by developing, alone or in partnership with global distribution systems, enhance merchandising applications allowing them to cross-sell and upsell using their privileged access to millions of global travelers.

19.8 Customers

The customer stakeholder's influence is considered the most importance in the airline industry since it can critically decide the survival of the airline. Customer demographics impact on the airline industry can be classified by three factors, including disposal income, age, and lifestyle. Guo et al. (2007) state that overall customer demand in the air transport industry in Asia has been increasing significantly, according to the economic growth of China, India and countries from Southeast Asia. Higher disposal incomes and increased internet access have encouraged Asian people to travel more often than previously. By 2030, two-thirds of the global travelling public will come from Asian countries (IATA, 2018). Furthermore, when populations are aging, these customers will seek greater on-board comforts and social status recognition with the branded airlines. This confirms the conclusion reached by Sezgen et al. (2019) that comfortable seats are another determinant of passenger satisfaction which is not unexpected when descending leg-room and seat comfort in the economy cabin is considered.

The fact that elderly customers prefer human interaction by purchasing air tickets from agents or air boutiques while younger customers prefer to engage with social media and wearable technology consents to the study of IATA (2018) stating a demand of human touch among virtual spaces. As a result, airline managers are demanded to employ separate strategies and approach to target these consumer demographics in order to optimize their sales efficiency. The majority of previous researches have been done with customer satisfaction and very little relates to customer demographic factors, which these findings do include.

In regard to 444 surveys conducted in Cambodia and Vietnam, the quantitative analysis indicates that passengers will select to fly with stronger airlines operating in their local markets and 90% of them choose to fly economy class for the lowest price as possible despite airlines now offer delux economy class for more comfort. Online payment method is less popular in a less developed country such as Cambodia and passengers in this country are forced to interact with physical ticket agents, as a result, the airline's business is influenced by the economic growth of a country. The result also shows that passengers switch to fly with low-cost carriers if there are LCCs operating in their market. And in most cases they do not notice about the aircraft type that airlines operate. All respondents in both countries rate the airlines' services in a range of 3.8 -5.2 while the offered highest rate is 7, meaning that their satisfaction towards the airlines' services moderately stands above the average rate. We can conclude that passengers consider the airlines' services acceptable for their travel experience and not absolutely satisfied. Most of Cambodian passengers participating in this survey are government officials and fly with Bangkok Airways to attend international workshops for their professional needs. Since these two clusters of Cambodian passengers do not pay for the air tickets at their own costs, their relatively low income does not truly impact to air ticket purchase power. In this sample, these Cambodian passengers do not consider price as a key factor but the airline's convenient departure and arrival times for their business, they tend to be at ease in evaluating the airline's services worthing money's value. On another hand, two clusters of passengers in Vietnam fly with Vietnam Airlines for travelling needs and pay for air tickets on their own costs. Younger Vietnamese passengers with lower income give the higher rate of satisfaction to the airline than elder passengers with higher income, meaning that older people are more demanding. In this market, passengers keep flying with the airline offering the cheapest prices though they are not totally happy with the airline's services. Compared to two recent researches on customer satisfaction with airline services analyzed with big data technique from Park et al. (2019) "*Determinants of customer satisfaction with airline services: An analysis of customer feedback big data*" and Ban and Kim (2019) "*Understanding customer experience and satisfaction through airlines passengers' online review*"; our findings focus on the price aspect while other service satisfaction are not clearly figured out. Ban and Kim (2019)'s results show that "Value for Money" criteria has the greatest impact on customer satisfaction recommendation and propose airlines to focus their most essential tangible and intangible resources on the value for money. Park et al. (2019)'s results prove that the relationship between monetary value and customer satisfaction is not supported by the customer data of LCCs but is validated by the customer data on FSCs, however, their results do not shape the customer satisfaction specifically either and they propose airlines to continuously seek solutions that allow customers to have positive affective experiences through the services provided.

19.9 Employees

The internal stakeholder's influence on the airline industry is manifested by the human resource factor. In some underdeveloped ASEAN countries, where talents often require higher wages, it is a dilemma for the airline's CEO to balance a sufficient number of qualified employees with the average ones in order to prevent rising payroll costs which affect total operating costs. The huge shortage of qualified and accredited managers, aircraft engineers and pilots definitely affects the airline's operations when employment in the airline industry is no longer appealing to younger generations. The lack of working passion in ground staff and cabin crews has dissatisfied customers and downgraded the image of some airlines, leading to a downturn of services in the public's perception. This finding is in line with the studies of Ekiz et al. (2006), Nardiri et al. (2008), Boetsch et al. (2011) and Namukasa (2013) when they confirm that personal service is an important dimension of an airline's overall service quality perception. It refers to the quality of service provided by the airline's staff and flight attendants in terms of their attitude and behaviour towards customer service. Moreover, personal services also encompass an error-free ticketing service, responsiveness of aircraft crew members, personal care and helping attitude. The study by Farooq et al. (2019) also provides evidence for the fact that better quality of personal services will significantly improve customer satisfaction levels. These findings endorse the results of previous studies, such as Ali et al. (2015) who observed that the attitude of ground staff and flight attendants have a significant impact on passengers' satisfaction with Pakistan International Airlines. The finding on a human-resource aspect conforms to the study of Ilyas et al. (2016) revealing that training and business strategies are a key to achieving an employee's strategic fit. Thus, training and business strategy are important predictors of strategic fit in an organization and increase employees' competency.

Regarding the pilot issue, this requires long training times to obtain a qualified commercial pilot who adequately meets the compulsory criteria to serve with an airline, thus the numbers of available pilots are not sufficient enough to supply to the market²⁶ while more and more new routes are created and greater numbers of aircraft are purchased for commercial growth. As a result, airlines have a tendency to poach pilots from each other or to hire foreign captains by paying higher wages, leading to the unfair competition for human resources in the airline industry. ASEAN airlines may place themselves under threat in terms of safety when they are unable to guarantee the quality of their pilots because of the vastly different standards among foreign pilots. This finding conforms with Lutte and Lovelace's (2018) results revealing that in a competitive environment where hiring is occurring at most regional carriers and competition for qualified pilots is steep, new candidates are in a position to be selective about the airline they target for employment. Large numbers of aspiring pilots indicated they would be willing to fly overseas due to the opportunity to earn higher salaries and pay is the top motivating factor for targeting a specific regional airline for employment for the collegiate flight student in the

²⁶ The Boeing Market Outlook for 2015–2034 projects that 588,000 new commercial airline pilots will be needed around the world over the next 20 years, with the report referring to this number as “unprecedented” (Boeing, 2015). The largest area of projected growth will be the Asia-Pacific region, requiring 226,000 new pilots over the next 20 years, while Europe and North America will each require an estimated 95,000 new pilots over the same time frame (Boeing, 2015).

pipeline. In addition, potential pilot strikes will cause heavy impacts on the airlines' operations with flight reductions or cancellations. As a result, it is recommended ASEAN countries follow the strategic pilot team building model employed in Australia, Japan and South Korea in order to strengthen their pilot workforce in the market.

In summary, the stakeholder environment in the airline industry consists of these following important elements, technological change, global political forces, legal forces, governments, shareholders, suppliers, competitors, customers and employees. Through the findings in the airline industry, it is accepted to state that stakeholders are vital to the survival and success of the airline. This study is in line with Freeman's (1984) Stakeholder Theory, especially since the stakeholder perspective in this industry indicates the mutually interdependent relationships between the airline and its stakeholders. The findings also fit with Freeman's (2004) Analytic Theory, stating that those types of stakeholders interact and create value, and the stakes of each stakeholder group are multifaceted and inherently connected to each other, and are vital to the survival of the organization.

Therefore, the following conclusion addresses the first research question: "*What are the business environment impacts on the strategies developed by ASEAN-region airlines?*"

➔ *Based on the interaction effect and their mutual relationships, Technological Change, Global Political Forces, Legal Forces, Governments, Shareholders, Suppliers, Competitors, Distributors, Customers, and Employees act as key attributes of the Stakeholder Environment, which depict the most significant impact on the strategies developed by ASEAN-region airline.*

SECTION 20

STRATEGIC FIT IN A DYNAMIC AIRLINE INDUSTRY

The airline business environment is dominated by regulations and directives on standardization, most of which relate to finance and accounting, environment and consumer rights (WNS, 2019). It is inevitably that new regulations are imposed for the global airline industry, thus airlines must engage and comply to common rules in order to articulate optimize business processes and transformed operations. Airlines' executives urge to find the most potentially lucrative competitive position and define whether their elements such as network, fleet, operating model, a reasonable cost-to-serve structure, digital capabilities, and the right partners have envisioned business environment or not. In the event that airlines cannot obtain those elements, should the airlines' executives seek alternative ways get them through organic growth such as consolidation, merging and acquisition or joint ventures (PwC, 2017)? In this section, we propose five groups of strategies obtained from the strategic insights developed by ASEAN airlines in envisioning to their respective business environment.

20.1 Business Growth Strategy

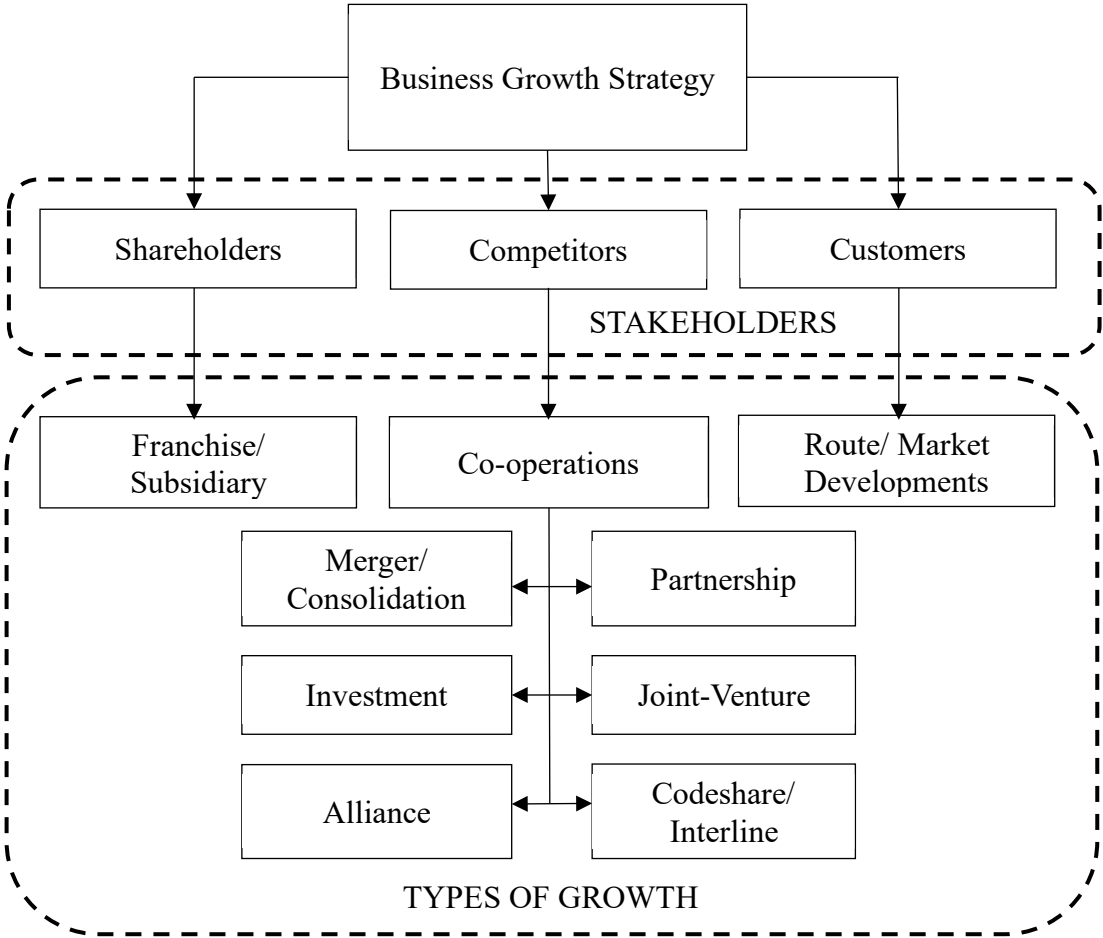
It depends on their business models and their own respective competition positions, both FSCs and LCCs will have different strategies for their business growth. For major airlines, the first strategy is to establish LCC subsidiaries to prevent their market share being poached by genuine LCCs. Second, in such a dynamic airline industry, it is crucial for an airline to establish mutual co-operations with other airlines or partners in order to grow its business. Third, the airline should develop its new markets for strengthening its position and expanding its networks. Figure 43 below shows types of business growth strategy of an ASEAN-region airline, presenting key essential elements for growing including (a) subsidiaries or franchise establishment, (b) co-operation methods comprising of partnership, codeshare/ interline, alliance, joint-venture, investment, merger/ consolidation; (c) and market/ route development.

Other than three dimensions examined for the business growth strategy in this research, other previous researchers have investigated a specific strategy that airlines use in order to meet the competition challenges in the market. Zhong, Varun and Lin (2017) use the Monte Carlo simulations to analyze the best scenarios for expanding the air transportation's capacity, taking into account the environmental constrains in the ASEAN area, and identify which airports have to expand runway capacity in order to increase connectivity. Warnock-Smith, O'Connell and Maleki (2015) examine two main categories of ancillary revenues: unbundled products and commission based income. They investigate passengers' willingness to pay for these services and what types of ancillary items are acceptable to particular price points. Yeun, Lei, Chow and Fung (2017) investigate the relation between air fares and hub premium using Hong Kong as a case. The authors study the impact of airline market power at the route level using several different explanatory variables.

Due to the restrictions on operating domestic flights in another country, the parent airlines use their subsidiary or franchise airlines to act as their branches in order to benefit from fifth

freedom rights. This results in the Open Skies Agreement creating an advantage for a certain aviation group to develop, then stimulate a franchise business model in the ASEAN aviation market. Derry Air is, in fact, currently the good airline in the ASEAN region that has created an airline franchise network in other countries by providing aircraft as its capital contribution. Franchising is a common practice in many industries (Price, 1997) but it was not common in the aviation industry until the mid-1980s in the U.S., and 1990s in Europe, when airlines used this approach as a strategic response to the deregulation of the air transport industry. The Open Skies Agreement has actually been leveraged by Derry Air to construct franchise co-operations in order to benefit from fifth freedom rights and avoid the protections imposed by other countries. From the Derry Air perspective, the airline believes that competition is allowing it to grow and helping it to open markets and create a level of efficiency that benefits passengers.

Figure 43: Types of Business Growth Strategy



With the increase of low-cost and hybrid airlines, it is obvious that major airlines will lose numbers of low-budget travellers as well as a slice of the cheaper end of the market. It is a sign of a sophisticated market when major airlines are launching long-haul low-cost subsidiaries to cover all market segments and to offset any losses at the budget end of the market. Low-cost long-haul travel is a new trend, although very few low-cost carriers provide long-haul flights, and to date most have failed after only a short period of operations. In the ASEAN region, there are only Singapore Airlines' Scoot and Arry Air, operating long-haul flights on the low-cost

business model. The operating margins and the regulatory environment for long-haul flights are tougher on a low-cost carrier than they are on a major airline. Airline specialists agree somewhat that low-cost carriers running long-haul flights have possibilities to increase competition for the major airlines.

The co-operation strategy is commonly used to grow the airline's business. In general, the airline industry can be said to be one in which there are no enemies and no friends. An airline will thus be more proactive in seeking co-operation whenever it detects an opportunity to solve an internal problem it has identified. Co-operation in the airline industry will never completely disappear, but will instead morph from one form into another, whether externally or internally, to ensure that the co-operating parties each gain a benefit. However, it is difficult to distinguish matters in a transparent manner when there are many varying stakeholder issues involved, such as the environment, aircraft types, human resources, training, maintenance, etc. The necessity to co-operate in solving a common problem arises when the co-operation benefit factor is judged to have become more important than the competition factor. Only when the co-operative conditions can no longer exist, within the regulations, in the case of bankruptcy or other such severe business factors, for example, will the co-operation cease. When an airline identifies a beneficial opportunity for itself, it will never refuse any co-operation that can realize that benefit, regardless of whether it is co-operating with a direct competitor or not. The very key element of two airlines co-operating together is mutual benefit. The findings in Chapter 8 have proved different types of co-operations in the ASEAN airline industry summarized as following:

The first type of co-operation form in the airline industry is the merger or consolidation strategy. This is a suitable mean by which to strengthen the airline industry in Southeast Asia. Some small airlines have been operating successfully under current market conditions, whereas others should be fully absorbed by a stronger airline. In reality, when consolidation of airlines is occurring slowly, weaker airlines will disappear gradually, eliminated by market forces. As a matter of fact, if airlines are not able to thrive in such a tough competitive environment because of financial crises or any other reason, they will be merged or disappear from the market through natural attrition within the first five year of operations. Nugraha (2018) confirms that when open skies were enacted in more regions, some niche airlines found an opportunity to conduct deeper co-operation through cross-border mergers and takeovers.

The second type of co-operation form is the joint-venture investment between an airline and a country, or between airlines. The joint ventures typically involve collaboration in areas such as schedule coordination and revenue sharing. Joint ventures allow carriers to launch new routes that otherwise would not be viable if only operated by one carrier. From the airline's point of view, this enables them to increase their revenue on a number of routes they themselves don't operate, and for travelers it tends to mean a greater number of travel options and better connections. Joint ventures also allow customers to mix and match bookings on a wider network to best suit their travel needs, and get the best possible combination of airport, flight times and price.

The third type of co-operation form is the signing of codeshare or interline agreements between airlines. If LCCs only work on their own point-to-point routes, there can be no new market

beyond those points. They would require enormous capital to join the GDS to achieve a similar system, leading to requirements for human resources to handle the auditing and operations. Instead of spending capital for this investment, LCCs can choose a beneficial solution by codeshare or interline agreements with other airlines in order to expand their markets. In addition, there is also co-operation between FSCs and LCCs which is evidenced by major airlines of OneWorld alliance co-operating with low-cost carriers to optimize their profits in local markets. Nugraha (2018) also confirms that code sharing is principally the expression of inter-airline co-operation through alliances. Airlines engaged in codeshare arrangements receive benefits through reduced operating costs and passengers receive benefits from frequent flyer programs and enjoy a wider range of flight schedule options. An important characteristic of codeshare arrangements is that they do not involve the introduction of new flights, and each carrier continues to operate the same flights as it has done prior to the arrangement.

The fourth type of co-operation form is the creation of airline alliances. Paralleling the growth of the airline industry, FSCs began connecting more closely with each other over time, before eventually grouping themselves into clusters of commonality and formulating alliances for collaboration and sharing for mutual interests. The principal aim of these alliances is to grow global aviation by getting more FSCs to join in order to create more flying opportunities for passengers through combining their airlines' routes. Similar to the FSCs, LCCs are now forming their own alliances to co-operate on profit sharing, codeshare and interline agreements. Though LCCs are very competitive, the time has arrived for them to co-operate and connect schedules into a single market. This finding complies with the study of Nugraha (2018) stating that "airlines have responded to national law which restrict foreign investment by forming alliances between themselves. Airline alliances are seen as the solution to circumvent restrictive bilateral agreements and national laws, which generally restrict cross-border mergers or acquisitions".

The fifth co-operation form in the airline industry is co-competition. It is understandable that the majority of airlines are currently more opportunistic in seeking commercial benefits. Co-operating with competitors beyond any alliance membership is a new trend in the aviation industry, driven by the actual need. When airlines enter international collaborations, the partner airlines enter a win-win partnership where each airline is able to yield a greater reward than would be possible individually. As the competition in the airline industry continues to rise, co-competition between airlines will become more than an added benefit, but a necessity in order for airlines to survive. To continue meeting client demands, appealing to customers, and generating profit, airlines will need to work together in order to offer more than a single airline. The co-competition can be classified in the form of code-sharing, interlining or joining alliance as mentioned above and, lastly, sharing maintenance services. Mutual co-operation is required for airlines to share maintenance services at their hubs in order to minimize the huge costs. It is extraordinarily difficult for airlines to procure a full suite of spare parts, or to construct and undertake their own line maintenance at every hub.

The last co-operation form is a direct beneficial partnership. While some airlines will strive to achieve all the standards for membership of an alliance in order to have the opportunity to co-operate with other member airlines and improve their market position, other airlines will focus their collaboration efforts on whomever they consider can provide a closer business opportunity

and commercial relationship rather than joining an alliance. Airlines that never intend to join an alliance wish to retain their independence and freedom of choice to collaborate with any partner they do desire in order to achieve mutual benefits without the constraints placed on alliance members.

It is predicted that membership of large alliances will decline as airlines begin to prefer to collaborate based on directly and mutually beneficial relationships. This may be considered an excessive move, but the trend has begun in recent years, with the numbers of new members joining these alliances slowing. Some larger alliance members will establish relationships with competitors of other members within their common alliance. Airlines will ignore the sensitivities of other members in the common alliance and are not abashed to collaborate with partners outside of their alliance. The fact that airlines choose to co-operate with others outside their particular alliance is the effect of different crucial elements comprising the situations of the airlines themselves; their region of origin; sources of their investments; and the identification of their shareholders.

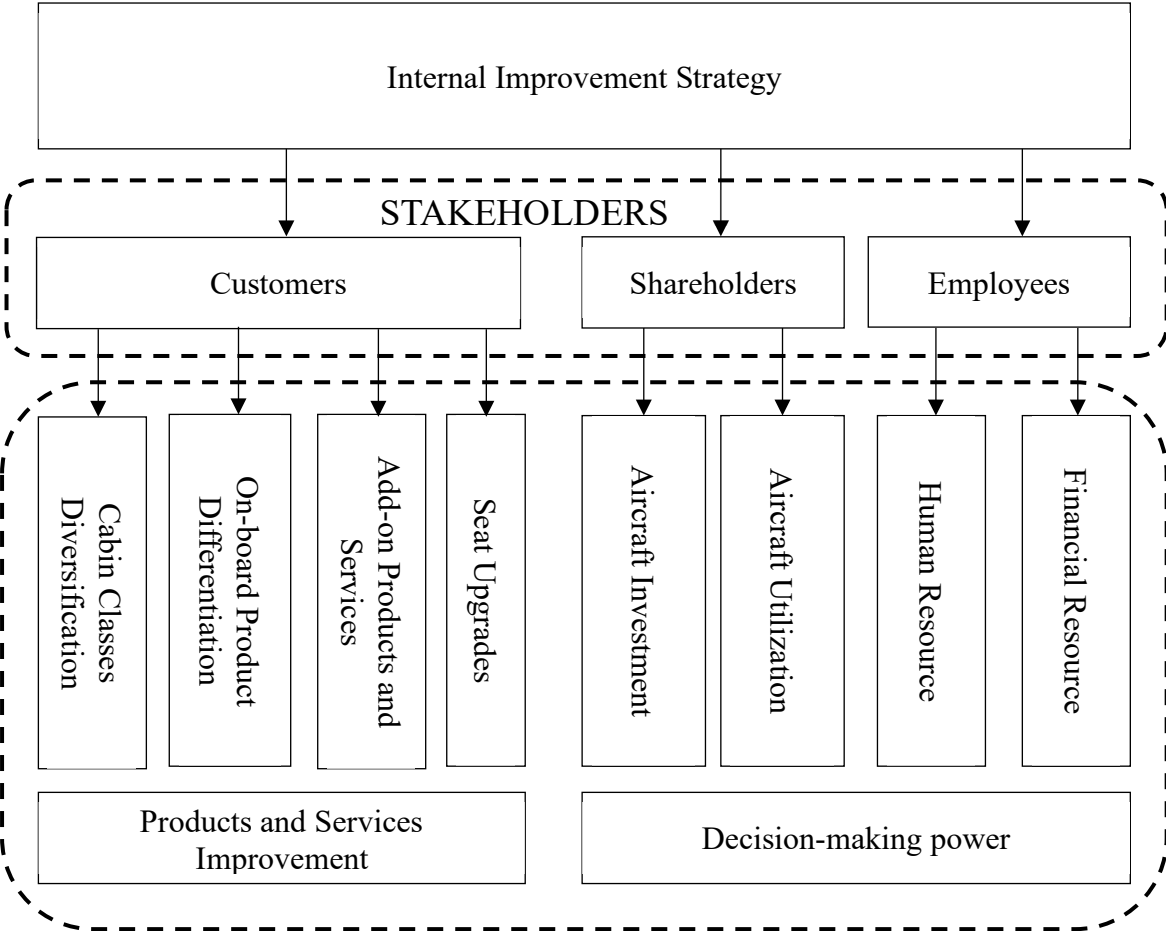
The third business growth strategy is to develop the market by opening new routes. In a market currently as competitive as ASEAN, it depends on the airlines' qualification, fleet condition and ambition to expand the market. All strategies focusing on gaining market share, growth and profitability depend on the will of each airline's shareholders. Airline managers must balance the issues of whether they desire to grow by putting in more investments and flying more with the commensurate risk of unprofitability because they can possibly gain profits if they fly less. On the contrary, if they limit their scale of operations, they will atrophy and become smaller by losing market share and gradually being overwhelmed or swallowed up by other major airlines. An unfortunate issue in the airline industry is the constant pressure to grow because there is always pressure from rising costs. When the pressure to grow becomes critical, the airline has to either open routes to new destinations or operate flights at a higher frequency. When an airline opens a route to a new destination, it will have to develop that destination as well. The airline cannot expect the new destination to return a profit in a short time because it must endure the initial start-up costs, including the station's setup process, the personnel structure and lower frequency of flights in the initial stages. Airline managers should divide the number of flights by the same number of people to maximize efficiency.

It is important, in preparation for the launching of new destinations to work closely with the local governments, the destinations' agencies, tourism agencies and operators, and all levels of local councils to encourage a two-way traffic flow. The airline management team has sensitively considered its new route development because it is crucial for the level of the services rendered, in terms of scheduling and most importantly in terms of cost. The mission of the airline is to ensure the best facilitation for passengers and the opportunity to fly at low-cost. It is believed that strategic thinking is always essential for an airline to develop its market, while cost is a factor, however, that most airlines continue to keep a focus on.

20.2 Internal Improvement Strategy

Nowadays, airlines need to enlarge their scale of operations or achieve special competitive advantages in order to compete. When airlines are small in scale, they will normally incur higher costs, particularly in relation to aircraft acquisition, financing, and maintenance. These costs are considered relatively high when compared to airlines of a bigger scale. Additionally, significant or unique competitive advantages for an airline may make it completely immune to competition. In fact, there is no single strategy for any airline to use in order to reach the optimum profitability, but there is a requirement for both combination and contribution of elements drawn from the airline’s resources and strategies. Figure 44 below shows types of internal improvement strategy for an airline industry, reflecting through two respects based on the airline’s resources: (a) products and services improvement and (b) decision-making power. In the research’s findings, the product and service improvements include the cabin class’s diversification, seat upgrades, add-on products and services options and on-board products differentiation; whereas decision-making power relates to the elements such as aircraft investment, aircraft utilization, human resource and financial resource.

Figure 44: Types of Internal Improvement Strategy



Over the last 40 years, the airline industry worldwide has been unprofitable as a whole or has been profitable by a margin of 0.1%. Therefore, the airline always keeps improving its products and services to catch up with new industrial trends. Since major airlines cannot metamorphose themselves into low-cost carriers or apply the same concept to different levels and different markets for both low-cost and legacy airlines, they must differentiate themselves. When there are more LCC competitors, the full-service carriers, primarily the major airlines, will view this as an opportunity to improve their service quality and adapt to changes in the market. Major airlines nowadays are offering more classes of air travel. Some airlines even break their cabin configurations into four classes; Economy; Premium Economy; Business; and First Class. Meanwhile, the LCC model supposes only one class in order to allow passengers to economize on their air ticket expenses as much as possible, and yet, with rising competition, the LCCs began to upgrade their seats by offering more options to passengers.

The major airlines classify their cabins into classes in order to broaden and diversify the air ticket price range, even though they have a very low price economy class with no amenities on short-haul flights. In fact, FSCs cannot sell all seats at a low price because they cannot reduce the standard cost of in-flight meals, or the cost of ground handling either, in order to compete with the LCCs. FSCs, however, will reduce economy class fares on certain routes and markets in order to attract more customers. In addition, major airlines start to sell based upon upselling and the sale of “add-on” products and services. In essence, the core air ticket product is sold at a standard price and other options are added to that price according to customer demand. Those options, for instance, additional luggage weight over the 7kg carry-on allowance, or the choice of a meal served in-flight, are add-ons which not only provide a profit margin for the airlines, but also avoid passengers receiving services for which they have no demand. In a very competitive environment, full-service carriers can gain from the experiences of the low-cost industry by leveraging important sources of ancillary service through offering seat selection, carry-on cabin luggage, extra legroom, a better or wider range of meals, etc.

The second respect of the internal improvement is the decision-making power from the organization’s management team. The research complies with the conclusion stating that a “successful decision is not necessarily the optimum or most rational decision. It is the decision the human being understands and knows how to apply effectively in the context of the situation” (Skybrary, 2010). We agree with previous researchers’ arguments, such as Rock et al., (1998), Woller (2002), Lapenu and Pierret (2005) and Mori (2010), on the importance of the shareholders and the board of directors. With the current globalization and increasing competition, strategic decisions are becoming more important and the involvement of boards in making these decisions is very important (Woller, 2002; Lapenu and Pierret, 2005). For the organization, the main strategic decisions made are those concerning growth strategy in terms of new product development and increased geographical outreach, choice of directors, lending policies and interest rates to be charged (Rock et al., 1998; Lapenu and Pierret, 2005). In addition, the stakeholder diverse board is necessary in order to bring different perspectives, experiences and expertise when involved in the process of making strategic decisions, decreasing or increasing the political power and increasing the level of intuition of the process which, in turn, have influence on organizational performance (Mori, 2010). However, In the airline industry, shareholders may either have a strong influence on the airline’s operations, or they may choose to remain as a passive investor and not be directly involved in the carrier’s

operations. Government shareholders, however, are rarely passive investors and they may exert a positive or negative influence on the airline's operation. At present, airlines are not only owned or controlled by government shareholders, but also by private shareholders, who are mostly large corporations or conglomerates. The trend among these private shareholders is to leave the management teams of the airlines to run operations free of interference, rarely intruding into their operations. Thus, moving forward to a single aviation market in Southeast Asia, operational independence from shareholders will be a new trend, where airlines freely confront either in competition or co-operation within their strategic thrusts.

In competition with low-cost carriers, major airlines have established budget airline subsidiaries to fly short-haul routes and cover the lower customer segment. However, these subsidiaries are not as successful as the truly independent low-cost carriers in the region. The key reason behind the failure of these subsidiaries is defined by most airline industry experts as being derived from the influence of the shareholders, and the dependence of those airlines in terms of management. When there is a feeling of protection, it is natural to depend upon, and live under the coverage of the parent company. In such circumstances, the decision-making power concerning human resources or the fleet, for example, will be slower, for the process must go through intermediate levels. Compared to the CEO of state-controlled airline, the CEO of a private airline has total control of the airline, leading to much faster decision-making on matters such as purchasing aircraft or hedging. The legal responsibilities to the private shareholders are governed by business regulations only, with no political considerations whatsoever. Once the airline cannot be creative and proactive, the decision-making process is slowed, creating one of the reasons why LCCs operating under the umbrella an FSC parent is often not successful.

In these findings, the airline's resources include aircraft, finances and human resources. The investment in aircraft, and the utilization of aircraft types are essential elements in optimizing an airline's operation and influence its profit generation. The nominal cost of an aircraft is incredibly high and has increased over the decades. Airlines are required to inject more capital when acquiring aircraft to cover the costs of the advanced technologies developed and included by the manufacturers. Therefore, the financial resource, which is extremely important, allows the management team to have the freedom power in utilizing the aircraft or making decision to invest on new aircraft. It makes little sense to run airline as a business model, meaning it is quite difficult to find investors, and it is almost impossible to find an airline wholly self-financed or financed entirely by debt. In fact, the running costs are constantly unpredictable in the setting of a turbulent environment. New technology has enticed airlines to invest hundred millions of dollars in new aircraft models, which consume less fuel, in an effort to mitigate the problem of unpredictable oil prices. Hence, airlines circle around in a vicious cycle of complicated acquisitions with limited financial capacity and the confrontation of generating profitability in a renewal process.

With regard to aircraft utilization, because of the many influential factors involved, it is quite difficult for airlines to fix utilization of small aircraft with higher flight frequencies or large aircraft with lower flight frequencies yet utilize the aircraft in a flexible way. Firstly, the distance between the origination and destination points will largely determine whether the airline will use small or large aircraft, noting that a large aircraft can always fly a short distance, but a small aircraft may not be capable of flying a long distance. Further to the above, the

allocation of slots is another crucial factor in determining aircraft utilization. The airline must ensure it has sufficient slots for all of its passenger demand because the airport may prevent it from flying too frequently within a day. If the airline has been offered four slots per day, its' strategy is to reserve the domestic slot for international flights and utilize the larger aircraft to carry the same number of passengers due to the difficulty in getting slots. This strategy will resolve the issue of the airline not being able to apply for a second slot for an additional flight, while the management team wants to increase the passenger capacity from destination A to destination B. Therefore, the method for gaining profitability, through the utilization of smaller or larger aircraft, with greater or lesser flight frequencies, depend on the impact of external factors, competition, financial resources, business structure and fleet structure of each airline.

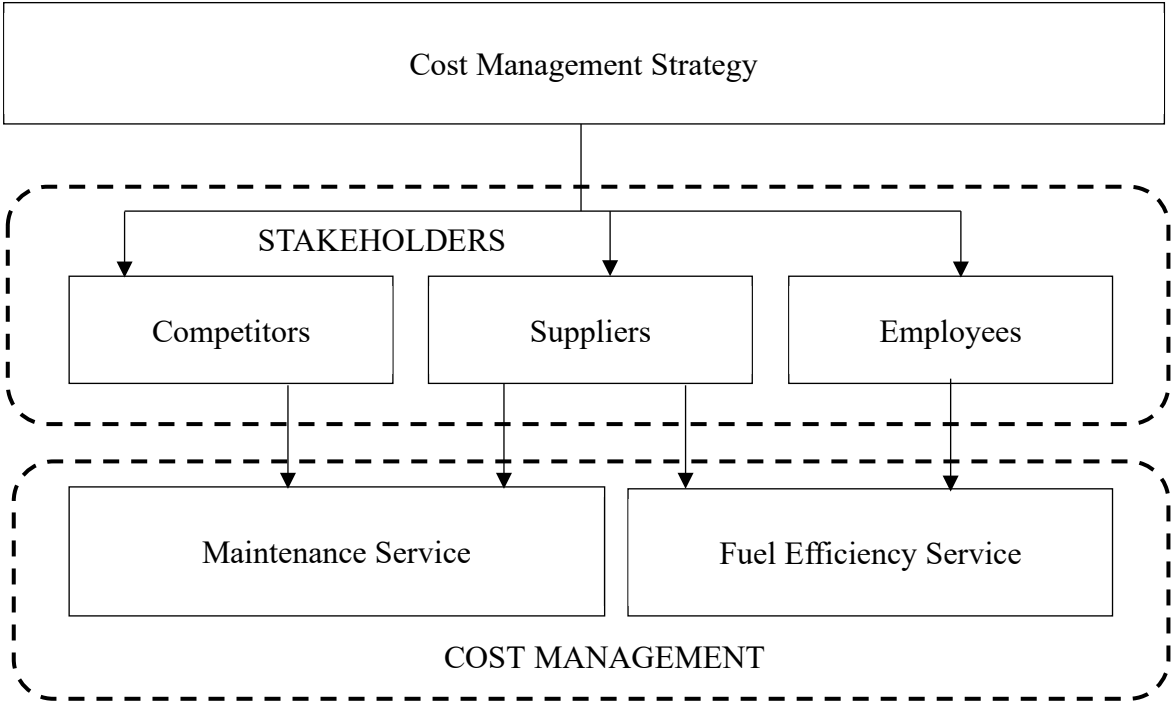
These findings are in line with the conclusion of Lapenu and Pierret (2005), we agree with them that managers and employees should be heavily involved in and identified with the organization in deploying strategies for daily operations. Managers and employees are dealing directly with clients, thus they can bring relevant information on boards concerning how to improve, innovate services and deliver process, which might lead to very competitive strategies (Lapenu and Pierret, 2005). We also agree with Clapham and Cooper (2005) that employees have direct access to detailed information concerning organizational activities. Having managers and employees in the process of making strategic decisions will give them the opportunity to participate in the long-term growth of the organization and will motivate them for the process of organizational performance. Mori (2010) involves stakeholders on boards and strategic decision-making as a mean of having a close relationship. This research supports Mori (2010)'s argument that the strategic decision-making process is the central part of the organizational survival and performance. When stakeholders are trusted, the organization will improve its decision process, which is characterized by one or a combination of rationality, political behavior and intuition. Moreover, a trusted relationship with stakeholders will open doors for more strategic decision outcomes, such as new products that match demand, new ways of providing services (Mori, 2010).

20.3 Cost Management Strategy

Though this strategy does not explicitly display in each case study, it is obtained from the strategic insights interviewed with aviation industry experts. Cost Management Strategy establishes a competitive advantage by having the lowest cost of operation in the industry. Cost management strategy in the airline industry drives the airline's efficiency, size, scale, scope, cumulative experience and using advanced technology. An airline could be the lowest-cost producer yet not offer the lowest-priced products or services, which help them to generate a higher than average profitability. Thus, cost leader airlines do compete on price and this is very effective at such a form of competition, having a low-cost structure and management. Figure 45 below shows types of Cost Management Strategy relating to two respects including (a) maintenance service and (b) fuel efficiency service. These following findings supplement to Porter (1980)'s competitive advantage point of view, when he said that *"cost leadership was gained from the organization's low cost position with its strategic target and/or high differentiation, with the proof that cost leadership can derive from mutual co-operations between the organization and its stakeholders"*.

Significantly greater co-operation in the airline industry is required as the business environment becomes ever more difficult. Apart from joining an alliance or forming joint-ventures, other services are being shared among airlines as well. Areas such as human resources and maintenance can be a win-win situation for all involved. Airlines are urged to share the common suppliers and infrastructure as a simple yet effective way to cut costs. In this area, there is no price war between airlines, but rather, they are allies in the main war against their common enemy, “costs”. Prices cannot be set lower than the current common rate in the market and managers can find no further ways to reduce costs unilaterally. Moreover, prices in the airline industry are not fixed over time but fluctuate according to market supply and demand. An airline can only defeat its rivals if its managers can maintain good service quality at a reasonable cost and sell at a price that brings the highest monetary efficacy.

Figure 45: Types of Cost Management Strategy



A massive financial capital investment is required. Therefore, maintenance companies are strategically located across many different hubs, making it beneficial for airlines to join those hubs. Furthermore, airlines cannot anticipate in advance when technical problems may occur. Though an aircraft engine may be designed to operate for more than 10 years, it can in fact shut down at any moment, and once an aircraft becomes unserviceable, it is necessary to locate the replacement parts immediately at the hubs. If not, it can take years to order the spare parts. This leads to a business loss as the aircraft will remain grounded awaiting repair. The airlines swap spare parts because prices to acquire all possibly required spare parts are simply too high for any single airline to bear. Additionally, local airlines attempt to share the same suppliers as a further cost-saving measure. They negotiate to invest in a bigger aircraft fleet in order to have more options and make more efficient use of the same systems. A major saving is made on the cost of labor, as pilots and engineers are licensed to operate and maintain a single aircraft type, and parts. Therefore, airlines co-operate with each other to contribute to a mutual pool of spare parts for the same type of aircraft, even though any particular airline may not be in need of the parts it has in inventory at any particular time. Airlines in the same alliance may use those spare

parts and then have a duty to replace what they use without delay in order for the other airlines to have that part available as may be needed. As a result, even as competitors, airlines must also be partners in some respects, i.e. sharing common warehouses and parts, for the sake of their own business and ultimately for their customers as well.

Thus, a price war can only be sustained for a short period of time and would not contribute to better quality of service because most new airlines appearing on the landscape are low-cost carriers. Another factor which illustrates that lowering prices cannot be sustained over the longer term is operating costs, which in large part are a factor beyond the control of the airlines. The most significant factor influencing operating costs is the price of aviation fuel. This is a cost that airlines are unable to control but attempt to mitigate and manage through hedging. With the current price of a barrel of oil predicted to increase, there must be a point at which flying at a very cheap price on medium-haul routes will not be possible.

Fuel prices not only affect the aviation industry, but also the entire economy across numerous industries including maritime, cargo, motor vehicle, plastics, etc. Depending upon the airline, fuel costs can range from 25% to 35% on average, or approximately one-third of all operating costs. When fuel prices double, triple or quadruple, airlines will be severely affected because ticket sales can only recover the total cost and generate no profits. If the fuel price rises 10 cents per liter, the big airlines will incur costs potentially amounting to billions of dollars. As a result, airlines are meticulously careful in fuel purchasing and refueling locations. Airlines also calculate the seats carefully to balance costs in attempting to fly with surplus fuel from a cheaper fuel location. Therefore, the increase in cost depends on a wide variety of factors, and the percentages of the total costs are different in each country. Thus, the airlines must maintain their operations in line with each country's unique characteristics. On the other hand, fuel prices impact the route development plan of an airline because the costs endured at each destination are different while the fuel price may remain the same. Thus, airlines must define destinations which bring greater profits.

The totality of fuel prices is even more woven into the fabric of the aviation industry than most others as airlines will undertake fuel hedging. Fuel hedging is a contractual tool to help major airlines, who consume large volumes of fuel, to stabilize their costs over the long term in an attempt to ameliorate the impact of high fuel price volatility. Hedging is not a tool used by every airline. It is more suitable to major airlines as they can contract big fuel hedging suppliers, whereas an LCC, a small airline or a new airline cannot do so. Regardless, many airlines hedge badly. It is difficult to estimate the level of hedging. Whether or not to hedge at all, or to hedge too much is a constant issue for airlines. In the aviation industry, even though an airline's yields are good, they may not be able to profit from that because all benefits can be completely annihilated by their hedge coverage. For state-owned airline companies in ASEAN, the management team hedges more conservatively because of the risk of being held legally responsible and liable.

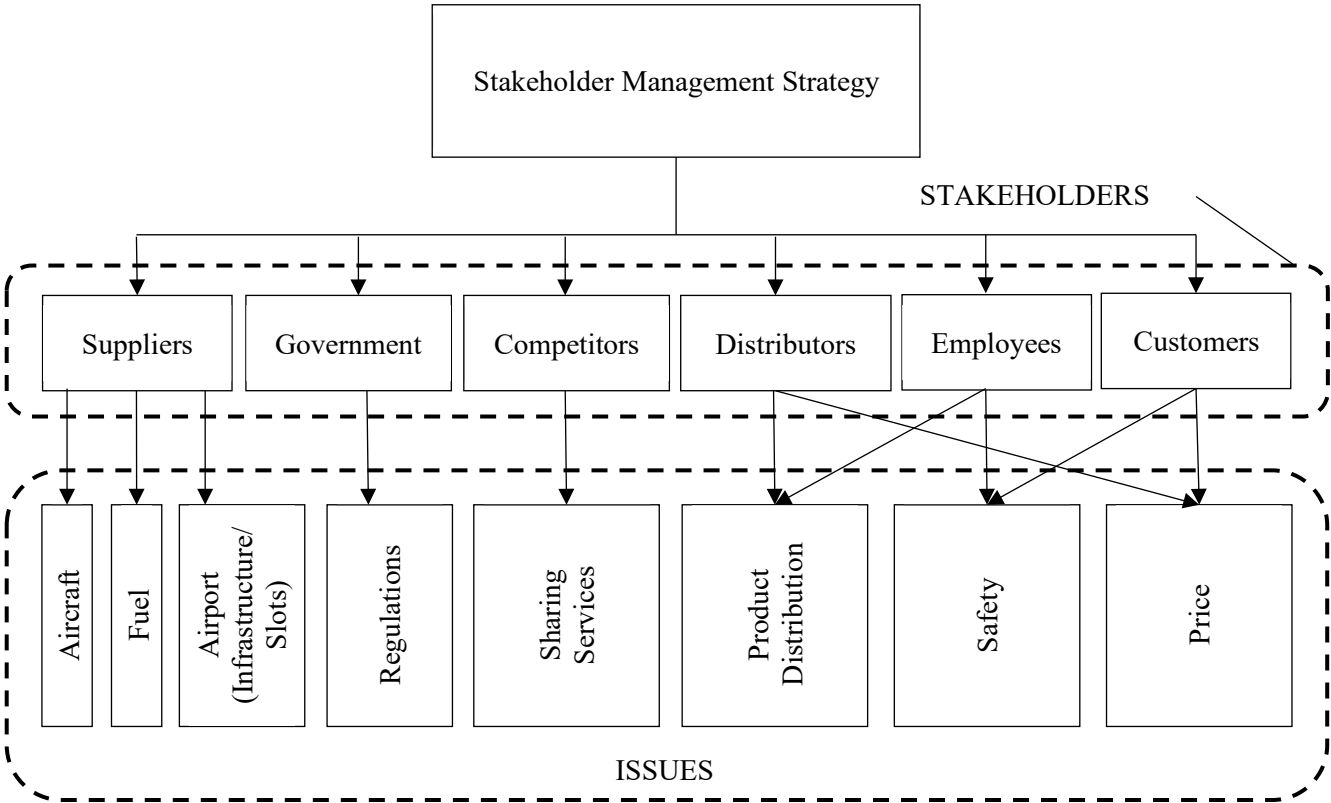
In addition, fuel consumption increases in proportion to aircraft weight. In Japan, executive managers even employ a special type of lightweight paint for the aircraft in order to reduce fuel consumption. The maximum take-off weight will depend on the aircraft type and the distance of the route. Thus, airlines must balance the customer and luggage load over the total weight

load of the aircraft and calculate the appropriate fuel consumption. When a cost-cutting program is carried out, pilots are even required to fly at a certain speed and maintain a certain altitude to save fuel. The pilots will not add power during the descent until landing. This cost-cutting measure can be applied in normal weather. Fuel consumption increases in turbulent weather because the pilot needs to fly evasion patterns. However, with computer assistance to calculate a fuel-efficient approach, nowadays the air-traffic control system and procedures are in place to support pilots in saving fuel.

20.4 Stakeholder Management Strategy

Figure 46 below shows types of Stakeholder Management strategy, in which each issue requires the airline to deal with each respective stakeholder through negotiation. The common issues in the airline industry relate to aircraft, fuel, slots, regulations, sharing services, product distribution, safety, and price. A stakeholder management strategy, including a negotiation as a form of engagement, will involve investors, workers, trade unions and government. Negotiation is needed because of the financial consequences for all relevant parties and the process of negotiation will engage among natural resources stakeholders leading to collective action. Thus, the identification and analysis of stakeholder are a crucial process; and the airline organization needs a stakeholder representative to handle this negotiated process addressing to the demands of interest groups. The illustrative findings correspond with Edmunds and Wollenberg (2001)’s conclusion on the strategic approach to multi-stakeholder negotiations. These authors concluded that *“negotiations based on an unhealthy combination of communicative rationality and liberal pluralism, which underplays or steel to neutralize differences among stakeholders, poses considerable risks for disadvantage groups”*.

Figure 46: Types of Stakeholder Management Strategy



The first issue that the airline needs to negotiate concerning to the Open Skies' impact, which relates to the government stakeholder. In fact, the Open Skies Agreement does not guarantee a pure competitive environment as per the aim of the policy. Less economically developed nations and their smaller airlines will be disadvantaged by signing the Open Skies Agreement, despite being granted the same rights as other participating nations, because their competitive power is much weaker. The primary barrier will be their difficulty in procuring slots to fly to the stronger countries, which constantly draw higher traffic loads, because those countries will prioritize allocation of slots for their own airlines. In addition, weaker airlines are threatened with elimination by stronger airlines if they do not seek the protection of their Governments in order to gain some measure of equivalent strength. For major airlines, the Open Skies Agreement has not fundamentally changed or affected the national carriers. As national carriers, these airlines can regulate the effects of the Open Skies Agreement to operate at whatever times they choose, given that their Governments will negotiate, or at least attempt to negotiate, favorable bilateral agreements for their benefit. This finding conforms to Nugraha (2018)'s study indicating that governments that represent the interest of states in international air transport, either as majority or minority shareholders, naturally exert their best effort to protect their flag carriers. The main reason for a government's decision to intervene in the aviation sector is to guarantee that the flag carrier maintains its effective control and market.

The second issue is having an appropriate response to the environmental standard regulation in the airline industry, which relates to the government and activist group stakeholders. The International Civil Aviation Organization (ICAO) plays a crucial role in addressing aviation's impacts on the environment. Its standards and policies ensure that aviation's environmental impacts, in terms of noise and carbon emissions, are addressed in a coherent manner, and guarantee a high degree of uniformity in the regulatory regime. ICAO's environmental standards allow the security of technological improvements and the creation of a level of regulatory predictability for airlines. However, implementation of ICAO's Environmental regulation regime has threatened the airline business. Airlines opposed the environmental levy, which increases the overall cost of air transport, and rapidly transferred this cost to customers through their ticket pricing. This has been seen as having a negative impact on the airlines, their customers, both domestic and international trade, and local economies. Therefore, the airlines ultimately responded to this regulatory imposition by investing in new, more environmentally friendly aircraft to meet the carbon emission standards and save on related costs. As a matter of fact, the airline industry has always been at the forefront of technology creation and innovation. There have always been large numbers of advancements, most of which have recently centered around fuel efficient engines, in order to reduce operating costs. Current aircraft models are especially fuel efficient compared to previous models, affording fuel savings of 18-20%, according to aircraft manufacturers, thus greatly assisting the airlines in reducing costs.

The third issue that the airline needs to deal with is the technology, distributor and customer stakeholders. The technology type impacting the air travel industry is product distribution, which has been revolutionary for the airlines. By its nature, the airline industry is dependent on strong distribution networks and was one of the first industries to computerize distribution. Until the 1980s, only travel agencies had direct access to airline seats. That changed when the airline industry was able to take full advantage of the the Internet. It was then that direct

connectivity was made, not just between the travel agencies and the airline reservation systems, but between the consumers themselves and the airline reservation systems. This marked a significant advancement for the airline industry. The time of the low-cost carriers arrived by taking full advantage of this technological leap measurably lowered ticketing costs by bypassing all the various intermediaries embedded in the previous product distribution models. In addition, the technologies chosen to be applied to websites and mobile applications in the airline industry also depend on the demographics of the consumer market. Young consumers, millennial and regular travelers find websites and mobile applications an important avenue for purchasing air tickets. Mobile applications facilitate young consumers with information, however, older generations still prefer to engage with printed materials for their convenience compared to a small mobile screen. Other consumers tend to rely on the airline's website rather than a mobile application. This group believes the website provides more accurate and adequate information than the application. Consumers from numerous countries worldwide, who prefer human interaction, continue purchasing air tickets directly from agents or airline boutiques. Another Internet-based method of purchasing air tickets is through search engines, with many consumers relying on such websites for price comparisons and the opportunity to locate cheaper fares independently.

The fourth issue relates to pricing and it is important to airlines to have an appropriate strategy to address to their customers. For the majority of the ASEAN population overall, and each country in particular, the customer purchase decision is still based on price. This is mostly confirmed by aviation leaders in the region. However, there is a minority that is more selective and concerned with criteria other than price when selecting airlines to fly with. There are several causal factors which will determine whether the passenger puts the price as the top priority or prefers convenience. Dominant among these factors are appropriate flight schedules, purpose of travel, and frequency of flying. Therefore, airline managers will set their pricing strategy on different situations derived from customer demand. Depending upon the target customers, the price will affect tour, conference or business itineraries. It is human nature for people to choose the cheapest option as money matters in a human life. However, price effects are only seen when the difference is quite large. As the price factor will depend on the targeted travelers, the full-service and low-cost carriers will aim to target their separate segments to boost their business. Airline managers will adjust fares according to fuel price decreases or increases and depending upon market demand. When fuel prices decrease, some airlines will decrease fares accordingly in order to treat their customers fairly. Some airlines, however, will take this opportunity to increase profit by maintaining ticket prices at levels prior to the fuel price decrease. Vice-versa, if the fuel price increases, it is not always a certainty that ticket prices will increase in line with fuel prices because of airlines' attitudes towards their customers and their perception of the market situation as mentioned.

The fifth decisive issue is a concern over safety and security, and the airline needs to deal with customer and employee stakeholders. These have a strong impact on the airlines because a carrier's safety reputation is very easily lost, and extremely difficult to rebuild. The second important environmental issue is terrorism. This has a more damaging impact on airlines than any other safety element. As a result, airlines and security service worldwide remain constantly vigilant, causing security screening procedures to become increasingly stringent. This has resulted in longer checkpoint waiting times and complaints from the travelling public. The

International Safety Regulatory regime has important control over the entire airline industry, where safety is considered the most influential factor. Though the commercial aspects currently impact strongly on the success of the airline business, the investment in safety from the airlines brings much value and benefit in terms of enhanced reputation and potential long-term commercial profits. As a result, airlines are encouraged to adopt the International Operation Safety Audit (IOSA) from the International Air Transport Association (IATA). The IOSA is internationally recognized and accepted. Despite the safety issue currently being difficult to measure, most ASEAN consumers are not actively aware of this factor. For the reputation of an airline, the carrier will look towards safety in regard to the long-term.

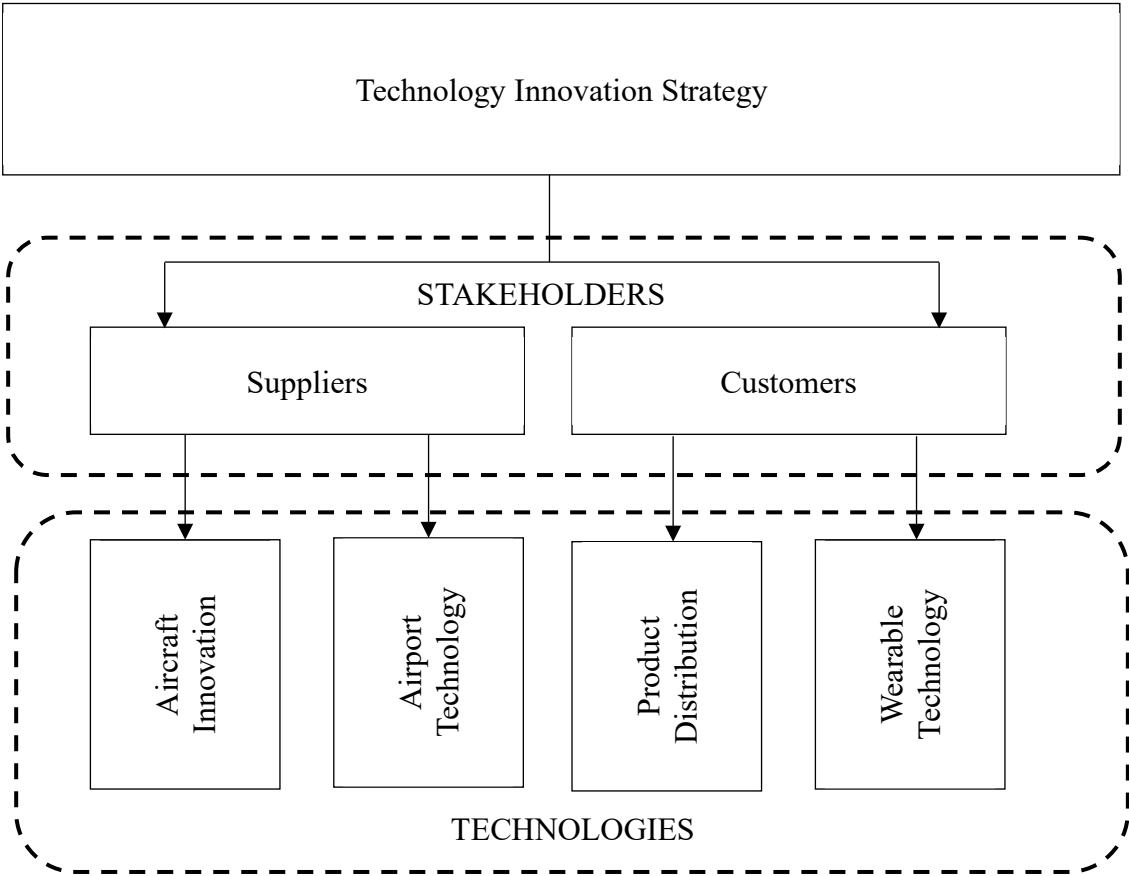
The configuration of aviation safety regulations in some ASEAN countries is not as strict as is necessary. In theory, airlines in Vietnam must reach the most stringent standards set by the Civil Aviation Authority of Vietnam (CAAV) or the International Air Transport Association (IATA). Similar safety regimes are applied to airlines in the other ASEAN nations. However, safety configurations are not sufficiently strict when it is clearly evident that the low-cost carriers demand more flight hours per day from each of their aircraft than do the traditional airlines in the region. Currently, the majority of customers pay more attention to ticket price than to safety because, given the hundreds of aircraft flying each day, and the thousands of flight hours every day, accidents are quite rare. If there is sufficient difference in ticket prices, people will switch to the cheapest fare. Therefore, for commercial purposes, airlines extract the maximum hours possible out of the aircraft and pilots. Thus, airline managers continually urge their airlines to secure sufficient pilots to the crew all required shifts and lessen the issue of duty limitations. This is particularly so if that airlines' business is growing through intensification of routes and the subsequent increase in flights. Restrictions on operating used aircraft may differ for each country and the issue presents pros and cons to the airlines. It is not a major concern for airlines to purchase used aircraft. However, they should carefully consider the maintenance history and ensure all technical checks are in compliance with the safety regulation. In itself, ensuring technical and regulatory compliance may be a longer and more costly process than acquiring a new aircraft.

The last issue concerns the oil price fluctuations, which are notoriously difficult to foresee in the long term and people have no idea how much prices may rise or fall, and airlines ought to deal with the fuel supplier stakeholder. Even the most experienced, knowledgeable experts working in the oil and gas industry are unable to make accurate predictions. Normally, fuel prices increase when economies are flourishing and there is a commensurately greater energy demand. This leaves some margin for the airlines to pass on to their passengers. In addition, when the fuel issue becomes an obstruction, the aviation technologies must improve or change. The aviation industry will either trigger the improvement of more fuel-efficient aircraft technology or look to alternative options such as electric or solar power which might come into operation in the future when the planet's oil reserves have been fully depleted. Firstly, if the fuel price is high in an airline's home country, that airline must invest in fuel efficient aircraft. The savings are not apparent on a monthly basis but can be seen as a huge accumulation over a longer timeframe, such as a decade. If an airline loses 15% on aircraft efficiency, it will pay more on leasing fees.

20.5 Technology Innovation Strategy

At present, technology is a commercial advantage for large airlines because it is easier for them to interact with their customers. Thus, these airlines’ marketing departments have become smarter in ways of selling additional services. They tailor their communication approach to customers and undertake big data analysis through the retrieval of customer information. Then, technology will be a differentiating factor and will be useful because the market has become more captive. For as long as consumer behavior is based on price a decision, and despite the best efforts of the marketers to play up the importance of technology, customers give little thought to the technologies the airlines use to deliver their services to their passengers. Figure 47 below develops a technology innovation strategy model, reflecting four technological respects in the airline industry including aircraft innovation, production distribution, airport technology and wearable technology. These following findings correspond to Stefanovie and Dukie (2011)’s results stating that every strategic alliance, which aims to become a market leader, must invest in innovation and formalization of the strategic innovation system. Successful implementation of strategy of innovation enables sustainable competitive advantage for strategic alliances, which become more and more significant and become very important for of co-operation between organizations. This form of co-operation has objectives to diversify of risk, increase in resources, develop new technologies and increase the market share, along with maximum exploitation of economies of scale and improving competition position.

Figure 47: Types of Technology Innovation Strategy



Firstly, the airline is equipped with the most modern aircraft models, such as the A350-1000, in keeping with its commitment to be environmental sustainability. Furthermore, the airline needs to focus new aircraft investments in noise reduction and cabin air quality aimed at minimizing passenger discomfort and fatigue. With these new technologies, new aircraft innovations reduce air quality-related symptoms such as dry eyes or dry skin during long-haul flights. Modern aircraft also usually provide personal in-flight entertainment systems instead of common shared screens, with the majority of passengers being happier when they have access to personal in-flight entertainment.

Secondly, a further significant motivation for the low-cost carriers to employ technology for their distribution systems is the large domination of major airlines which have exerted control over the traditional distribution channels. Major carriers will cease to co-operate with any travel agency which supports other airlines. There have also been changes in the interactions the customers have with the online technology. The proportion of customers interacting with the technology has increased 25% to 30% annually, including online ticket purchases and check-in, or buying add-on packages such as in-flight meals, additional luggage allowance or seat selection. Online distribution systems also aid the low-cost carriers by reducing the cost of commissions to travel agents. Commissions are currently paid at approximately 7% - 9%. The technology has a major influence on the airline's profits, and hence their growth.

Airlines currently utilize the Global Distribution System (GDS) model which Amazon also uses. At the time when people in general did not yet have any notions of E-commerce, it was being applied in the aviation industry. It is believed aviation is the first industry to use E-commerce as a distribution system. The areas that the technology covers, in general, are ticket sales through websites and mobile applications which empower customers to purchase tickets quickly, at times of their own convenience, and as easily as possible. Another remarkable intermediary involved in the sales distribution system of the airline industry is the OTA (Online Travel Agent). OTA is a sales system attached directly to the airline's reservation system. The OTA interface is user friendly, allowing customers to book tickets on-screen and update changes immediately in accordance with any changes from the airlines. When this technology has exerted sufficient influence over consumer behavior, airlines may realize greater profits by replacing GDS with OTA. OTA takes a lower commission than either GDS or traditional travel agents. Despite the fact that most airlines worldwide would greatly prefer to distribute their tickets through their own websites, much depends on the maturity of the target market. Airlines must continue to employ third parties to sell flights, especially in small and less developed markets where online payments may not be popular or widespread.

A third type of technology employed in the aviation industry relates primarily to the airport side, the use of biometric technology for immigration management. At large airports, biometrics and artificial intelligence are replacing elements of the human workforce. A new flying experience happens when a passenger does not have any human interaction during check-in, a process that was previously completely humanized. This passenger can arrive at the check-in area and interact only with the computer technologies, a system which is presently employed by large airports. The adoption of facial recognition technologies at the self-baggage-drop machines, integrate border control lanes and self-boarding gates allow for security checks to be fully automated. Today, departing passengers are required to verify their identity at three

locations: luggage check-in; border control; and when boarding, all previously performed manually by ground handling staff or immigration officers. By leveraging technology, all clearances through these touch points are expected to be speedier, thereby enhancing operational efficiency while reducing the reliance on manpower and the associated costs.

The last technology holding significant potential benefits for airports and airlines is wearable technology. When wearable technology is integrated seamlessly with mobile services, the passenger experience can be significantly enhanced. For instance, this technology will deliver timely and relevant notifications to passengers concerning their flight status, guiding them in finding or highlighting events or promotions around them. In short, while self-service bag drop and self-tagging are simplifying passenger processing, the widespread use of biometrics has revolutionized the customer's overall airport experience. In the 21st century, daily processes are more systemized and use of mobile and digital technology is more pervasive among the younger generations. This trend will continue to crystalize in the near future. However, in relation to mobile technology usage, airlines will find themselves in a more difficult situation than the banks are currently facing. Airline managers have no choice but to create separate strategies and approaches for different marketing plans. These strategies will all depend on the target consumer demographic and how those people are using technology.

20.6 Processes for Strategic Fit in the ASEAN Airline Industry

Under the guidance of the ESO framework, the empirical research in the ASEAN airline industry correlatively corresponds to the work of Milliot (2013) stating the coherent casual relationships between the environment, strategy and organization. With the employment of four different profiled airlines as case studies, we have explored both favorable and unfavorable external pressures imposed on the airline's business and the strategic responses from airline's decision markers to fit with the perpetual environmental changes. Referring to the internationalization strategies adapted from the work of Perlmutter (1969), Porter (1986) and Milliot (2013), the selected case studies employed in this research conform to their classification of organizational profiles.

Compared to other major airlines worldwide, Vietnam Airlines has obtained the international strategic orientation because this airline has a strong concentration of decision-making power domestically rather than internationally. Vietnam Airlines is the legacy-national airline of Vietnam, and also acts as the parent company of both Cambodia Angkor Air and Jestar Pacific, the management's control and leaders are usually from Vietnam, thus, its organizational orientation can be categorized as ethnocentric. The second case is Qatar Airways, which has obtained a global strategic orientation with its decision-making power concentrated in Doha to co-ordinate geographically distributed activities in several countries in order to respond in a harmonized way to the global market. Qatar Airways does not establish subsidiaries, but operates office units worldwide and employs most adapted skilled people, hence, its organizational orientation can be categorized as holicentric. The third case is Derry Air, which has obtained the multinational strategic orientation when its subsidiaries operate independently in different markets and disperse its decision-making power. The airline has franchised subsidiaries through two countries and its subsidiaries operate in a close relationship with each

other in order to boost the Derry Air brand across Asia, thus, its organizational orientation can be categorized as polycentric. The last case is NokScoot Airlines, which has obtained the transnational strategic orientation demonstrating with a low concentration of decision-making power and strong co-ordination of geographically dispersed activities. NokScoot Airlines is a subsidiary established by Scoot in Singapore and Nok Air in Thailand. The fact this airline depends heavily on its parent companies in terms of aircraft and route networks categorizes its organizational orientation as geocentric.

This research consents with previous researchers' debates such as Barney (1991), Narney (1991), Eisenhardt and Matin (2000) and Halfat et al. (2007) stating that the common capabilities among organizations will not be considered as sources of competitive advantage. In fact, these findings uncover four resources attributing to an airline's competitive advantage including aircraft innovation, airport technology, wearable technology and product distribution. Those reconfigured resources derive from the technological respect that require an airline to have a sustainable financial base to accommodate, thus, not all airlines possess a strong cashflow to keep up with the technological development. This finding is in line with Lichtenthaler (2009)'s conclusion stating that dynamic capabilities performs stronger during technological and market turbulence. In addition, the possession of own airport and the priority of slot issuance bring the competitive advantage to an airline as well because they are the exceptional capabilities built based on both internal and external processes, which conforms to Teece, Pisano and Shuen (1997)'s point of view asserting that the organizational resources generating a competitive advantage must be precious, rare, impossible to imitate and substitutable.

This research also complies to Teece (2007)'s concept indicating that managerial competences must act as a key element of dynamic capabilities for an organization to seize new opportunities when it needs to devise and refine new business models in response to new changing environment. The practical model for strategic fit presented in Figure 52 below displays a fit between strategies and environmental conditions. These relationships are causal for which the strategies match the external pressures as criteria and guarantee the organization's survival and gain of a competitive advantage. This works correlatively with the definitions from Porter (1980, 1985) and Hill and Brown (2007) on both external and internal dimensions. Thus, the airline formulates and re-adapt its strategies in alignment with the external environment leading to improved performance and profit's generation.

In regard to generating profits, this is not entirely up to the airline itself as there are circumstances which are beyond the airline's control. Profitability also depends on external factors such as economic impacts, competition levels, customer demand, unexpected influences, etc. For instance, the ASEAN airlines must endure major expenses, which account for over 60% of total operating expenses, denominated in foreign currencies, such as aircraft leasing, acquisition, maintenance costs, insurance premiums, and fuel costs. Currency fluctuations inevitably affect airlines' expenses because they cannot be controlled or forecast accurately due to the influences of both domestic and global economic conditions. In the airline industry, profits can be generated from different sources depending on the airlines' strategies. The airlines do not profit greatly from passenger transportation, but instead, air freight transport will be a growing business for the airline industry into the future, as the passenger carriage

business is nearing saturation. The profits generated from passengers are derived primarily from changing dates or seats, and overweight luggage penalties. However, this type of profit cannot compare to the profits able to be generated from cargo and airfreight, which are now a focus for most airlines. Other sources of profit can come from ancillary services, including overweight luggage charges, duty free, aircraft leasing, catering services, line maintenance, and ground services. The findings on profitability are different from other previous researchers, most of whom worked on the effect of different antecedents upon the profitability such as airline routes and aircraft utilization (E.Kasturi, 2016), code-sharing co-operation (L.Zou and X.Chen, 2017), aircraft leasing (S.Bourjade et al. 2017), and deployment of Airbus A350-900XWB (G.Baxter and P.Srisaeng, 2018), and ancillary service (W. Song, H.Lee, 2018).

In Figures 48 and 49 below, we present the contributions before and after the implementation of the Open Skies Agreement in ASEAN. Before the implementation of the Open Skies Agreement, most of the airlines are flag carriers in ASEAN, owned or partly owned by their respective governments. The governments in ASEAN countries give high priority to their flag carriers since those carriers not only transport but also represent their countries' international profile. The government's protection also shields national airlines from extreme competition, especially against stronger neighboring airlines. Thus, national airlines dominate the domestic markets by charging high fares on their services and gain high profits, as shown in Figure 48. According to Lee (2015), the initial proposal towards the liberalization of the aviation sector in 1995 only dealt with soft rights such as marketing and reservation systems, while hard rights such as traffic and capacity setting were excluded. The ASEAN Single Aviation Market is not a fully liberalized market, and is less ambitious compared to what the EU has achieved due to inequivalent constraints.

After the implementation of the ASEAN Open Skies Agreement, the aviation industry was transformed by allowing for more liberalization between the regional aviation markets, encouraging greater connectivity, higher traffic growth and service quality while lowering ticket prices. The competition from LCCs over FSCs allows LCCs and FSCs to expand and become regional players thanks to deregulation and liberalization in several countries in ASEAN. Ten membered countries mutually acknowledge licensing requirements for pilots and flight crew, allowing them to move from one ASEAN carrier to another.

However, there remain challenges for the implementation of the Open Skies Agreement. Granting of fifth-freedom rights remains arbitrary and dependent on the host country. At present, the Open Skies Agreement only remove restrictions up to the fifth freedom right while strong airlines expect to be granted seventh-freedom right²⁷. In addition, existing infrastructural challenges in terms of capacity, efficiency and service quality are insufficient to accommodate additional demands. The best landing and take-off slots are reserved for national carriers and not all ASEAN member states have opened all their airports to competition.

The slow pace of aviation services integration can be attributed to the political context of inter-governmental co-operation in ASEAN. The bloc's member states were reluctant to give up their

²⁷ The seventh freedom refers to the right of a carrier to operate between two foreign hubs outside of its home country.

nationalistic character, preferring to engage with each other where inter-governmental consensus and consultation will act rather than taking a legalistic, formal approach is the norm (Lee, 2015). Existing protectionist policies and the restrictions imposed by ASEAN states on the ownership and controls of airlines encumber the development of air travel. Regulatory harmonization among member states is still being discussed and not yet established in any treaty agreed by ASEAN members.

Since there is no security standards and checks across ASEAN nations, we, therefore, propose an ASEAN Regulator to act as a higher authority to settle disputes and ensure adherence among countries through price standardization and regular monitoring of aviation security checks, shown in Figure 53. The liberalization derived from the Open Skies Agreement has leveraged more connectivities, boosting traffic growth, lowering prices, proving service quality, and adapting mutual licensing requirements; most of which stimulate the competition between LCCs and FSCs.

Figure 49 illustrates current strategies from 1 to 7 that airlines are using to develop their strategy growth. Based on the Open Skies Agreement, stronger FSCs can use Strategy 1, the fifth freedom right, to stop over at another country before continuing their next flights. In response to the threat of losing market shares, weaker FSCs use Strategy 2 to negotiate and demand the protection from their governments to against stronger FSCs, which pushes back and derails the airline industry in the long run. In the event that both stronger and weaker FSCs and LCCs can do co-operations, coopetitions are mostly used by airlines with Strategies 3, 4, 5, 6 and 7. Stronger FSCs are currently codesharing (Strategy 3) with weaker FSCs and interlining (Strategy 4) with LCCs to expand their network in the region. On another hand, stronger FSCs and LCCs can acquire stakes (Strategy 5) from weaker airlines in order to strengthen and reconfigure weaker airlines' resources for them to survive or grow. In the competition with genuine LCCs, strong FSCs establish their LCC subsidiaries (Strategy 6) to compete for the low customer segment in order to maintain their market shares. The LCC subsidiaries can be merged to the major FSCs (Strategy 7) when there is a need to revoke their legs in order to preserve internal resources.

These above strategies are considered as a tool to implement the Business Growth Strategy for airlines to expand to international markets and local markets. We propose to supplement four strategies obtained from the data analysis, that are numbered from 8 to 11 in Figure 49. FSCs can use the Internal Improvement Strategy (Strategy 8) to improve organizational resources through a process of configuration, in which presented as Dynamic Capabilities in the framework. While LCCs are less protected, these airlines are proposed to use the Stakeholder Management Strategy (Strategy 9) to supplement to other strategies for their business growth. Both FSCs and LCCs need to employ the Technology Innovation Strategy (Strategy 10) and the Cost Management Strategy (Strategy 11) to supplement to the Business Growth Strategy. Without the investment on technology innovation, one airline would lose its competitive position or might be swallowed up by its rivals. In addition, cost management is crucial to implement in a tough competition whereas the airline industry is also known as a high cost industry. When prices are lowering at the lowest rate, cost is the main factor that airlines to have manage effectively to maintain the marginal profit.

The research's proposed strategies supplement to current strategies that airlines are using to grow in confronting with the Open Skies Agreement. Specifically, with the focus on internal improvement and cooperation, airlines are more reaching to win-win co-operation than setting themselves being a less competitive gainer. Stronger airlines should co-operate under various forms with weaker airlines and thereby to leverage weaker airlines' internal resources for them to exploit within their local markets rather than expecting to use the fifth and seventh freedom rights to fly freely in the region. When resources are not equally, thus the protectionism is not unavoidable as we have seen the current situation. As a result, the rational co-operations will characterize and shape the airline industry, leading to a sustainable development and stability in the ASEAN region.

This research also confirms the conclusion from Yusoff et al. (2016) stating that strategies demand all organizational processes and resources to work cohesively to contribute to their success. In the case of failure, strategists will have to find the processes and resources incapability as the responsible factor. Executives need to create an alignment between the processes, resources and core strategies to minimize the conflicts between multiple goals during the strategic execution.

Figure 48: Airline Industry Before the ASEAN Open Skies Implementation

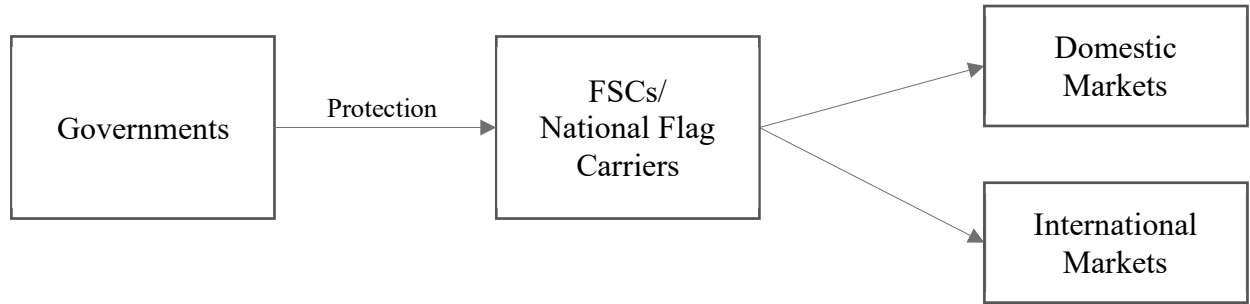
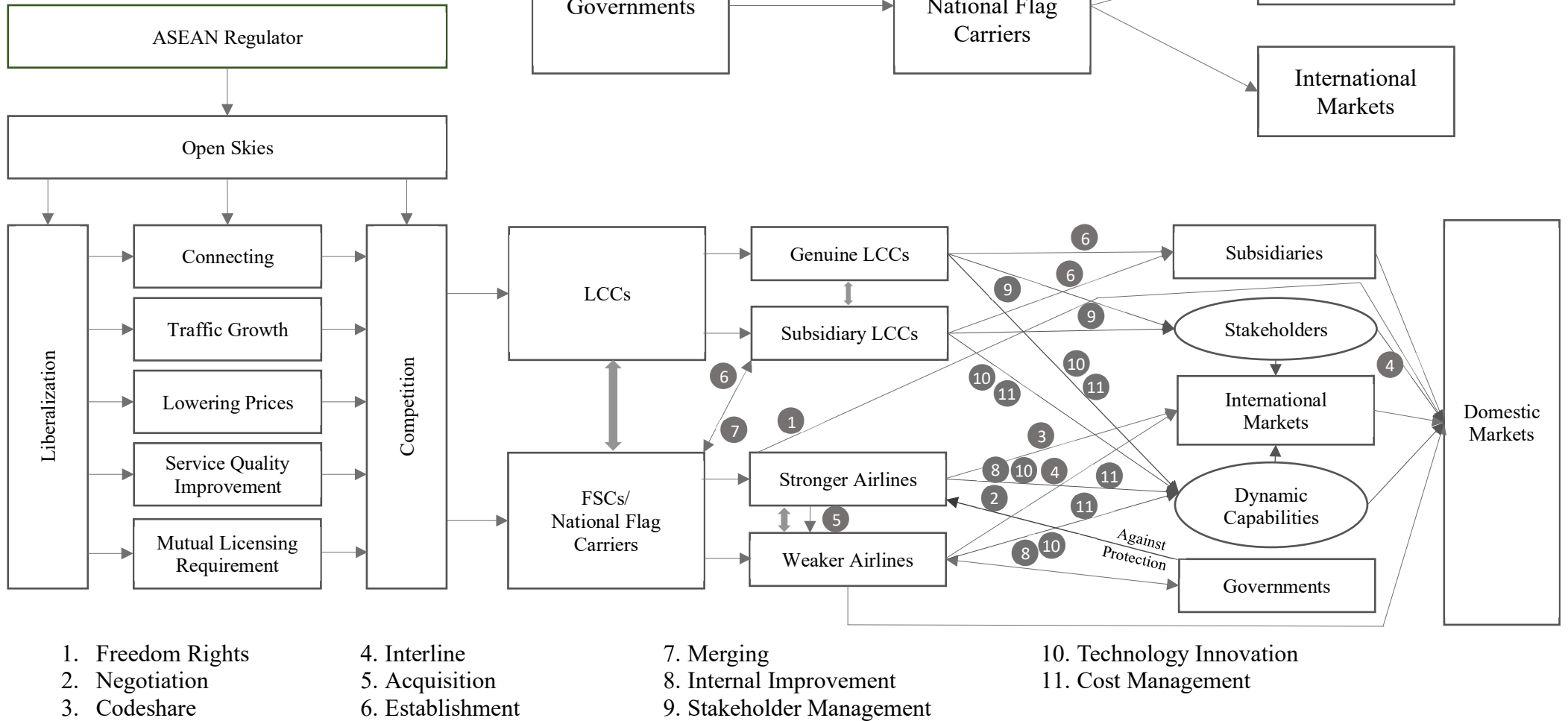


Figure 49: Airline Industry After the ASEAN Open Skies Implementation



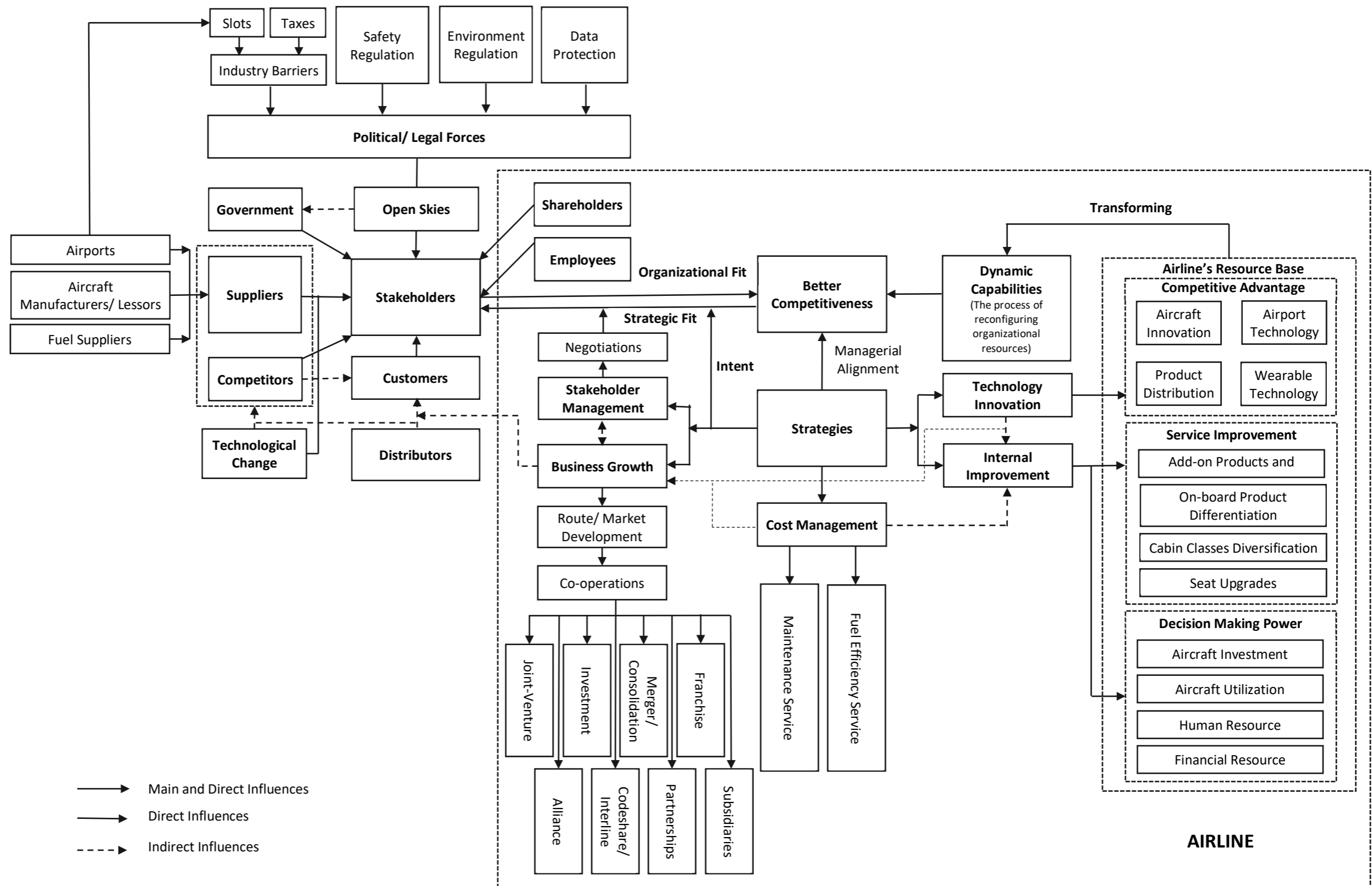
Therefore, the proposed interpretation of strategic fit in the airline industry is considered dynamic. In Figure 50, we present a practical model for the airline industry, which is validated by CEO of NokScoot Airlines, Country Head Manager of Qatar Airways - Cambodia's Station and CEO of Y2International Aviation Consulting. These practitioners find the practical model rational and applicable for the industry. This model is considered completed and able to cover all matters in airline businesses, especially for the passenger transport business. In reality, though one airline can cover all these elements as presented in Figure 50, the practitioners do not guarantee that airline will be successful because the airline needs to provide exactly what passengers need. In general, this model is theoretically a good instrument for airline operational standard measurement, however, it does not imply the business model of each airline. In this model, the process of managerial alignment is crucial for airlines to obtain the strategic fit through the correlation of business processes and strategies, which links the organization's structure and resources. Through the presented findings, the airlines are able to implement five key strategies including a business growth strategy and a stakeholder management strategy which responds directly to the environmental stakeholders. Another three strategies including an internal improvement strategy, a cost management strategy and a technology innovation strategy will enhance and strengthen the organization's capabilities, thereby to transform the airline's resource base and complement to the business growth and stakeholder management strategies in implementing strategic alignment.

The Business Growth Strategy, namely the employment of Co-operations under different forms, is the main strategy for any airline to expand its route network and market. The Stakeholder Management Strategy is used to negotiate with external stakeholders to resolve issues during the implementation of the Business Growth Strategy. Both Business Growth Strategy and Stakeholder Management Strategy are used to deal with the external environmental impacts. In order to effect the Business Growth Strategy feasible, an airline needs to improve its resources with the Internal Improvement Strategy, in which it will focus mainly on its service improvement and enhance its decision-making power in terms of the decision of aircraft investment and utilization; and the control of its human and financial resources. As mentioned above, Technology Innovation and Cost Management Strategies will, on one hand, subordinate the Business Growth Strategy, on another hand, subordinate the Internal Improvement Strategy to help strengthening organizational resources. With those workable strategies, an airline is encouraged to obtain a better competitiveness.

As a result, we can conclude as following for this discussion in addressing to the second research question: *“What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?”*

- ➔ *The process for strategic fit in the ASEAN airline industry, with the SBU as passenger transport, must involve five types of strategies including a Business Growth Strategy, an Internal Improvement Strategy, a Cost Management Strategy, a Stakeholder Management Strategy, and a Technology Innovation Strategy. These strategies are implemented and combined to achieve a strategic fit in confronting with external environmental impacts and obtain an organizational fit to head the airline toward a better competitiveness.*

Figure 50: Development of Practical Model for Strategic Fit in the ASEAN Airline Industry



SECTION 21

RESEARCH CONTRIBUTIONS

In this section, we present the research contributions relating to stakeholder environment's priority ranking and the generation of the Strategic Tool Analytical Framework. Based on the nature of the airline industry, this research proposes to input the government and competitor stakeholders into the operating environment and consider these two stakeholders as primary stakeholders. The Strategic Tool Analytical Framework is adapted from the ESO framework developed by Milliot (2013, 2014) and Dynamic Capabilities Business Model developed by Teece (2017). In this framework, external growth and internal growth strategies are defined and characterized by five specific strategies that facilitate an organization to response to its respective influenced environment.

21.1 Theoretical Contributions

The first theoretical contribution is the proposal of the re-organization of the stakeholder environment's level based on the study of Freeman, Harrison, and Wicks (2007). The research proposes that Government and Competitor stakeholders in the airline industry play more important roles within the primary stakeholder environment than the Communities as in the study of Freeman, Harrison and Wicks (2007), since these elements have a direct effect on organizational performance and strategies. Additionally, the Employee stakeholder should be positioned in the primary stakeholder environment rather in the central organizational environment. According to previous researchers, employees are considered to be internal stakeholders that affects the profitability and sustainability of the companies (Galbreath, 2006). The research consents with Matuleviciene and Stravinskiene (2015)'s argument that even these stakeholders who find themselves in the same stakeholder group have unequal importance to the organization. Vilanova (2007), Kaler (2009), Bussy and Suprawan (2012) stated that employees and shareholders were attributed to the same stakeholder group for a long time. However, the shareholders take up a higher position than the employees. Stieb (2009) noticed that the interests of the shareholders should not often be the leading and he queries whether it is possible to rely on the theory in a real business.

This research supports the priority ranking of stakeholders for an organization to shape its environment. Our debate is that the prioritization is essential for the organization to run its operations and to ensure that strategic management will focus on the most important elements. We agree with Matuleviciene and Stravinskiene (2015) to summarize the stakeholder grouping and its importance, it should be first emphasized that the stakeholder grouping is one of the most important and decisive factors, which determines not only the performance of organization, but also its reputation. The situation in business shows that the primary stakeholders begin to take the secondary position according to their importance to the organization. The analysis of stakeholder grouping initiated that while grouping stakeholders in accordance with their importance to the organization, it is worth to divide them into primary and secondary. Allocating the stakeholders to the primary and secondary groups unconsciously

leads to the conclusion that primary stakeholders take the first, i.e. the most important place with regard to secondary stakeholders.

Figure 51 below shows the research contribution through the re-organization of the stakeholder environment's levels for the airline industry in particular. This research is in agreement that although the airline industry has been affected by Technology Change, Global Political/Legal Forces, Global Economic Forces, and Social Cultural Forces, those elements remain segmented in the broader stakeholder environment since they are not intrinsically vital to the airlines. Furthermore, this finding is in line with the studies of Harrison and St. John (1994, 1998), which applied organization theory and industrial organization economics to the task of prioritizing and managing stakeholders in the strategic management process. We also agree with Vazques-Brust et al. (2010)'s research in Argentina and Siriwardhane and Taylor (2014)'s research in Australia revealed that the urgency and the legitimacy of stakeholders are more important criteria than the stakeholder power.

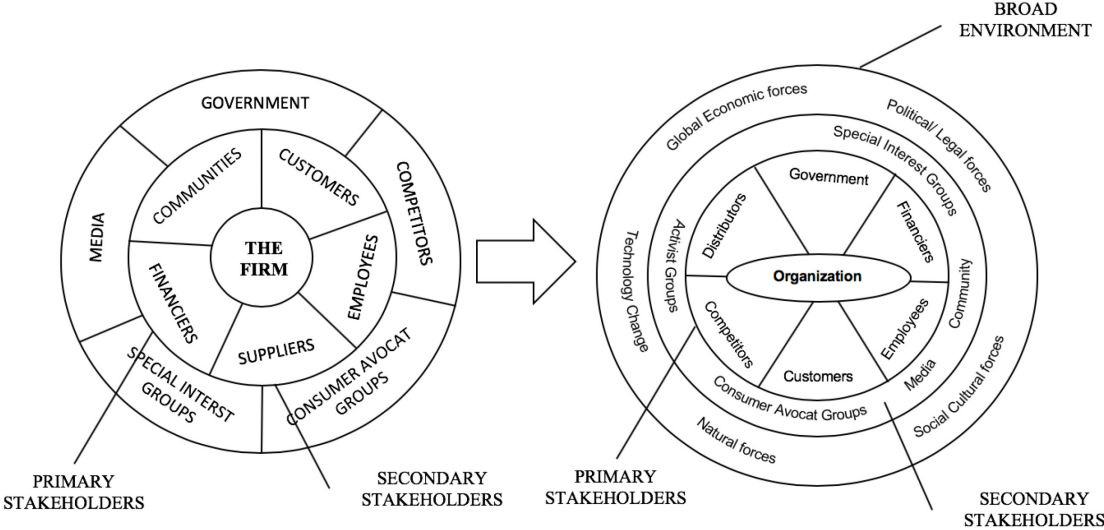
However, their debate, stating that the organization has little or no influence over the Broad Environment, does not entirely fit the nature of the airline industry, especially in the present time, where those four forces have become more complicated in such a chaotic world. We may conclude that the stakeholder's positioning in the Broad Environment has a smaller influence than those which are segmented in the operating environment. The findings, presented in Chapter 7, also indicate the effects from natural hazards such as earthquakes, floods, hurricanes, tornadoes, volcanic eruptions, and tsunamis on property damage, the airlines' business and passenger safety, and has been taken into account as a significant factor in the airline industry or indeed any other industry. Thus, the study suggests the addition of a "Natural forces" element into the Broad Stakeholder Environment in subordinating further to the research of Harrison (1998, 2007), St. John (1998), Freeman and Wicks (2007).

Governments, Shareholders, Suppliers, Competitors, Customers and Employees can be considered the primary stakeholders in the airline industry, who can directly affect, or be affected by, the airline's operations (Freeman, 1984). According to Freeman, Harrison and Wicks (2007), the "Government" and "Competitor" elements are not characterized as primary stakeholders because they are less important than the other elements of Customers, Employees, Suppliers, Financiers and Communities. This priority is an absolute fit with the previous business environment when the competition was less fierce and the environment was more predictable (Freeman, 1984) as well. In this current era, the environment has become more sensitive and turbulent, with competition increasing robustly from both domestic and foreign entrants, especially in the airline industry, leading to protectionism from governments in favour of state-owned business entities for maintaining the country's key economic sectors. The research proves that Government and Competitor stakeholders in the airline industry take important positions within the primary stakeholder environment, rather than the Communities as in the study of Freeman, Harrison and Wicks (2007), since these elements have a direct effect on organizational performance and strategies.

Shareholders, as cited in the airline industry, can be understood to be located in the Financier stakeholder because they legally own one or more shares of the stock in an organization and

their influence is determined by the shareholding percentage owned. The shareholder’s financial engagement contributes to, and creates, stakeholder value for the organization. Shareholders expect the company’s management to take actions which increase the share price and dividends, and then to improve their financial position. Thus, the shareholder is regarded as part of the Financier stakeholder, and takes the premier priority within the stakeholder level for its direct effects on the organization.

Figure 51: The Organization and Levels of Stakeholder Environment



Source: Adapted from John (1998), Freeman, Harrison, and Wicks (2007)

This study corresponds with the work of Freeman, Harrison, and Wicks (2007) in pondering the Employee as a separate stakeholder group, located in the primary stakeholder level, since the employees’ competence and attitude severely affects the airline’s business. In the study of Harrison and John (1989), these authors have positioned the Employee stakeholder, together with Owners/ Board of Directors and Managers in the Organization environment. However, the research proves that although employees in the airline industry can affect the organization’s interests, they do not make any strategic decisions for the company as they do at managerial levels. Therefore, the Employee stakeholder should be positioned in the primary stakeholder environment rather in the central organizational environment.

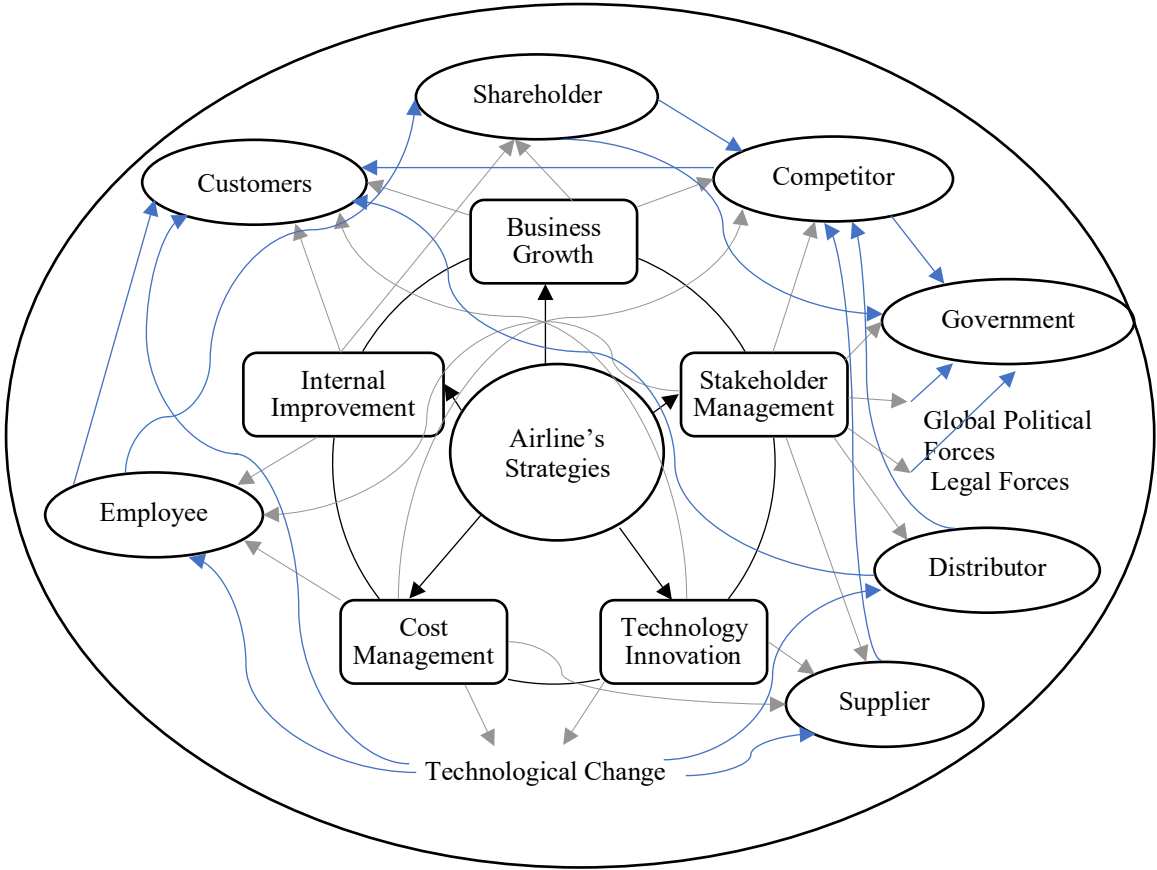
The secondary stakeholder level, that of Media, Communities, Special Interest Groups, Activitst Groups and Consumer Avocat Groups, has less influence than those at the primary stakeholder level. While Harrison and John (1989) have placed those elements in the operating environment together with Competitors, Suppliers and Customers, this research supports the priority ranking of stakeholders for an organization to shape its environment. The prioritization is essential for the organization to run its operations. It ensures that strategic management will focus on the most important elements and everyone in the organization would implement their efforts to focus on the most critical business needs and requirements. The research’s position is consistent with Freeman’s (2004) Analytic Theory in stating that “*the stakeholders of the organization should be defined in a hierarchy to increase the efficiency of the organization’s stakeholder management*”.

The findings also prove that ASEAN-region airlines have employed a stakeholder management strategy in response to their stakeholder environment, as discussed in Section 20, which corresponds to Freeman's (1984) Stakeholder Theory. When faced with a turbulent environment, the organization needs to generate a new model to cope up with the changes, in which an illustrative practical model for the airline industry can be found in Figure 50 above. The stakeholder management strategy identifies and documents the approach to take in order to increase support and decrease the negative impacts of stakeholders throughout the life of the organization. The strategy should identify the key stakeholders along with the level of power and influence, the management approach for each stakeholder, and the appropriate levels of communication and participation each stakeholder will have on the business's interests. This research concurs with other previous researchers' work such as Rowley, Mitchell, Agle, and Wood (1997) *in leveraging a need to identify more factors such as urgency, power and legitimacy to allocate to different stakeholders in organization management*. In addition, we find that the employment of Resource Dependence Theory is necessary to subordinate the Stakeholder Theory in explaining the organizational resources and capabilities, thereby to be consistent with the stakeholder perspective in explaining how an organization's stakeholder network can itself be a source of sustainable competitive advantage (Harrison et al., 2010). This research reveals the understandings of how the ASEAN-region airlines respond to the environmental challenges and the engagement of case studies have subordinated both ESO theoretical framework (Milliot, 2013, 2014) and guidance theories.

The second theoretical contribution is the proposal of the Strategic Tool Analytical Framework, adapted from the ESO framework developed by Milliot (2013, 2014) and Dynamic Capabilities Business Model developed by Teece (2017). In this model, we focus on five types of strategies mentioned above, divided into two groups, including external growth strategies and internal growth strategies, for an organization to implement in the process of achieving both strategic and organizational fits in response to the stakeholders. It depends on the organization’s strength in terms of financial resource together with a competent human resource, the organization is able to transform its current resources into stronger ones in order to fit with a new business environment.

Figure 52 shows the interactions between airlines’ strategies and their stakeholders. Stakeholders may interact, co-operate and form alliances with other stakeholders (Neville and Menguc, 2006). The identification of a particular role of each stakeholder group will provide further understanding of the complexity of the relationships obscuring by the traditional perspective of the organization-stakeholder network (Rowley, 1997; Wolfe and Putler, 2002). The roles played by consumers, governments, employees, and so on, need to be considered when assessing their likely impact upon the organization and other stakeholders.

Figure 52: Interactions between Airlines’ Strategies and Stakeholders



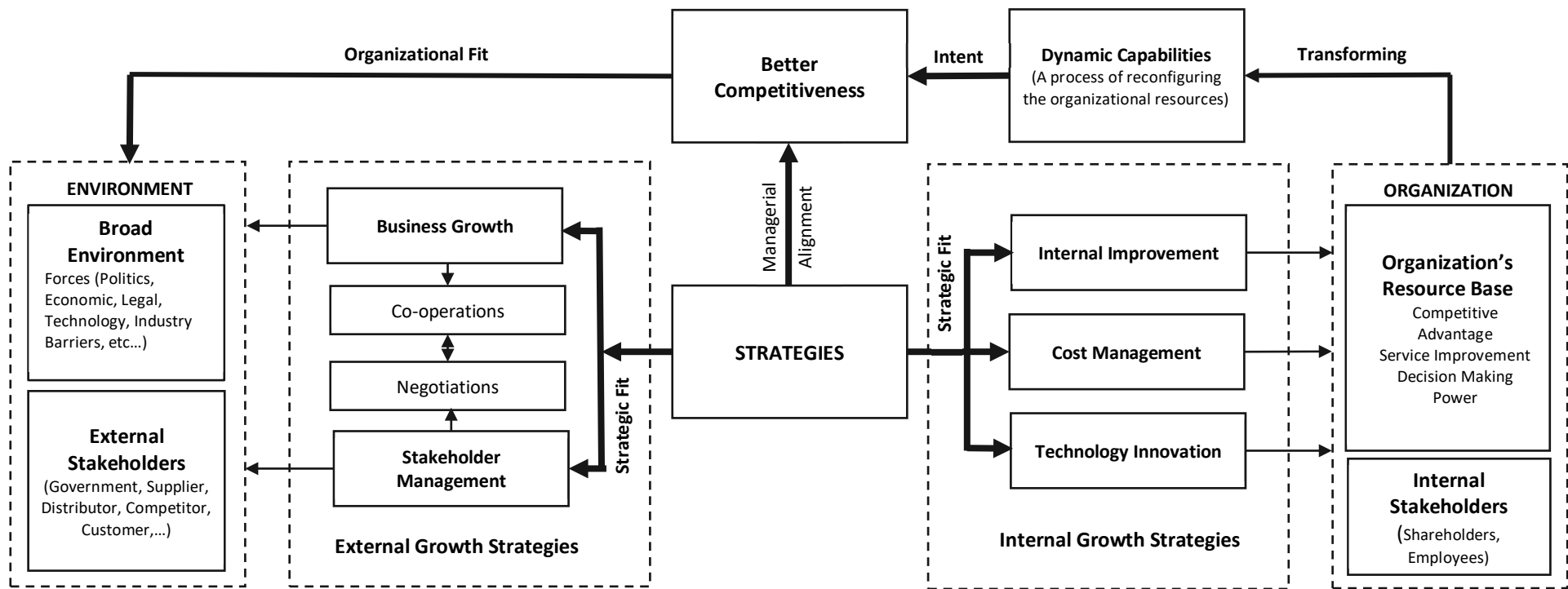
In Figure 52 above, the grey arrows show the relationships between the airline’s five groups of strategies with its stakeholders and the blue arrows show the relationships between each of the stakeholders. As mentioned above, external growth strategies comprising of the business

growth strategy and the stakeholder management strategy are interacting with shareholders, customers, competitors, governments, distributors, suppliers, employees and the global political/ legal forces. Internal growth strategies comprising of the internal improvement strategy, cost management strategy, and technology innovation strategy are interacting with customers, employees, competitors and suppliers. When differing strategies interact with common stakeholders, they must engage with each other. The airline cannot focus on only one strategy to grow because they need to deal with various stakeholders in the operating environment and each stakeholder needs to be dealt with appropriate strategies. The organization needs to understand the techniques that influence each stakeholder positively (Layton, 2015).

Five proposed strategies presented in Section 20 act as a process for a strategic fit in a dynamic industry. Figure 53 below shows a development of Strategic Tool Analytical Model adapted from the Practical Framework for Strategic Fit in the ASEAN Airline Industry presented in Figure 50. This proposed analytical model can be applied to any organization operating in any industry while confronting with its business environment such as primary, secondary stakeholders or broad environmental influences. This strategic analysis model is elaborated based on the ESO framework developed by Milliot (2013, 2014) and Dynamic Capabilities Business Model developed by Teece (2017) and conforms to the definitions of Worrall (2007)²⁸ stating that “Strategic analysis is a theoretically informed understanding of the environment in which an organization is operating, together with an understanding of the organization’s interaction with its environment in order to improve organizational efficiency and effectiveness by increasing the organization’s capacity to deploy and redeploy its resources intelligently.”

²⁸ Source extracted from CIMA’s report, Strategic Analysis Tools, p.3

Figure 53: Development of Strategic Tool Analytical Framework



Source: Adapted from ESO Model, Milliot (2013, 2014), Teece (2017)

The findings of five strategies including a Business Growth Strategy, a Stakeholder Management Strategy, an Internal Improvement Strategy, a Cost Management Strategy, and a Technology Strategy, acting as core components, assist an organization to enhance its internal strength and to cope with external forces. Within five strategies, the business growth and stakeholder management strategies are segmented as External Growth Strategies. External growth strategies are about increasing output or business reach with the aid of resources and capabilities that are not developed by the organization itself. Furthermore, these resources are obtained through the merger or acquisition or partnership with other companies. The internal improvement, cost management, and technology innovation strategies are segmented as Internal Growth Strategies. Internal growth strategies rely on developing the organization's own internal resources and capabilities, exploiting the strength of its current resources and expanding current operations and businesses. These resources are transformed during a dynamic capability process to integrate, build and reconfigure internal and external competencies to establish an organizational fit to address to rapidly changing environments.

In external growth strategies, co-operations and negotiations are employed to endorse the business growth and stakeholder management strategies. Both co-operation method and co-operative negotiation should align with the process of interest based or integrative bargaining which leads the organization and its stakeholders to seek for win-win solutions. The findings presented in Chapters 7 and 8 subordinate Axerold's Co-operation and Reynauld's Social Regulation theories. We agree that the usage of negotiation has released the fundamental tension between parties whether they need to co-operate or compete in order to achieve their goals. The co-operative negotiations aim to understand the perspectives of the parties and develop strategies that benefit both. Co-operative strategies lead to creative solutions that enlarge the outcome whereby both parties get more than that what they aspired to initially. In the airline industry, a pure co-operative strategy might be impractical when the stakeholders seek to maximize their own interests, leading to competition. Then a combination of co-operative and competitive approaches is applied to set up a mechanism for mitigation and sustainable development.

Compared to the conceptual model generated in Section 7, this Strategic Tool Analytical Framework has figured out two specific groups of strategies developed by the organization to fit with the environment. This model conforms to Checkland and Scholes (1990)'s conceptual model building method that is to create a new model of what exists, which has a close similarity form to the original with the aim of redrawing that model expressing the changes of realities. At the initial step of building the conceptual model, we have yet engaged to the case studies' analysis and processed other types of empirical and secondary data. We incorporate the dynamic capability business model (Teece, 2017) into the ESO framework (Milliot, 2013, 2014) in order to complement the reconfiguration of the resources, generated by the organization with its unanticipated strategies. We expect this process will assist to enhance the organizational performance, leading to the organization's competitive position within the industry. In our new analytical model, we point out five strategies obtained from the process of data analysis, presented in Figure 55, used to fit with the stakeholder environments and improve the organization's resource base. The dynamic capability process is crucial to input in the model for the need of transforming the organization's current resources to be stronger ones. This also can be used to build longer-term competitive advantage and being a source for new

organizational learning, which helps the organization to produce the new strategy sets to fit with the changing environments.

21.2 Methodology Contribution

The analytical technique employed for this research is “conceptualization explanation” and “explanation building”, which combine an explanatory with a descriptive agenda. According to Milliot (2019), it is challenging to focus simultaneously on contextualization and causal claims because this combination leads to develop two research purposes: analytical description and explanation. The research consents with this proposal when selecting four cases with different managerial profiles and characteristics to reflect a whole context and identify main causal claims.

Not only using the data extracted from secondary resource for the cases, we have constructed a semi-structure qualitative research interview and cross-checked with the interviewees for the reliability and validation. Furthermore, an approach to the top leaders of each case study allows clarification and confirmation for the descriptive explanations. In this technique, we have incorporated the cross-case analysis to compare the similarities of each case and then to achieve the common points in order to combine the factors that contribute to the outcomes of the cases generating findings.

In addition, we associated quantitative data obtained from passenger surveys and qualitative data obtained from industry experts’ interviews to achieve a deeper level of insights through the exploratory nature. We employ the qualitative analysis technique to analyze these obtained quantitative and qualitative data aiming for descriptive explanations. The qualitative analysis results retrieved from the quantitative data subordinate to the qualitative analysis results retrieved from the qualitative data. We integrate both quantitative and qualitative data across the stages of the research’s process in order to get the valuation of both sides: aviation industry experts and passengers.

21.3 Managerial Contribution

For managerial implication, the study constructs a practical model for airlines as in Figure 54 above to examine the inter-relationships among the environmental and strategic factors and provide airlines with the clear strategic fit. This research figures out five types of strategies which are obtained to implement the processes for strategic fit for the passenger transport business in the airline industry. Through the mentioned-above data analysis, findings, and discussions; the research proposes some strategic recommendations for airlines in confronting remained challenges through different perspectives as following:

Management Perspective

In the future, airlines will be no longer described as either low-cost carriers (LCCs) or full service network carriers (FSNCs) when many of the so-called hybrid airlines are combining attributes from LCCs and FSNCs to broaden their target demand and survive in an increasing competition (Lohmann and Koo, 2013). However, we propose the airline’s shareholders to

define their business models at the starting point for the clearance of freedom in decision-making and management. The business model has a more complexity than the financial aspect, and can translate a business strategy into activities and operations (Naire et al., 2011).

- ***Defining a managerial profile***

- Based on the typology of international strategies suggested by Milliot (2013) combining with the identification of four best managerial profiles adapted from Perlmutter (1969) and Milliot (2013), we propose the application of Transnational Strategy and Geocentric Orientation as the best managerial profile for airlines. With this orientation, airlines possess a strong decision-making power and a strong co-ordination of geographically dispersed activities. There is a close collaboration between parent companies and their subsidiaries themselves to support the network growth on a regional or global scale. This collaboration can help to integrate both universal and local standards and require regular and co-ordinated monitoring of operations. Leaders of the subsidiaries have power to choose and manage their personal resources, international skills and experiences. Defining the managerial profile allows the broader and more flexible activities and freedom of decision-making power for any airline's business model.

Internal Perspective

Airline businesses need a huge number of personnel, good infrastructure and aircraft investment (Erdogar and Kaya, 2014). We propose the focus on human resources for the airline's internal improvement. An airline with better trained and qualified personnel can meet the customer demand and can offer better quality service (Heracleous and Wirtz, 2009).

- ***Providing trainings to technical employees***

- To develop together, airlines in the ASEAN region can program joint-training to share technical and operational expertise to encourage less-developed member states to upgrade their facilities and resources. This co-operation allows ASEAN to handle more flights and compete more effectively against other regions for air traffic.
- Human factors (HF) training is crucial to focus and provide to ground operation employees in order to recognize and prevent human error. This training promotes awareness and affects attitude thereby reducing costs associated to human performance issues, leveraging the employees to understand important principles and procedures in order to integrate them into the work environment for efficiency.

- ***Building strategic pilot team***

- Airlines should invest on their strategic pilot and technician teams to guarantee their stable flight operations. In response to this common dilemma between airlines, they should establish their own programs and sponsorships for young pilot cadets in order to create a steady supply of pilots for themselves because this is an extremely competitive environment where there is a limited supply of pilots being sought by a strong market demand.

Growth Perspective

Today, airlines are pushing much of their efforts to remain competitive in an intense competition and the emergence of new markets. Setting the co-operation by increasing partnerships and alliances, airlines in South East Asia are strengthening their positions while minimizing risks and investments (SiaPartners, 2018). Due to its proper characteristics, the airline's operations bring high costs and the structure of the industry is strongly vulnerable to uncertainties, risks and crises (Tanriverdi and Kucukyilmaz, 2016). In order to cope with high costs, risk and uncertainties, we propose "Coopetition Strategy" to be employed between competitor airlines.

- ***Coopetitions under various forms of co-operations***
 - ➔ Airlines can refer to game theory to set up coopetition strategies base on various forms of co-operations (Heiets et al., 2019). Airlines have established networks of alliances and signed code sharing agreements in order to increase their competitive advantages and customer benefits. These co-operations facilitate increasing number of destinations, reducing costs, promoting innovation, increasing the level and standards of customer service, and increasing airline's brand recognition that an individual organization cannot furnish all. Beside that, in accordance to the implementation of the Open Skies Agreement, we recommend the co-operations between stronger and weaker FSCs or between FSCs and LCCs in terms of finance, human resource, training, and technical resource sharing in order to optimize the operation and route network in local markets. The coopetition between airlines which could lessen the competition from the stronger airlines and the protection requirement from weaker airlines, boosts the integration process in the ASEAN region shorter for the aim of being a single aviation market.

Customer Perspective

With the economic pressure, the rapid changing competitive landscape and the increasing connected consumer, airlines have to improve and expand digital experiences to drive revenue, satisfy customers and maintain profitability. The personal mobile devices allow the "always connected" customers to manage travel on-the-go and airlines need to provide innovative experience to their customers. Thus, we propose "Digital Technology" as a core strategy for ASEAN-region airlines to interact with their customers with the aim of revenue optimization and cost reduction, followed by these below key points:

- ***Providing free wifi or streaming IFE***
 - ➔ Currently, major airlines such as Qatar Airways or Cathay Pacific offer free wifi in business class zone or one hour in economy class zone, and fees are applied after one hour of usage. Airlines should accommodate free wifi for both short-haul (3-4 hours) and long-haul flights to reduce customers' boredom or to facilitate their work on-board by using their own electronic devices. As technology and consumer habits change, airlines should think much more critically about what was once considered to be a vital facet of the consumer experience when the growth of smartphone and tablet usage among target customers increases and become part of their daily lives. Since the majority of ASEAN-region airlines do not provide seat-back entertainment screens for in-flight entertainment (IFE) or only equip drop-down

LCD screens, we recommend that ASEAN airlines should install a streaming system or a wifi system instead of installing a traditional IFE system to reduce costs and leverage their competitive position. The new technology reduces costs from the software and hardware installations, hardware maintenance and the content update of the normal in-flight entertainment system.

- ***Building customer databases to get customer insights***

- ➔ Today, digital customer interactions provide new data points about customer behaviors that airlines can combine with insights from both internal sources and external sources. We recommend that airlines should enrich their customer databases and capitalize on insights from their operational systems as well as real-time insights contained during the travel journey for all passengers by constantly managing the customer dialogue. Real-time insights technology can help airlines to offer cross-selling products or operational offers such as providing information on flight status or boarding, guide customers to gates, VIP lounges or baggage carousels, send digital vouchers for airport restaurants to passengers' mobile devices when flights are delayed, provide an app allowing customers to provide real-time ratings on the flight, crew, entertainment, and food while on board. The use of real-time analytics paired with mobile self-service and other digital solutions can empower airlines to continually adapt the customer dialogue, making for an experience that is consistently relevant and highly personal.

Conclusion of Chapter 9

Chapter 9 presents the discussions on stakeholders' impact and strategic fit in the dynamic airline industry, thereby to complement two research contributions. Through the findings, the stakeholders' impact in the airline industry mainly derives from following stakeholders such as technology change, global geo-political forces, regulations, governments, competitors, suppliers, customers and employees. We propose five strategies to airline executives to optimize business processes and transform operations in envisioning to their respective business environment. These strategies are business growth strategy, internal improvement strategy, stakeholder management strategy, technology innovation strategy, and cost management strategy. This research proposes a process of managerial alignment for ASEAN airlines to obtain the strategic fit through the correlation of internal processes and strategies, presented as a business model indicating a practicable vision for the airline industry.

The discussions in Sections 19 and 20 deliver two conclusions addressing to two research questions as following:

1) What are the business environment impacts on the strategies developed by ASEAN-region airlines?

➔ *Based on the interaction effect and their mutual relationships, Technological Change, Global Political Forces, Legal Forces, Governments, Shareholders, Suppliers, Competitors, Distributors, Customers, and Employees act as key attributes of the Stakeholder Environment, which depict the most significant impact on the strategies developed by ASEAN-region airlines.*

2) What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?

➔ *The process for strategic fit in the ASEAN airline industry must involve five types of strategies including a Business Growth Strategy, an Internal Improvement Strategy, a Cost Management Strategy, a Stakeholder Management Strategy, and a Technology Innovation Strategy. These strategies are implemented and combined to achieve a strategic fit in confronting with external environmental impacts and obtain an organizational fit to head the airline toward a better competitiveness.*

This research proposes two theoretical contributions relating to stakeholder environment's priority ranking, in which the government and competitor stakeholders are proposed to input in the operating environment and consider as primary stakeholders; and the generation of the Strategic Tool Analytical Framework adapted from the ESO framework developed by Milliot (2013, 2014) and the Dynamic Capabilities Business Model developed by Teece (2017).

Conclusion of Part Three

Part Three presents results, discussions and research contributions. The findings and analysis presented in Chapters 7 and 8 provide evidences for the discussions presented in Chapter 9. The discussion points are summarized and systemized in accordance with the defined structure to reflect stakeholder levels and proposed strategies. The research contributions help to contribute to previous researches and complement specific strategies to propose to airline practitioners. Policy makers and industry stakeholders need to set up a sustainable aviation industry in Southeast Asia in terms of infrastructure development, road network improvements, trade connectivity, mobility, power and other public services in developing regions (Perrott, 2015). A smooth connectivity in ASEAN is expected to conduct via transportation, communications and energy infrastructure, leading to the reduction of barriers to trade and investment; and the opening of new opportunities for ASEAN-wide communication and exchange (Perrot, 2015).

GENERAL CONCLUSION

The purpose of this research is to examine how organizations respond and maintain their strategic fit in adapting to environmental changes in the context of a dynamic airline industry. We are seeking to address this matter by developing a strategic analytical framework through which to present the processes based on the organization's dynamic capabilities. Thus, environmental and organizational circumstances should be identified by utilizing insights from traditional contingency arguments, recent resource-based perspectives, and industry-specific knowledge. Therefore, the ESO triple analytical framework has been employed in this research to identify performance by organizations, especially as applied to the context of the aviation industry. The ESO framework focuses on the interaction between the external contexts of the multinational (Environment), the organization's orientations and actions (Strategy) and its capacity for implementation (Organization). The observation on the airline industry's actuality is in line with the Stakeholder (Freeman, 1984), Co-operation (Axelrod, 1984) and Social Regulation (Reynaud, 1999) theories that are followed.

Key findings are presented in Sections 15, 16, 17 and 18. The future validation for the ASEAN aviation industry is hereby obtained reflecting an optimistic view from the airline executives and industry specialists [R1, R2, R3, R4, R5, R6, R7, R9, R11, R13, R15, R16]. Despite there are still environmental constraints, there are potentials for airlines to develop their business in the region, especially when considering that Vietnam and Indonesia have a combined population of approximately 300 million people, equivalent to half of the total population in ASEAN [R1, R3]. Travel demand is increasing strongly by the day and is expected to boom in the next five years, without being unduly affected by the economic situation [R2]. From Derry Air's perspective, the industry is still growing, with over 600 million people in ASEAN, the regional airlines have only touched the tip of the iceberg [R2]. As a result, there is still time for Derry Air to find opportunities to offer people air travel at the right price because the people in ASEAN still have a great desire to fly, experience, visit, or conduct business in other countries [R2].

Currently, U.S. and China are the biggest aviation markets in the world, allowing their people to travel to Asia more when visas in those countries are waived [R4]. In addition, it is known that ASEAN countries are now among the fastest growing economies in the world, for example, 7% in Cambodia and 7-8% in Vietnam in 2018 [R11]. When the economy grows and disposal incomes in the developing ASEAN countries rise, domestic and international travel demand will increase and people will be more encouraged to visit other countries, in particular, those countries where visa restrictions have been eased, i.e. it is now easier for Vietnamese people to obtain a visa to travel to Japan and Korea than before, or where no visa is required for a short stay [R4]. Furthermore, demand for air travel is also derived from some geographical circumstances in the region which actually incentivize the flights, i.e. the archipelagic geography of Indonesia, Malaysia and the Philippines [R3, R4].

There are a rapid growth and fierce competition in Southeast Asia in general and in the airline industry in particular, thus, airlines are struggling to seek for profitable markets to deploy additional aircraft whereas fuel prices are pivotal and lowest cost operations are required. Seat capacity in Southeast Asia has doubled from 200 million seats in 2008 to closely to 530 million

seats in 2018, in which 50% of the seats provided by low-cost airlines (CAPA, 2018). LCCs account for 50% of the capacity in five largest markets in ASEAN, namely Indonesia, Thailand, Vietnam, Malaysia and the Philippines; approximately 70% of the domestic market in Thailand and in the Philippines (CAPA, 2019). When the ASEAN-region becomes a promising land for long and short haul low-cost airlines, incumbent full service airlines are thriving for innovative strategies; leading to a future evolution that could be special than other parts of the world (CAPA, 2018).

To subordinate to this optimistic view, we refer to IATA (2018)'s study with four scenarios labeled "New Frontiers", "Sustainable Future", "Platform", and "Resource Wars" are set for the airline industry to face till 2035 through the usage of drivers of change. We consent with the scenario "New Frontiers" which is more appropriate and close to the ASEAN region's context. In this scenario, the world has become more multi-polar and is fractious with global governance. The U.S. and China are dominant on the economic and military weight with strong regional alliances around strategic interests. Main sectors such as energy, transportation and communications have been deregulated to encourage innovation (IATA, 2018). Therefore, with the impact of bilateral Open Skies Air Service Agreements in the airline industry, there is a need to explore a strategic fit in this dynamic industry in which airlines are able to prepare themselves during the process of global liberalization.

In this research, two main research questions are addressed as:

- 1) *What are the business environment impacts on the strategies developed by ASEAN-region airlines?*
- 2) *What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*

To achieve the answers for the above questions, we use qualitative, explanatory-descriptive and contextual approach to conduct this empirical research. From the four case studies data analysis options mentioned above, we process the analysis with the options of "qualitative analysis of qualitative data" and "qualitative analysis of quantitative data" for this study since the data is recorded from interviews, observations and questionnaires. Though the qualitative method is primarily used to analyze and retrieve results in this research, the quantitative method is used to supplement the qualitative analysis for partial validation of the results.

The surveys conducted in Cambodia and Vietnam indicate that passengers will select to fly with stronger airlines operating in their local markets and 90% of them choose to fly economy class for the lowest price as possible despite airlines now offer delux economy class for more comfort. Online payment method is less popular in a less developed country as Cambodia and passengers in this country are forced to interact with physical ticket agents, as a result, the airline's business is influenced by the economic growth of a country. The result also shows that passengers switch to fly with low-cost carriers if there are LCCs operating in their market. And in most cases they do not notice about the aircraft type that airlines operate. All respondents in both countries rate the airlines' services in a range of 3.8 -5.2 while the offered highest rate is 7, meaning that their satisfaction towards the airlines' services stands moderately above the average rate. We can conclude that passengers consider the airlines' services acceptable for

their travel experience and not absolutely satisfied. This survey helps practitioners to somewhat understand customer behaviors in these two markets and to validate the customer stakeholder's influence analyzed in Section 19.

From the case studies, we find common important strategies among four airlines to address to the above research questions. Firstly, most of the airlines' Internal Improvement Strategy is to focus on the investment of new aircraft and human resources. Vietnam Airlines invests on new aircraft and restructure flight crew to adapt with the fleet development. The internal resources have also been improved through training programs, in which pilots are trained to adapt with new generation aircraft and flight attendants and sales staff are trained to improve service quality and sales capacity. Being a global airline, Qatar Airways' internal improvement strategy is to reconfigure its resources in a short turnaround time to set its competitive position. The usage of new generation aircraft and the growth of fleet not only allows to grow markets and helps to save fuel cost but also turns Qatar Airways to be an industry leader. Similarly, Derry Air reconfigures its capabilities by investing on new aircraft for higher passenger capacity to avoid slot constraint at busiest airports such as Jakarta, Bali, Manila and Singapore; and NokScoot Airlines' investment of aircraft helps to expand its markets.

Secondly, cooperations are much more employed by FSCs to help growing their business as well as to strengthen their resources. The cooperation with ANA allows Vietnam Airlines' customers to use miles points within codeshare flights between two airlines, and Vietnam Airlines profits from its strategic partner's resources in terms of tourism incentive programs, technical support, customer service, information technology and engineering. Another cooperation with Air France under the joint-venture form allows the sharing of strength of each party regarding to air routes, sales networks, technical and financial infrastructure, regular customers and lounges. Furthermore, the partnership with twenty five airlines and one railway company helps Vietnam Airlines to increase its destinations worldwide and the partnership with engine and aircraft maintenance suppliers help its maintenance service subsidiary to obtain technical trainings in order to improve the quality of aviation maintenance services in Vietnam. For Qatar Airways, the cooperations with other airlines are implemented under the forms of acquisition of stakes and code sharing partnerships. Qatar Airways acquired stakes of Cathay Pacific in Hong Kong, Meridiana in Italy and Latam in Brazil. The investment on the strong airline aims to share common activities and strengthens its position; and the codeshare partnerships in OneWorld Alliance helps the airline to expand flight options for passengers.

Thirdly, we find that airlines are using Stakeholder Management Strategy to resolve issues in the process of implementing their business growth and search for alternative solutions under the influences of stakeholder environment. The airlines need to negotiate and clarify with their stakeholders in order to understand the conflicts may arise and try to resolve them. The organization's managers are somewhat must act as politicians and have to exercise influence effectively over others because they are not intrinsically powerful or capable of imposing their will directly on co-workers, sub-contractors, and suppliers (Solera, 2009). Under the geo-political impact, Qatar Airways switches to open new routes and increase frequencies in African market, South America, and Eastern Europe to offset the loss of 18 regional destinations. The airline also keeps expanding its international relationship and negotiating on agreements with EU and U.S. in order to maintain its markets. For Derry Air, the Stakeholder Management

Strategy is needed to deal with local partners when the airline creates its subsidiaries in different countries to expand network and tourism hubs in ASEAN.

The Stakeholder Management Strategy is needed to work with suppliers by negotiations in certain complicated cases. Using the digitalization to capture and integrate customer data into the airline's single platform, Derry Air uses IoT technology to process data for its business decisions, efficient operation and customer service improvement. The airline has to partner with an aviation technology company to equip sensors in the aircraft for real-time data recording based on aircraft physical conditions and engine performance. Furthermore, it needs to negotiate with Airbus, its aircraft supplier, to install its aviation data system to serve as the core platform. For NokScoot Airlines, it mainly deals with the political and regulation forces. The regulation to ban the import of aircraft older than 15 years imposed by the government impacts negatively to the airline's business though the aircraft's lifespan lasts up to 25 years in reality. The airline business was also heavily impacted by the regulation imposed by the international authority (ICAO), leading to other governments' restriction on the airline's new services, such as Korea and Japan. Though Thai carriers cannot operate flights to Japan during the restriction period, Scoot, with the co-operation, has used its subsidiary, NokScoot Airlines to sell Scoot-operated flights from Thailand to Japan in order to profit the huge Japanese and Thai source markets.

The combinations drawn from case studies, cross-case analysis in Section 13 and the data analyses in Sections 15, 16, 17 and 18 facilitate the conclusions for seven propositions below. The key finding analyses presented in Section 15 and 16 generate conclusions that correlate basically with the propositions 1, 2, 3, and 4 in addressing to the research question 1: "*What are the business environment impacts on the strategies developed by ASEAN-region airlines?*".

Proposition 1: The Open Skies Agreement has stimulated increased competition among the regional airlines and set both positive and negative impacts on ASEAN airlines' strategies.

➔ *The Open Skies Agreement has mostly a positive impact on ASEAN airlines' strategies, despite stimulating increased competition among the regional airlines, and the active opposition of some ASEAN member states through Government regulation.*

Proposition 2: Technical innovations strongly affect the development of the airline industry, in which airlines adopting updated technological innovation will get more competitive advantage than their non-adopting or slower adopting competitors.

➔ *The adoption of technical innovations relating to aircraft convenience and comfort, online ticket purchasing, the check-in process, and mobile integration will deliver advantages over non-adopting or slower adopting competitors.*

Proposition 3: Customer demographics directly impact an airline's growth as the traveling public diversifies in nature.

➔ *Customer demographics directly impact the airlines, as the traveling public diversifies in nature. However, airlines are able to create new generations of travelers, and drive the travelling public to follow the airlines' new evolution strategies.*

Proposition 4: Brand reputation plays an important role in identifying an airline's market position.

→ *Brand reputation plays an important role in identifying an airlines' market position, with the carrier's pricing strategy and safety being the most decisive factors influencing both customer perception and the airline's business.*

Based on the analyses of Propositions 1, 2, 3, and 4; we have systemized and characterized the data analysis in accordance to types of stakeholder impacts as presented in Section 19. In this section, we find that the stakeholder environment in the airline industry consists of these following important elements, technological change, global political forces, legal forces, governments, shareholders, suppliers, competitors, customers and employees. Through the findings, it is accepted to state that stakeholders are vital to the survival and success of the airline industry. This study is in line with Freeman's (1984) Stakeholder Theory, especially since the stakeholder perspective in this industry indicates the mutually interdependent relationships between the airline and its stakeholders. The findings also fit with Freeman's (2004) Analytic Theory, stating that those types of stakeholders interact and create value, and the stakes of each stakeholder group are multifaceted and inherently connected to each other, and are vital to the survival of the organization; and is concluded as following:

→ *Based on the interaction effect and their mutual relationships, Technological Change, Global Political Forces, Legal Forces, Governments, Shareholders, Suppliers, Competitors, Distributors, Customers, and Employees act as key attributes of the Stakeholder Environment, which depict the most significant impact on the strategies developed by ASEAN-region airlines.*

Chapter 8 reflects strategic responses that correlate to propositions 5, 6 and 7; and correspond to the research question 2 "*What should be the processes to develop in order to propose a strategic fit in response to the new competitive environment?*".

Proposition 5: Airlines must engage with all parties to sell flights in order to optimize sales despite their preference for a direct distributor channel.

→ *Sales through digital distribution channels will increase markedly and become the key customer service channel. However, airlines must still engage third parties to sell flights in order to optimize sales, despite their preference for a more direct distribution channel.*

Proposition 6: Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to transform themselves in order to compete.

→ *Low-Cost Carriers (LCCs) increase competition within the airline industry, forcing Full-Service Carriers (FSCs) to differentiate themselves and seek co-operative arrangements with rivals in order to develop and save costs, instead of focusing their efforts on price competition.*

Proposition 7: Dynamic capabilities are needed for an airline to combine multiple growth strategies to achieve transformations and maximize profitability.

➔ *The dynamic capabilities of an airline, including aircraft, human resources, financial resources and decision-making power, are needed for airlines to combine multiple growth strategies to transform and maximize competitiveness.*

Based on the analyses of Propositions 5, 6 and 7; we have re-arranged the data analysis in accordance to five common strategies formulated for airlines to implement in the process for strategic fit, which is concluded as following:

➔ *The process for strategic fit in the ASEAN airline industry must involve five types of strategies including a Business Growth Strategy, an Internal Improvement Strategy, a Cost Management Strategy, a Stakeholder Management Strategy, and a Technology Innovation Strategy. These strategies are implemented and combined to achieve a strategic fit in confronting with external environmental impacts and obtain an organizational fit to head the airline toward a better competitiveness.*

Limitation and Future Research

This research focuses on the passenger transport study of ASEAN-region airlines, however, more airlines such as Philippine Airlines, Garuda Airlines, Thai Airways, Bangkok Air, and Lion Air; and consumers in other countries such as The Philippines, Malaysia, Singapore, and Thailand should be examined in further researches. The study of four airlines operating in Vietnam, Cambodia, Thailand and Indonesia, do not sufficiently manifest the real settings of the ASEAN bloc, leading to the possibly subjective conclusions and assumptions. On another hand, besides the employment of qualitative analysis as a key research method, this research can be conducted with a deeper quantitative analysis by getting more informants' opinions whose expertise in the aviation industry and obtaining customer perception from passengers located in other ASEAN countries in order to have a clearer computation and accurate statements.

The findings presented in Chapters 7 and 8 also show that airlines' managers have filtered their common actions, interests and determined optimal strategies for stakeholder management in responding to current issues. This study supports the ideas of strategists such as Baron (1995), Shaffer, Quasney, and Grimm (2000), Jones, Kunz (2005) and Rodgers et al. (2018) engaging non-market strategies as a source of competitive advantage. Non-market strategy is essential for organizations to get competitive advantage and this issue becomes a relevant problem in the studies of strategic management (Xie, Jin, and Jin, 2009). Companies in a wide range of industries invest their effort in monitoring and researching emerging drivers of change in their business environment, especially in the domains of new technologies, events of social, economic, political and the ecological scene (Vecchiato and Roveda, 2010). According to Henisz and Zelner (2003), business organizations not only compete for their share but also touch to the political arena in order to manipulate regulations, laws and other institutions that govern the marketplace. This type of stakeholder management strategy encompasses how an organization deals with government, interest groups, activists and the public.

The non-market strategies are employed in the ASEAN airline industry including the use of political lobbying and mass media for the market influence and for competition. Many organizations can engage in non-market strategies to outdo their competitors in the market or to secure a monopoly of the market. The examples of such companies are normally found in the U.S. but can also be found with the presence of new entrants entering the ASEAN airline industry. Researches on non-market strategies refer to lobbying aspects from corruptive behaviors (Mauro, 1995), indicating that an organization can use partial ties to engage non-market strategies to mitigate political risks, thereby to establish a mechanism against arbitrary institutional behaviors (Dieleman and Boddewyn, 2011). Mellahi et al. (2016) suggest to employ stakeholder theory, agency theory, institutional theory, resource-based views, and resource dependency theory as theoretical backgrounds to examine non-market strategies. We do not focus on non-market strategies to develop stakeholder theory and resource-based views for the literature, which is a limitation in this research. However, this issue should be studied in further researches to confirm this assumption while the current phenomenon is not sufficiently transparent to figure out.

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ANNEXES

ANNEX 1

INTERVIEW QUESTION GUIDE 1

(Compact version for 1h interview)

1. Does XYZ Airlines see the Open Skies policy, which encourages airlines to enter the single market in ASEAN, as an advantage or threat?
2. Do you think the technology pressure impacts positively to the development of the airline industry? Which kind of technology that the XYZ Airlines will invest on?
3. What are your key strategies to optimize the operation in such competitive environment? Which strategies that you consider the most importance to focus on?
4. Are product differentiation, customer service improvement and marketing strategies the main actors to help AYZ Airlines to reach the intense profitability?
5. Do you reduce cost in all aspects to maintain your business performance? How do you cut cost?
6. Do you think low cost airlines increase competition and force major airlines to distinguished themselves among rivals?
7. Why do major airlines are not successful with their budget subsidiaries?
8. Do you think airlines now are seeking corporation instead of competition to develop? What kind of co-operation that XYZ Airlines is co-operating at the moment and in the future?
9. Do you think airlines keep operating their route network to increase their geographic coverage for competitive position rather than achieving profits?
10. Will XYZ Airlines create any new travelling generation then they open new routes?
11. Do you think airlines will get rid of GDS (Global Distribution System) in the future?
12. How is the impact of the fuel price on airlines? Will hedging helps airlines to secure their stable operation?
13. Do you think price is the main factor to influence the ticket purchase behavior?
14. Do you think airlines prefer more frequencies with small aircraft or less frequencies with large aircraft?
15. How will the shortage of qualified employees and pilots affect to the development of airlines?
16. What is your outlook about the airline industry in ASEAN?

INTERVIEW QUESTION GUIDE 2*(Full version for >1h interview)***A. ENVIRONMENT****1. REGULATION**

Question 1a: The single aviation market in ASEAN will lead to grow and open to more competition in ASEAN. This also encourages higher traffic growth and service quality, while lowering ticket prices. Some ASEAN countries try not to join the agreement in order to protect their airlines. This will be the long term protection.

Disagree Agree
1 2 3 4 5 6 7

Question 1b: Open Skies policy will allow large airlines in the Asian region such as Japan and China to take freedom rights in ASEAN region, leading to the threats to small airlines.

Disagree Agree
1 2 3 4 5 6 7

2. GOVERNMENT

Question 2a: The government's regulations such as taxes, carbon emissions will lead to the increase cost of air travel and the depress in travel demand.

Disagree Agree
1 2 3 4 5 6 7

Question 2b: Some countries in the ASEAN region operate monopolies with local or regional major airlines given preferred standing or exclusive territories, leading to the prevention of entering a new market.

Disagree Agree
1 2 3 4 5 6 7

3. SHAREHOLDERS

Question 3: Shareholder's influence and their financial support are strong enough to protect the carrier from competition.

Disagree Agree
1 2 3 4 5 6 7

4. SUPPLIERS

Question 4: The supplies of fuel will affect strongly on the yielded elasticity estimates and rising oil prices will affect on tourism demand.

Disagree Agree
1 2 3 4 5 6 7

5. CUSTOMERS

Question 5: Customer satisfaction will affect the general perception of the airline through word of mouth. Their concerns on the carriers' reputation, fleet or security will affect strongly to the airlines.

Disagree Agree
1 2 3 4 5 6 7

6. COMPETITORS

Question 6a: Low cost carriers will grow and be a new trend in the future for they draw lower fares in order to keep their seats full.

Disagree Agree
1 2 3 4 5 6 7

Question 6b: Low cost carriers expanding long haul flights will increase competitions and force airlines to distinguish themselves among rivals.

Disagree Agree

1 2 3 4 5 6 7

7. SOCIETY/ECONOMY

Question 7a: Air fares would continue to be impacted by weak economy and security concerns.

Disagree Agree
1 2 3 4 5 6 7

Question 7b: Demographics of the customers will affect on the airlines since customers can be price-sensitive travellers.

Disagree Agree
1 2 3 4 5 6 7

8. TECHNOLOGY

Question 8: The development of technology such as artificial intelligence, biometrics, blockchain, internet has made the operation of large airlines and airports efficiently and gain a competitive edge. Small airlines that cannot afford these technology in ASEAN region will strongly being affected.

Disagree Agree
1 2 3 4 5 6 7

B. RESOURCES

9. HUMAN RESOURCES

Question 9a: Employee satisfaction will have a positive effect on the airlines' performance and customer satisfaction.

Disagree Agree
1 2 3 4 5 6 7

Question 9b: The shortage of qualified employees, managers and pilots will affect on the development of the airlines. Especially, the reputation of pilot's skills will impact on the sales of the airlines, especially from young candidates.

Disagree Agree
1 2 3 4 5 6 7

10. FINANCE

Question 10a: Financial difficulties will cause pressure for the airlines and prevent new opportunities. Then, the airlines need to possess a healthy finance in order to maintain its good performance.

Disagree Agree
1 2 3 4 5 6 7

Question 10b: Airlines will benefit from oil dropping prices for the next five years. Then, small airlines will benefit accordingly to maintain their performance.

Disagree Agree
1 2 3 4 5 6 7

11. FLEETS

Question 11a: Wide body aircrafts are preferred by customers than narrow body aircrafts.

Disagree Agree
1 2 3 4 5 6 7

Question 11b: New invested aircrafts are much preferred by customers.

Disagree Agree
1 2 3 4 5 6 7

12. TECHNICAL RESOURCES

Question 12a: The website for an airline including sufficient features such as information, ticket booking, web check-in and seat selection would drive traffic and customers than a less-functional websites.

Disagree Agree
1 2 3 4 5 6 7

Question 12b: Technical innovation relating to convenience and comfort, checking process, mobile integration will gain competitive advantage over competitors.

Disagree Agree
1 2 3 4 5 6 7

13. REPUTATION

Question 13: Brand image plays an important role in identifying the airline's position. The brand will have a positive effect on the airline's sales and draw customer loyalty.

Disagree Agree
1 2 3 4 5 6 7

14. DISTRIBUTION

Question 14a: The sales through digital retailing distribution channel will increase remarkably and become the key channel to serve travellers.

Disagree Agree
1 2 3 4 5 6 7

Question 14b: Airlines still have to employ third parties to sell flights in order to optimize their sales though they prefer the direct distribution channel.

Disagree Agree
1 2 3 4 5 6 7

15. MARKETING

Question 15a: Since the competition rises in the whole region, airlines will reserve more budget to spend for marketing activity over their rivals.

Disagree Agree
1 2 3 4 5 6 7

Question 15b: Customer data is an important resource and play a crucial function in all aspects relating to retailings, dynamic pricing and management.

Disagree Agree
1 2 3 4 5 6 7

C. STRATEGY

16. CORPORATION

Question 16a: Small airlines should merge or doing codeshare, instead of competing in order to maintain their performance.

Disagree Agree
1 2 3 4 5 6 7

Question 16b: Airlines will put their collaboration efforts to whom they have a closer opportunity and more beneficial commercial relationship rather than joining the star alliance network.

Disagree Agree
1 2 3 4 5 6 7

17. SHAREHOLDERS

Question 17a: Currently, most of the carriers are owned by governments or by a group of stakeholders, the ownership will open to public shareholders in the future.

Disagree Agree
1 2 3 4 5 6 7

Question 17b: The stakeholders have the influence on the operation of the carriers or support them on high level issue.

Disagree Agree
1 2 3 4 5 6 7

18. COST REDUCTION

Question 18a: Lower cost airlines will continue to play a role in moderating ticket costs, even mergers will cut the number of major carriers and reduce competition.

Disagree Agree
1 2 3 4 5 6 7

Question 18b: Full-serviced airlines will shift their strategy toward the low-cost airlines in order to reduce cost

Disagree Agree
1 2 3 4 5 6 7

Question 18c: Full serviced airlines will replace smaller jets with larger planes to increase the number of seats and match fares offered by low-cost carriers.

Disagree Agree
1 2 3 4 5 6 7

19. ROUTE DEVELOPMENT

Question 19a: While airports engage airlines to develop their networks by introducing the opportunity, providing robust traffic and yield forecast, setting out key economic and leisure indicators, small airlines in ASEAN are not capable to expand their networks, then they would ask for the protection of the government and limit the competition in the region.

Disagree Agree
1 2 3 4 5 6 7

Question 19b: Financial and reputation risks are key concerns for airlines when opening new routes, then airlines seek for airports that would become their hubs only.

Disagree Agree
1 2 3 4 5 6 7

Question 19c: Influenced factors beyond the airlines and airports' control such as unpredictable fuels and controversial government taxation, leading to the negative impact on route development. Then carriers will simply hold on their routes and not actively look at new destinations, even in the region.

Disagree Agree
1 2 3 4 5 6 7

20. SALES and MARKETING

Question 20a: While traditional marketing communication channels including print advertising, newsletters, and sales missions are still employed, digital marketing and social media be a key trend to enable airlines to consistently reach their customers more often, to build and strengthen relationships on a multi-platform basis.

Disagree Agree
1 2 3 4 5 6 7

Question 20b: Internet sales can reduce labor costs and increase market share and profitability. Physical agents will be cut off in the future.

Disagree Agree
1 2 3 4 5 6 7

Question 20c: Airlines would invest largely on mobile technology for this will be an essential tool to connect with customers for ticketing and travelling.

Disagree Agree
1 2 3 4 5 6 7

21. CUSTOMER SERVICE

Question 21a: Airlines will improve customer service rather than pouring budget on advertising activities for customers' words of mouth would be more effective in drawing new customers and customers' loyalty.

Disagree Agree
1 2 3 4 5 6 7

Question 21b: Airlines will conduct more researches and deliver surveys to passengers in order to study passengers behaviours and adjust customer service. They believe that passagers have a second wallet to purchase better service and more comfort.

Disagree Agree
1 2 3 4 5 6

INTERVIEW 1

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 1
Designation	▪ Senior Executive Level – Vietnam Airlines in Vietnam
Date of Interview	▪ 21st December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Vietnam Airlines’ Office – Hanoi – Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Thai Binh: How does the Open Skies policy impact to the strategies and performance of Vietnam Airlines?

Respondent 1: As a point of view of the national airline, we support the Open Skies policy, as it is beneficial to Vietnam. Basically, this opens the skies and encourages more tourists to visit Vietnam. For Vietnam Airlines, when there are more competitors, it will help us to improve ourselves to be better. We have no problem with this. However, there is a point we need to note; that is the Vietnam Aviation Authority, under the Government, will consider on how to open the market to fit into the development plan of the Vietnamese aviation industry. If we open too much and too fast while the infrastructure of Vietnam is fully established, this will decrease the quality of the aviation service industry, which is not good. Therefore, it is good when you open, it will also depend heavily on the government, aviation authority as well as the infrastructure of that country. In general, we can say on one hand, it is good. However, on the other hand; it will not be good if we do not know how to fit within the infrastructure of the Open Skies policy.

Thai Binh: Derry Air promotes Open Skies policy in the region, they have set their presence in Thailand, Philippines, Indonesia, Malaysia and will be in Vietnam in 2019. They will increase the competition in our country, then does Vietnam Airlines see it an issue to consider?

Respondent 1: During this period, the fact that many airlines making a presence in Vietnam is not necessary. This can be for the future. At present, the infrastructure in Vietnam is overloaded; even the slots, meaning the departure and arrival times of the airlines, just to mention a few, are overloaded at Tan Son Nhat International Airport, Ho Chi Minh City. Bamboo Airlines has entered the market; VietJet now develops strongly, then if there is another airline entering the market, we come back to the above-mentioned issue, which is infrastructure problem.

Thai Binh: Technology will develop positively to the development of the airline industry, then which domain will Vietnam Airlines focus on? For example, distribution system, aircraft and so on...?

Respondent 1: Technology is the Number One key factor of the aviation industry Vietnam Airlines will focus on. With the most modern technology, the most interesting innovations can be applied to the aviation industry. For example, airlines are using the Global Distribution System (GDS) model which Amazon uses. Everyone can buy Vietnam Airlines air tickets from anywhere these days. At the time when people do not have any notion about E-commerce, we had applied this notion in the aviation industry already. Come to think about it, we can say that the aviation industry is the first industry that used the E-commerce. Hence, technology is always important.

To the airline industry, there are 2 types of technology of importance; the first being the aircraft. The current aircraft models are very modern, especially in fuel efficiency as compared to previous models. According to advertisements, the saving of fuel cost is 18-20% that helps airlines to reduce costs immensely. So, the first point should be the aircraft. The pioneer airlines always purchase newer aircraft and upgrade with new technology to save cost of operations and maintenance.

The second type of technology is in regard to product distribution; this is the revolution among airlines. Nowadays, we distribute and sell tickets mainly through websites and E-commerce system, but there is another very important

point, that is the ancillary revenue. Currently, the sales of ancillary products become much easier than before. For example, the airline would like to sell more on-demand services, such as taxi pick-up, in-flight meals or seat upgrades. All of these are carried out with technology and this technology will apply in distribution system, which helps the airline to increase revenues immensely. Thus, the sales organization is much simpler, moving forward.

Thai Binh: Do you think airlines will get rid of GDS in the future?

Respondent 1: Oh, this is an interesting topic, because GDS currently sits in the middle and the vendors are making a lot of money from airlines. This is not good. Another strange point to note; whereas technology is developing at a much faster rate but the vendor rates for GDS is not decreased, and in fact, this year's price is higher than the previous year! In my opinion, this is the unreasonable point, and airlines should consolidate to challenge this.

Currently, to curb this problem, IATA has employed NDC (New Distribution Capability), but it is not efficient yet. If GDS vendors do not reduce price, the system will disappear after 5 to 10 years because no one would accept such expensive distribution channel. GDS's price is much more expensive than an air ticket price, which means lesser low-cost carriers (LCC) employ GDS to sell through their websites. However, for full cost carriers, people purchase tickets for two or four flights, we will still use GDS. People can buy one-way tickets with low cost carriers, from this destination to that destination, then low cost carriers use lesser GDS and the majority of customers prefer to buy on websites.

Thai Binh: Which key strategies would you focus on for your operation in a competitive environment, for example, human resource, marketing...?

Respondent 1: It will depend on each airline and each airline's character. For example, an airline will focus on the point that they are weak in. During a certain period, there will have an audit, for example, an external consultant will say that your fleet is weak, your fleet is old then you need to change. A second example will be, an old and obsolete management team that needed to be changed. Vietnam Airlines has encountered a problem with the infrastructure of the country, which means that the airports are not modernized; people are not familiar with the latest technology trends, and we do not have time to prepare and implement as we are short of highly qualified personnel.

Thai Binh: Then this situation is commonly applied for the countries such as Cambodia, Myanmar and Laos?

Respondent 1: Correct. Those countries have bad infrastructure and weak management in the aviation industry, especially Cambodia and Myanmar. I am not sure about Laos but there is limited competence in management too.

Thai Binh: Will product differentiation, service improvement, marketing strategies, etc. act as key factors to reach profitability at Vietnam Airlines?

Respondent 1: Correct. Vietnam Airlines is a national carrier, full-service or full cost airline, then we need to focus on our customer segment who is able to purchase tickets with high prices and consider quality as a foundation. Customers who buy tickets from Vietnam Airlines will enjoy more added values, so we can keep existing customers and attract new customers with Vietnam Airlines.

Thai Binh: Do you reduce cost to maintain your business operation?

Respondent 1: In fact, the main war among airlines now is cost. The airline who is the first to implement the latest technology wins. There is no price war because price is just that, there is no way. Price is not fixable, you can sell \$100 today; tomorrow you can also see your competitors selling at \$100, but if you can maintain the good service quality alongside a reasonable cost, then you can win. People can sell at \$100; we can sell at \$150 with our services though our cost is \$20 higher than theirs, then we will still win. The key point here is that we must have a reasonable cost and this point is very important.

Cost must be reasonable while lowest cost does not mean it is good. You are only good if you have a reasonable cost and sell with a price that brings the highest efficiency. If you have a low cost and sell a low price, passengers may still be in doubt to fly with you. But the important point is that, to make people feel justified when flying with an airline, the services rendered, and monetary values must match. Thus, this is the success factor of an airline.

Thai Binh: The appearance of low-cost airlines (LCC) which will increase the competition, will make the full-service airlines to adapt and create their differentiation, is it right?

Respondent 1: Correct. It is good that LCC entering the airline industry. They allow people to have the opportunity

to travel and push the economy of a country as well as build relationships between countries. LCC is a trend at the beginning but when there are many LCCs in the market, these airlines will have to compete with one another. Then, it is not easy to survive. For example, before there is only one LCC such as Derry Air, so they can be very happy to provide half the price of full service carriers, but now there are hundreds of LCC in the world, so LCC gradually move towards to full cost, whereas full cost carriers gradually move towards to low cost, depending on each route.

In my opinion, I don't see much different between low cost and full cost, which means that low LCC add in additional services more, with the feeling of being the likes full cost carriers; whereas full cost carriers reduce airfares more to compete. Depending on each route, each airline will have ways to differentiate themselves; but to ensure the efficiency, then there is not much differentiation. For example, it is difficult to tell the difference between low cost and full cost for an 1-hour flight, but we can only see the clearer difference within the long-haul flights.

Thai Binh: Major airlines often create low cost subsidiaries; from my observation, why these subsidiaries are not successful as other independent LCC?

Respondent 1: Oh, in a subsidy period, it is easily understood that people always rely on other people. If you live alone, you must manage everything to survive, and if you live under the coverage of the parent company, you need not worry. This is the natural cause in every industry. If you are protected, you will have a feeling of protection. Secondly, in such conditions, the power of decisions concerning about human resources or fleet will be slow because it will go through the intermediate level. For example, if Jetstar Pacific needs to acquire an aircraft, it needs the permission from parent company Vietnam Airlines. Vice versa, if Jetstar Pacific is independent, it does not need to ask permission. It does not need to do anything; it can analyze the market and make decision.

One cannot be creative here, as this slows down the decision-making process. This is one of the reasons why LCC which are under the umbrella are not often successful. When you are protected, you don't need to think.

There is saying that poor people who are thriving are winners. Of course, it is not correct to say that the majority of people who have rich parents will be excellent, the success proportion can be 70/30 (70% rich parent and 30% excellent offspring), or 80/20 (80% rich parent and 20% excellent offspring). Vice versa, offspring of normal people can become rich too. So, this is the deepen cause. Capitalism is like Communism; if we can ask for assistance, we just ask for it.

In another scenario, the Senior Executive Level of the subsidiary, if he or she aims to get higher positions at the parent company, then he or she will not put 100% effort in this subsidiary. Or, when selecting human talent, the parent company will choose the best ones for them first and transfer the lesser competent workers to the subsidiary. In short, we are under the subsidy mechanism that prevents us from being creative and holds us up to deliver decision at the right time.

Thai Binh: Do you think that airlines now are seeking corporation instead of competition to develop together? Which kind of corporation that Vietnam Airlines seeks in the future, for example, codeshare or interline, etc.?

Respondent 1: We have codeshares with Air France and interline with whoever we can work with. The strength of being a full-service airline is that we can do co-operation together and the systems are ready to co-operate. We can co-operate within our alliance or externally with the aim of gaining benefits. Two persons to perform a task are always better than one; except during a dispute, the corporation will bring win-win situation in any case.

Thai Binh: Even we do co-operation with our competitors?

Respondent 1: There is no problem. Even Vietnam Airlines and VietJet can co-operate if we both can gain benefit. People co-operate for benefits only. When two persons sit down to co-operate, they will discuss, "What will I get, what will you get?" Then I will get this, you will get that, and both will come to a compromise and sign a contract for co-operation. This co-operation will never disappear, it will turn from one form to another, to ensure that both co-operative parties will gain benefits. This will be the fact. Only when the co-operative condition can no longer exist within the regulation, in the case bankruptcy, or something other factors, then the co-operation will cease to continue. No airlines will refuse co-operations that bring benefits for them.

Thai Binh: Do you think airlines will open route network in order to have a full geographic coverage other than the purpose of profit?

Respondent 1: This is a difficult question. If you want a big market share, you need to fly a lot of routes; but it depends on your qualification and how you can make profit. This is the issue which no one can answer. It totally

depends on the condition, fleet situation, the airline's ambition. For instance, Vietnam Airlines wants to become the top three airlines in Asia. What you are going to do to be in top three? So, each airline will have their own criteria and objectives for the next 5 to 10 years. So, what is its objective? For instance, the objective of Vietnam Airlines is to become the favorite airline in Asia, top three airline in Asia and the airline that Vietnamese love to work for.

However, there are still other airlines that target only profits. They maintain the fleet, maintain the yearly profit ratio at 10%, higher than the 6% profit industry rate and this rate currently drops down to 4%. All of these depend on what the shareholders want for the future. For example, Arsenal Football Club; they are not the top, yet they are the most profitable club in England. Then, this is the most difficult issue for airlines among the market share, profit and the growth. If you want to grow, you must invest, but when you fly a lot, it is uncertain that there will be profit; you can have profit when you fly less. However, if you don't want to grow, you will become smaller and lose the market share, and gradually you will be swallowed up by other major airlines.

So why do we see that the most profitable airlines are from USA? This is because the USA market is categorized after 20 years of massive growth and with many airlines competing. Now the USA market is stable because the number of travelers does not increase 5-10% like in Asia annually. For example, the travelers in Vietnam increase 15-20% annually, then naturally it creates a shock in airline development, but this shock has to be paid off in the future. For example, VietJet has ordered 100 aircraft, when the market will be slow down in the next 5 years, it will create a redundant supply crisis within the industry, then some players will be sacrificed, maybe VietJet, maybe Bamboo or maybe Vietnam Airlines or JetStar Pacific. After this sacrificial process, the market will grow and categorize as in accordance with the USA market with the unchanged number of travelers, unchanged route network. Then it will be easy for us to do planning and profit will be always maximized because there is not much airline competition.

Thai Binh: Now in Cambodia, some airlines are reportedly created for the money laundering purpose; they will disappear after 2 or 3 years.

Respondent 1: Correct. Those airlines just appear for fun.

Thai Binh: What is the impact of the fuel price to the airline industry?

Respondent 1: The fuel price impacts terribly because the fuel cost accounts for 25-35% of the airline's cost. When the fuel price goes up, it accounts to 35%, when the fuel price goes down, it accounts to 25%.

Thai Binh: Do you do hedging?

Respondent 1: No. It is profitable when we do good hedging, but it is worse when the hedging is not done well. No one does that. State-owned companies will not do hedging, it looks like gambling and we should not do that, in my honest opinion. Even JetStar Pacific and Cathay Pacific; they met problems with hedging. For example, Vietnamese people often like to reserve foreign currency, what for? For nothing.

Thai Binh: So, if the fuel price increases, will you increase air ticket prices?

Respondent 1: Not really. When the fuel price decreases, it is uncertain that the air ticket prices will decrease accordingly, and when the fuel price increases, it is also uncertain that the air ticket prices will increase. It all depends on the market. In general, airlines expect the fuel price is about USD\$70-80 per barrel Jet A-1. If the fuel price is higher, it will be a problem, there is no way to cover the loss. We cannot push up the ticket prices because if the ticket price is too high, passengers cannot afford it. So, airlines expect a stable fuel price for their business, as this is the main factor of cost.

Thai Binh: Do you think price is the main factor to affect on the consumer purchase behavior?

Respondent 1: Price is mostly concerned by the majority; whereas rich people will concern about the quality. People will look up prices firstly and see how much it is. The reason why many people purchase air tickets from Derry Air because their prices are low. In general, in the airline industry, air ticket price is the number one factor to impact to the consumer purchase behavior.

Thai Binh: In regard to the utilization of aircraft, will airlines utilize small aircraft with more flight frequencies or large aircraft with lesser flight frequencies? Will this cause an overload to the airport?

Respondent 1: It's difficult to tell which one is better than the other, because during each landing and take-off time, we have to spend more cost on large aircraft. Cost is calculated on each landing and take-off time too. For

example, each aircraft is allowed to land and take-off 100 times in a month, after that you have to change the wheels or other equipment. If you fly from Hanoi to Saigon with a large aircraft, the amount of times of landing and taking off increases, the wheels should undergo maintenance or changed more often, thus the cost increases. If you only fly from Vietnam to France, the number of hours on air are much longer, and the times you land, and take-off are lesser; then the cost of operation and maintenance will be lower. Hence, this is dependent on the fleet structure or the structure to return flights of each airline. For example, we are forced to fly Saigon-Hanoi at all cost. Then, our aircraft will fly from here to France at 23:00, after 13 hours, it will arrive to France at 7:00 am, then we will return at 10:00 am in France and arrive to Vietnam at early morning, so you just stay here for all day? No, you will have to fly 2 flights: Hanoi - Saigon and Saigon - Hanoi.

Another example, Singapore Airlines. They fly internationally to almost anywhere, yet they cannot fly domestically. They have to set flight schedules to fly away. So how to utilize small or large aircraft with more or lesser frequencies, this is dependent on the business structure of each airline, fleet structure in a certain country. Flying a lot does not mean good, flying many aircraft or flying just one aircraft does not mean good.

For example, now we are flying to Beijing airport, it's very difficult to apply for a slot, so it's better to utilize large aircraft, then we need to fly one flight instead of two flights. We cannot apply slot for the second flight while we want to increase the capacity of loading passengers from Hanoi to Beijing. Then we cannot say that the utilization of small or large aircraft has its pros and cons, which is dependent on the situation. We have to utilize large aircraft in a certain condition, it is not only good to use just small aircraft.

Thai Binh: How will the shortage of qualified talents affect the airline industry?

Respondent 1: In short, we cannot do anything if there are no talents. Then we need to care and enhance the existing manpower by training, providing more knowledge to employees, and this is one way. However, if the society is not fully developed, we would never be able to have qualified talents. Then we need to expect the quality of airline education in Vietnam to improve tremendously, then we will have sufficient qualified talent at that time.

Vice-versa, if the society develops highly, the cost for employees will grow up. If you want good talent, you have to pay much more. Then you will face a problem how to balance the proportion of good talent and average talent at a balanced level for you to develop your business. If not, the labor cost is very high, the labor cost in foreign countries accounts for 15-20%, we only need to save a little bit in this resource and can make big interests for the company. Two important points. Firstly, how to acquire good qualified talent; second, how to have a reasonable cost for talent, then this is the problem for airline CEOs to think about. Regarding pilots, this is a very special profession; we cannot have a qualified pilot in an instance but need to train and select the cadets that meet certain criteria, so this is something different from other professions. We will have many more aircraft in the near future, it is sure that we are short of pilots. How can we train in a hurry? Each aircraft needs a couple of pilots, which means that one aircraft will consist of 4 to 5 crews, so how many pilots to be trained for 100 aircraft? In the future, the cost for pilots and technicians will be much higher than present.

Thai Binh: There are regulations impacting the airline industry, beside the Open Skies policy, environment, are there any other regulations?

Respondent 1: There is still one regulation released by the EU, that is the passenger data protection. This is the strictest and the most terrible regulation.

Thai Binh: What is your opinion about the future outlook of the aviation industry in the ASEAN region?

Respondent 1: There is much potential in ASEAN, especially Vietnam and Indonesia. These two countries have a large population, Indonesia has 200 million people, Vietnam has 100 million people. Travelling in ASEAN will be booming.

Thai Binh: If the East Sea war happens, then the economic outlook will be the same?

Respondent 1: In fact, you should think this way. War will never happen again because people have had experienced war; the current leaders in the world can speak in a tough way but no one wants another war to happen. They can speak about this war or that war just to hide the weakness of the country and drive people out of the country in the event of political competition. I am sure war will never happen, China and Vietnam will always be friends, we can never become enemies just because two countries could not get rid of each other, and because of the geography, we should be good neighbors. Similarly, for Cambodia and Vietnam, we should keep and maintain a good relationship.

Thai Binh: Thank you very much for your time and your responses.

INTERVIEW 2

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers – France
Interviewee	Respondent 2
Designation	▪ Senior Executive Level – Derry Air
Date of Interview	▪ 10th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Derry Air’s Office – Jakarta – Indonesia
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: My research is based on the tripartite framework and I examine the relationships among the organization, the environment and the strategies. Then, I examine with the airlines in the ASEAN region. Can I go to the questions now? Firstly, Open Skies is one of the factors, the element to influence mostly our industry, I would like to have a question, do you see that the Open Skies policy is an advantage or a threat to Derry Air?

Respondent 2: From the perspective of Derry Air, firstly we believe in competition. I think competition allows us to grow, competition opens our market, and creates a level of efficiency that would benefit the passengers. So, with regards to Open Skies, obviously we have been always supporting this. We believe in complimentary; it allows us to liberalize the air travel and accessibility and I think it’s a crucial point and it’s something that we encourage to happen. We have been engaging with all necessary bodies in ASEAN. So, we establish this understanding, and of course, anything that is liberalizing the industry, is something that we encourage, and we would love to participate in the possibilities because we want to grow as well.

Thai Binh: Derry Air promotes the Open Skies policy the most in the region and because the airline opens a lot of offices and branches in different countries.

Respondent 2: Correct. Yes, it is. In fact, yesterday, we just signed an MOU in Vietnam. It shows our commitment in terms of what we believe in, and more importantly, what we believe the aviation industry in the region can grow to. So, it’s not just about Derry Air, but overall, and for the benefit of passengers because this is the opportunity to allow people to travel and travel easily, conveniently and more efficiently. You know, we cross boundaries now. We did the same thing in Indonesia. At one point, air travel was too expensive even for Indonesian. And I think when Derry Air broke the mold, that was when we saw the increase in air traffic, people movement because we made it affordable. That is something we continue to strive for, but not only in Indonesia but for the region and globally, if possible.

Thai Binh: And this policy impacts positively to your strategies?

Respondent 2: Of course. I think that’s one of the reasons why we are a proponent of it because we see the opportunity and Open Skies will allow everyone, not only Air Asia to progress and grow, everyone else will benefit from this.

Thai Binh: Technology pressure impacts positively to the development of the airlines. Which kind of technology that you invest in, for example, distribution system, or aircraft or other things?

Respondent 2: When it comes to technology, one thing I can highlight Derry Air has always embraced technology from the day of its inception. Why I say this is because our founders, when they started the airline, their initial mode of selling the tickets was also done online, when Malaysia itself in terms of internet accessibility was very limited. You are still dialing up and the connectivity was never constant, and you get drop off easily so and so forth.

And I think from the first day of approaching and embracing technology we had evolved to the point that our reliance on technology is seamless in terms of our day to day operations. The areas that the technology covers are from the sales of tickets, yes, now we have a website, we have an application online, we have the experience to allow people to buy, book everything as easy as possible, and then the experience obviously is brought toward

their own moment. For example, in getting themselves check-in at the counter, we have self-service kiosks, we also have self-baggage drop systems for them. So, it is all, if you noticed, everything has got a technology behind it but to make it simpler and to make it easy, we are encouraged to see that passengers are very comfortable with technology now. Other than that, in terms of the experiences of the passengers themselves, from the operational point of view, we obviously utilize many more areas in terms of technology, in terms of support.

In terms of monitoring our aircraft, we have thousands of sensors of each aircraft. We have worked closely with Airbus as well as GE, and what it does I see predictive information so we know this particular system is OK we need to do everything has got certain schedules that we need to stick to but all these are captured in the form through technology and that data is passed down to our engineers for them to evaluate and execute all the necessary checks and checking procedures.

So from people who embrace technology to implement so that they have a very good experience and then from operations, for example, we have predictive data gathering through technology and we can go further to the simpler into the areas of even scanners, when you board our plane in Jakarta, for example, at our kiosk stations you will be scanned in. What it does is that actually, instead of the usual tear, and ticking the pen, "Oh yes, you are who, you can go to the plane". The scanner itself creates a very simple experience in the sense that, it scans you, you are supposed to be on board, you are OK.

Thai Binh: So, you expect to have no human involvement in the future?

Respondent 2: The irony is many people are querying me the same thing; "Are we replacing humans with machines?" To be honest with you, it will never happen; a machine is machine, you know, yes, they are intelligent to a certain degree, but it takes a human to run it. It needs a human to create codes, to be the brains behind it. What machines do or the technology it does to extend degree is to assist us to become more efficient and more cost effective in many ways.

You know, as long as you are comfortable with your phone as I am, 20 years ago, we were not. An accessibility to such technology was very scarce. So now is a different world we live in, it is a job like us to combine both, the human, capital aspect and technology and get the best out of it for the organization and more importantly for the passengers' experiences at the end of the day.

Technology is embraced fully in Derry Air; we see it as an advantage. Obviously, we never shy from anything that allow us to get better in the form of technology, and I think this is something everyone has embraced from philosophy and culture perspective in the organization and we now see the results of it and we are going to continue to enhance, we will continue to improve as we go on to the years.

Thai Binh: So what are your key strategies to optimize your operation in such competitive environment?

Respondent 2: One of the areas in Derry Air we are pretty good at is being different to a certain degree. We started the business from flying into second-tier cities and we still do, we still exploring obviously. More recently for Vietnam, we flew to Phu Quoc. Again, no one else has done it from Malaysia; we have a direct flight now. I have just seen the numbers; it's very encouraging because Indonesians suddenly found a new place to go to, which is great.

I was there 3 weeks ago, totally enjoy it; lovely place, good honey, everything is so natural and if you're an explorer of sorts it's a nice place to go. What I'm getting at is Derry Air has always been adventurous and willing to take calculated risks in terms of going to new places and that is a strategy that we will still continue, and this strategy has built us to what we are today. The importance of flying to second, third or even fourth tier cities, because there's population and is just a matter if an airport is available, and the airport is up to standard for landing.

Thai Binh: So when you have an own airport, you don't need any strategy?

Respondent 2: Well, you do have. We do enough studies, in the fact that where the destinations we are going to head to, obviously the population is very important because you need to have a reciprocal movement, not just one-way movement. The airline that you cannot be done in that form because you will then be penalized in terms of cost. So, it's also important that when we go to such destinations, we work closely with the government, agencies of the destination, tourism agencies, for example, all local councils to encourage traffic both ways.

You know, and I think that this is something we always have good experiences with and because we have grown to be who we are now, we are pretty much welcomed, and we have very good partners in the states that we are flying to. And I think this is something, as mentioned much earlier, we will continue to do and there is a very clear

strategy that we kept from Day One to now, there are many examples of airports or states or cities that have grown in terms of benefits by us flying there and encouraging others to do so as well.

Sometimes people as human are like that, who goes first, and after a while they see good business then they go. You know, one example is Bandung, we were the only international carrier that flew into Bandung, Indonesia; small airport at that point, and as of now we have 13 international flights from different carriers daily then. So, it's something that we started and then I guess when people see that "Ah, Derry Air is doing OK" that's why we come, and everyone benefits. For us you know again to your first point is competition, I know it's great for the passengers and our job is upstage our competition as much as we can but that we do it through our ability to serve customers or the passengers in the best way that we can, in terms of experience, safety quality, and schedule and options at the end of the day.

Thai Binh: You mentioned that differentiation is the key strategy of Derry Air, in general for every airline, do you think that product differentiation, customer service improvement and marketing strategy are the key actors?

Respondent 2: Yes, those are very crucial, the strategy I highlighted are regards to our core business of actually exploring and all that is important, and we will continue. You are right; the subset of it. You know, I have to make sure that passengers are kept happy. But only if I can improve my people, enhance themselves in terms of procedures, in terms of understandings, in terms of management of expectations, in that sense. That is also inclusive of products, yes, I fly to Phu Quoc, but if I only fly there once a week, it won't work, right? You know because no one will stay there one week and wait for my aircraft which will only arrive one week later.

Product wise, we have done in many destinations in our business, you know it is crucial from the level of the services rendered, in terms of scheduling, and more importantly in terms of cost. Our job is ensuring the passengers get what they want and also to ensure that they fly at the lowest cost possible. And that is something that it is also quite part and parcel of our DNA in Derry Air, which we cannot deny.

Thinking strategy, yes, but how to get there, cost is a factor we will focus on and continue to focus on that. So, you got people, yes, you take that, we will have very good people working with us, improving daily so that we can get better results for the passengers. We talk about cost, not only for us internally not only as an operator, and more importantly for the passengers to get the benefit in terms of their cost, in terms of purchasing and flying to their destinations of choice.

Thai Binh: So you will minimize all the costs of operation?

Respondent 2: We always maintain the best; I think in terms of cost we have been able to manage it very well and I think it's a model that we kept up to now. Our attention to details is in utmost articulation mode than you can ever get. We look at it on a daily basis. But low cost doesn't mean low quality; that is something I must emphasize. People always assume low cost means low quality. It is totally opposite for us here; we invest a lot as I mentioned much earlier into technology, we invest a lot in terms of people, we invest in terms of their development as well.

And more importantly is the crucial aspect of engineering, we invest our capital heavily mostly in terms of operational expenditure on a yearly basis. This is also to ensure that people flying in a very safe environment, and safety is very important to us, regardless of what business we are running. This is a good balance that we currently have. We are very happy with what we have, but of course on the daily basis we will continue to improve all areas as much as we can. Cost is part and parcel of our business mode, but we must know how to manage it correctly. And I can say that from Day One to what we are today, we have been managing it very well, we will continue to grow the business, but we will also manage things as per expected and not just us internally but also to regulators so on and so forth.

Thai Binh: Low cost airlines (LCC) nowadays increases the competition among other major airlines; will you foresee this competition to force major airlines to differentiate among themselves?

Respondent 2: Well, I think there are two types of modelling that I see clearly now available in the aviation industry, you have the premium airline.

Thai Binh: Because major airlines will classify to major classes offerings to passengers or sometimes, they may offer cheaper tickets.

Respondent 2: Yeah, but it is totally different modelling all together when you look at how the legacy airlines or the premium airlines are. You are right, they break it down into classes. You have the first class, business class,

economy and now they even do premium economy. Premium economy likes hot seats for us, then you look at our LCC model, not just us, but the likes of VietJet, Cebu Pacific, so on and so forth.

One class, that's it. But you can have the option of certain seats, for example, you want hot seats which is more spacious by a few centimeters or you want to have certain priorities given to you such as extra baggage, so on and so forth; which can be done but that's the model (its add-ons), the bottom line is that LCC offers the people these options.

Thai Binh: You will get what you pay for.

Respondent 2: Exactly. Nothing is forced; you choose what you want, and the option is yours. Whereas, if you go to the more premium modelling, I mean you buy you get the whole package which is fair, so you have a choice, but the choice is not as you know as bare or as simple as ours, for example, and I think we will always be different in that sense but I think the goal and ultimate objective here is purely making it an affordable experience.

Thai Binh: Do you think in the future you will offer the passengers business class?

Respondent 2: No, we will be doing the same thing and the closest thing you can have extra is "heat seats" and I think other than smaller items we will offer because the configuration of the airplanes is such, because our modelling requires it to be so. The minute if we put business class seats; that will take up space and our aircraft need to fill people, and I cannot charge business classes to someone who pays the normal rate of 300 Ringgit for normal class to 3,000 Ringgit for business class.

Thai Binh: Nowadays, some legacy airlines imitate or follow the low-cost model, they said they are operating a hybrid model.

Respondent 2: Yes, they call themselves hybrid model, but to be fair, I mean you look at JetStar, that's a low-cost carrier. It's a low-cost model but it has the benefits of a premium airline because they have codeshares, because they are owned by Qantas; they can do so. But they also want to play a bit in the LCC area because they know there are passengers that are very choosy on what they want to have in terms of experience.

Someone would say, "I just want to buy the minimum price ticket to get there, my holiday is my destination and not in the air, right"? But if you are hungry with Derry Air, you pay and I'll sell you, no problem. I mean, we see the hybrids and what's not and I think to each its own. They have their modelling but what it does is to give options to passengers, and I think that's a good thing for the consumers at the end of the day.

Thai Binh: So legacy airlines like Singapore Airlines and Air France, they also opened low cost subsidiaries like Scoot or Joon, but I think they are not very successful with this model, they should follow the low-cost model at the beginning of their operations.

Respondent 2: As I said, they probably end up being a pure hybrid solution.

Thai Binh: They want to cover all segments?

Respondent 2: Correct. But for us, people like us, VietJet, Nok, and Cebu Pacific, we are pretty much on our own. We don't have code sharing, no interlines either because right now our network is expanding enough that we can accommodate, while it allows us to focus directly, you know, and the focus is in Derry Air, that red tail at the back there, that's all we look at. Yes, we are an LCC in Thailand, Philippines, India, Japan, you know, but we all work as one and that's our code sharing among us and we don't see the need to share with other airlines; we need to cater to our needs here first.

Thai Binh: How long will Derry Air will fly for one flight?

Respondent 2: My responsibility is only up to 4 hours. So I do 4 hours, and on average the majority of my distance flights are usually 2 1/2 hours, which is very conducive. But for me, it is all about the effectiveness of utilizing my aircrafts reaching to the destinations. Right now, I fly to 130 destinations; I think it's more than enough from now but we are looking at growing next year, so on and so forth, but it gives us the base to work on. That's why we believe that filing of each other is better, and on top of that we have sister companies that brings the passengers into the network here and then they move within our network and then fly back. But there are people who fly in premium airlines, landing in KLIA or Penang and take our network in Bangkok, for example, and then take our flights after that which is a rarity, to be honest, because the majority actually fly Derry Air from point one all the way.

So, I think I do need to qualify the fact that it is not the experience really. People who fly legacy to come into our network, not much in terms of the numbers, is very minimal. So that's why we really focus on our own network and we have to expand it obviously.

Thai Binh: Who is your corporation partner? Do you co-operate for ancillary services?

Respondent 2: It's our in-house. Everything is done in-house. Our in-flight catering, our duty free, that's the thing about Derry Air we like to keep things within our control in the right way, not in the bad way. Because what it does is that we get the efficiency, and when we have efficiency, we are able to pass all the savings to the passengers, you know if we use an intermediary, there is a margin that we will make. We don't want that, we want it to be passed on straight to our passengers.

Thai Binh: With your strong finance resources and investments, does Derry Air create a new generation to travel inbound or outbound? You carry your own type of passengers but, I mean do you inspire to create a new generation of passengers?

Respondent 2: Oh yes, of course, I mean that's why one of the points is that we made earlier is the embracement of technology because that is connected to the new generation. You know airline is an airline, but people buy things online now.

Thai Binh: For young people to encourage them to travel.

Respondent 2: Correct. If we don't make it easy for them to buy a ticket, they will forget us. That's why we embrace technology, that's why we are engaging the use, we are engaging the future in that sense. When I say that we control our own ecosystem, it also includes financial technology as well.

We have our own investment in BigPay, which is an e-wallet/Fintech. Nowadays, people don't carry cash, but if you are a BigPay user in our ecosystem you get many benefits. We keep it our circle, if you are BigPay member, cardholder, you get benefits in terms of zero service charge if you buy our ticket, when promotions come, you will get it, you will be first on the priority listing in terms of users that will get benefits. And the best exchange rate because we want you to travel around the region and we are currently utilizing that as a mean point for that, because exchange rates from credit card can be high when you go to another country.

We are very competitive in that sense, so keeping the future generation of travelers interested has begun. In fact, it started from the first day. We captured the adventurous guys, the ones that actually went online 17 years ago to buy a ticket to fly to a destination that no one has been to, and we continue to do that, and continue to enhance it. That being said, we are also encouraged by the mix of our passengers; not just in terms or age but also in terms of purpose. We never thought our airline will be important enough in the business circle, but if you fly from Kuala Lumpur to Singapore, people are in suits; they are businessmen and businesswomen, board members they are rushing to meetings in Singapore, something that was unheard of before this. Most people felt that they should be in the premium airlines.

So it is the spectrum in terms of the passengers' demographics is very comforting for Derry Air, so we have for one end to another end, the job here is to continuously enhance what we do and encourage the young generation to come with us, but also not to ignore the older generation that is very comfortable with us, but most of the time we look for the efficiencies in terms of scheduling, timing and all services at the end of the day which we are getting to as well.

Thai Binh: And you get the very strong distribution system on the internet, are you getting rid of the GDS (Global Distribution System) totally?

Respondent 2: Right now, we sell direct from our website and we do have some agents we work with, that are OTA (Online Travel Agents). We do not get rid of the OTA because in some of the countries there are limitations, and they are still there and the passengers and consumers of those countries utilize OTA as their only way to buy tickets because technology can only reach so far, and some OTAs still plays a part so we will still work with them. I don't think that there will be a notion to close on that sense. But it is important for us to enhance ourselves and encourage technology that's part and parcel of what we do. If you buy direct from us, you will get the best benefits and I think that's a message that we keep telling everyone and I am pretty comfortable that in terms of percentage, we are comfortable to say that our direct purchases are very high.

Thai Binh: And how about the fuel price affects to the airlines? Do you do the hedging to secure your operation?

Respondent 2: Well, we do some but not much; we are bullish about it. We have been able to manage the cost

with the fluctuation of oil at the moment, but we are looking at the very positive outlook. We are always very positive anyway. And even if the oil goes up, we will find ways to manage it, and I think a good example we did with the fuel prices going high, and we didn't put a fuel surcharge to anybody.

So it's something that I think as an organization we are very nimble, very proactive in many ways that we can manage the cost and I think that something that has been in discipline whether we like it or not as I kept repeating this from Day One. We kept the discipline in that sense.

Thai Binh: So you utilize smaller aircrafts with more frequencies or large aircrafts with less frequencies?

Respondent 2: My aircraft is just a bit standard at the moment, all my aircraft are A320s; the only difference would be some newer ones have additional hot seats, 186 or 180. The efficiencies are on the basis of standardizing the aircraft made, so when it comes to servicing to pilot training, it's the same standard.

I think, we kept it going that way and continue to do so. The routes we fly into our owned very well calculated, so we know what it will cost us. The aircraft that we have are fuel efficient, the latest aerodynamic design, they also assist us in terms of fuel savings, so on and so forth. So effectiveness is all managed in many pockets; at the end of the day to give the result that we want; a cost-effective business, but more importantly the ability to allow passengers to fly at low fares.

Thai Binh: Do you have the shortage of qualified employees or pilots?

Respondent 2: The world right now faces a real shortage of pilots and we have on our side, a cadet program and in 2020, I will have the first batch of 200 cadets that will become pilots. What we have realized over the years, the consistency of supply in terms of pilots into the system was not really there. We made a decision two years ago to create a supply for ourselves. We have done so and we will get our first batch by 2020. But it is a very competitive environment, pilots are in very small supply, so demand is strong.

Also, the notion of the culture we work in and those who work with us will understand that this is a good place to work in, and this is a good place in terms of culture for them to grow and progress. We also promote internally in terms of their progression and experience because it is not a dead-end job in Derry Air and as we grow, opportunities will grow, with that of our people as well. It's the same in terms of engineers and what not, and we have seen not just this Malaysian taking an initiative or having better bigger schools.

We ourselves encourage they work with the authorities to see how we can contribute to get more qualified technicians, more qualified engineers coming out from the Malaysian system to supply us at the end of the day, and the good thing about certain aspects like pilots and what not, baring their qualifying factors by local regulators, they can fly anywhere.

Thai Binh: What is your outlook about the airline industry in ASEAN?

Respondent 2: I am a proponent of Open Skies! Being honest, I think this industry still grows, as mentioned earlier 600 million something of the population just in ASEAN; we only touched the tip of the iceberg. I think the opportunity to offer people to travel is what we are gearing for at the right cost obviously; also we have enough demand within the region of people that want to fly and to experience and to visit or do business with other countries.

This is something that I see continuously would happen and year in year out we have our challenges, no doubt; not just in a country but as a region, but it's something that everyone, you know, goes about it and that's part and parcel of how we do things and I think for ASEAN the potential to grow is amazing, we see the potentials. We are exploring, especially ASEAN, especially Indochina, for us it is a very important market because we are not flying enough there.

Thai Binh: At this moment, I have heard that the economic situation in your country is not very good that leads to less travel demand, how do you stimulate the travel demand?

Respondent 2: Right now, I can't say I'm correct on this notion, but travel was not really affected too much this year. I mean, from our perspective, we have seen growth still, we have seen growth in domestic movement. In fact, I have even introduced multiple new routes this year and high frequencies and the loads that I see are very encouraging.

So far from Malaysian perspective people still travel, if it is not for holiday, it's for business because we allow the convenience of travelling now and I think in terms of us promoting the routes and what not, we have a marketing

team, that's their job to also encourage people movement but more importantly we work with all the agencies, the state, councils, all the government agencies to encourage also people movement because it benefits everyone at the end of the day. So, on hindsight, I still see positivity as the numbers shown in, and our recent results also show the Q3 numbers are encouraging and very positive. If we just get our things right going in 2019, I believe it will be OK.

Thai Binh: Thank you very much for hosting me the interview.

INTERVIEW 3

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 3
Designation	▪ Senior Executive Level – NokScoot Airlines
Date of Interview	▪ 19th November 2018
Mean of interview	▪ Meeting in Person
Location	▪ NokScoot Airlines’ Office – Don Mueang International Airport – ▪ Bangkok – Thailand
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: My work is based on a tripartite framework studied by my director of the dissertation, which is the ESO. I would like to examine the responses of the air carriers in the ASEAN region. Especially, we are going to move up to the single aviation market in ASEAN, that’s why many airlines are preparing to integrate to this market.

I have two researched questions, the first one is “What are the impacts of the Open skies agreement on the strategies developed by the aviation companies in ASEAN?”. And the second question is “What are the obtained processes to propose a strategic fit allowing a sustainable response to the new competitive conditions of the sector among membered countries in ASEAN?” Based on researched questions I developed around 7 propositions. The Open skies policy can be considered as an external factor of the environment that affects to the airline’s operation nowadays, then, does NokScoot Airlines see the Open skies policy, which can encourage the airlines to enter the single aviation market, as an advantage or threat?

Respondent 3: The aim to have a single market is definitely a good and a nice aim, but in reality, an aim sometimes can be very different. So, when you look at the aiming of the single market, it means that you want to have fair and similar conditions to all participants. That’s the idea behind the Open skies and the single market. Unfortunately, every country and airline has slightly different point of departure; every country based on its location, population, infrastructure and financial capabilities have different points of departure. So, the assumption when you are saying free and open, is that everybody is equal; but they are not equal. When everyone is not equal, most of the countries then still have to adapt to that aim.

You know, everybody sees the aim and because everybody is not equal, everyone is trying to find their own response. I give you an example; Cambodia, with a 6 million population. How can you get to an aviation industry that isn’t on par with anyone else? This is very difficult. Vietnam and Thailand are similar, but not Myanmar; even though Myanmar has the same number of people, but the development of the aviation industry is way behind.

In the case for Myanmar, it is more difficult to promote the same level of Open Skies than everybody else because when your own national carrier is not competitive as compared to the other airlines, then you need the Governmental protection in order to equalize a little bit the different kind of strengths. So, you will see the airlines that are the strongest in the region promoting the Open Skies the most because they have the most to gain. So you will see the likes of Derry Air being the biggest promoter of Open Skies for ASEAN, but you will not see the same level of enthusiasm from any Myanmar carrier or Cambodian carrier.

Thai Binh: The Open Skies policy is supposed to be completed by 2015, but now it is still pending, right?

Respondent 3: As I said, the Open Skies is a good aim, but you have different points of departure and you cannot assume the level of difference between the countries, which are so enormous. You know; you compare Thailand against Laos. How many airlines do you have in Thailand? How many airlines do you have in Laos? How many aircraft do you have in Thailand? How many aircraft do you have in Laos? Now, having the assumption that everybody is equal is one thing; but having the assumption that everybody should have the same right and the same assumption the same strength, and equal opportunity is not really right because it does not reflect the reality.

Thai Binh: Actually, I see that NokScoot Airlines have routes locally, and to China, Singapore and operated by Scoot but with the favors of Open skies, are you ready or have any plan to fly in ASEAN region, like the original point is different from your country?

Respondent 3: NokScoot is slightly different strategy. Our airline is currently operating only the wide body aircraft. And when we are operating wide body, you have to look for city pairs that are fairly heavy in traffic. So, when you are looking for a city pair that have heavy traffic, it's mainly outside the ASEAN region. We are flying to Japan, to China, and we are going to fly to India, we are flying to Taipei, Taiwan. We are going to fly to Korea. So this has very little to do with the Open Skies. We have Open Skies with China, but this is bilateral Open Skies between China and Thailand. So, we are not very much affected on the level of your study.

Thai Binh: And I see that NokScoot is very differentiating itself from other airlines with the vision and the mission, and also I see in front of your office with the motto that Naxiot is fun, is cheeky and something like that, so do you aim to any special market or any generation, such as the millennial generation?

Respondent 3: When you look at the market that we are flying to, you will see that we are flying a lot to China and when you are flying a lot to China out of Thailand, China is a market that still needs to be discovered. So, when you are travelling between China and Thailand, it's mainly inbound traffic, from China to Thailand, but to stimulate the Thai market to go to China you will have to look for the first movers. You know, because China is not yet an established market for Thailand, so you will have to create the desire for adventure, to test out something new, to try new things. And you cannot achieve these if you are having a conservative point of view. So, that's why we are positioning our airline more to the younger generation, ages between 25 to 44, so that area, and to get the more adventurous people that are still looking for.

You know, the airline business is probably one of the very difficult industries to have a very pointed differentiation, because at the end of the day, most of the airlines are flying with the same equipment. So, it's either you have Airbus, or you have Boeing. It's not like you are going into a restaurant, which might be a Chinese restaurant, Vietnamese restaurant, or Indian restaurant. There could be so many different types of restaurants by nationalities, by ethnics, etc. But when it comes to airline, a seat still remains a seat; and so the differentiation between the airlines is definite there, but it might not be as strong, as visible as in other industries, where the food is definitely different in an Arab restaurant or an European restaurant. But the seat on an Arab aircraft or the Chinese one is going to be very similar. So, it's quite challenging for airlines to come up with differentiation that hits the spot.

Thai Binh: So, in your opinion, is price the most factor that influences on customer purchasing behavior?

Respondent 3: Definitely price is one of the strongest factors. I wouldn't say it is always the only one, it's definitely a decisive one and it depends a lot on the target group that you are having. It depends a lot on other factors as well, like the right timing, am I making the most of my holiday, am I flying only once a year, or do I fly every week. People that are flying only once or twice a year are probably more concerned about price; whereas people who are flying every week are a bit more concerned about convenience. They are not going to be in long queue, they are not cramped into small seats, they are exposed to the journey more often then they are interested in more comfort. Whereas people that only travel once or twice a year, cannot compare which one would be comfort and which one could be non-comfort. And if you don't have the ability or necessity to compare, you are likely to focus on price.

Thai Binh: So this morning, I don't feel regretful to fly with Bangkok Airways. My concern is that if I fly with Derry Air or the Chinese airline in Cambodia, may have some delays or cancellations, so it might spoil my business trip.

Respondent 3: But if you would be a different person and you did not have a business trip!

Thai Binh: Yes, If I am a tourist, I will have plenty of time.

Respondent 3: Yeah, if you have plenty of time, you might not care so much about potential negative factors, but you care about how expensive the ticket is.

Thai Binh: So as I know that NokScoot Airlines is the co-operation between two countries; Singapore and Thailand, but the business model is low cost, right? Do you have the support from both governments, or you do the management freely and competitive in the environment?

Respondent 3: You have to differentiate between the management of the company, the shareholder structure of the company and the corporation level of the company. They are all on different levels, on different issues. The reason why Nok Air at that time has started a joint venture with Scoot, which is a subsidiary of Singapore Airlines, the reason behind is very simple. Nok Air is mainly a domestic carrier. Nok Air was mainly or purely a narrow body operator whereas NokScoot and its vision to fly international.

Thai Binh: So at the moment, Nok Air is still existing?

Respondent 3: Yes. But Nok Air does not operate wide body. We are operating wide body, and we are operating only international. So, when you are operating only wide body international, the expertise is more on the Singapore side than on the Thai side. So, we, when I say we is Nok Air because I used to work for Nok Air. We are looking to have the right partner for the longer distance. And that's why we have the corporation with Scoot.

Thai Binh: Yea, I see. So what are your key strategies for NokScoot to optimize the operation in such competitive condition? I mean, which strategy is the most importance that you focus on, like marketing, or human resources, or brand or others...?

Respondent 3: Actually, there is no single strategy for any airline. It's a combination of multiple strategies from multiple areas.

I give you an example. Nowadays a lot of airlines do need scale in order to compete. This is because, when you have smaller airlines you have higher cost, particularly on acquisition of aircraft, financing of aircraft, maintenance, all these kinds of things are fairly high in cost, compared to airlines that have a bigger scale. So, either you have a competitive advantage, like Bangkok Airways having their own airport, so you have physical USPs, means that nobody can take away that from you, then you don't need a strategy because that probably the best strategy you have. It makes you completely invulnerable against the competition. Operating your own airport is probably the best option, but there are not many airlines that have their own airports.

And the second one is probably to have the traffic rights unlimited, so when Bangkok Airways was operating to Cambodia for a long while; it was the only Thai carrier operating into Cambodia. So, when you have preferences in terms of traffic right, that is the second-best option. Either you have your own airport, or you have traffic rights that nobody else has. The third one would be then to have slots that nobody else has. You know, even say the sky is opened, it's not really opened because within the open sky there are so many different levels. You can have the most open sky without the slot it will help you nothing, so the strategy is basically usually depending on the strength of the airline.

Thai Binh: Thank you so much; this is something I'd like to know about NokScoot Airlines, so it now goes to the general propositions for the airline industry. I also employ the stakeholder theory in my dissertation, so I would like to know about the stakeholder environment in the airline industry, may consist of the government's regulation such as taxes, or carbon emissions or monopoly policy and the shareholders of the airlines might have influence on the airlines, so would these factors impact on the airline's competitive position?

Respondent 3: Would it impact, you know, you have to ask yourself why are these things in place? And usually they are in place for a reason. And the reason behind this at the very beginning is the national interest, the very first thing is national. Why is the national interest so important to the aviation; because the sky doesn't belong to the airline but it belongs to the country, and therefore, when you have national interest, you have to take care about your carriers that are carrying your national flag, so you have the flag of the country's nationality on the aircraft. And that is there for a reason. So, it's the same as the Open skies, you can claim it opened but it's not opened, and the country can say, "Oh it's all very free but it can't be completely free".

The country has to take care about its own national carrier, all the carriers that are carrying their flag, and therefore, they have the regulations of having the foreign portion of the joint venture, which has also impact on our jump. So, in Thailand, the foreign shareholder cannot be more than the Thai shareholder. And it's there for a reason, because they are protecting the local carriers. When you don't have any kind of this mechanism, then it is possible for foreign carriers to use the traffic rights of another country and take full advantages. That is something that those who are strong are usually promoting and those who are weak are trying to protect themselves. It's a very normal situation.

Thai Binh: I agree with that. Do you agree that the technology pressure would impact positively to the development of the airline industry?

Respondent 3: The airline industry has always been the forefront of technology advancement. This is very basic because airlines do require distribution and when you are dependent on the strong distribution network, the airline was the first to computerize. However, in the beginning it was just the travel agencies that has accessed to airline seats. But it sets the foundation already in the 70s, in the 80s for the airline industry being an industry that were able to take full advantage of the Internet. So, the moment there was the connectivity not just between the travel agencies and the airline reservation systems, but between the consumer and the airline reservation systems, so that was the advancement of airlines; and, that was the beginning of low cost. This is because low cost bypassed all the various intermediates and will take in full advantage of that technology jump. But the technology jump in that period was mainly on the distribution side.

For the airline itself, of course there has been a large number of advancements, most of it went into the engine, the fuel efficiency of engines in order to bring down the cost of operation, the durability of the aircraft, so that you have longer intervals to do the maintenance. So these were advancements, but I have to say, it's not really outstanding, you know, it was outstanding maybe in the beginning when you shifted from travel agents to direct online booking, that was probably on the distribution side the biggest chief.

Nowadays, technology advancing in other areas faster, you know when you are looking into banking, in the past you have to go to a bank to make a bank transfer. Now everything is almost done online; mobile only. Bank branches just are closing. So, in other areas, the impact of the mobile technology has probably currently the highest impact on the airline industry.

Thai Binh: So the technology will comprise of the biometrics, and also used for automatic in checking in and in dropping baggage. Do you think small airlines will have lesser competitive positions as compared to large airlines?

Respondent 3: I am not really sure about that because when you say biometrics, it's more about security. Security is more about airports than about airlines. When you are talking about the conveniences of the passengers now today, the limitation is more on the airport rather than on the airlines, because of the things you can already do; the online check-in, you can do a lot of things already that were not possible 10 or 15 years ago, you can do so now. And there is hardly any additional level of conveniences.

You know, when the only thing that I see that is still an obstacle is that you still need to check in the luggage. Now; if you do your online check-in then the burden is not anymore on the airline. It was the security of the airport and the check-in counter and the body-counter again. It's more in the airport side than it's on the airline side. So; what you are mentioning in terms of the competitive advantage that coming from technology is basically on more some areas of the airlines, for instance, customer relationship management, predicting of load factors, revenue management. Those are large number of technologies where you would have a strong difference between the small and the big airlines.

Thai Binh: So, regarding the distribution channel, are you going to get rid of the GDS or still keep them to optimize the sales channel?

Respondent 3: I think when you are operating internationally, you will still need to make use of all the channels that are available to, I don't think that any of the airline currently in the position.

Thai Binh: Because airlines might feel not comfortable and don't like to pay percentage to GDS, like 5 to 7% so they want to cut cost and drive all customers to their own website to book tickets.

Respondent 3: Yeah, you know the airlines normally are very opportunistic, meaning to say that yes, none of the airlines like GDS because they felt overcharged, but on the other end, they are still working with GDS but they are not incentivizing their consumers to use the GDS. That's the way we are operating when you look at the history of GDS, they all started from airlines.

Thai Binh: And in terms of the organization, organization has its own capabilities, means the resources like brand, reputation, human resources, finance sources and these sources are the strongest stands for an airline to set strategies and beside that you will have product differentiation, customer service improvement, and appropriate marketing strategy. Do you think these are the actors to help the airline to reach the intense profitability?

Respondent 3: Whether the airline reach the profitability or not, is not entirely up to the airline itself. There are circumstances that are beyond the control of the airline. For example, currency exchange, fuel price went up and down, you know, even just year on year between last year and this year, you look at the fuel price differences, it's very significant. But, as I told you at the beginning, the differentiation possibility between the various airlines are fairly limited. However, you still have to thrive for as much differentiation within that limited spectrum that you can do, you still have to go for it. And to go for it you need the human resources to do that. You know, it's not the aircraft doing it simply for yourself; you need the human resources and you need the best human resources in order to make that small differentiation window become big, otherwise it's too small. So, the humans are the key factors to any kind of success of flavor.

Thai Binh: So airlines nowadays, as you said, they are very opportunistic, I see that now they are seeking co-operation instead of competition to develop their business. Do you think so?

Respondent 3: You have to look into case by case scenario. Airlines are in general, very busy with themselves because the markets are so competitive as a ground rule or as a default, they will be busy just trying to survive or trying to grow. And co-operation with other airlines is only sought if it helps them to survive or to grow, not for

any kind of other purposes. So when they see that co-operations of the airline will make them help growing or would make them help capturing a market segment that they were not able to tap on by themselves, then they will look for co-operations, but they will unlikely to proactively look for co-operations because that portion of the co-operations is likely to be almost insignificant compared to the organic and the local growth from their own based strategy.

Thai Binh: So airlines now are not looking for co-operation with airlines like codeshare, interlines; they also cooperate in many other relevant industries like food, tourism to provide small services to customers, right?

Respondent 3: Yes, to be honest, that's still very low. It's still not really exciting. When you look at airlines co-operating with other airlines, or with other partners, they are still very airline-centric, you know. So, the first thing that comes into airline's mind is who can I partner with that allows me to get more money out of my customers. So insurance, food, water, or drinks, souvenirs, duty free, then once other things that, is covered that they are selling on aircraft itself, then they will start looking at other things like hotels, cars, tours, events, and then they focus on further. Then they will only come restaurants, and events, and further but it's small, it's still small of the airline-centric partnership view. So, they are looking if a customer buys ticket, what else that they need, but airlines are not really good in asking what do the customers want, what is their desire; none of their customers are sitting on the aircraft. It's not the desire of any customer, the desire of the customer is to get new experiences, to go for an adventure, to bring their wives on the honeymoon, to explore new things to see, but definitely not sitting on the aircraft, but airlines are still very airline-centric.

Thai Binh: And an airline not only earn money from selling the ticket itself but also earn money from ancillary services, and I have heard that some airlines even do the investment or do the hedging, for example, doing the hedging in the inversed direction to gain the profit, so is it risky or not?

Respondent 3: I think airlines are not doing enough, why; it's very simple you know. Airlines are usually have a fairly large budget for marketing, and if you would put part of that money into ventures that it's helping the customers on its entire journey, not just for the portion of flying, not just for the ancillary revenue, you know, it's very closed, very airline-centric. As I told you, the customers want to achieve something completely different; just that the airline is part of that entire journey. It's just a small part, not a center part, but the airline sometimes they think they are the center piece, but it's not. The center piece is something else.

Thai Binh: So, it is hard for the airline to get profit, some airlines are profitable, and some are not, so there are airlines in the market selling the tickets under the market price, so what do you think about that? Are they going to do money laundering, for example, in Cambodia's market, during recent years there are seven airlines appearing in the market from China?

Respondent 3: I am not aware about what airlines are doing in Cambodia and I would also not dare to comment on the other airlines what they are doing, but when it comes to an airline being profitable or not, there are many factors. It depends on external factors, the competition level factors, demand factor that can be very seasonal, or influence. Just recently, a couple of months ago we had a boat accident involving Chinese travelers, which had a very strong impact on the tourism market in Thailand, but you can't say that was the airline's fault, but it has the huge impact on the airline industry when you have every customer coming from China is coming by airplanes. So, when large number of Chinese customers, not all coming from China, the first one that going to be hit are the airlines and that definitely have an impact whether you are profitable, or you are not profitable.

An airline is not like a taxi while you can say; OK, if I cannot drive here, I drive there, you know. When you have an airline then you have to apply for a traffic right, then you have to comply, you have to fly, otherwise you are losing the right to fly. There are so many unexpected factors that takes a bit away of the flexibility from the airline to handle situations.

Thai Binh: So airlines now are reducing cost in all aspects to maintain their business performance, is it true?

Respondent 3: Airlines are always trying to reduce cost, but that applies to other business as well. You know, you are trying to improve efficiencies, you are trying to improve the ratio between the number of people and the number of aircraft that you have, everybody is trying to find ways to operate more effectively. It is a very normal thing, it's not a surprise for any company trying to reduce the cost for operations; it's very normal.

Thai Binh: Airlines normally keep opening their route networks, so do you think they keep opening the networks to open their geographic coverage for their competition rather than to achieve the profit or efficiency?

Respondent 3: I don't understand.

Thai Binh: Because some airlines are trying to open new routes to expand their geographic network to let people see that they are the large airline to have a wide network, but some routes failed after that. So, do you think they just open that or rather than to achieve the efficiency in order to gain profit, or you can work in a smaller scale, but you are profitable rather than in a larger scale but unprofitable?

Respondent 3: The unfortunate thing with airline is, there is a pressure to grow because there is always pressure on cost. When there is a pressure to grow, you either have to open new stations or you have to go for higher frequencies. But the chances are that when you start a new destination then you will have to develop that destination, and it's not all destinations that when you are going to start with profitable from the very first moment that you are going then, you know when you only have one flight, then you have to share the cost of that one flight; you have to open the station that will take some times until you have the second flight to there, the third flight to there, once they have the third flight the cost structure for that station will be reduced because you still likely to have, only slightly number or higher number of personnel, so you can divide the number of flights by the same number of people, so you get more and more efficient.

That takes times, it's not something that people are just operating a bigger network for a sake of having a bigger network. I am not saying that people are not doing so; but most of the airlines will have to grow at least for certain percentage to keep up the rising cost structure.

Thai Binh: What is your outlook about the airline industry in ASEAN?

Respondent 3: The outlook is very simple, you know. The demand for air travel will continue, because the largest number of people are living in this area, not necessary ASEAN, only but as in Asia and the more the people can afford it the more people will be flying. And there are some geographical circumstances in the region that actually it's incentivizing flights.

You know when you are in Indonesia, so many islands, you can't do the railway network like in China. So, there are needs for the aviation industry in Asia to grow.

Thai Binh: Thank you very much for your time.

INTERVIEW 4

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 4
Designation	▪ Senior Executive Level, Y2International Aviation Consulting in Cambodia
Date of Interview	▪ 13th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Cafeteria, Rosewood 5* Hotel – Phnom Penh – Cambodia
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: With the tripartite ESO model, I discover the co-relationships among environment, strategy and the organization. The strategies developed by the organization to response to the challenges of the environment, and then I work on the case studies of airlines in ASEAN, so first of all I intended to work on Singapore Airlines and Derry Air, two prototyped airlines, one is legacy airline and one is low cost airline.

... (conversation not relevant to the topic)

Thai Binh: At the moment, there are now 8 airlines in Cambodia, how do you find the competitive environment here?

Respondent 4: I think there are too many airlines in Cambodia. Actually, a maximum of two or three is enough, but that is the government’s policy. There is one reason to give the government because of Cambodia Angkor Air (K6). A lot of passengers have complained out K6, the national carrier but K6 is the only domestic airline in Cambodia. You know, K6 shifts a lot of schedules and then they merge 2 flight schedules into 1 aircraft, to make it full, only to cancel it later. When I use K6 to fly to Siem Reap or somewhere else, there is no alternative flights, only K6 flights and I have to fly it. But after Bassaka Air started operations, many passengers shifted to Bassaka Air. As the key monopoly player, K6 always makes things difficult for the customers, so they have to live with it.

As you know, the Cambodian government, they welcome all forms of investments from any other countries. So, they do not have any objection who are investing in the airline business are. So they are just accept it. They mentioned, if you accepted this offer, they will provide better prices, better quality and service to all passengers. I think they set up the airlines and they bring more tourists from other countries into Cambodia, that’s why they have no any objections. However, they must control the numbers of the airline.

Thai Binh: Do you think they are doing money laundering from China?

Respondent 4: Yes, that’s so much saying money laundering, money laundering here is using under many purposes, real estates, tourism, hotels, or casino or whatsoever. Money laundering is coming, and they are doing another one because as I know it is difficult to bring the money out from China to other countries without any proof, or without any business. So, I think most of Chinese investors are using the money for with many purposes, but I heard K6 has also sold to some of their stakes to Chinese investors. So, I can say in Cambodia, all the airlines in Cambodia has had some form of investment from China.

Thai Binh: Do you think there have some airlines in the Cambodian market operating for two or three years, and then disappear?

Respondent 4: This is not only happening in Cambodia, but also to other airlines in the world. New airlines usually find it very difficult to survive the first two or three years, because the airline business needs a lot of cashflow and a lot of investments. This will be a major problem if you don’t have enough money to run the airline for two or three years. I think most of the airlines; 80 or 90% of the new airlines will close within three years. If they can survive three to five years, it will be more stable. This means that if you are a new airline, it will be difficult to sell and promote to the passengers. Potential customers do not want to use the new airline until they are stable. Also, travel agents are not willing to sell because they have had many bad experiences when they sell tickets of the new airlines, such as flight cancellations or bankruptcy. If you see, Small Planet Airline just lasted 2 years, and KC International Airlines just 6 months. For Bassaka, I think they can last 3 years. As for JC International Airlines

and Lanmei, they are also new airlines, and if they survive until next year, think they can survive longer.

Thai Binh: And how about Open skies, do small airlines benefit from Open skies?

Respondent 4: I don't think Open skies is good for small airlines. In the Asian countries, except for Singapore, the other countries are almost the same. I usually participate in all aviation meetings since 2010. About two years ago, all the Asian members made an agreement that they rectify all aviation agreements, but still just few airlines use it. You cannot get a slot; you have a right, yet you cannot fly because there is no slot. For example, in Manila or Jakarta, they are using fifth freedom flying from capital to capital. Only Vietnam Airlines is using this one with Hanoi to Vientiane, Phnom Penh to Ho Chi Minh. However, any airline in Cambodia who want to use the fifth freedom, from Phnom Penh to Jakarta, Singapore to Jakarta, I don't think they can get. So, they had already rectified all the agreements, but each government, is very elective with their local airlines and they are trying pressuring them not to give this one.

There are many reasons; for new airlines they are doing the due diligence on cash flow, financial reports, applications, for scheduled flights and not chartered flights etc. I don't think many airlines can use the agreements, but Singapore Airlines is able to. So, I think the major carriers, having support from the government, or the legacy carriers, for them there is a very good chance. But for LCC, for example, Derry Air, they don't need the Open skies policy because they have their airlines already in Indonesia, Malaysia, and Thailand. Therefore, it is not necessarily for them to join Open skies. They just connected via different codeshare. For full-service carriers like Singapore Airlines, Thai Airways, Philippine Airlines, they really need it but they also having codeshare with the Star Alliance, One World, so they are doing codeshares. Even they don't use Open Skies policy, they can do it in different way among the Asian members themselves. Nothing changes even though the Asian members are ready.

Thai Binh: We need to improve the technology in the airline industry, mostly focus on distribution system and aircraft. Do you agree that technology is one of the factors influenced to the development of the airlines?

Respondent 4: Of course, because the technology and the system saves time. For example, just few years ago, nobody uses mobile apps. For the airlines they mainly sell directly B2C. Just 5 to 10 years ago, they sell tickets from the GDS as well as to the travel agents. So, all travel agents start to sell these airline tickets, but they have no knowledge on how to sell directly to customer. But I think VietJet can sell because they make use of the technology to help them.

As you know in Vietnam there are many new airlines joining the market, same as Cambodia. Why? This is because Vietnam Airlines dominates almost 90% of the market. So, new airlines are joining the market, but they don't have distribution channels, so the only way is to sell through the travel agents, but then, they have the pressure from Vietnam Airlines; if you sell this, we may not co-operate with you.

VietJet sells their tickets directly from their website. If there is no innovative technology, VietJet will not be successful. This is very important, and the airline doesn't have to give commissions to the travel agent. Previously, it was 9%, nowadays, sometimes zero commission. They want to sell directly on their website or through GDS, even GDS before only the tour agencies can use. But now, many OTA like Skyscanner, Expedia etc., can collect all this information before they sell. The commission is lesser than that of travel agents. So the technology has a major influence in the airline's growth and profits.

Thai Binh: Do you think are they going to get rid of GDS?

Respondent 4: No, I don't think so. They will be, later on, but not right now. If you see the legacy and the LCC, Derry Air only uses their own inventory system, but they also use GDS. Why? This is because, their website cannot cover all customers. Still, there are other people; they are only using travel agent companies. They are not familiar using the mobile. For example, customers around the ages of 60s and 70s; they have time and money, and they want to travel. However, they still prefer the traditional style of buying tickets through agents.

So, Derry Air also joins the GDS; but at the beginning they did not enjoy it. The full-service carriers they have many alliances as well as code sharing. If you only fly your own sector, maybe the GDS can cover all the things. However, if you sell this, you will be connected to other airlines. Singapore Airlines flies to Los Angeles and somewhere domestic. If their partner is American Airlines, they will codeshare. When American Airlines uses the GDS, Singapore Airlines also using the GDS and they can codeshare and share the profit from the IATA. So, I don't think the GDS will disappear immediately, but airlines will keep the GDS just limited to sales. Also, there can sell on their own system to b2c directly.

Thai Binh: Lots of airlines purchase new aircraft models A380 or B787 Dreamliner to be more competitive among their rivals, especially major airlines. In this case, they invest lots of money on aircraft; will airlines invest on

technology to be more competitive?

Respondent 4: There are many factors, especially commercially for marketing as well as using brand new aircraft with efficient technology which will benefit the customers. For example, A321, the old version they carry a maximum of 220 passengers. The new model carries 230 passengers, but the fuel consumption is less. So, I think the fuel price is high, then using the more fuel-efficient aircraft is good. So it's very complicated, this decision.

Another example. In Korea, most airlines try to acquire brand new 737MAX or SV21 because geographically, the maximum mileage an A380 and B737-800 that flies from Korea will be Thailand and Cambodia. They really want to fly to Jakarta, Bali, Singapore and Kuala Lumpur, they can't, because of the limitation of the aircraft capability. However, when they use the new technology and the new aircraft, they can fly, and they can create the new markets, carry more passengers, yet with lesser fuel consumption. So, if you divide the cost by seats, the cost is less.

Thai Binh: So, do you mean when we invest more, we save more? And then we can open to a new business?

Respondent 4: Yes. So there are many factors. It can be also to be competitive because some airlines using the 737MAX or SV21; they fly to Singapore and they open a new route, which another competitor cannot do so, using the same aircraft. In this case, they already cover the cost and profit, and they created this market before their competitors. So, when you are creating a chartered flight and you set the price, you have to set the same price comparable other airlines. You can sell this at 30 dollars; they also sell 30 dollars. You have the profit from 30 dollars but for the other airlines, they just break even.

Thai Binh: Which strategies that airlines should focus on, marketing or human resources or finance or other things? Derry Air and NokScoot focus on the human resources, and I would like to confirm this factor.

Respondent 4: The human resource is very important to the airlines because finally the passengers need three things; aircraft, crew and the check-in staff. So all the final stages are handled by humans. Even these days, you can check-in via mobile. This is good for the young people; but for older generations, definitely, they are not familiar with these things. Currently, in Asia, most people are not very well versed with technology. I think the human resource is really important. The airline's image and reputation are heavily dependent on passengers, be it from check-in counter service, to boarding experience, cabin crew service after boarding, as well as interaction with the pilot and other things.

If a passenger has something to complain, they will call the hotline and air their grievances to the staff. In earlier times, we do not have SMS, and most of the time, complaints are being ignored. Nowadays you can complain using SMS or upload a picture to complain. This will create a heavy impact to the airline image. You see many airlines in America; they have this kind of problems, and when things get viral and ugly, you'll see the Senior Executive Level of the airline apologizing. All staff must have loyalty to the airline, so the airlines HR department must train them well, in order keep the company values in place and have customer loyalty from the top-notch services provided.

Thai Binh: Comparison in terms of priority, which is more important, human resources, aircraft, services, operations, the shining decoration inside the aircraft or price?

Respondent 4: It is difficult, it depends on the passengers. If the passenger is more affluent, they like luxury air travel and full-service, they will be more focused on the service they don't care about price. If the passenger is less affluent, they just want to travel somewhere; service doesn't matter; they won't care doesn't much about the aircraft, entertainment system, just the price. So, it is very difficult to say which one is more priority, it depends on the customers.

There used to be just full-service, legacy carriers and LCC. Some passengers don't like full service, as they don't need it, whereas some are not in favor of LCCs as they have to pay for food, spending a lot on check-in and luggage. Now, there are some hybrid airlines coming in as well, doing a well mix of both full-service and LCC. I cannot say which one is more priority, it depends on the passengers.

Thai Binh: Which factors will help an airline reach the desired profitability, like product differentiation, customer service improvement or marketing strategy?

Respondent 4: Because it is not the separate things, all are the combination. Basically, this is a combination of many factors coming together; no single factor stands alone. I give you a couple of scenarios. Even you have good marketing, if you don't have good service; you will not be profitable. You have good service, marketing and sales but your operation is not good, always delaying the flights due to maintenance issues, you will not be profitable.

It's very complicated, it's not just one issue, but a combination of issues as a whole. So, the airline Senior Executive Level and management team they must know how to balance on all ends, not only for just one good aspect. For example, in the past, Vietnam Airlines was a terrible carrier. At the time when I worked for Vietnam Airlines, the aircraft were old, cabin crew were very rude, and the service was also bad. Actually, now, the airline is doing well, they have a 3-star Skytrax rating. Not only they are flying, using the brand new A350, the cabin crew service also improved, and their operation team as well, and most of the flights are on time. When these 3 factors come together then the image or they managed to get the 3-star rating.

Thai Binh: So, cost is the key issue. Do you think all airlines will reduce cost to maintain their business performance? Will they try to cut cost, as legacy airlines are trying to cut cost and follow the hybrid model?

Respondent 4: I think it's a very different thing, depending on the country and airline. Even in Cambodia, sometimes airlines don't want to cut the cost of the maintenance fee.

Thai Binh: They want to cut cost on services aspect; sometimes they do not provide enough services to customers, for example airline meals.

Respondent 4: Sometimes, these decisions were made by the management team or the station manager. For example, the maintenance team need more time to fix the aircraft, but the sales team is pushing to them to fix faster so they can get more passengers to fly. So, who can decide on this one? They cannot decide, they are all at the same level. Somebody at the top management have to decide that, even the top management cannot touch that issue because safety is the first priority. Therefore, the maintenance team who is in charge should take charge, handle this issue, they must let the maintenance team finish their job. Yes, the airline will lose money, but if any accidents happen, the airline image will be destroyed.

So, I think, all the airlines, not only the aviation industry; all the industries in the world are trying to cut costs. They will plan to use innovative new technology system; they try to co-operate with many other different suppliers. There are many ways to save the cost. For example, you purchase the spare part from only one source, only or you have bigger fleet, you can easily negotiate and get cheaper price. But in Cambodia, there are only four or five aircraft in each airline, it is difficult to acquire the spare parts to Cambodia as the prices will be very high. Sometimes they are end up swapping the spare parts. Also, some local airlines are trying to work together, using one company together to save cost and expenses. There are many ways to save cost and just not try to cut the cost of maintenance. I don't agree with that. But it's a really dangerous decision that may destroy the airline image. They try to find ways to save the cost for the maintenance not to fly with any schedule or whatsoever. Also, they will try to co-operate with another airline, and they try to make create a bigger aircraft fleet, they will negotiate more and make use of the same system, which makes things easier. I don't agree just cut maintenance cost.

Thai Binh: When low cost airlines appear in the market, they force major airlines to differentiate themselves by providing more services on board and to increase cabin classes. Sometimes they even sell cheaper tickets than low cost airlines.

Respondent 4: When I see all airlines in the aviation industry nowadays, it's a mix. Even a full-service carrier, they have a brand-new aircraft, very good service but they are selling tickets the price range of an LCC like Derry Air, they have business class, premium economy.

Thai Binh: Yeah, they have hot seats.

Respondent 4: They also have a flatbed in the beginning, but they don't use this one. The full-service carriers are not flying scheduled flights that much, the main target is mainly more on the ticket price, expect full service but LCC style. So, as a businessman, there are two choices. Thai Airways have one or two flights, but Thai Smiles have 3 or 4 flights, sometimes 5 or 6, depending which airline you are using. Now the airlines, the LCC and the legacy are massive. LCC follow the full-service carriers, they don't want to setup the entertainment system in the cabin, but now they are using different technology such as Wi-Fi and the inflight hosting service. Everyone is using a mobile, can be saved in one drive; you just connect your mobile to this drive and you can watch all the movies.

Before, they have to upload all these into an on-board entertainment system, and this cost a lot. But now, they just provide signal. On SilkAir flights, they provide no monitors, but you can use your mobile to connect and watch movies. So, this is an LCC model, but it's not an upgrade. They listen to what the passengers who fly LCC wanted. If the flights are for one hour is OK, 2 hours are enough.

Above 2 hours, passengers will need some food, and some entertainment system but LCC do not have it. Now LCC can provide you with this kind of entertainment system; you can use your mobile and connect it. You can

play game, watch a movie or WiFi. But LCC, they are doing food service kiosks; they are doing the same way of promotions and pricing by mixing the services they provide. There is some hybrid model behind this; we provide meal, we provide entertainment system; we provide 20kg luggage check-in, something like this, so I think for the passengers, they are creating a new service not only for LCC, but also full-service carriers. So, market demand has so many variants, whichever airline can provide all these things, they can survive. If an LCC carrier doesn't provide at all, the other LCCs or hybrid airlines will take away their passengers.

Thai Binh: My research also mentions about the co-operation theory which is the key fundamental. I know that airlines nowadays are very opportunistic, but they are now also seeking co-operation rather competing each other. For example, they are looking for codeshare and interline co-operations.

Respondent 4: If you see the Asian market, Derry Air is the first LCC model. For America and Europe, they already have it, but Derry Air is the first to setup an LCC in Asia. After that, a few years later on, most of the full-service carriers they are creating their own LCC companies like Tiger Air, NokScoot, Scoot, Korean has Jin Air; Vietnam Airlines just has Jetstar, they know that they cannot compete with the same concept for different levels and at different markets for LCC and legacy carriers.

So, the full-service carrier they try to co-operate with other full-service carriers closer. So, year after year, more legacy airlines are joining airline alliances such as Star Alliance, OneWorld and SkyTeam. They are trying to get more of these full-service airlines to join and create more flying opportunities to the passengers and they cover more routes worldwide. Flying long haul, the full-service carriers are more focused on long range and worldwide. Whereas for LCC carriers they focus on point to point. Now, they are also trying to make alliance, like Derry Air, Korea and Thai LCCs, they are forming their own alliances. So, from Incheon to Bangkok and from Bangkok to somewhere, they are working on profit sharing, codeshare and interline agreements.

If you are only doing your own routes, point to point, that's it, there is no new market beyond; that is why they try to cover beyond the market to make an interline agreement, codeshare but you need a lot of budget to join the GDS and you need more people to handle the audit, setup the staff and control this people. Which one is better? You spend this amount and invest this amount and you can get more profits, and then you can decide. So, the LCC co-operation is coming up already. They are trying to connect all schedules in one market, and they are sharing like an alliance for LCC. But sometimes they are very competitive, they try to co-operate as well.

As a matter of fact, there are no enemies or friends. If you need help then they you are a friend; if not, then you are an enemy. So, it is very difficult to categorize because co-operation is more important the competitor or maybe you have to align with them. There are many different issues such as environment, aircraft type, and there are many other different issues, so we cannot say we just co-operate; they are my competitor. Sometimes you can be a competitor, sometimes you can be a friend.

Thai Binh: Sometimes airlines in the same alliance; they don't co-operate together. They seek the airlines outside to co-operate for the sake of their purpose. It's a kind of betrayal...

Respondent 4: No, because there are different situations and different circumstances. You are a member of an alliance. The region you are based in, where your investments are from, who are the shareholders, these are also very important. China Southern Airlines is under the SkyTeam alliance, but now they are trying to move to OneWorld because of American Airlines is one of the shareholders. In China, big airlines such as China Eastern and China Southern join Sky Team. So, as you see, there are 2 big airlines of a same country in the alliance. There is one of examples.

Why airlines join alliances, is because they need something from them. The alliance does not accept any airline to join in and they try to make a balance. But, as China is quite big, it is possible to have two Chinese airlines in one alliance. But now, China Southern is moving to OneWorld because American Airline is one of the shareholders. America and China are big markets and they try to codeshare or whatever is beneficial to them, which is better than keeping in SkyTeam. But Japan Airlines and Korean Air they do codeshare because they are different alliance, and they are fine to op-erate on this.

Thai Binh: So, in different alliances, you can do co-operation?

Respondent 4: Yes, the main purpose is for mutual benefits. For Korean Air, when they fly to Frankfurt, they codeshare with Lufthansa but many Star Alliance members complain why you have a co-operation with a competitor. But Lufthansa also accepts for this one and Korea Air's hub in Europe is Frankfurt, so they bring a lot of passengers to Europe using the Lufthansa network.

But, in different alliances there are competitors too, but they work together for beneficial purposes. They get a lot of passengers from Korea and using their network, but due to the pressure from other members of the alliance Korean Air stopped doing this. That's why, Korean air purchased the share of Czech Airlines, then they move to one of their hubs in Czech. Czech Airlines does not have A330 and Korea air provides the aircraft to fly to Korea, and they try to distribute to all the passengers. There is no competitor then.

If you need, they can co-operate even if they are competitors. So that is the new trend in the aviation. So, you can say that alliance is a small power; It is for marketing purposes, for an airline to join. But they cannot stick on this Star Alliance or other alliances you have more chance to do business with any other airline or market because you are a member of other alliance and you cannot do that.

Thai Binh: Do you think airlines will withdraw from alliances?

Respondent 4: Of course, there is a benefit. In an alliance they have a minimum standard of a service which one needs to adhere with, so they don't just accept any airlines or members. When Vietnam Airlines wanted to join the SkyTeam they were told they are not good enough so, Korean Air sent their team train them for cabin crew service. These 2 airlines started to co-operate. Vietnam Airlines they learnt a lot and improved. That's why Vietnam Airlines join SkyTeam and they get big benefits. They need someone to teach them to reach the world benchmark.

Thai Binh: Do you think airlines now try to open their route network to increase the geographic coverage rather than achieving profits?

Respondent 4: That one has so many issues joined together. If you have a new aircraft, new technology, but until now you cannot fly. An example, from Incheon to Bali, to Phuket and Singapore these are big markets. This is a big market, but you cannot go there. So, they join with LCC alliance, they sell ticket from Incheon to Bali, Bali to Bangkok, Bangkok to Phuket, using Derry Air. They do joint sales. But now they bring the new aircraft, so they can fly directly.

If you buy a ticket from Incheon to Bangkok and from Bangkok to Singapore, the price even for a low-cost carrier, with the prices combine is expensive, almost the same price of Singapore Airlines flying Singapore to Incheon at USD 600. Flying from Incheon to Bangkok will cost USD300; Bangkok to Singapore USD200. It's about 100 USD difference; but do note that the transport and transfer is 5 hours and no direct flights. For the service, will you choose Singapore Airlines or the combined LCC, which one? Of course, you will choose Singapore Airlines. So, depending viability of the market, then the LCC may decide to open the new route, using like a codeshare or if you are a full-service carrier you can use an alliance team codeshare.

Sometimes, like Emirates and Qatar, they are members of different alliances, they have many airline codeshares. Like Bangkok Airways; they don't have any alliance, but they accept many airline codeshares. Aeroflot, Finnair, American Airlines and many other airlines. So even three alliances cannot cover worldwide. So, they try to find any airline who has capabilities to work with them. Bangkok Airways, one of the best airlines in Thailand, they are not LCC. They are not a legacy; they are boutique and works like a hybrid airline. They are like a normal airline; they provide food, but they don't provide inflight entertainment and they don't have really good business class seats.

Thai Binh: CEO of NokScoot Airlines told me that Bangkok Airways has their own airport, which airport is that?

Respondent 4: Koh Samui. Koh Samui became a big market after they built their own airport. It's a private airport and only fly Bangkok Airways, they don't allow other airlines. If you want to fly to Koh Samui, maybe you must have codeshare. So a lot of airlines Bangkok to Koh Samui have codeshare. And from Bangkok to Phnom Penh, they have codeshare with Bangkok Airways. All the airlines, they know which market is good and they can fly directly. Japan Airlines can fly directly to Phnom Penh but there is ANA that have a lot of flights to Bangkok. Bangkok Airways to Phnom Penh they can provide this, so they try to join it. So, it doesn't matter you are LCC or full-service carrier, any demand from the airline or passenger willing to co-operate for their profits. There are many examples for the case in this market.

Thai Binh: So how is the impact of fuel price to the airline industry? Do airlines do hedging to secure their operation?

Respondent 4: This also depends on the country and the airlines; it's a different issue. You know Singapore they have a very big Jet A fuel market and they also have refineries to process the fuel, so the price is cheaper. As for Dubai, they don't really care if the fuel price is cheaper than water. So, these countries and airlines, they get a lot of the benefits and support from their governments. Qatar and Emirates ticket prices are cheaper, as they can

control the fuel monopoly. The two things they have are aircraft and fuel, so they can save a lot of money. Therefore, they can do more aggressive marketing to compete with other airlines.

Thai Binh: Does any airlines have more competitive advantage over other airlines in terms of aircraft and fuel?

Respondent 4: Yes, to some countries the fuel is a big issue. For example, in Cambodia, they import 100% of the fuel, and there are 1 or 2 providers, therefore the price is much higher than in other countries. If you fly Phnom Penh to Bangkok, Bangkok to Singapore, Singapore to here, the costs are all different and then the human resources in Singapore will be much higher in all. In Cambodia, the cost of human resource is lesser, but the fuel price is very high.

The percentage of the total costs are different, so we cannot say that the fuel increase and decrease. This depends on many different factors, as related to all the cost. Of course, the fuel price is a big factor to the operation, if an airline decides to open a route. So, many airlines fly to a destination, but these destination prices may be higher at some destinations, yet cheaper at some, though the fuel prices cost the same. Therefore, if you fly to this destination, your profit is lesser. Right? So the fuel prices depend on the country and the airline.

For hedging, when you have a big volume and you can do that. When you have contract with the big suppliers you can do that, but if you are an LCC, a small airline, or new airline, then you can't do so. No airline can do this in Cambodia. So, it depends on the situation and the country; some you can do it, some you cannot.

Some airlines they are using fuel support from the government. If the fuel price is high in the country where your airline is based in, then you need a more efficient aircraft. If you calculate monthly, the savings are not much; but if you are calculating this for 10 years it is a big amount. If you lose 15% efficiency of the aircraft, you pay more the leasing fee. However, you can cover all your cost during the leasing period, so it depends on the fuel. For example, Iran and the Middle East, they are using big aircraft and do not really care about fuel efficiency; they are more concerned about how many seats are in the aircraft, or how many passengers they can carry per flight. This is my opinion.

Thai Binh: Do airlines prefer small aircraft with more frequencies or large aircraft with less frequencies nowadays?

Respondent 4: They depend on the cost and the price. For example, in Cambodia. KC International Airlines is using ATR 72, flying about 3 to 4 times per day, but the total passengers are around 200 something. So, if you were to fly an Airbus 2 times daily, it is all the same. So, which one is more efficient? For me, I may use the ATR 72 for 4 times but why the other airlines they don't use ATR 72. Why?

Thai Binh: Because passengers do not feel comfortable flying on ATR 72?

Respondent 4: No, that is not the reason. Of course, for efficiency, it is ATR 72 as well as the fuel price and the handling charges. It is less risky as well. Also, you have more flight frequencies. Therefore, passengers can have more options other than K6. But the other airlines they are not using the ATR 72.

Thai Binh: But, every time you fly, it will incur more charges, right?

Respondent 4: I also considered while I was working at Sky Angkor Airlines. We are using the ATR 72, but when we check the aircraft lease, Airbus and ATR 72 are almost the same price. But now, it depends on what year and what conditions, the Airbus aircraft in Cambodia are not brand new; most are 10 years or more.

But, ATR72 is an uncommon aircraft, so it is difficult to find its spare parts. Even if you can find it, the price will be very high. The spare parts for ATR 72 cost about USD 150,000 and the Airbus USD 50,000. And that is the issue. If you keep 2 aircraft types, you have more cost. You must have 2 engineers, as well as 2 types of pilots. If the ATR needs maintenance, you must fly the Airbus, the cost will be doubled. However, when the Airbus needs maintenance, you cannot use the ATR 72. ATR 72 is for domestic flight use only. So, the people find it difficult to use ATR 72, but the market is enough for the ATR 72 the short frequencies flights.

However, most of airlines are using just one fleet to save cost. If I pay the rental fee, which is the same cost for renting an ATR 72, I can get the Airbus then I can fly to long destination to cover the cost. It can be a backup, but ATR 72 doesn't fulfil this function. So that's my opinion. That's the reason why small aircraft have more flight frequencies, as compared to Airbus. So, geographically, there are different situation, like in Vietnam, flight time between Hanoi and Ho Chi Minh City is very long; you can fly via a Boeing 777, which is better than A320, as it has more capacity. Similar like here, even they are using A350 for domestic.

In Korea, they use B747 from Gimpo to Jeju. Each flight, they can carry a lot of passengers. This is an issue for the slot. You schedule 4 flights a day, but you need to keep the slot, and the slot is difficult to get. Therefore, you better use domestic slot for international one, and you can use a big aircraft to carry the same passengers. This is the reason for the slot and the cost to keep different aircraft types.

Thai Binh: Will the shortage of the employees and pilots affect to the development of an airline?

Respondent 4: Yes. Definitely, of course. It's a big issue now.

Thai Binh: So let's say some airlines will propose the aircraft manufacturers to produce the aircraft without pilots. Will it happen in the future?

Respondent 4: I think, technically, 90% already it can be done. They can do without pilots; even for Boeing they already had done testing on auto landings and take-offs.

You know, many European carriers; the LCCs have a problem during peak season. They have 10 aircraft available, but they can use only 8 aircraft. The schedule is for 10 aircraft, but they have to cancel 2 because they don't have enough pilots. They don't have enough pilots. The regulations for pilots and crew and these people, have more limitations than before. Before, people can fly 1200 flight hours, but now they reduce the number of flight hours. So, it makes many airlines have more pilots and LCCs are opening more new markets. For example, before Derry Air, many people find it difficult to travel to internationally, as they are too expensive as compared to their income. After Derry Air, they promote tickets at USD 20. Why don't we go outside? So, a new market is created. After that worldwide, a lot of new LCCs were created and became a huge market, that's why the aviation market is brisk.

The full-service carriers, they do, reduce the prices, so they create a new market. In China, the GDP and the citizen incomes increased, they have more chances to travel. Before, they take the trains or buses, which takes too long. But, if you were to travel by air, the timings are quite short, so they create a new domestic market. The big issue is the China aviation market is growing too fast, and the human resource cannot keep up the training for them, so they have a black hole in the aviation pilot market. They offer very high salaries to attract pilots from all over the world to work there. But then, they have a big issue. They know that the pilot is a mass-produced product from a factory. You need a certain period to study, experience and hours. So, you cannot make it short-term and create pilots. Aircraft manufacturers keep producing new aircraft to meet the demands of the numbers of air travelers. Therefore, this is a big issue. Many airlines have big issues in Europe, and they went bankrupt. In Europe they have to compensate a lot of money to passengers because they cancelled a lot of flights and delayed a lot of flights and because they lack pilots.

Thai Binh: Are airlines going to poach pilots from one another?

Respondent 4: Yes, Sky Angkor they are very smart to use different seasons. Most European carriers have a peak season in summer, March to October. From November to March, their flight operations decrease. Many aircraft are just at the airports and not flying. During this time, pilots have a break because long Christmas holidays and New Year, they earn money and they spend money during this season.

But, in Asia, winter is the peak season, so the pilots moved from Europe to Asia during Winter season, but Sky Angkor Airlines they recruit for only winter season. So, if you are using this kind of pilot, it's more efficient to use aircraft and human resource. Pilots earn one of the most expensive salaries in the world; if you keep it for a long term, you have to pay the operation, so you just keep it for half a season. They work in Asia during winter season. And then they go back to Europe. Additionally, during the winter season, even the aircraft also...they bring to Asia; they use advantage for co-operations to create win-win situations. This is one of the solutions; do not just think that we cannot find partners and pilots, very difficult and they ask for high salaries.

Thai Binh: Are they happy to do work by monthly or hours?

Respondent 4: Of course, monthly or hours depend on the contract. But in Europe, they have a job. In Asia, they have contract only for summer season and winter. Even flying lesser hours, you can earn a lot of money during the low season. So, it's good for the pilots and it's good for the airlines as well. This is a big issue, but you can find some solutions if you study the seasonality and geographical aspects.

Thai Binh: K6 do not trust on pilots from Europe or Middle East countries.

Respondent 4: They don't trust on what aspects? Knowledge, skill, or their policy?

Thai Binh: I think it's their perception only. Maybe people from Middle East countries are Muslims, they are scared and don't employ those pilots.

Respondent 4: No, I don't think so. They prefer the Asian or their own nationalities. But it is very difficult because the aviation market just started in this area. So, Vietnam and Cambodia increase the number of airlines, number of demands increase in a short time, therefore the human resource cannot keep up with the demand. Anyway, you need the pilot. VietJet employs pilots worldwide; from Korea, China, Europe, America. The nationality doesn't matter; even from Africa. This is because you don't have an option, you have a choice, you just need to employ good pilots.

If you have enough pilots in your own market, I prefer Asian nationalities, Cambodian, Vietnamese or even Koreans. A lot of new pilots are still in cadet school, but it is not enough. It does not matter. If you have a pilot license and if you pass all airlines procedures and tests, you cannot just be a pilot with a license. You still must do screenings, check all the records and test your skills and knowledge on the flight stimulator. If you pass this one, it doesn't matter which country you are from. If you're from Cambodia, and you are doing well, you are qualified. If you are from America, you have FA, you have flight license, but if you fail you go home. There is ICAO regulation worldwide. Even if you are based in a different country the regulations will be based on this ICAO regulations. Based on this, they have to abide to the ICAO regulations. So, you have the pilot license in the world, so everything is at the same level

Thai Binh: What is your outlook about the airline industry in ASEAN?

Respondent 4: It's growing so fast. And I think, as I told you, in China, only about 10% of the people having passports, that's about 150 million? Still, I think that US is the biggest aviation market in the world. The second is China. But China is still growing.

I think, in Asia also have more chance to have a free visa so they can travel without visa and also, maintain more chances so travelers can travel more. Also, all the Asian developing countries income have increased; they are willing to visit the other countries. They are always staying in their countries, but they are getting more income, they have more time, therefore, they are willing to travel. The Chinese travel a lot in the Asia market and Asians also travel a lot. When I worked at Vietnam Airlines, Vietnamese passengers account for less than 10 %. Most of the Vietnamese travelers are not tourists, because it's very difficult to get the visa. If a travel visa is easier to obtain or made free, Vietnamese will travel to Japan and Korea.

In Thailand, it is 50:50 now. Thai citizens travel by the international route, so the local market is also growing. Asian countries now are one of the fastest growing economies in the world. For example, in Cambodia, 7% every year; Vietnam 7% or 8%. Most of the Asian countries, they are developing so fast. When the economy grows, the people also travel a lot internationally, as well as domestic. So, I think the aviation market in Asia, I think it's bright, I believe in 10 to 15 years, but there will be more and more competitors, which is good; because travelers have more chances in getting cheaper tickers and better quality of service.

Thai Binh: Derry Air has signed an MOU to enter Vietnam soon, so do you think they will compete with Vietnam Airlines and VietJet as well in the domestic market?

Respondent 4: Of course, Derry Air, they have a big fleet, and their cost is much cheaper than Bamboo Airlines; they will start from maybe end of this month.

Thai Binh: I flew via Derry Air to Malaysia and I see that they are very punctual, and they do not delay flights, the service is good, and the aircraft is nice.

Respondent 4: So, if there is a market, there is an investment. Vietnam is one of the fastest growing market among the Asian countries, especially for aviation. So far, VietJet is doing well because Vietnam Airlines is too big; they belong to the government. As a national carrier they don't really care about their passengers and service. So VietJet enters the market at a very good time; that's why they can grow so fast.

But I don't think VietJet can grow as fast as before. For example, only Vietnam Airlines and VietJet are two airlines who can compete. The Vietnamese cannot cover themselves much in Vietnam. They have VietJet Thai, but I think the mistake they made is using VietJet. Just like Derry Air; but VietJet Thai, VietJet Cambodia, so everything is a Vietnamese carrier. And they really face a major competition in Thailand.

Thai Binh: I think at the beginning they don't think they will reach to international.

Respondent 4: Yes. I think they should do some new re-naming. They setup the VietJet Thai around 4 years, but their fleet is still less than 10 aircraft. They face a major competition in Thailand, Derry Air, NokScoot, Bangkok Airways, Thai Smile and a lot of others, therefore it's not easy. What are they doing in Thailand?

VietJet cannot grow and expand like what they are doing now. They have limitations; if they don't change it, they are trying to do like what Derry Air does. Otherwise, they compete with Lion Group, and Derry Air Group. I don't think they can survive. So far, it looks nice, but I don't think they keep doing this; lobby and bribery. Vietnam is quite a good market because Derry Air and Lion Air; they had set up their own airlines there. The last place they want to expand is into Cambodia. I don't think they can, it is too small.

Thai Binh: When they come, does Vietnamese government do something to prevent them to compete?

Respondent 4: I think so. When VietJet entered the market, Vietnam Airlines also pressured the government; even they try to kill off VietJet using the travel agents, but VietJet still survive, because they are using very good technology, so they avoid the pressure.

Thai Binh: When Derry Air comes in, as they are a foreign airline, they will also set regulation policies.

Respondent 4: Jetstar Pacific is a Qantas and Vietnam Airlines joint venture.

Thai Binh: Because they signed.

Respondent 4: OK, if Derry Air coming to Vietnam and they will use a local company to share 51%, and the joint venture they can do it. So how come the government protect and prevent this? If you prevent this, the international investor won't want to invest in Vietnam. They should open the market; it's good for the passengers. I don't think they can prevent, they can; but they do this way, I don't know.

In Korea, there are also 5 LCCs already but 2 more LCCs applied; and the current operators they complained a lot. So, I don't think the Vietnamese government will do this. Legally, they are going to do the joint-venture 49:51, no one can object this. They cannot do, Derry Air is coming to Vietnam, they start operating, they share the 49% shares or whatever, why not?

I can do; if I am Derry Air, I'll do it. As a matter of fact, Derry Air also set up an airline in Japan already. Ok, why not? Can do it. So, I think all airlines will focus on knowledge in the future and the mobile environment and the cloud, because the big data. Who are using the big data? The airlines will be successful if they can grasp these technologies.

Thai Binh: Currently, airlines somehow don't know what to do with big data?

Respondent 4: Yes. The big data already existed; not only the airline business, also for like shopping mall, whatever. You join as a member and you are flying to where and when, male, female, age, your location. Thu, there is many big data, but you don't know how to consolidate all the data and how to connect this to your marketing strategies and sales.

Thai Binh: Not to forget, the co-operation between the departments to upload data and to process data.

Respondent 4: So, now the technology is more developed; all the systems are moving to the cloud system. The cloud system means we put all the data into one cloud server. Then many different departments can use this cloud system share all their information. Clouding system can be easier to using all the big data because now every department and all these things they are using, all separated individually. However, when we put all the things into the cloud system, it is easy to share all the information and collect the big data, then analyze the big data. The marketing experts then must propose how they can use the big data. We can track people, income level people, travel preferences, convert these into some form of big data then they can send promotional emails.

Thai Binh: Airlines can create differentiation by creating a special generation of travelers, using the big data, so airlines know the trend, so they can make themselves to adapt to or just want to serve certain type of travelers, then to create the new generation?

Respondent 4: Yes, the big data and the system can help create more working opportunities together with all the tourism industry, not just for aviation. When you travel, and you will need an accommodation; you have to do something about the information from various industries. These different industries, they can share the big data like Agoda, Skyscanner. Many new OTAS including Klook are coming. These act as symbols of a tour package like restaurants, car rentals like Grab. We can combine all the data, co-operate together and provide more exact

information at the right time to the passengers, so passenger can easier collate all the information and decide on the spot.

Before, you have to contact the agents to buy the tickets, accommodation and what I am doing there. Now, many service providers, they provide these; so, it is easier to access all this information to the passengers and travelers. You know travel industries increase mainly is because of many industries such as airlines, accommodation, tour operators, and transportation, car rentals, and whatever that is relates to the travel industry working together.

Big data is the one of the hardest issues for tourist industry; not only the airlines. Airline is one of the parts from start to the end. However, when you arrive at the accommodation, after that you use a Grab to travel to the city, and there are many things, such as apps to book a restaurant and everything.

Some airlines, the management teams try to keep the previous systems as they are more familiar with them. However, some new airlines or new management, they are thinking more about the future one, and the customers will be different. For Korean Air, most of the customers are between the ages of 50 to 70. They started flying when they were young. Also, there are more younger passengers, so different models and different strategies to approach them. If you are the legacy airline, and your main customers are old people and you kept promoting the mobile app system, then they will move to another airline.

I read that a restaurant, due to increase in labor cost, they started changing to machine automated systems, one of their long-term customers do not patronize them anymore. They are going to the restaurant not only for the food; they want to get some human touch, and ends up, they have to order via a machine by pressing buttons. These people are not familiar to this, and they may reject it. Every customer is different.

So that's why the big data is very important. For young people, you can send information via mobile but still, there are people who like to read printed materials; the brochure. They are easier to read as compared to a small mobile screen. So, the big data have to create separate strategies and approaches to the different marketing plans. So, this 21st century will be more systematized; the mobile era and technology is coming so the younger generation is more adaptive to them, they don't like this printed material. So, I think it can be changed but some companies still have not started investing right now. In time to come, airlines will find themselves in more difficult situations than banks right now.

Thai Binh: Thank you very much for your time.

INTERVIEW 5

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 5
Designation	▪ Director Level – Qatar Airways – Cambodia
Dates of Interview	▪ 8th and 10th June 2018
Mean of interview	▪ Speaking via phone - WhatsApp
Location	▪ Phnom Penh/ Cambodia – Manila/ The Philippines
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: The single aviation market in ASEAN will lead to grow and open to more competition in ASEAN. This also encourages higher traffic growth and service quality, while lowering ticket prices. Some ASEAN countries try not to join the agreement in order to protect their airlines. This will be the long term protection.

I work on the tripartite model, concerning the impact of the environment and the performance of the organization and the strategies. So, how the airlines will perform to be fitted with the environment as you know that we have the Open skies policy in ASEAN. I was inspired about this topic when I took part in the conference about the Open skies in Cambodia, I see that regulations affect to the development, affect to the performance of smaller airlines and there are some countries like Indonesia and Philippines, who do not totally agree to join to all agreements of this policy.

Respondent 5: So which countries try not to join the policy? The Philippines?

Thai Binh: Yes, Philippines and Indonesia. As for Cambodia, they will join but some of the countries in ASEAN do not totally join all of the agreements because they want to protect their own interests. For example, Qatar Airways; they can take the fifth freedoms. They can fly from Cambodia to Vietnam.

Respondent 5: Yeah, I used to be in charge of that.

Thai Binh: So this will affect the smaller airlines, as they cannot gain the competitiveness, so they have to prevent it.

Respondent 5: You know that, I mean, the Middle East air carrier have looked like a threat; but on the fifth freedom flight, when they have traffic rights between two countries, another two countries other than their origins, they all have failed. They haven't gained significant market share. When they have traffic right between 2 countries, they have filled a gap operating a flight that nobody operating. For example, the Emirates flight that flies from Dubai to Myanmar and from Myanmar to Cambodia. They are not really threatening anybody else, because nobody is operating these routes of Yangon to Phnom Penh flights before anyway. The only airline that actually try to operate that flight before was Myanmar International Airlines. And Myanmar International Airlines withdrew from the flight, because it was loss making; they weren't a profitable route.

There are too many elements in the first question for me to agree or disagree with this. Basically, there are three questions in one. The single aviation market in ASEAN will lead to growth and open to more competition in ASEAN. Yes, I agree with that.

This also encourages higher traffic growth and service quality, while lowering ticket prices. I disagree with that.

Some ASEAN countries try not to join the agreement in order to protect their airlines. This will be the long term protection. I kinda disagree with that as well.

You know, in one question, it's hard for me to say I disagree or I agree because I agree with the first part of the question and I disagree with the two other parts of the question. So I will choose number 3, that I agree but completely disagree.

Thai Binh: OK, I can break it down.

Respondent 5: Alright, the first question of the regulation. I disagree and you can take number 3. My opinion on the first part, the single aviation market in ASEAN will lead to growth and open to more competition in ASEAN, I agree and we have seen that already.

Especially with Chinese airlines in a lot more aggressive in Southeast Asia opening more and more routes in Southeast Asia. The small airlines appearing in Southeast Asia and try to operate to China, Macau, Japan and Korea. We see a lot of examples in Thailand, Philippines, Cambodia, and in Vietnam.

Then we have examples, such as Bamboo Airways in Vietnam. In Cambodia, you have Lanmei, you have JC International, you have Bassaka on this. In Thailand, you have NewGen Airways, have you heard about them? And in Philippines, you have Pan Pacific Airways. So those guys are trying to benefit from the Open Skies policy.

But the underpinning factor on that is what we see is or small airlines benefiting from it, rather than large airlines. And the Open skies agreement hasn't really changed the life of large airlines such as Vietnam Airlines, Thai Airways and Singapore Airlines. It hasn't changed anything much for them. The reason for that is because even those airlines are so closely related to the states and their governments, that they really need an open skies to operate as they wanted, they want to push their governments to negotiate bilateral agreements on their behalf.

So what this has favoured, is mostly small airlines. Small airlines that were created out of the blue. The question that this raises; is will those small airlines will be able to survive. Because an Open skies agreement does not necessarily translate into a larger market. What I mean by this is that even if the middle class population in the Southeast Asia grows every year, which means that the population can afford buying airlines ticket is growing. It is not growing as fast as the number of airlines are being created, and it's not growing as fast as the regulatory environment is changing. So that's my comment for the first part of the question.

Now, the second part of the question which is about the encouragement of higher traffic growth and service quality, while lowering ticket prices. I agree with the lowering ticket prices. We are seeing price wars starting now in Southeast Asia. We can take the example of JC International, in Cambodia who flies to Macau for USD120. I mean this is half of the price that is practiced by Cathay Pacific. Now the question is how long will these price wars be sustainable; that is to say how long will JC International be able to absorb the losses that this will create, because it is not profitable.

It is not impossible to turn a profit in such low margin. And without having a feeding traffic because, as you know, those small airlines are OandD airlines. They are origin destination airlines; they fly from point A to point B with no other mandates. Why large airlines in Southeast Asia are hub and spoke airlines; which means that even if they have to take a loss on the first segment, on the first leg, they might turn the profit on second leg. For example, in Hong Kong, somebody flies to Hong Kong via JC International will stop in Hong Kong. JC International can only make money on that passenger that flies from Phnom Penh to Hong Kong. But Cathay Pacific will make money on that same passenger from Phnom Penh to Hong Kong and maybe after that from Hong Kong to Los Angeles.

So I think it will lower prices, yes, but not on a very long term; only opportunistically and only for short term. I don't think this will contribute to better quality of service because most of the airlines we see, appearing in the landscape are low cost airlines. So there is unique selling point (USP) is mainly price but not quality of service. There is another factor in which I don't see this a lower price factor last for very long because the cost of operations are something that airlines can't control 100%. For example, the price of fuel is out of control. The price of oil barrels is predicted to increase; which means that there is going to be a point that flying at a very cheap price on medium haul flights (about 3 hours) won't be possible anymore.

That also raises the legitimacy of those new airlines coming out. Are they real airlines who are operating, or do they have another agenda other than transporting people? I won't answer those questions because they are very risky but, anyway, so I think it will encourage higher traffic growth marginally. I don't think it will increase the service quality. And I think it will lower the ticket prices but for short term, for as long as the market players can sustain the price war.

Some ASEAN countries try not to join the agreement in order to protect their airlines. This will be the long term protection. Yes and No.

Some countries are trying to protect their airlines. I agree; that is a fact. I don't think this is particularly an Asian thing; quite the opposite we can see the American market is extremely protective. The Northern American market particularly extremely protective their local airlines, especially the US and Canada. So, that is not something that is specific to Asia Pacific and I don't think it's gonna be a long term protection. We have to split that. The countries who are not willing to join the whole agreement and only adopt part of it, are mainly two airlines; two national airlines, Philippine Airlines for Philippines and Garuda for Indonesia.

Now, Garuda and Philippine Airlines are not really threatened by the new players; and as a matter of fact, Philippine Airlines is one of the most profitable airlines in Southeast Asia today together with Vietnam Airlines. Everyone keeps talking about Singapore Airlines and Thai Airways. For Singapore Airlines, they posted a loss last year and they are restructuring at the moment. For example, they are getting SilkAir back to the main line operation and Thai Airways has been loss making for decades. So, I think there are also other reasons why they are trying to protect themselves on not to adopt the entire of the ASEAN Open skies agreement. I am not sure what they are, but I don't think it increases the competition. It must be another reason. I don't know what it is.

Thai Binh: Yes, also Malaysia will not join totally.

Respondent 5: Malaysia will not join totally; that makes more sense in the way, as Malaysia Airlines is in such a bad shape. They had been restructuring since 2012 really, way before the MH370 and the MH17 crashes. So I could understand that. That's really politically motivated decision because only Malaysia Airlines would benefit by not adopting the Open skies policy. I think Derry Air is in favour of the Open Skies policy because they are operating so many subsidiaries in Southeast Asia. They have Indonesia Derry Air, Philippine Derry Air, Thai Derry Air, and Derry Air India. There is a new government now that has been elected in Malaysia a couple of weeks ago; so let's see how that changes. They might change their mind, I don't know but let's see.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Open skies policy will allow large airlines in the Asian region such as Japan and China to take freedom rights in ASEAN region, leading to the threats to small airlines.

Respondent 5: I rate it 5. The reason why I don't rate it 7 because I disagree with the last part of the sentence which is "leading to the threats to small airlines", but I will get back to that.

"Open Skies policy will allow large airlines in the Asian region such as Japan and China to take freedom rights in ASEAN region", that's is correct. We are already seeing that, we are seeing Japanese airlines opening routes to secondary cities in Asia.

ANA has started flights to Phnom Penh, they also started flights to Yangon 2 years ago with the 737-700, which is a very long flight for such a small plane; but they are really trying to maximize niche market, so that is correct. We are also seeing a new effect in China, so the Civil Aviation Administration of China (CAAC) in China, historically forbade national airlines or airlines belonging to CAAC, so that's pretty much all airlines. Air China, China Southern, China Eastern and all subsidiaries like Xiemen Airlines, so on. They forbade them to establish hubs in city that is the stronghold of other airlines.

For example, China Eastern base is in Shanghai and China Southern bases is in Guangzhou. Now they are starting an Air China based in Beijing, so now they are starting to open up competitions within national airlines. What that is going to create is that we should start seeing more direct flights flying to secondary cities, that is to say; today China Southern operates a Guangzhou-Phnom Penh flight, and China Eastern operates a Shanghai – Phnom Penh flight. We might start seeing China Southern tries to compete with China Eastern on the Shanghai – Phnom Penh flight as well. And this is not only true for Phnom Penh, but it's also true for Bangkok, Singapore, Kular Lumpur, Jakarta, etc. So I agree with that point.

Threats to small airlines, I think the main threats to small airlines are small airlines themselves. We are going to have to see the consolidation in Southeast Asia that we haven't seen yet. There are just too many airlines, and the threats to small airlines is not big airlines, in fact, they are so small and they can't consolidate and they are fighting among themselves so much to exist.

I just going back to Cambodia because Cambodia is really, the aviation landscape has changed so much in the last 2 years. In one year we saw 5 airlines and all from Chinese investors. So there is no way, given the size of the market, there is no way those 5 airlines can grow and co-habitate in such a small market, and on top of that they pretty much operate all the same routes, that makes no sense.

I am not sure whether threats to small airlines in new regulatory environment of big airlines from China and Japan. I don't think so. People who can afford flying ANA, Japan Airlines, China Southern and so on, they will keep flying with those airlines because they have a huge network. Those small airlines will keep appealing to backpackers, to VFR traffic, visting family and friends, family and relatives. They will never be able to capture the corporate market. They rely alot on tour operators, generate very low margin. We have seen alot of tour operators related the airlines disappeared in Europe.

As a matter of fact, Monarch Airlines disappeared last year, which was a big name in the aviation industry in Europe. So yeah, that's the last line I disagree with, the threats to small airlines.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The government's regulations such as taxes, carbon emissions will lead to the increased cost of air travel and the depress in travel demand.

Respondent 5: I am not sure about that really. I quite disagree with that. I would say I disagree with no. 2. Historically, the big impression in travel demand in air traffic have not been related to these taxes, to government actions. It has been related to globalized economical elements.

For example, the increase in fuel prices, yes, that is the big issue. Terrorism, or natural disasters, these have had a big impact on airline operations. In terms of examples you can mention 9/11, terrorist attack in US, you can mention when the price of the oil barrel was above USD150 that was horrible for the aviation industry. In Southeast Asia, we have a tsunami that has a big affect on the infrastructure. In Europe you can mention the ice land, vocalno eruption that pretty much blocked the air traffic for almost the month. These have big impacts.

Carbon emissions, taxes, you know, you study in France and I am French, so France is a good example for that. The French government, years after years after years, regardless which political party, would be the head of the country. They keep on hammering airlines and airports with new taxes all the time, and yet, air traffic, passenger traffic and cargo traffic have not decreased in France.

In Paris, Charles de Gaulle Airport (CDG) is still the second largest airport in terms of passenger traffic in Europe, after London. France has been affected by that, yet traffic has not decreased, and all this kind of thing is the same for Phnom Penh. Phnom Penh is quite an expensive airport to operate indeed, unless you work for Cambodia Angkor Air but that is a different story. The traffic growth at Phnom Penh airport has never decreased. It has actually increased quite a bit. I kinda disagree with that.

There are elements, there are factors that do impact travel demand. But there are only marginally related to government initiatives, and taxes. There is one big question that no body really has the answer to it yet; is carbon emission because the national and international regulation around carbon emission is a new thing, and it keeps on changing every 2 or 3 years.

You heard about COP 22, 23 where all the governments of the world gather and they discuss how to tackle pollution, problems and so on. And every 2 or 3 years they come up with new initiatives. So today, to comment on that to quantify the impact of taxation, on carbon emission and the impact on travel demand is very difficult. We are not in a factual analysis; people have opinions but there is no real factual definitive final answers on that yet.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Some countries in the ASEAN region operate monopolies with local or regional major airlines given preferred standing or exclusive territories, leading to the prevention of entering a new market.

Respondent 5: Do you have example, who do you have in mind?

Thai Binh: For example, Vietnam Airlines, national airlines. It's difficult for other airlines to enter the market.

Respondent 5: I quite agree with that, you can rate it a 5.

It's true that there are arrangements in certain countries for certain airlines to operate monopoly on certain routes. For example, until Lanmei came in, Vietnam Airlines was the only airline allowed to operate Phnom Penh – Hanoi flight. There is one example that comes to mind between Vietnam and Philippines. Until recently, the only major operating Saigon-Manila flight was Philippine Airlines and it changed to Vietnam Airlines, but in most cases, the flight is always the codeshare between two airlines.

The codeshare is kind of going against the monopoly. If there are monopoly there will be no codeshare. The other reason why you have to be careful not to give the impression that it's the very common thing is because it's very hard to operate the monopoly on international routes. The only flights you can operate with the monopolies usually are domestic flights. And domestic traffic in Asia, compared to regional traffic is very small, because countries in Southeast Asia, except Indonesia, Thailand, and maybe Philippines, but countries in Southeast Asia are quite small. So it's hard to operate a lot of domestic flights.

The really big domestic market in Asia are China and Japan, other countries are too small to have a very strong monopoly, and Indonesia because they have a lot of islands, inter-island flights, but I think mostly it's a regional traffic, so yes but be careful.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Shareholder's influence and their financial support are strong enough to protect the carrier from competition.

Respondent 5: Who do you have in mind?

Thai Binh: Shareholders of the airlines, maybe the government?

Respondent 5: You see that is the problem. There are so many different models in Asia. Vietnam Airlines is under Vietnamese government through different identities but it's a Vietnamese government; Cathay Pacific actually is absolutely not a government but with a group, Air China. In Singapore, they pretend that is not a public airline, but actually they belong to Temasek Holdings, and Temasek Holdings is the national sovereignty fund. So, it's a bit difficult, I agree with it.

Philippine Airlines here is the national carrier but it is completely a privatized airline. It belongs to Lucio Tan Group. You have a lot of low cost airlines in Southeast Asia and of course, none of them belong to the governments, they are private interests. You have HDBank with VietJet Air; Derry Air is Tony Fernandes and different investors. Yes, all large airlines are solidly backed up by their shareholders. A valid proof will be, as compared to North America where there have been a lot of mergers in Europe, where even national airlines have disappeared like Sabena in Belgium disappeared, Swissair disappeared and was kind of re-created with the same name but a different airline; Alitalia is about to disappear; Iberia was bought over by the IAT Group, which is British Airways.

The proof that is true is that Southeast Asia; despite the very unfavourable environment for airlines after the 2008 economic crisis and the terrorist attack before that, none of these airlines have disappeared. They all resisted through fund injections, payouts, whatever you want. But the end of the day they still here. Thai Airways is still here, Philippine Airlines is still here, Garuda is still here and those airlines who are doing very badly. And yet they are still here. So yes, it is correct, I believe. I will rate that a 6, but again be careful, describe the shareholding structure that is important.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The supplies of fuel will strongly affect the yield and rising oil prices will affect on tourism demand.

Respondent 5: I agree with that; rate it a 7. This is common sense. This is not necessarily related to aviation. Fuel prices affect worldwide economy; it affects everybody. So, this does not specifically fit in the aviation industry only.

It is true in maritime. For example, it's true for cargo; cargo ships, it's true for the car industry, it's true for the plastic industry because plastic is made of petrol; so the whole bunch of industries, but you can tell them that the volatility of fuel prices is even more prevalent in the aviation industry. The reason for that is also because airlines do something called hedging. Do you know hedging?

Thai Binh: Yeah, I know hedging.

Respondent 5: Ah, you know hedging. A lot of airlines hedge badly and there is a very difficult talent to find between not hedging at all and hedging too much. This is what happened with Air France. For example, you should give examples to illustrate of what you are talking about. You can give airline names, country names, so people feel that you know what you are talking about.

Air France, when the oil prices started to go down, Air France had hedged a lot and they bought expensive fuel because they are scared that the fuel will become even more expensive but the price stayed still. Because they hedged so much when the oil price went down they could not benefit from this.

For two years they reported losses not because they will not performing well enough, not from not enough passengers, not enough good traffic or bad yield, because whatever benefit they could earn whenever, even though the yield was good, they could not benefit from it because all these benefits were completely annihilated by the

hedge coverage. So, you can talk about that, don't just talk about or say when oil price increases, traffic demand decreases because cost of travelling increases. You should talk about hedging on that question.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Customer satisfaction will affect the general perception of the airline through word of mouth. Their concerns on the carriers' reputation, fleet or security will affect strongly to the airlines.

Respondent 5: I agree with the second point, their concern on the carriers' reputation, fleet or security will affect strongly to the airlines. Word of mouth, not at all. At least not at all on large market, on small market, yes. Let's rate this a 5.

Funnily enough, today it is very easy to affect a brand reputation, you can post a video on Youtube that gives negative comments about a certain airline. You can tweet, you can post articles, you can create what people call a buzz. You can spread that to your network of people through LinkedIn, through Facebook and so on. And those people can retweet, and this is what we call a ripple effect. It's true but all the same time the amount of information that we get bombarded on the daily basis is so huge that the longevity of word of mouth is inexistent. So, you see a video on Tuesday that Qatar Airways is a very bad airline because they've lost somebody's bag and that person complained and made a video about it and post this video on their Facebook wall and they tweeted about it, and you are in touch with that person, you see that and you think it's very bad, and then you move on. On Thursday, two days later, your boss tell you need to travel; you check airline tickets and you see the promotion of Qatar Airways and then you think: Well, airlines do lose baggages every day; it can happen to any body and I don't want to miss this promotion because it is USD200 cheaper than anybody else. So you are going to fly Qatar Airways whatever happens. So word of mouth, I disagree.

However, what is really true is the carrier's reputation; that is something very hard to compensate, to rebuild. You know Aeroflot, right, the Russian airline. When people talk about Aeroflot, even today they think Aeroflot is old Russian aircraft from the Soviet Union like Tupolev and Antonov, but that is bullshit. Actually, today, Aeroflot is a 4-star Skytrax airline. It is a very good airline. They have great service; 95% of their fleet are Boeing and Airbus. They have thousands of aircraft in order. They have a great service, a great business class, domestic market and connect Asia to Europe. They are very good airline and yet in peoples' mind; even today in 2018, and even they have a 4-star Skytrax rating, people still have at the back of their minds, "Oh, Aeroflot is an old Soviet Union airline and I don't want to fly Aeroflot." It is not popular, but it is a very good airline. I flew with them; they are great. Try to use this kind of example instead of a common place which is always the same Malaysia Airlines crash. You can tell both, you started with Malaysia Airlines and then you can give Aeroflot as an example, and they will say, "Oh you are right."

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Low cost carriers (LCC) on long haul will be a new trend in the future for they draw lower fares in order to keep their seats full.

Respondent 5: No, I disagree with that. The first sentence "LCC will grow and be a new trend". LCC is not a new trend; it has been around for 30 years. EasyJet had been around from 20 years; Ryanair, they've been around for 20 years, and Derry Air has been around for 20 years.

Thai Binh: People will invest in LCC, that means low cost airlines are going to be borned more than full serviced airlines.

Respondent 5: On regional market, yes. Long haul is a new trend; and very few long haul LCC. As a matter of fact, most long haul LCC have failed. So there is a good reason for that, because the operation marginal on long haul and the regulatory environment on long haul is so constraining that's it's very hard for you to do better than a major carrier. It could be a new trend. They draw lower fares in order to keep their seats full, that's not true. When you compare the price of a ticket, on last minute basis to fill the seats between the LCC airline and major, sometimes the major is cheaper.

I will never fly via Cebu Pacific, never, you know why? Because they are systematically more expensive than Philippine Airlines; they are always more expensive than Philippine Airlines. Now, there is a perception with the low cost that the ticket is cheaper and often it is cheaper when you buy your ticket very margin in advance, that is true. The only difference that they have cheap tickets is when you buy early; but if you buy late, the tickets are not cheaper at all. They are the same price; plus you have to buy all the add-ons, all the ancillary services, such as baggage, seat selections, food, queuing, lounge and so on. Which is why, it is so hard for LLC to capture the corporate market. The only airline that has been succesful capturing the corporate market is EasyJet because they

implemented a new package offered that is specifically designed for corporate, which is the high yield market. Corporate is the high yield, that's what you want. You don't want back package. So I disagree with that.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Low cost carriers expanding long haul flights will increase competitions and force airlines to distinguish themselves among rivals.

Respondent 5: This is a good question. What you should say is that low cost travel is now the trend, not a new trend, it is "The Trend", because people are making travelling this season, most purely based on price unless is a corporate trip. What is new though is long haul which is the second question is correct. LCC expanding long haul flights will increase competitions and force airlines to distinguish themselves among rivals. Yes, I agree with that, you can give it 6.

I think what is going to happen is that, this has already happened; major airlines are now offering more and more classes of travel onboard of their flights. And the bulk of the cheaper end of the market is going to low cost. So what you see now on major airlines is some airlines splitting their cabin to four different classes. You have Economy, Premium economy, Business class and First class. It is incredible that you have four different classes and this is what British Airways did. They are now rolling out most of their seats in four classes. Most of airlines are getting rid of their First class, they are making the Business class look like a first class, the Premium economy is looking like Business class 20 years ago more and more, and the normal Economy class is becoming a little bit better. You have bigger screens, better food, sometimes you can order your food in advance to have some better food onboard, and then they are coming up with a very low pricing Economy class, which is the same seat, but no amenities at all.

So, for example, you don't have a baggage included; you have to pay for a baggage extra, that why United Airlines in the US. So, physically on board you have only 3 classes but in the tariff system, the revenue management system, you have actually 4 main classes and then you have all the travel classes like Yankee, Juliet Alpha and so on. You've been in marketing, so you know about that. So I agree. Differentiation is going to be the question of survival for airlines in the next 5 to 10 years. I agree with that.

And ultimately, major airlines are going to lose their cheap travellers, cheap market segments like VFR and leisure, that kind is going away. They are going to shift over to long haul low cost carrier like Cebu Pacific (Philippines). You can talk about Norwegian in Europe as a great example. You can talk about Arry Air, but they have never managed to turn profits. You can also say that certain airlines are launching low cost long haul subsidiaries. That's a sign as well. So, what they are trying to do is not to loose the cheaper end of the market, they are rebranding themselves to capture that segment of the market but under a different brand so there are one example, you can talk about Joon. Have you heard about Joon? A subsidiary of Air France. Scoot and NokScoot from Singapore Airlines and Nok Air. Scoot has long haul flights to Athen as well as Berlin. You can talk about Scoot, Norwegian and Joon. Differentiation is going to be crucial, absolutely. This you can give it 7.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Air fares would continue to be impacted by weak economy and security concerns.

Respondent 5: Again, that's a very commonplace. I find the question uninteresting. Let rate it a 6 and see what we can talk about and make it some interesting. What you can say is that of course air fares would continue to be impacted by weak economy and security concerns, but then the reason I did not rate it 7, actually, I'll give it 5. You say two things.

First thing; despite weak economy and very prevalent terrorism issues around the world over almost 20 years now, you can say that travel demand has almost always grown except during major crisis. Yes, there has times of crisis, like in 2008 economic crisis and after the 911 attacks in the US; but if we look at the average of the trend over the last 50 years. At the end of the day, traffic has still grown, so that's one thing. The other thing is that you also need to say no other industry is as easily impacted in peoples' mind than the airline industry.

So, if a crash happens although the airline is the safest mode of transport in the world without any debate. It is very volatile; there are so many elements that are out of control in airline operations. You can talk about natural disasters, you can put about tsunami, you can put about vocalno, you can put typhoons, that's kind of climate change is something that does affect airlines a lot. When there is snow storm in a place and at a time there should be no storm to affect the airline operation.

You can say terrorist attacks is a very damaging effect because even there is a terrorist attack in Rio de Janeiro in Brazil, and somebody reads the news released in Japan, he still will be thinking twice about flying even though something has happened very far from where he is. And you can say that the reason behind that is because the aviation industry, in essence, is a globalised industry. So when something goes wrong at point A, it will have a ripple effect to point B,C,D, E and F. Even if point B,C,D, E and F have nothing to do with the event that happens at point A. So, you can try to formulate it that way so it doesn't sound too obvious, you try to go a little bit beyond.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Demographics of the customers will affect the airlines as the travelling public diversifies in nature?

Respondent 5: One way the airline is going to distinguish themselves is by tapping through different demographics. You have been a marketing director for Cambodia Angkor Air, as a marketing director you know that you can't talk to a 50 year old business man the same way you will talk to a young millennium.

So demographics is going to be very important in 2 ways. There is an age factor and there is a lifestyle factor. There are three elements actually and then there is an available income factor. These are the 3 elements of demographics. So, the nature of the travelling public is going to change. I agree at a rating of 7, I agree 10 even.

So now what you need to talk about, there are 3 factors that affect the travelling public. The first factor is the factor that leads the traffic growth in the world right now and especially in Asia, which is availability of disposal income. What does that mean? Basically, this is a very convoluted term to explain that basically in Southeast Asia but pretty much everywhere in the world. The middle class category of people is growing particularly fast in Southeast Asia. Now what defines the middle class is availability of disposal income, so basically is the amount of money, people have to do things that are not related to their survival, which means having a roof, sending their kids to school, eating, drinking, having access to water and electricity. So this disposal income goes a lot through a communication. People get internet and they travel. They start flying even though it is not very far, even if it's not in business class, but they start travelling. So, as this category of people grow, this will affect positively the airlines because they will have more people to sell tickets to, just as simple as that.

So, there is a very good Ted talk on that. I will send you the link with the airline example from Ola and Hans Rosling, who are demographic and global health scientist, but they talk about air travel, they estimate that; before basically travelling public was only North American people and European people that were the vast majority of the people who travel around the world. Because there was a vast majority of people that were constituting the middle class in the entire world, and the middle class in Asia is very small. Now, that was the case in 1975, now they estimate that 2030 or 2035, only 1/3 of the population that can travel will be made out of European people and North American people, which means that 2/3 of the worldwide traveling public will come to the developing countries. You can find the exact numbers in the video that I am going to send you, the Ted Talk, quite funny as well and not boring to watch. So that the first element that will affect the nature of the travelling public.

The travelling public is also going to diversify in terms of age. As people aged, people get into more senior position and they have more refined taste so they are looking for a little bit more comfort, a little bit more service on board. They are willing to spend a little bit more to access a certain category of travel.

It is also a social status recognition thing, even if you fly Economic class, people are always proud to say that they fly back to the United States with EVA Air. Qatar Airways tries to get the "Oknha" in Cambodia to fly with us, but they were reluctant because they try to fly with Singapore Airlines to Europe or to fly EVA Air to the US. Now EVA Air is my favourite airline and a very good airline in the world. I really love EVA Air. But Singapore Airlines, I used to be a gold member with Singapore Airlines 10 years ago and I flew them recently and they are not as good as they were any more. As a matter of fact, we were much better than them. Qatar Airways, but still, because it was a social thing, the Oknha they still want to be able to say that they fly with Singapore Airlines because it is more prestigious. Now, this is not a new thing at all, when people get older, they spend more because they want nicer things. The demographic is such that because there has been an increase in worldwide population.

People who are young today are going to be old tomorrow; and the number of older people is going to grow, so mathematically, statistically, there is going to be more old people in the future than there is today. So, the proportional of those people, old people, who can travel and are looking for a little bit of comfort, a little bit of more service they will also increase. And I thought it is going to be in favor of airline who manage to successfully differentiate themselves.

And the good thing is that you are linking back with the question No. 6, point 2. You know "forces airlines to distinguish themselves among rivals". It is good to link questions together so it make sense and homogenous. The last part is the third element in demographics. The last thing is the lifestyle. Let's us go back to the example of

Joon in France. When you read about the marketing strategy of Joon, actually you should do that, go to their website and have a look, read about articles in the press, the media that will release when Air France announced the creation of Joon. Joon was specifically created to appeal to millennials, so this airline is very weird, but apparently it's the trend. The new generation of people who are generations that grow with internet connection and iPhones, and access to global media, things like this, and who are conscious about the world, they usually know about climate change, they are sensitive to human rights questions and stuff like that. They are also sensitive to the way they consume, to the way they buy stuff, so they want to eat all organic. Some airlines believe that they should come up with products that appeal to certain categories of people in a certain age of bracket. So for millennials, what they want is, they want something that is cheap but also have some service and that is strongly inline with their values, their ethic. So, you know equality, transparency, all these kinds of things. And Joon was launched for these peoples. Supposingly it specialised for millennials. If you ask me, it's stupid, because I mean millennial is one generation of travellers. So what about the people who are not millennial, they are not welcomed on board, what does that mean? But I think about it doesn't matter that I like it or not, doesn't matter because it is not factual.

The fact is that airlines' marketing departments are now coming up with the analysis of demographics that is not only related to population size, but it also related to population consumption trends and consumption habits. How do they consume? How do they spend their money? I think that's crucial and you really need to talk about that because this is really a new trend. You can talk about generation X, generation Z, millennials; all this kind of new terms came out over the last 5 years. So there are 3 elements in the demographic so I think you can do a good paragraph on that.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The development of technology such as artificial intelligence (AI), biometrics, blockchain and internet has made the operation of large airlines and airports efficient and gain a competitive edge. Small airlines that cannot afford these technology in ASEAN region will strongly be affected.

Respondent 5: Strongly be affected, I don't know. I would remove "strongly". I agree on 5; I am gonna tell you why I agree 5, and not 7. I agree because what you are describing is just an inevitable trend, right? We cannot avoid it. It is going to affect it whether we like it a not; and again as I said before, the nature of the aviation industry is to be highly globalised and interconnected.

This is because globalisation is driven by those factors like technology, blockchain, biometric and such kind of stuff. Automatically, it's the fact in the aviation industry. Biometric recognition is the big thing when it comes to immigration now related to aviation. Blockchain; yes, they are new technology around revenue management. For example, for reservation systems they are being developed around blockchain technology. Artificial intelligent, yes, you can see now in the airline, in airports, you know; checking process that is completely dehumanized. You don't even see a human anymore. You come in; talk to a computer and sometimes the computer even looks like as human being! That is the case in Singapore. You check your baggage by yourself, you give biometric information and then you connect your ticket and you put the baggage yourself on the belt. And then you go through immigration where you face with biometrics again.

Maybe the airline ticket is going to disappear. Maybe we will be able to board an aircraft with a fingerprint. Some countries, E.g. Israel is working on that. They have very big AI companies working on this throughout this whole process, there is no more tickets anymore, not even on your mobile phones. Nothing; it's just your finger. When you go to the checkin counter, you put your finger on a biometric plate. It knows your name, your passport number, your passport validity, your class of travel and how many bags you allowed on board. You check in yourself and you go through security and immigration again via biometrics. When you board the aircraft, the seat is unlocked with your biometrics. You go to your seat, you put your finger, they say yes, seat number 5B is indeed Ms. Thai Binh's seat. Everything just with your finger. So yes, I agree with that.

Now, why not give it 7, the reason is because small airlines are not necessarily going to be unable to afford it, that's first, because it's not that expensive actually. It is because a lot of things in aviation are more and more based on a pay-as-you-use tariffication. So, you no longer necessarily need to buy things and own things like own software, own parts and own equipment to be able to access that equipment. You can rent it, or you can just pay for the amount that you use, so that makes it proportional to your usage which you should be able to cover. That's the first thing.

The second thing is that, obviously, this technology is also a commercial advantage for large airlines because they can better interact with their customers. The marketing departments are getting smarter in the way they try to sell you additional services. They manage to tailor the way they talk to you and that's based on the information they collect, AI the way they process big data and extract information from those big data.

For big airlines, yes, this is commercial advantage. But what kind of pomderade start is that on the other end, for as long as purchasing a ticket will be on the price based decision, which is very much the case these days, people are buying a price they don't have any loyalty to airlines any more. If Emirates is USD2 cheaper than Qatar Airways and people keep flying with Emirates and vice versa. So for as long as the buying decision on an airline ticket will be vastly based on price. Whether the airlines have those gadgets, technology and beautiful shiny things etc., most travellers won't care. They only care about the fact that this is the cheapest ticket to fly from point A to point B or not. That's why you have to mitigate that.

I think this will become really important when the industry will reshape and airlines restructure their offerings based on price. Back to your question about which segment of the market will belong to low cost for both long haul and short haul and which segment of the market will belong to major airlines with different products like economy minus, economy plus, business class and first class, etc. When this thing in the market has been matured into something stable because now we are still structuring, so we don't know. Then I think technology would be a differentiation factor because market will be more captive so then those gadgets would be useful. But right now, the offering in the market is quite homogeneous. So, for as long as homogeneous, it's a price-based decision; nobody will really care about customer journey on the mobile app. It's not that important. Marketing departments try to make it very important but in reality, it's not.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Employee satisfaction will have a positive effect on the airlines' performance and customer satisfaction.

Respondent 5: Do you know Richard Branson, have you heard about him? Senior Executive Level of Virgin Atlantic, a very well known figure in the airline industry. He's a billionaire; he involved in a lot of companies but he made his company Virgin Atlantic, which is an airline, and they have subsidiaries in different places in the world, in Australia and so on. One of the things that he said in one of his books is "Treat your employees the best and in return they will take care of your customers." Try to research the real quote and quote him in the introduction about that, that's quite important. What you can say about this why is it particularly important in the airline industry because it's true everywhere. If you treat employees satisfaction important everything in the industry but now the airline industry is facing a very big challenge. It's having a very hard time to find new employees to recruit, especially for technical jobs. There is a huge shortage of pilots at the moment and there is a shortage of aircraft engineer as well. One of the reasons behind that is because after the aviation crisis, after 9/11 and the economic downturn in 2008, a lot of young engineers and young people didn't find the airline career appealing any more, especially in the Western countries and the US. In the US, a regional airline pilot fly on an ATR, for example, fly on a turboprop makes less than a pizza delivery guy. So it is very hard now to find motivated people to work in the airline industry because the salaries are not that great and as a consequence, some of the people who have ended up in the airline industry recently are not passionate people.

You can see the demographic of airline employees have changed a lot, and the lack of passion for the airline industry has driven a lot of dissatisfaction from customers. The service level has gone down in the public's perception. It's not necessarily true but it's the public perception. So airlines who do invest in the heavy training programs, tend to be more successful than airlines that just recruit and face attrition of personnel. Attrition is basically when you hire 10 people, how many will stay in the airline so for example, if you hire 10 people in 2018 and 5 of them leave the airline in 2019, then your attrition rate is 50%. The attrition rate in the airline industry is quite high, if you can find some numbers that would be good.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The shortage of qualified employees, managers and pilots will affect on the development of the airlines. Especially, the reputation of pilot's skills will impact on the sales of the airlines, especially from young candidates.

Respondent 5: You can merge those 2 questions, and I agree 7 with the second one, that's very true. In terms of development, technological development in the airline industry, some airlines are now talking to aircraft manufacturers again to explore the idea of having only one pilot on board or even no pilots any more. Or even have automatic flown aircraft because that will solve the problem directly.

In my opinion, this is a dangerous strategy; because instead of addressing the human problem, which is, the fact that career in the airline industry are not as appealing as they used to be. The answer from the airline industry is to try to eliminate the problem by not addressing it but by going around it. So pilots are not happy, let's not try to

make them happy, let's eliminate pilots all together. So you can talk about that, there would be an interesting opening.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Financial difficulties will cause pressure for the airlines and prevent new opportunities. Then, the airlines need to possess a healthy finance in order to maintain its good performance.

Respondent 5: That's true for every industry, not only for the airline industry. I think you should reword this question because it is too generic. You can change it to say: "Financial pressure caused by increasing acquisition costs may prevent airlines from growing and innovating. The need to find new financing options or sources may derail the airline industry."

I agree with that; 7. The nominal cost of an aircraft is very high as you know, incredibly high; it's crazy. Now because airlines' technological advance, they require more and more money to purchase even one. Of course, the cost of aircraft has increased decades after decades, even if we remove inflation, an Airbus A380 is 300 million on catalogue price. That's the public price, not the actual price that the airline pays. Airlines never pay public price, but it doesn't matter. So the cost to acquire a new aircraft to renew your fleet every 10, 20, 30 years has increased so much. Yet the airline industry is not a very profitable business at all.

The profitability margin in the airline industry compared to the cost of running an airline operation and the cost of acquiring materials is ridiculous low; very low. As a matter of fact, there is a graph you can find in IATA. Over the last 40 years if we accumulate all the losses and all the benefits from the airline industry. Over 40 years, the airline industry worldwide, as a whole, has been unprofitable; or profitable by a margin of 0.1%. So it makes very little sense to run airlines as a business model. So what does that mean, that means that one; it's very difficult to find investors and it's almost impossible for airlines to self-finance, which means that they have to create. They have to get in debt all the time; they are constantly in debt. You combine that with the fact that the running cost are very unpredictable. For example, there is a war in the Middle East. We know that the oil price is going up again, and that is unpredictable, and that the oil price goes up again, then it is more expensive to run the airline because you have to spend more on fuel. Now, one way to go against that is to buy new aircraft models, new aircraft types that offer a technology that consumes less fuel. But if you do that, you have to put up million of dollars of capital to buy those new aircraft. So it's a very vicious circle, and the airline financing will be very complicated equation, very hard to find profitability in a renewal easily. So that's what that affects the airline.

Now, this phenomenon does not only affect the airline, it also affects the aircraft manufacturers like Boeing, Airbus, ATR, Bombardier, etc. The cost of developing new aircraft is becoming so huge that what we see now, the behaviour in terms of RandD from the aircraft manufacturers is a lot more conservative. What we see nowadays is that aircraft manufacturers tend to stay too long, new aircraft models a lot lesser. They innovate a lot lesser than they used to. As opposed to what they say, Airbus and Boeing keep bragging about their lateness: "We launch new technology, bla bla bla", but actually they innovate lesser than in the past. And they can delay the development of aircraft family at the same time. One proof of that is the Boeing 737 which is short and medium haul aircraft sold by Boeing has been around since 1967. I mean, obviously they change the wings, they change the engine, they change the computer and everything, but basically its still the same aircraft, as the same basic model, but they kept improving years after years, so it's still very long time.

The Airbus A380 and A320 has been around in 1987, it's also quite along time now. So Boeing was asked by its customer to launch a new study for a medium haul aircraft which is called MMA, and they have kept on delaying that in the favour of the Boeing 787 Dreamliner program, and the development of the Boeing 777X.

So you see the behaviour is that they keep on delaying and they launch the new family of 737 instead, which is just recycling the same concept over and over again, instead of coming up with new aircraft. The reason for that is because they can't take the risk to invest on an aircraft but they are not 100% sure will succeed. Another good example, is Bombardier; which used to be the third aircraft manufacturer in the world in terms of number of aircraft delivered. It's a Canadian manufacturer, they launched the aircraft called the CSeries. It's an aircraft launched about 10 years ago. This aircraft is really an excellent aircraft; very good at doing its mission, but it's been very unsuccessful in terms of sales.

Now Bombardier got into a joint venture with Airbus few months ago to save the aircraft and save the company because they invested so much money into developing the aircraft without making sure they have enough customers that it almost wiped the whole company away, and this is not the small company. This is the third aircraft manufacturer in the world, it's a huge company and they make billions of dollars every year. So this financing problem, you could do your PhD only on the aircraft financing actually, it's huge, very big topic, a lot

of people working on that every day and to think about new ways addressing this problem, it's a core issue in the airline industry.

Thai Binh: How about the companies leasing the aircraft?

Respondent 5: The aircraft leasing companies, they don't take many risks actually. I suppose to what people think because when they order 50 aircraft they have already to negotiate with airlines to take those aircraft as soon as they deliver it.

It's not like the leasing company when they take the aircraft then they go around they say: "Hey, I have A320 to lease, would you like it?" You have known these guys and there are a whole bunch of those guys. But there has been a consolidation even in this industry. There used to be a lot of aircraft lessors, they are a lot less now; they have merged for some of them, and they have to acquire those aircraft as well.

You see the A380 aircraft the big whale, this aircraft has been very unsuccessful as well. It's just huge and expensive to buy it. It's incredibly expensive and it's not that flexible in terms of use. So very few aircraft lessors have bought the A380 because they are not sure they could lease them out. They had no commitment from the airline industry to rent those aircraft. So financing is definitely a big headache in the airline industry.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines will benefit from oil dropping prices for the next five years. Then, small airlines will benefit accordingly to maintain their performance.

Respondent 5: No, it's not really now. This I rate it 2, because there are 2 reasons that I disagree with that, there is a short term reason and there is a long term reason. The short term reason that has actually three reasons: one short term and two long terms. The first short term reason is right now what we see the oil price is actually going up. Short term I disagree with that.

Long term the two reasons I disagree with that. The first long term reason is because even tomorrow the price goes down again, which is possible, the oil price is very unpredictable. Actually, over the next 5 years, it could go up and down again. We have no idea. There are people working on that every day and in reality is that nobody knows. Some people are making predictions, they work in the airline industry, oil and gas industry, stock market. They all brag and think they are smart guys; they are big guys and so on. In reality they are dumb. They don't know; nobody knows. It's unpredictable. So the unpredictability is the long term reason, that's why I disagree.

The third reason is because inevitably the technology will have to change. The arrival of Tesla, the electric engine, is coming, it's not a matter of if, it's a matter of when. You don't know exactly. So over the next 5 years I don't think any large aircraft with passengers on board will yet be equipped with electrical engine. I don't think it's going to happen in the next 5 years, but definitely in the next 5 years, the technology is going to mature, whatever happens. And actually the more oil price will go up, the faster this technology will happen because it will motivate industrial companies to invest in electrical engines, and to come up with the solution quickly. When the oil price is low, airlines tend to buy less new aircraft and keep the aircraft they already have, and the research and development tends to be less prompt to come up with new technologies but immediately as soon as the oil price going up again, everybody's excited, everybody's scares and works on the innovations again because they have to.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Wide body aircrafts are preferred by customers than narrow body aircraft.

Respondent 5: I know it's a trend but I would rate that 4.

It's true if you give a guy the choice between a small aircraft and large aircraft, they would prefer a big aircraft. Now the reason I think it's irrelevant; the vast majority of people, I will say 95% of the people who travel have no idea they will get onto before they board. Although this information is available when you book; the airline tells you which aircraft model you are going to fly on, they don't really care. Most people don't know what A320 or B777 is. They don't have a clue and they don't care. That's the lack of aviation knowledge by the general public. The second reason I think it's true but irrelevant because, airlines are not going wide body aircraft on a certain route unless there is market demand on a short flight, just to please a few passengers on onboard, that makes no sense.

Thai Binh: Do you think the airlines prefer to use the wide body aircraft to save the cost because they are having lots of customers instead of operating many flights, they can gather into one flight or two flights per day?

Respondent 5: Yeah, the trend these days airlines prefer frequency over size, clearly, that's why the Dreamliner from Boeing is a successful aircraft. That's why the likes of A350, A320, as well as Boeing 737 from Airbus are successful aircrafts. The ATR is the successful aircraft for very short haul domestic flights.

And yes, the ATR is a very unpopular aircraft and people don't want to fly on turboprops; but the end of the day ATR is still successful at selling it, so it's proof that airlines don't really care about what customers prefer, but they care about to have the right aircraft operating on the right route and the right frequency and the right time, with the right yield.

Thai Binh: Yes, but most of customers they do not understand about this, they always complain to me.

Respondent 5: The other thing is the difference in terms of onboard products. The difference between narrow body is getting smaller. I can give you an example. SilkAir is going to disappear; and it is to get back to Singapore Airlines, and will operate as Singapore Airlines flights. So they will do that after they complete the refurbishing of the aircraft interior with 4 flat beds in business class even in narrow body which is quite rare, right.

Philippine Airlines intends to do the same with the A320 new that they are ordering. So basically, you know now on A320s you have TV on board on B737s as well. You look at the B737 fleet from Malaysia Airlines they have TV on board, Philippines Airlines, Silk Air, you have full flat bed in business class, Qatar Airways as well on their A320 fleet, more and more they have full flat beds. So, before you could only have accessed to this kind of on board product on wide body aircraft which is wide, people prefer wide body aircraft, especially business class travellers. It's very true for business class travellers but now that the same kind of products is becoming available in narrow body aircraft.

Disagree 1 2 3 4 5 6 7 Agree

Thai Binh: New invested aircrafts are much preferred by customers.

Respondent 5: I would rate that 5. I think it's true and I think airlines do communicate more about their aircraft nowadays. They do more marketing around the new aircraft delivery today than they did in the past. That's how I feel. So, for the loyal customers, for the regular travellers and loyalty program customers, members, I think yes. People want to fly new aircraft but that because they are informed. Again most of the travelling public, they don't care because they don't know. Buying decision is based on price; for example Qatar Airways flies out of Phnom Penh, but people are going to fly Emirates if they are cheaper. They don't care to fly if Emirates flies with a Boeing 777 or whatever, and Qatar Airways fly with A330.

Thai Binh: I will share with you about my interview with the consumers. I got the survey with 441 people in Cambodia and in Vietnam and I asked whether they know the aircraft, which kind of aircraft and their experiences. So, I asked them about Airbus, ATR and Boeing, the reason that they don't know so I will tell you the percentage.

Respondent 5: What's the percentage?

Thai Binh: Around 160 persons mentioned that they were flying with A320, and around 120 people mentioned that they do not pay attention or they don't know. As for B747 and the A321 around 100 persons indicated that they knew. Lastly, for B777, A330, A380, A350 between 60 to 80 people knew about that. I mean travellers nowadays are aware of the aircraft that they are flying on.

Respondent 5: They are aware, but some are aware but not all. The second thing that I want to comment on is, in terms of impact, even if they know, I can tell you that very few people are willing to pay more to fly on a certain type of aircraft. Even if they know, firstly, most of them don't know. Second; even if they know, it only marginally affects their buying decision. Even if they know, the conclusion at the end of the day, is whether they know or they don't know, it makes very little difference because it doesn't really change the consumer behaviour. Some people will want to pay a little bit more if they are already a member of the airline, because they want to accumulate miles but that has nothing to do with the aircraft type.

I think the only time this could affect immediately is that if an aircraft crashes and there is a lot of noise around the aircraft type and people might don't want to fly that aircraft type any more. I give you an example with Malaysia Airlines, MH370. When it crashed very shortly after, Malaysia Airlines removed all the 777 out of their fleet

although the 777 is the safest aircraft in the world; but it was kicked out because it was the marketing decision. It was the PR decision.

The MA60 has a bad reputation as well and many people don't want to fly with an airline because they operate the MA60, but the reality is that MA60 is a fine aircraft and there is nothing wrong with the MA60. The MA60 has crashed a lot, compared to the number of aircraft that it was produced but when you look at the reason why it crashed, almost always by the pilot's error. So it's nothing to do with the aircraft itself, is that particular pilot, if not crashed with MA60, he will crash the ATR or other aircraft anyway. The MA60 hasn't failed. I flew with it many times and I have no problem. It's the same customer experience as the ATR, just looks a little bit more rough, you know, less refined, it's not western built, when I take it to Siem Reap the same way, right?

Thai Binh: I saw a Vietnamese pilot when they take off with the ATR; not very stable.

Respondent 5: I flew with the ATR last week, through the ATR72-600, the new one, and it was so quiet on board, the aircraft was really comfortable. The one that K6 operates was the 500, which I have flown on many times in many different countries and it is still a very noisy aircraft, but the 600 is very quiet. But the thing is from outside, the 600 and 500 they look exactly the same, there is absolutely no difference. So when people see the ATR they think: "Oh, I don't like to fly on ATR because they are noisy, they are slow, they are small and they cramp, but as the passenger experience between an ATR72-500 and ATR72-600, it's completely different. So you know the public is misinformed; at the end of the day, it does not change anything, does not change consumer behaviour.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The website for an airline including sufficient features such as information, ticket booking, web check-in and seat selection would drive traffic and customers than a less-functional websites. I did with Qatar Airways because I fly to France with Qatar, I did everything on the website.

Respondent 5: And, did you like it?

Thai Binh: Yes, I did. I did the check-in and I saved lots of time when I arrived to the airport.

Respondent 5: I find the Qatar Airways website compared to others not that good, to be honest with you. I think a lot of other airlines have better websites than Qatar Airways, but it's not the bad website, but there are better ones. I will rate it a 5. So I agree but with some distinctions. I think that it really depends on demographics I would say that for younger consumers, younger travellers, millennials and young adults. For regular travellers, these customer journeys on the website is important. And I would agree and apply this also to mobile apps. Now, it's getting better but for a long time, booking your ticket on the first airline's mobile app was really crap. As a matter of fact, Emirates didn't have an app for many years. They only recently have a mobile app for 1 or 2 years only, whereas Lufthansa has a mile app for 6 or 7 years.

Thai Binh: You know, for me I feel safer to purchase tickets on the website than a mobile app.

Respondent 5: Yes, it's customer habit, you see. You and I are the same. I wouldn't want to buy a ticket on an app and my parents don't want to buy a ticket on a computer. They want to see somebody, so they go to the shop, so it's really affected by demographics. Regular travellers and younger consumers pay attention to the customer journey because they are educated about that.

Now there are 2 elements that kind of mitigate this, which is why I did not give it 7. The first one is that many countries around the world, people are still buying tickets from shops, agent and from the airline boutique directly. That's the first point.

The second point is that a lot of customers are buying their tickets from search engines. A lot of people are buying from Skyscanner, Expedia etc. That means the quality of the website from the airlines becomes irrelevant, because people will fly on that airline without ever interacting with the airline at all until, they check-in. They will never talk to an airline customer service agent, they will never go on their website, or just book everything through the search engine and no matter how good or bad.

The search engines are horrible, and I found those websites terrible. It's very hard to find information about price, changes, cancellation, re-booking, sometimes they are even incorrect. And the reason why this is mitigating the whole thing down to 5, because again buying a ticket is first and foremost a price decision. So people are willing to go through a worse customer experience to pay a cheaper price than having a simpler customer experience, simpler navigation on the website and pay more. Most people are willing to do that.

Disagree Agree

1 2 3 4 5 6 7

Thai Binh: Technical innovation relating to convenience and comfort, checking process, mobile integration will gain competitive advantage over competitors.

Respondent 5: You can rate it a 5. I agree it will become gradually more important, as newer generation come in and are familiar with these things. It's a question of expectation. So, now it's getting more and more expected because the travelling public is more educated and more tech savvy. So yes, I really see so much with Qatar Airways. Again, the buying decision is a price based decision.

I find it really sad to work for airlines these days because no matter how much effort you put into having a great website, having a beautiful onboard product, having new aircraft, having Skytrax 5-star, Qatar Airways is the only airline in the world has had "Airlines of the year" 4 times. And yet, the only reason people fly or do not fly Qatar Airways because it is cheaper or not, it does not matter. Qatar Airways they have Dream Liners, they have A350, they have flat beds on the entire fleet. They have A380s, they have 200 destinations around the world. They have everything. And yet, if Emirates is USD5 cheaper, people will fly Emirates, Thai Airways, SQ or whoever. It's ridiculous. Actually, I would give it a 4, 5 is OK because I change a little bit with new generation coming in, people are more informed.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Brand image plays an important role in identifying the airline's position. The brand will have a positive effect on the airline's sales and draw customer loyalty.

Respondent 5: Brand image is always important, and that's true everywhere, not only true for the airline industry. I would give it 5. I don't fully agree with that, again for the same reason, actually the other way around, it's the price again. Brand reputation is expected, people expect the airline to have good service and most importance is to be safe. So people are not more loyal to the airline because the airline has good brand. It's the other way round. People become less loyal when the brand is not as good as it was. It's a negative approach.

So let's say there are 10 airlines, and one of the airlines loses its reputation or gets its reputation tarnished like Malaysia Airlines, for example, then people are going to be less loyal to Malaysia Airlines but that does not mean they will be more loyal to another airline, because they still have a lot of airlines to choose from. And those airlines have a good reputation. So, out of the 10 players on the market, one player gets vanished, get kicked down. The loyalty still gets spread among the 9 remaining players. So, nobody really benefiting because he has a strong brand.

In Cambodia, for example, Emirates has a very strong brand worldwide and they are very good with the marketing. As a matter of fact, I used to mock Emirates because for me, Emirates is not only an airline; Emirates is a marketing company that flies planes. It's different, it's always my joke with my team. But nevertheless, Thai Airways, which has a lesser good reputation than Emirates in the world, they have a few problems on their end. They are unprofitable, they don't have the good service as compared to have 20 years ago. Yet, in terms of market share, they are still the number 1 airline in Cambodia. It's right. It's been Thai Airways. It's still Thai Airways. And I think it's always be Thai Airways. So you see, reputation, loyalty, yes and no, really.

Thai Binh: Yeah, like the first trip to France I flied with Air France because it was cheaper than Qatar Airways, but the second and the third I chose Qatar Airways because it's cheaper than Air France.

Respondent 5: Exactly!

Thai Binh: And you know Air France's ground staff are so annoying in CDG airport. Yeah, they are just annoying, they check the luggage and just 1 kg over they made me to take the stuff out and then they asked me to put in.

Respondent 5: Yeah, I don't fly Air France anymore. But it does not mean I fly another airline more. I still have the choice between so may airlines. I have a loyalty member card. I am a member with EVA Air. I am a member with Philippine Airlines and I am a member with Qatar. And I am silver with Philippine Airlines and I am nothing with the two others. I used to be gold with Singapore Airlines because I used to fly them alot, but I lost that status. And I also a member with Delta Airlines in the US, so you see I have 4 membership cards but I still buy the cheapest ticket which is why I don't become gold member very quickly. And the only people who become gold member very quickly are the corporate travellers because they don't pay their tickets. The company pays for their tickets. So, brand reputation, yes and no. Actually this one is really 4.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: The sales through digital retail distribution channel will increase remarkably and become the key channel to serve travellers.

Respondent 5: Actually, GDS tends to change now, so no.3. You cannot put digital distribution all in one bucket, that makes no sense because the most profitable and the most favourable distribution channel, both for the passengers and for the airlines is the airline's website itself, because in certain cases, you can avoid global distribution system cost (GDS).

You need to talk about GDS in your paper because distribution is largely about that. Now GDS is the most profitable player in the entire airline industry, because they only provide the platform for travel agents, or for online travel agents or physical travel agents to sell a ticket on behalf of an airline through that GDS platform. You have Galileo, you have Amadeus which is the largest, you have Sabre. So, these guys make money by doing nothing, only by providing a platform and they charge between USD7 and USD15 per ticket. So they just still there and collect money. Now some airlines do not want to work with GDS because they don't want to have to pay, but to sell their own ticket which I think make sense.

So gradually, more and more airlines are getting rid of GDS. Lufthansa did that; which was a very bold move. A lot of travel agents were very mad about that, so they didn't want to pay the GDS cost any more. And a lot of low cost airlines don't pay GDS cost either. The only way to book an Ryan air tickets is to buy through their website. So that they cut off the GDS. I agree with you, if you count the website of the airline itself, but you have to differentiate the way airline sells, when they sell through their own website and when they sell through GDS.

Now, some airlines even when they sell through their own website, they still pay the GDS, This is the only way they can track and distribute the air tickets. So I believe airlines will try to get rid of the cost of the GDS as time goes on. And we already see that low cost airlines, we started Qatar Airways, we started in Cambodia as well with the system to give travel agents direct access to our inventory without going through GDS at all. This is the nightmare, GDS are the plague of the airline industry. They should not exist. They are terrible, they hold everyone hostage; they block your inventory, they are horrible. So you have to talk about the GDS, you have to talk about the fact that the airline industry is trying to take back control over their distribution by getting rid of the GDS and trying to have a more direct access to their consumers, whether we talk about the passengers themselves or we talk about travel agents. They want to give travel agents to access directly to their inventory which makes a lot of sense. If you make those distinctions, I will rate that a 6.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines still have to employ third parties to sell flights in order to optimize their sales though they prefer the direct distribution channel.

Respondent 5: It depends on the market, really. I agree, give it a 5. But it depends on the maturity of the market. In countries like Cambodia, so let's say, a less developed third world country. The direct distribution channel was only 20%; so, 80% was still sold through agents, OTA online travel agents and directly of Qatar Airways shop. It's huge. So yes, it's true.

Yes, it's a trend but it really depends on the maturity of the market. The reason for that is quite simple; because in third world country, people still pay cash a lot, you cannot pay cash online. You know what Qatar Airways did to change that. Now, with Qatar Airways, you can book your ticket online, block the ticket for 24 hours and you go to Qatar Airways' agency and pay cash there. Yes, it's true but it really depends on the maturity of the market.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Since the competition rises in the whole region, airlines will reserve more budget to spend for marketing activity over their rivals.

Respondent 5: No, I disagree with that. I give it 2. Again, in Qatar Airways in all countries around the world (150 destinations) the marketing budget every year decreases.

Since you are talking about Southeast Asia, I will give you an example about Asian airline, Cathay Pacific. They have almost no marketing budget at all. The only thing they do is to carry out initiatives together with travel agents, but that's not a point of marketing budget, that's an operational budget. Other than that, they don't do any marketing. Have you ever seen an ad about Cathay Pacific? You never see their ads on TV, any ads on newspapers, you don't see any billboards in the streets, you don't see anything. They don't advertise at all.

I think now marketing campaigns are mostly run by headquarters and they are trying to do campaigns that are run by headquarters, and are run on digital support, which are less expensive than TV and newspapers and things like that. Now you see campaigns are happening on LinkedIn, on Facebook, these kinds of things, but really marketing knows that airlines are still doing that. Emirates and Qatar, they still do that, because it's not their whole market. In Southeast Asia, what airlines do is they sponsor events. They sponsor sports events. In Asia, you don't really see any airline doing alone marketing. Singapore Airlines does a little bit, they do TV ads. Other than that, Derry Air they do a lot of Marketing, that's it, very little, it's not the majority.

Thai Binh: Customer data is an important resource and play a crucial function in all aspects relating to retailing, dynamic pricing and management.

Respondent 5: Ideally what it should be, in reality is not. I would give that a 4. The reality of what's happening is very few airlines have any idea what do with the data.

Thai Binh: You know, now they are going to work with big data. They call it like that.

Respondent 5: Yeah, I know. Big data is a big word that everybody's using but nobody really knows what it is.

Thai Binh: They said that airlines now can use it to predict the trend.

Respondent 5: Correct. It's true, but it requires so much investment to have a data programming that can filter the right information. You see the problem nowadays is that all sorts of companies including the airlines, they collect so much information that they are overwhelmed by the quantity of information they have access to. And the end of the day, they don't know what to do with it any more. They don't know how to make a difference between an important information and an information that is useless.

Plus, big data is more and more regulated, you must have seen the new data protection rule in Europe that had sent the whole bunch of emails about that. All countries are implementing the same thing. In Singapore, you have the Personal Data Protection Commission (PDPC). Actually, you know my company is registered in Singapore and I have to appoint for my own company to appoint a DPO (Data Protection Officer), which is myself.

All countries are coming with this kind of thing. In the Philippines, it's the (Data Privacy Act) DPA. So it's getting more and more difficult, first to use the data in a legal way, what you are allowed to use and what you are not. And how can you extract that values all of these. Very few airlines have a clue about what to do.

You know, the best I've seen so far in terms of airlines doing anything with data with me is I received an email from EVA Air on the day of my birthday, wishing me happy birthday. There are some initiatives onboard. For example, onboard, they have tablets more and more. The purser on board has digital tablets, and in business class they come to you and they know your name, your status. Sometimes they know your favourite food or they know your favourite movies.

But you see, if data was really used in a smart way, for example, as a frequent flyer or even in a non-frequent flyer, what would be really smart is that they check what kind of movies I watch regularly on my flight, maybe movies, may documentaries, or maybe cartoons. Then, because they know who I am, if I fly the second time because I have my name in the database system, and they can correlate the information from the inflight department and the commercial department and the IT department.

When I board the plane, its screen they could write "Welcome on board Raphael Laforest. We are suggesting a selection of movies for you", but nobody does that. I am going to tell you why nobody does that. It's because in-flight services has its own database. IT, they have their own database, commercial departments; they have their own database. Engineering; they also have their own database that they have to load on board each aircraft to prepare the aircraft with the inflight entertainment system.

Now to have all the departments of the airline to sit around the table and agree on what to do, and then practice and buy the software to segregate the information and come up with another software that load the data on board of the aircraft. It's just too complicated and costly and the airlines do not have time to do that. They have enough headache to deal with it already. So I think that when big data solution will come up on the market because right now big data is still new, it's not developed yet. Airlines really don't know what to do with it yet. I think in the next 10 years we start to see this kind of thing. Right now no; and the next 5 years maybe.

Dynamic pricing, I can tell you, no. One smart way if they did dynamic pricing, nobody does that I have never seen that anyway, anywhere. When I travel, I always have a lot of luggage, because I travel with my daughter and usually when I travel between countries I bring gifts and I move things around for my company. I am bring

marketing brochures and stuff like that. So when I travel I always buy extra luggage. Extra luggage is an ancillary revenue for the airline, so, since I do that, almost systematically on all the last flight I did I bought extra luggage. On the last 10 flights I did, I bought extra luggage every single time. Now if the airline was smart and they did dynamic pricing, what they would do is whatever I loggin and they will offer me that an ancillary service immediately to help to facilitate my customer journey. They would remember me, they would remember my buying habits were, say “We know you buy extra luggage, we offer you to buy extra luggage right now at that step, you don’t have to come back to do on website again”. It’s complicated and takes times and the rules are always kind of blurry or what they would do is, maybe for every two or three flights, they would give me a rebate on extra luggage. That is dynamic pricing using big data and no airline does it. So I think the airline industry quite late with big data. I would rate it a 4.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Small airlines should merge or doing codeshares, instead of competing in order to maintain their performance.

Respondent 5: It really depends. In Asia, i agree. It is not in order to maintain their performance, but a means to maintain their existence. Some small airlines have been very sucessful at existing because they are small, because they will enjoy certain market conditions. Some other airlines, they definitely should merge. This year in Cambodia, there is going to be, I think, 3 more airlines again. There is KC International, there is Cambodia Airways who will to do long haul with A320s, and Air Siem Reap.

Thai Binh: I think the reason many Chinese airlines coming to Cambodia because of the large population of Chinese living in Cambodia now.

Respondent 5: No, that’s not the reason at all. The reason of those airlines is money laundering. They are washing money and what’s that they do. In 3 years they will disappear.

Thai Binh: At Bayon Airlines, I look at their report, a thousand of dollar revenue a month, how is that possible?

Respondent 5: Bayon Airlines is different, it’s a government thing. Bayon Airlines belongs to Aviation Industry of China (AVIC). AVIC is the aircraft manufacturer and it belongs to China Aviation Administration of China (CAAC). It’s not a private initiative; it’s public.

Clearly some airlines should merge, as a matter of fact, some airlines are starting to merge, you see SilkAir is going back into Singapore Airlines. In Indonesia, Merpati Nusantara Airlines got eliminated and now flying as Garuda Express. So, consolidation is happening slowly in Southeat Asia. Thai Airways did not continue developing Thai Smile, and they are operating very few flights. However, I agree that, that’s a consolidation effect and then clearly what we have seen Southeast Asia that small airlines tend to disappear after 2 or 3 years of operation. So many examples and there will still be a lot of examples. In Thailand there are so many of them, you can name Jet Asia Airways and Business Air. There was Orient Thai that was doing very badly. There was One-To-Go Airlines that disappeared, there was Nok Mini Airlines that disappeared as well. In Philippines, Jet Air disappeared, Asian Spirits disappeared, CAir disappeared. In Taiwan, V Air disappeared.

All those small airlines disappeared. In Cambodia, there is Royal Cambodia and Royal Air Cambodge that disappeared. And those small airlines, I can guarantee will merge or they will disappeared because the Chinese are so proud, they will not merge the airlines with one another, so they will just disappear. I can tell you in 5 years, Lanmei, JC, KC, Cambodia Airways, and all those guys; Bassaka will have to dispappear. Only Cambodia Angkor Air and Vietnam Airlines will remain. Disappear means to go bankrupt. JC Airlines has already very bad performance, they cancel flights all the times. Also even Cambodia Angkor Air used to cancel a lot of flights. If Vietnam Airlines stops the support, they will disappear.

Thai Binh: How come they do not co-operate, with the competition, especially the Chinese Airlines?

Respondent 5: Hmm, they do not operate the same flights. I agree with that, should the airlines merge or do codeshare. I rate it a 6.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines will put their collaboration efforts to whom they have a closer opportunity and more beneficial commercial relationship rather than joining the Star Alliance network.

Respondent 5: Star Alliance is just an alliance, just driving an alliance. Star Allainces is one of a few alliances; you have 4 alliances in the world right now. You have Oneworld, you have SkyTeam, you have Star Alliance and now in Asia, you have U-Fly; which is a low-cost airline alliance. It's quite good actually. Yes, I agree with that.

Some experts even predict the death of large alliances. So, I think it's a little bit excessive but I agree that something is going on. Airlines tend to join bigger alliances lesser and lesser. As a matter of fact, if you look on the three bigger alliances, they haven't announced new members for a long long time. That's the first thing.

The second thing is a few years ago, we started to see for the first time, some airlines changing alliances that had never happened before. Some of them went from Star Alliance to OneWorld. For example. TAM from Brasil, they changed alliance. What you can also say is that certain big alliance members are going into relationship with competitors from other alliance members. I give you an example, Malaysian Airlines is a Oneworld member, Qatar Airways is a Oneworld member but Malaysia Airlines signed strategic partnership with Emirates in stead of Qatar Airways to fly to Europe. And Qatar Airways was very bad when that happened, because Emirates is not part with any alliance at all. So it's kind of a betrayal, now airlines, as you said they are correctly in your question, now airlines are more opportunitstic. They collaborate even outside of their alliance memberships.

Another airline did that which makes Oneworld is very mad, particularly, was British Airways. Qantas from Australia also was a Oneworld member, started to collaborate strategic partnership with Emirates as well, instead of British Airways or Qatar Airways. Some airlines in alliances hate each other. For example, in Star Alliance, Turkish Airlines and Lufthansa hate each other and they don't collaborate. American Airlines which is a OneWold member does not collaborate with Qatar Airways any more because the US airlines are against the Middle Eastern airlines. And yet they are both Oneworld members. And a lot of airlines are not looking at joining any alliance. They are doing very well by themselves. Philippine Airlines is doing very well by itself in Asia. In the US, Hawaiian Airlines is doing very well by themselves. Alaska Airlines, which is one of the only airlines in the world that has begun profitable since its creation, has always be profitable and a very successful airline. They have never been part of any alliance because they want to remain their independence and they want to decide who they want to collaborate with at different time.

So codesharing now or interline agreements which were historical cycle before there was no alliance and airlines collaborate based on their own choice. Then alliance became the new trend and now we are back to alliance being less of a trend. One of the only alliance that has gained members is Oneworld. The reason behind that is the most flexible alliance. And the strictest alliance to become a member with is Star Alliance. And Star Alliance is not getting any new member because they are too strict in terms of you have to comply with alot of rules. As a matter of fact, you can even say in your paper we are now even see major airlines in alliances collaborating with low cost airlines. Qatar Airways has an interline agreement with Vietjet Air in Vietnam, so you have a 5 star airline collaborating on certain routes to Nha Trang and Danang and Hue, collaborating with VietJet Air which is absolutely not a 5 star airline.

You have another example; Qatar Airways has a partnership with WestJet in Canada, which is a low cost carrier (LCC), or JetBlue in the US; also a LCC. For Qatar to fly more destinations in the US, this is the interline collaboration. You can talk about British Airways that bought over Vueling Iberia. Some of the flights from Arabia and British Airways which are both major airlines in Europe and full-serviced airlines are operated by Vueling, and Vueling is a low-cost airline. Now it's not black and white like it is used to be any more, very opportunistic. So yes, I agree with that absolutely. That's a good question actually.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Currently, most of the carriers are owned by governments or by a group of stakeholders, the ownership will open to public shareholders in the future.

Respondent 5: By a group a stakeholders, that is ok; but by government not necessarily. The ownership will open public shareholders in the future. To be honest, I don't know about that. Even if that's the case I don't think it is going to change much. For the first part of the question, no. I don't see that happening, I'll rate it 4 because I am not too sure.

I don't think Singapore Airlines will open as Temasek will keep control of it. For Philippine Airlines I think it is a publicly traded airline; Vietnam Airlines maybe they will privatise one part; actually, it was on sale. ANA wanted to buy one part of it, but the end you see, it did not happen. For Garuda, they want to privatize but it is not going anywhere. I think that the fact that governments are involved quite heavily on the destiny of airlines in Southeast Asia. Even if they are not sole proprietor of the airline, and the fact that they are huge, very rich people are behind those airlines, those very few rich people they have no intention to share anything with anybody. I don't think so. So that's the first question.

Disagree 1 2 3 4 5 6 7 Agree

Thai Binh: The stakeholders have the influence on the operation of the carriers or support them on high level issue.

Respondent 5: No, from my experience, not really. I mean some airlines, yes, some airlines no. There are examples where there is a high influence, and there are examples that they are not. The government stakeholder do have a lot of influence, and usually negative influence. I will provide 2 examples. In Thailand, the Senior Executive Level of Thai Airways is nominated by the government and had kept on changing every year for the last 15 years. It's a very political company, so this is why they have had a very hard time to get out of trouble because the decisions are not based on management best practices, but they are based on political acquaintances. It's also the case in Malaysia; and Malaysia Airlines although now is getting better because they restructure the airline. However, the political involvement in the airline has had negative effect. Now private stakeholders airline belongs to large corporations, they are fairly free on the way they operate.

I'll give you 2 examples. One is Cathay Pacific and Dragon Air. They belong to Swire Group and Swire Group belongs to the state, consortium. Swire Group does not really interfere a lot in the way how the airlines are run. Cathay Pacific and Dragon Air are fairly free to run as the way they want. Another example is EVA Air in Taiwan, EVA Air belongs to Evergreen Group. Evergreen Group is mainly a maritime cargo company and again EVA Air is run by EVA Air. Obviously if they start doing very badly, the parent company will look into it, but not at the operational level. Same for Singapore Airlines. Temasek Holdings do not really get involved. They support; when supposed they need to buy new aircraft, but they do not get involve in the operational running of the airline. Vietnam Airlines is the same, I don't feel like Civil Aviation Authority of Vietnam(CAAV) or the Ministry of Transportation really got involved a lot on how the airline is run. But from an outsider's perspective, I feel like Vietnam Airlines is well run, actually. It's a profitable airline and I don't think there is too much government interference; probably there is a little bit, but not too much.

Thai Binh: For Vietnamese, when they encounter difficulties, they will demand the influence from the government.

Respondent 5: Yes, the government does not have to control everything, that's what I mean.

Thai Binh: They don't control the operation, no.

Respondent 5: I would give this a 3, because there are more examples no than yes. For "yes", you can give 3 examples of Malaysia Airlines, Thai Airways and Garuda in Indonesia, which I agree. For "no", I will give 4 examples EVA Air Taiwan (Evergreen Group), Singapore Airlines with Temasek Holdings, Cathay Pacific, Dragon Air with Swire Group in Hong Kong and Vietnam with Vietnam Airlines. You can also talk about Philippine Airlines with Lucio Tan, it belongs to Tan Group and it does not belong to the government anymore. And this tendency starts to be infuse with Malaysia Airlines. Now they are less political than they are used to be. So, it's more "no" than "yes".

Disagree 1 2 3 4 5 6 7 Agree

Thai Binh: Lower cost airlines will continue to play a role in moderating ticket costs, even mergers will cut the number of major carriers and reduce competition.

Respondent 5: Yes, I agree with the fact that low cost airlines push major airlines to stay on their toes, which means that they put enough pressure on the major airlines to keep reasonable prices. That's true, I agree with that.

The second thing is even mergers will cut the number of major carriers and reduce competition; I am not sure that a lot of consolidation is going to happen in ASEAN region. I mean, the ASEAN region is not like the US and Canada or Europe. It's not a federation yet. So the nationalistic feeling is very strong. Vietnamese are very proud, Thais are very proud, Malaysians are very proud, Singaporeans are very proud and so on. For a merger to happen between major airlines, because they would suffer too much from competition. Two countries would have to agree to surrender their national airlines. And I don't see that happening at all.

I think the ASEAN region, a political organization, is way to patriotic to surrender a national flag because airlines are very important. If tomorrow, Thai Airways was to buy Vietnam Airlines, I think the Vietnamese people will be very mad. You can give an example behind that. You see the problem with Spratly Islands, South China Sea? China is building artificial islands and army boats surrounding those islands. You see, the ASEAN is incapable of resolving that problem. The reason they are incapable to resolve that issue is because they are all very nationalistic

countries. So I think if some airlines are failing, they will be bailed out by their government. This is what we see actually. Garuda in Indonesia is bailed out by its government. Thai Airways was bailed out many times by their government. I think I would even push my thinking to say that even airlines failed and the government didn't bail it out; the government would prefer to let the airline die than to let the neighbouring country to take over the airline because of pride. I think, the ASEAN as a political organization, is not yet matured enough to solve these kind of issues. It's not the EU, it's not North America. In addition, a lot of countries in the Southeast Asia they hate each other. So merger, No.

Thai Binh: So how about K6, the joint-venture of Vietnam and Cambodia and makes it a national flag carrier.

Respondent 5: Vietnam and Cambodia is an exception; it's not the rule at all. And as you know Cambodian usually don't like Vietnamese people anyway, because of the invasion by Vietnam in 1979. It's definitely an exception having a national airline of a country to support an airline of a smaller country is not a rule at all. Even very small country in the region like Brunei, they have their own airline, Royal Brunei Airlines. But they are very rich, so you cannot compare. But even Laos, they have their own airline and nobody is supporting them, really.

Thai Binh: That's why Cambodian people they even don't want to recognize K6 as their national airline, they said that airline is from Vietnam, and always keep saying like that.

Respondent 5: Yeah, exactly. Actually you give it a 4 because I agree with the first part of the sentence "Lower cost airlines will continue to play a role in moderating ticket costs", but I disagree with "even mergers will cut the number of major carriers and reduce competition". I don't see that happening because of patriotic feeling and the nature of country's behaviour in the ASEAN region.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Full-serviced airlines will shift their strategy toward the low-cost airlines in order to reduce cost.

Respondent 5: In order to reduce cost and compete in the market should have that.

Thai Binh: Should major airlines will turn themselves into low cost airlines?

Respondent 5: Ah no, I don't think so. I think what has happened already is what is going to continue to happen, which we back to discuss about this section.

Thai Binh: The K6 Senior Executive Level wants the airline to follow the hybrid model; making it to look similarly as low cost airline.

Respondent 5: What I think might happen is airlines are already trying to mimic, to copy low cost by offering entry ticket price; a few seats at a very low price. This model works very well.

Philippine Airlines competes with Derry Air and Philippine Airlines does that very well to compete with Cebu Pacific. That's correct. They will not turn into low cost airlines, I don't believe that. Most airlines in the region, what they are trying to do is to come up with low cost structures, low cost subsidiaries to compete with those guys.

Malaysia Airlines did that with Firefly, and it failed. Thai Airways did that with Thai Smiles, but they didn't really do much. They try to compete with Nok Air and did not really work. Philippine Airlines tried to do this with Philippine Express, also, it didn't really work. The only airline has managed to do it quite successfully is Singapore Airlines with Scoot.

So I think major airlines have the temptation to try to imitate low cost airlines. They did for the last 5 to 10 years. They noticed that it didn't work for a simple reason. You cannot improvise yourself into a low cost airline. You have to start as a low cost airline, which is why most of the airlines that have opened low cost subsidiaries have failed.

Lufthansa with Germanwings, doesn't really work. Air France with Transavia and Joon, it doesn't really work. It works a little bit but it does not work compete head to head, with Ryan Air and EasyJet Europe, neither does it compete head to head with Derry Air, because most of the low cost carriers belong to major airlines.

Jetstar belongs to Qantas. Tigerair, they belong to Singapore Airline. But they cannot really affect the low-cost airlines. So I think that now airlines understand that and they understand they need to differentiate themselves from the low cost instead of trying to imitate them. So I'm not seeing that happening at all. I will rate it as 3.

However, what you can say is that full-serviced airlines have learned from the low cost industry. They are gaining experience from the low cost industry. For example, they now understand better the importance source of ancillary services, which is why now more and more, you have to pay to select your seat, you have to pay to take a bag on board, you can pay to get extra legroom, you can pay to have better food or all kinds of things. So they took some ideas from the low cost airlines; that doesn't mean they became low cost airlines.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Full serviced airlines will replace smaller jets with larger planes to increase the number of seats and match fares offered by low-cost carriers.

Respondent 5: No, I don't see that happening. I don't think so. I will rate it a 2. On the wide body sides; new wide bodies that are replacing old wide bodies, they tend to offer less seats than the aircraft they are replacing. There are 3 reasons for that.

The first reason is because airlines tend to privilege frequency over capacity these days. And you know that to offer frequency without fluctuating the market, you need to fly less dense aircraft.

The second reason is because of this need for differentiation. Airlines are splitting their cabins to more classes; economy, premium economy, business and first class. So the more classes you have, the less seats you can have on board because it needs space for the body.

The final reason is the aircraft that they replace used to be bigger. I give you an example. Philippine Airlines is going to receive their first A350, and it is supposed to replace the A340 and they have lesser seats. They are going to operate that A350 to Europe and the US and they are going to work on the yield. They rather have less seats and better yields than more seats at terrible yields. EVA Air; they did the same they phased out the 747-400 in October last year and they are replacing it only with 777s. And, yet, 777s have less seats as well. Another thing that you can see is the A320 and A321. They also tend now to have less seats because they are installing bigger business class seats on those aircraft.

Low cost, they do the opposite. They try to densify the cabin. They don't have the problem of class because there is only one class. So for example, Philippine Airlines had ordered A321 NEO and I think they will be equipped with 168 seats, which is not much for A321 actually.

Thai Binh: But they try to increase the economy seats, right, with smaller space?

Respondent 5: Yes, a little bit. But there is only that much you can do at some point is you still want to have Skytrax stars. And Philippine Airlines gained 4 stars with Skytrax. So, they cannot densify the economy class cabin that much. Now, Cebu Pacific is also ordering the A321 NEO and the A321 NEO is going to be configured with 230 seats. That's 60 seats more than Philippine Airlines on the same aircraft type.

The last reason is airlines are trying to open new destinations that were unprofitable before and are only now becoming profitable because the aircraft that fly to those destinations are more economical to fly those routes. So this is opening new destinations but those destinations don't necessarily have a huge market demand. But they may have a high yield demand. So, to operate those routes profitably, you don't need a very large aircraft.

You need an aircraft that you can fill at a good price. And this is where the A350 and the Dreamliner are doing really well but if what you say was true, you will see the A320 family aircraft and the Boeing 737 family aircraft getting lesser orders. But that's not the case; they keep getting more and more orders.

Some airlines that were only operating wide body aircraft before now looking into narrow body aircraft. Emirates is now looking for narrow body aircraft although they have never operated narrow body aircraft except the beginning of their history. Singapore Airlines has always operated wide body aircraft for the last 20-30 years, it was not the case before, and now they are going to re-integrate Silk Air. So, they still understand the needs, even though they understand so far, they only operate wide body aircraft. They still see the importance of narrow aircraft in their fleet to be able to address smaller market, or to be able to address large markets with a lot of frequency flights. One flight for every 2 hours, maybe. You can't do with the large aircraft. So for the above reasons. I disagree. I will rate it 2.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: While airports engage airlines to develop their networks by introducing the opportunity, providing robust traffic and yield forecast, setting out key economic and leisure indicators, small airlines in ASEAN are not

capable to expand their networks, then they would ask for the protection of the government and limit the competition in the region.

Respondent 5: I disagree because I agree for Cambodia but you cannot say for ASEAN, you can only talk in Cambodia. Everywhere else, they have no problem to expand networks. I don't even know why K6 is not expanding their network. They should buy more aircraft and fly more, it's not difficult.

You know, if it wasn't corruption, the Cambodian government wouldn't allow almost 10 new airlines to be created. You may allow one or two, ok, let them try. However, you can't allow 7 airlines that's too much! The country is ridiculously small and the population that can afford flying, maybe 1 million, that's it. The rest of the 10 million they make USD\$100 a month. They are not flying anywhere.

Thai Binh: But they said they will serve Chinese people on China's routes.

Respondent 5: No, come on. There are not enough Chinese tourists coming to fill daily flights for 7 airlines, that's not true. And the government knows that for sure. So you know it's a dangerous question because this question is only applicable to Cambodia, so instead of turning into a question, why don't you talk about the specific example of Cambodia but not necessarily related to a question, just talk about the situation in Cambodia, because otherwise I have to disagree, I would give it 1 or 2 because it's true for K6, but not true in Thailand, Singapore, Philippines, and Indonesia. So I think you should eliminate this question, but you still talk about the situation in Cambodia and K6 and the whole situation there in your paper, but don't make it a question, because it's too specific for Cambodia.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Financial and reputation risks are key concerns for airlines when opening new routes, then airlines seek for airports that would provide operational guarantees.

Respondent 5: I give that a 5. So, what I mean by "operational guarantees" is that, airlines run their analysis they decided to fly to a new destination or they get approached by an airport. They do the analysis and they decide to launch the destination. Now if the destination fails, what I mean by providing operational guarantees is that the airport will give favourable conditions to operate to this airport or even kickbacks; by marketing help or tourism promotional help and things like that.

For example, an airline could decide to only operate to airports that eliminate landing taxes for the first 2 years of operation, or they would agree to fly to airports that invest USD150K in marketing fund to promote that airline or the country destination in their own city annually. That's already happening in Europe with Ryanair and it's illegal. A lot of Chamber of Commerces which manage local airports in Europe and especially in France, definitely know about that because it's very well known. Even for people don't know everything about aviation, they've heard about that.

Ryanair, they only fly to airports that pay them to fly in. So, I think for secondary airports in Asia, this is going to happen as well. I wouldn't be surprised, for example if the Chinese, when they are going to control the airports in Cambodia, it's going to happen soon. They will offer some kickbacks to airlines who are willing to fly to Shihanouk Ville. This is because right now nobody goes to Shihanouk Ville; very few airlines. So, to motivate new airlines to come to Shihanouk Ville, they might give them some cash or they might give them some marketing promotion. I can see that happening, yes. And I think Cambodia airports already do that even in Phnom Penh, but officially not, unofficially I'm pretty sure they do.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Influencing factors beyond the airlines and the control of airports such as unpredictable fuels and controversial government taxation, lead to the negative impacts on route developments. This will result in carriers simply holding on to their routes and not actively seeking new destinations, even in the region.

Respondent 5: Yes, I agree with that. Taxation is a huge problem in Southeast Asia. It's an enormous problem in Cambodia. The headquarters actually asked for my recommendations; I told them to close down the route. This route is making no sense whatsoever with the taxation from the Cambodian government, which is crazy. I told Qatar Airways to close down, but they didn't listen to me. I told them the taxation in Cambodia which is crazy taxation for airlines, the only country in the world taxing airlines this way. We should close down completely as it makes no sense. The problem is not about Qatar on which route they operate; the problem is the Cambodian government is crazy. That's the problem. The Cambodian government is completely ridiculous in regards to taxation. They don't understand airline taxation, so it's impossible to be profitable in Cambodia as an airline.

Another country that is causing problem to foreign airlines is Philippines. Those 2 countries believe that taxation should be based on the number of passengers that board the aircraft at their local airports. The problem with that, you see that for any given airport, not all the passengers are boarding are from that country where they purchase the tickets. In Cambodia, a minority of people purchase their tickets, board the aircraft in Phnom Penh, only 20 passengers bought their tickets in Cambodia. So, the revenue of the branch Cambodia should be the taxation of 20 people, but Cambodia they tax 100. The point with that Qatar Airways they already pay the taxes on that ticket in all other countries that the passengers come from. If the passengers come from France, and they return to France, Qatar Airways already pays taxes in France and in Cambodia they are charged double (France and Cambodia), which is why it not possible to operate properly in these countries. And in Philippines this is the same, though not as bad as in Cambodia; but it's still a problem.

The reason is in ASEAN maybe through the ICAO, which had the original office in Bangkok or maybe through IATA, or may through a meeting between the Transportation Ministers of the ASEAN countries, there is a need for a unified taxation system. Everybody should apply the same taxation for airlines because airlines are highly globalized operation, so there should be an agreement how to tax airlines, and also to avoid dual taxation. Actually, even countries that having dual taxation agreement with Cambodia are still affected. SilkAir flies to Phnom Penh twice a day. Singapore is one of the only countries in the world that has the dual taxation agreement with Cambodia; and yet SilkAir is still affected by the dual taxation system because this is making the Cambodian government so much money and the people in the General Department of Taxation (GDT) and the State Secretariat of Civil Aviation (SSCA) are so corrupted that even they also ignore the bilateral agreements. The guy from SilkAir has spending a lot of times at the Singapore Embassy to ask the Singaporean Ambassador to talk to GDT and talk to SSCA to stop the dual taxation for SilkAir ticket, and he's still having problem. So I agree with that, again it's true by only true in 2 countries. Let's rate it 5.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: While traditional marketing communication channels including print advertising, newsletters, and sales missions are still employed, digital marketing and social media be a key trend to enable airlines to consistently reach their customers more often, to build and strengthen relationships on a multi-platform basis.

Respondent 5: Yes, clearly. I rate it 6.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Internet sales can reduce labor costs and increase market share and profitability. Physical agents will be cut off in the future.

Respondent 5: I would rate it a 5. I would agree in general, but again I would not make the same comments; there are several instances where they are not true.

First, tour operators are still very strong in Southeast Asia, and a lot of Southeast Asian tourists are visiting Southeast Asia countries. Origin tourism is still done a lot in tours, and you see that tour operators are almost systematically agents. So that's not true for them.

The second reason is why it is not completely true is because of the maturity of the market as I mentioned before. The needs for cash transaction. The percentage of the population that has accessed to debit cards in Cambodia seem quite low, even in Vietnam. It's not completely everywhere. Of course in Hanoi and Saigon but in Nha Trang, Danang, Dalat, all these places, people still like to have a cash transactions. In Philippines as well, a lot of cash transactions. I was in El Nido, Palawan last week. In this city, there is only one ATM. This is a major tourist destination in the Philippines. We are talking about an enormous place, full of tourists, only one ATM for the whole city!

And the last reason is because even only agents only represent 5-10% of sales in the very matured markets, its not even true. The internet penetration of British Airways 5 years ago was 55%. So, that means that 45% of their tickets are still purchased through traditional channels. But anyway, so back to my example, even if only 5-10% of tickets are sold by agents in the next 10 years, the profitability of the airline industry, the margins are so thin. You cannot cut yourself off from somebody that represents only 10% of your market.

That's one of the reason why airlines in Cambodia; foreign airlines in Cambodia like Thai Airways, Qatar Airways, Emirates still have their own offices, own branches with staff who are selling tickets from the offices. Qatar Airways, by revenue percentage 10% was made from the Qatar Airways' agencies and although having an office

at Vatanac Tower, which was very expensive it is still worth it because I could not let go of those 10%, it was still the important part of my budget.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines would invest largely on mobile technology for this will be an essential tool to connect with customers for ticketing and travelling.

Respondent 5: Yes, on mobile apps suppose it's true I would rate it 5.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines will invest in customer service more as a mean to draw new customers and increase customer's loyalty.

Respondent 5: I agree with that by a rating of 6. Philippine Airlines does that quite well. The slogan, the marketing motto of Philippine Airlines is "The Heart of the Filipino", and they really stick heavily on the Filipino hospitality, the smile, the service on board, the way they care about the children when people fly with their family. Instead of talking about their business class and the size of the screen on board and the size of the seats and so on. Actually their onboard products are not very good but the services are really good. Another 2 good examples will be Singapore Airlines "The Singapore Girl" and Thai Airways "Smooth as Silk".

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Airlines will conduct more researches and deliver surveys to passengers in order to study passengers behaviours and adjust customer service. They believe that passengers have a second wallet to purchase better service, more comfort, and even totally even travelling ancillary products.

Respondent 5: I agree with that but don't only mention about upgrades; talk about all the ancillary services. People will want to pay a little bit more to have more legroom, have better meals because some airlines they allow you to buy. For example, in economy class, in a premium economy you can pay a little bit more and get the food from business class, not the seat, but the food. Some airlines try to charge to make you watch more movies. They give you 4 or 5 movies for the flight, but if you want to see all the movies, have to access to more movies and more documentary, you pay. Yes, I agree with that.

I think airlines will try to study and ask for the feedback from the passengers and they use the big data they have accessed to identify more opportunities for selling all kinds of ancillary services to their customers. For example, Spring Airlines in China did a partnership with Alibaba, and instead of using the screen of the aircraft as a TV, you can use it as a catalogue to buy things on Alibaba and these things will be delivered to you when you go back home. And of course, the airline take a small commission on whatever people buy on board. You even could buy a car onboard! So I think airlines will try to tap on 3 things; market research, new creative partnership like maybe Amazon or Alibaba and big data from customers to see what kind of new services they can sell you as part of your customer journey. It can be extra luggage, lounge access as you mentioned. It could be a whole bunch of things.

Airport transits as well. Some airlines have started to do that, they send you a driver to pick you from home. They did a partnership, I think it is in the US, it was an airline that partner with Uber and during the booking, you could book an Uber ride as part of the service, so that the guy can come to pick you up at the time you want. You did not have to book the day before, you can pre-book. You will have a nice car and you wouldn't need to pay anything to the Uber driver. They would already been paid in your ticket. This is the kind of new services that smart airlines are looking into. Not just extra-luggage and better food, and a perfume on board and lounge access.

Airlines are making a lot of money from ancillary services. Actually, I think that Ryanair's revenue; about 30 or 40% come from ancillary services because they sell holiday packages, and renting cars. They sell a whole bunch of things; they sell everything on board, they sell food, they sell dutyfree, and they are very good at that.

For the second part of the question, I agree with that and rate it a 6.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Thank you very for your time and valuable resources.

INTERVIEW 6

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 6
Designation	▪ Manager Level – Qatar Airways – Vietnam’s Station
Date of Interview	▪ 27th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Qatar Airways’ Office – Ho Chi Minh City – Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is transted into English

TRANSCRIPTION

Thai Binh: Can you please share some information about the strategic development of Qatar Airways toward the ASEAN market?

Respondent 6: It is quite vast to speak about the strategic development towards the ASEAN market, I can only share about the strategic development in the Vietnamese market in general. In 2018, Qatar has opened a new destination route in Vietnam; which is Danang. Qatar has just opened their third route after 11 years in Vietnam, which means that Qatar commits its presence in Vietnam very strongly and seriously. This is because Qatar is the first Middle Eastern airline that operates route to Danang, as well as being the first Middle Eastern airline operating routes in three large cities in Vietnam.

In 2018, Qatar Airways had also increased the flight frequencies to both Hanoi and Saigon. Currently, Qatar Airways have 56 flights weekly in total; of which 14 weekly flights from Hanoi to Doha, 10 weekly flights from Saigon to Doha, as well as 4 weekly flights from Danang to Doha. Qatar Airways is well renowned as the Middle Eastern airline that has the most flight frequencies in Vietnam. This is our key strength because the presence of Qatar Airways in ASEAN will stimulate tourism worldwide to visit Vietnam, especially from Europe and America, which are two main markets for the airline. Qatar now has over 150 destinations over the world, which is very important because there is no international airline flying and operating at so many international destinations in the world.

Thai Binh: Does Qatar Airways have a tendency to develop in other countries in ASEAN? They have taken advantage of the Open skies policy to get passengers from Cambodia to Vietnam. How about the Philippines, Singapore and other countries?

Respondent 6: In addition to Danang, Qatar Airways opened 2 new destinations in the region last year; they are Chiangmai (Thailand) and Davao (Philippines). These are two destinations in the ASEAN region. The importance of these destinations is mainly to develop the tourism markets. However, we do not only develop Danang as a tourism market but also an economic and commercial market. Also, Danang is waiting for an airline with such strong and wide network in order to bring their passengers to Danang and develop tourism, as well as to develop the outbound market. This is a very big opportunity for Danang. That’s why the Danang government welcomed Qatar Airways with red carpet.

Especially in 2019 - 2020, there will be not so many destinations in Asia, but the key market will be Isfahan, Iran. In December 2018, before opening the new route in Danang, we expanded flight routes to Gothenburg in Sweden and Mombasa in Kenya, and increased flights in Nairobi. Africa will also be an important destination. In addition, between 2019 - 2020, our plan is fly to Lisbon, Portugal, Chile, Rio De Janeiro and other destinations such as Tallinn. This is the network development horizontal plan. But there will be no new destination in Asia during 2019 - 2020.

Thai Binh: I see that Qatar flies to Tehran, Iran from Doha.

Respondent 6: We are going to fly to Isfahan, Iran. Turkey is also an important destination for Qatar Airways. Last year, we opened two new destinations in Turkey; that were Antalya and Goreme. This year especially, Danang is the 12th destination of Qatar Airways. You can imagine that not so many airlines can open many new routes within a year.

Thai Binh: Qatar Airways is a Middle Eastern airline, and normally airlines from the Middle East will not care much about the fuel price. Since they have so much oil, they can develop and open as many routes as they can, right?

Respondent 6: This is partly correct when they have the advantage of the fuel. In fact, regarding the geography and resources, Qatar is not a country that is strong in oil reserves, but natural gas. They are Number 1 in the world in exporting natural gas reserves and exports. Currently, the largest natural gas mine is located in Qatar. Qatar is not as strong as other countries in the region in terms of oil reserves. In return, they sell the natural gas and buy oil, and now they have gas pipelines leading to China and Russia, which are two key markets of Qatar to export gas. This is their advantage.

However, in the last five years, the government of Qatar started to focus on the development of the tourism market, similarly to Dubai, they recognized that oil will diminish within the next 50 years. In order to sustainably development, they will have to change and diversify the economic structure.

Thai Binh: So, Qatar develops tourism in their country?

Respondent 6: Currently, the tourism industry is very young in Qatar. However, they are starting to focus on tourism development within the next 5 years with tourism related infrastructure as well as focusing on preparation for the 2022 World Cup. This is the reason why the Qatar government is very determined to win the rights to organize the 2022 World Cup, because it will bring so many benefits not just in economic terms. We might not have profit from organizing the World Cup. However, we will get big plus points in terms of diplomatic relations. Now, they start to build the football stadiums in Qatar, and develop new markets. The immigration department starts to waive visa requirements for around 80 nationalities and waive the visa fee of passengers who transit in Qatar, regardless of nationalities, if they transit in Qatar and fly with Qatar Airways within 96 hours.

Thai Binh: Can I book separate flights for transit?

Respondent 6: Yes, you can stop as long as you want. you can transit even two times, but the maximum length of stay would be 96 hours and you must fly with Qatar Airways.

Thai Binh: Regarding the Open skies policy, I referenced Qatar Airways as a case study because I see that Qatar Airways has taken this advantage to fly from Phnom Penh to Ho Chi Minh. In your opinion, does this policy affect to the airline's strategy and performance?

Respondent 6: Open skies impacts a lot to the US market. However, people in the Middle East always have long term development thoughts as compared to other countries. That's why they are very smart and always get the big picture. In fact, after having signed the Open skies agreement, they have thought of the backup plan because it is sure that they cannot maintain such situations. USA is a strong country with strong airline companies such as Delta and American Airlines, two of the largest airlines in the world in terms of scale.

They have forced the American government to cancel this policy because it seems that Middle Eastern airlines are taking advantage, and the US airlines are losing their market share even on home turf. So, for this question, I will answer both Yes and No. For example, Emirates have some market share but they too, have to cut off many route networks and flight frequencies to US.

At Qatar, we fly regularly with one or two flights per day to big hubs such as New York, but we do not advertise so much in US market because our Senior Executive Level, Mr. Akbar Al Baker, would like to maintain a good relationship with the US. He does not want to gain the market share and does not see the need to sell competitively in that market. He is not so ambitious with the US market, but he needs Qatar's presence in this market because of the benefit the passengers. If there are no Middle Eastern airlines in US, the US airlines will keep their monopoly status and the US consumers have to bear with the limited choices.

When we have the Open Skies, the Middle Eastern airlines can join in and expand the competition in the market to benefit the customers. However, large airlines in the US also struggle, due to the expansion of the Middle Eastern airlines. This is the reason why we have not opened new routes to the US in the last 2 years, because we do not consider the US market as our key market.

Returning to the issue of the Open skies and the preparation of Qatar Airways, according to unofficial information; we do have plans to switch key markets in America to Europe and use alliances, for example, we invest in Air Italy, previously called Meliana. This is a hidden strategy; a key backup plan. In the event that flights to the US are cut or are not supported because of certain reasons, our alliances will help to support customers in such emergency cases.

Thai Binh: So, you will co-operate within the alliances, do you co-operate outside?

Respondent 6: I do not mean it is the alliances among airlines. Qatar Airways also wants to withdraw OneWorld.

What I mean “alliance” here is that Qatar will invest money on other airlines who become weak such as Air Italy and Cathay Pacific. EY (Etihad Airways) and EK (Emirates) also acquired some weaker airlines. The question is that what are you going to do with those airlines after acquisition? Do you help them to recover or whether your stakes are strong enough to raise disagreement or change points among the board of directors when needed?

EY’s mistake was to invest only 49% of shares and did not have enough power to change all the overall structure of an airline, leading to heavy losses. Air Berlin is an example, after 2 years of investment, the airline went bankrupt. Qatar Airways is luckier; we invested on 2 competitors who are currently profitable. Another important investment is within the IAG Group; who has stakes in British Airways. We invest with well-developed partners. It is also risky to invest on the loss-making airlines; we will not only inject money but also consider their management team and whether that airline is deserved for us to put in all of our efforts.

Thai Binh: I learnt that Cathay Pacific reported their loss in 2018, right?

Respondent 6: Correct. They offered to sell the shares and we could only purchase 10% because they did not want to sell too much. Of course, Qatar and Cathay are in the same alliance. they sold to us as a matter of respect only because other airlines have to prevent the Middle Eastern airlines from acquiring a majority stake; they are afraid of losing their rights of control, too. In addition, Qatar’s other business is to lease aircraft to other airlines. During the time we had blockade problem within the Middle Eastern region, we were not so strong at the passenger segment. However, in return we gained profit from freights. I can say that the future of the global airline industry will be the air freight transportation.

In Vietnam, Qatar Airways Cargo develops robustly despite the fact that they were just opened last year, and they will have plan to open Cargo office in Hanoi. For Danang, they will combine cargo with passenger flights since they do not have our proper chartered flights for Danang market. In the future, Danang will be a potential market in the central region of Vietnam.

Thai Binh: Regarding technology, does Qatar Airways apply all the latest technology?

Respondent 6: There are many aspects relating to technology application, of course, the first criteria in the aviation industry is safety. I do not mention about the cheap criteria, this would be the last criteria in this industry.

The safety criteria is not only reserved for employees but also for passengers. Qatar Airways has a sustainable strategic development plan. For example, we always use the latest aircraft models for fuel efficiency and being recognized as green, clean and friendly aircraft towards the environment. We have equipped the most modern aircraft such as A350-1000s to commit the environmental sustainability, which is very remarkable point. Qatar’s aircraft fleet usage is around 5.5 years on average; then our aircraft are very new. The oldest aircraft model that we still use for the Saigon market is A330. However, we also make use of newer and more modern models such as Boeing 787 Dreamliner for day flights, and Boeing 777 for night flights.

Qatar Airways focuses on the new aircraft investments for noise reduction, to adjust the inflight air quality to limit passengers’ fatigue when travelling. Also, to reduce symptoms such as dry eye or dry skin during long-haul flights; all thanks to technology. The modern aircraft usually provides the personal inflight entertainment screens, not the common shared screens. The fact that many people are happy when they have a personal inflight entertainment screen at their seats. Concerning the aircraft, we are strong at this point, we possess all the latest models in the world.

Thai Binh: Will Qatar Airways combine all the strategies to develop or focus on some important strategies?

Respondent 6: There are many barriers to release a common strategy in a large organization because our departments are fragmented. For example, to implement a gala dinner, the command will be top-down and there is no specific strategy. Then the staff have to implement it within the company’s standard. That’s why there is a limitation in a very large corporation, because when you assess whether the environment is effective or not; or whether the strategy is successful or not, all will depend on the co-ordinations among departments.

In fact, we also have many hiccups and many layers through the reporting line; we get the approvals late. Whenever we have any project, we are calling all departments involved in order to get the best result, but the process would be slow.

Thai Binh: So, do all offices in all countries co-operate among together?

Respondent 6: In fact, it depends. If the offices are in the same country and directed by one boss, the co-ordination is tighter. However, the Vietnamese and Cambodian markets are managed by one boss, these two markets are vastly different. In addition, the country who is more funded will incorporate bigger programs whereas the lesser funded country will do nothing.

The mindset of the Asian market is very different from the European market. European passengers may buy tickets 6 months in advanced but Asian passengers often buy late and pay more. It also depends on the market practice of each market. In short, external people may not know, but we are working in the industry; we know this. Most importantly, it boils down to the leadership, whether the leader can co-ordinate all departments involved.

Thai Binh: Regarding profitability, which factors will contribute the to generation of profitability, for example, product differentiation, service improvement, or marketing strategies, etc?

Respondent 6: We can say that each factor contributes a little bit. Everyone knows that Marketing does not generate revenues. Marketing does not help much in terms of sales, but only to promote the branding. It's the reason why we mainly use marketing tools to promote brand and we do not expect marketing to drive sales in this industry. Emirates has had poured in so much money on advertising, and only this airline knows the efficiency from Marketing within themselves.

In my opinion, marketing efficiency is not quite high. Airlines often spend money on social media platforms such as Google and Facebook, as a record for their references; but I don't click to see these advertisements because I am not interested. So, Emirates have invested lots of money on marketing because they are rich. Qatar only spend money on tactical marketing activities, and not so much on advertising.

I could not comment on the factors that help to generate the profitability because I am from the sales office, and not the HQ. Also, we are not in charge of finance, we only operate for the revenues, not for the profits. We only know the financial result at the end of the financial year sent from the group, and of course, the result reflects the financial indicators of the whole group only. Then when we read the report, we can know that profits derive from which factors. To be honest, the profit from passenger carrier is not high, but the profit from air freight transportation is high. Air freight transport will be a growing business in the airline industry in the future; and the passenger carrier business now is coming to saturation.

Thai Binh: How about ancillary revenues?

Respondent 6: We get revenues from many different ancillary resources such as overweight luggage, duty free, aircraft leasing. However, as per my prediction, profit was mostly coming firstly from cargo, then secondly, from passengers.

We do duty free in-house but not so much because Doha is not a popular shopping hub for passengers; goods are not diversified enough, and it is not too big enough for people to consider it as a shopping paradise as in Singapore or Bangkok. The remarkable profit is from cargo and freight, and that's why now airlines much focus on freight business. The profit generated from passengers are derived from changing dates, changing seats, overweight luggage charges. However, this profit cannot compare to the profit generated from cargo.

Another source of profit is coming from aircraft leasing, which is also important. This can help airlines who are redundant of aircraft can earn a huge profit. VietJet is following this model. They buy and defer payment, and lease and gain the surplus. So, we can see that VietJet will get a huge profit from this source.

Another example is Singapore Airlines. they have a huge income source from selling and leasing aircraft. VietJet does not have aircraft to sell but Singapore Airlines they do. They sell their old aircraft to low cost airlines or to airlines in less developed countries. They replace their fleet with the new aircraft model and re-sell the used aircraft having the life span of 9 or 10 years. They collected a good income from selling aircraft 3-4 years ago with at least USD70 million. So, the profit of an airline does not only come from the passenger carrier, but from many different sources as well.

Other sources of gaining profit are from the catering service company, line maintenance company, and ground service company established by airlines. Qatar Airways has a catering service subsidiary to supply in-flight meals to more than 200 airlines in Doha. This subsidiary was just established but is was invested correctly and this is a very important point.

Thai Binh: Is Qatar Airways belongs to the Qatar government?

Respondent 6: Qatar Airways is a national airline and the government holds the majority of stakes. Qatar Airways Group now consists of well-known companies such as Qatar Executive specializing in leasing aircraft, Duty Free, Airport (HIA). Of course, the States has invested the largest proportion of stakes and gains the right to direct all activities of Qatar Airways. There are also individual investors, but they are a small majority with limited voices over the key decisions. We can say that Qatar Airways is a national airline and belongs to the government.

Thai Binh: Despite Qatar Airways being so rich, do they cut cost to remain the effective performance?

Respondent 6: Qatar Airways is one of the airlines who has strength in terms of finance. In my opinion, there are not so many airlines in the world having the same strength as Qatar Airways. I have worked with Singapore Airlines and Qatar Airways; I can say that these are the top airlines who have the tight financial management system. It reflects their tight management through daily activities though they scatter their investment widely. All management system is centralized, which means that the airline manages all branches from the head office and through policies. That's why when there are complaints from some agents, we do not have rights to solve the problem.

Singapore Airlines is a little bit different from Qatar Airways. At Singapore Airlines, it is managed their Singaporeans. In Qatar Airways, there are expats managing the top management. And the way they use the personnel is also very important; they employ Indian citizens from Bangor and Mantras to do finance because people from those regions are very good at numbers, and there is no exception from those people. And Middle Eastern airlines are still using Indian teams to manage finance.

And we also employ third parties to audit and to do accounting, thus everything is very objective. This is our strength and the management team is willing to spend. We have spent a lot for filling and auditing, but we see it worth the money because we can control every cent. So, the strength is to use the right people to do the right work and dare to spend in order to get the best result. Surely, the company cannot be objective if you do not have the third party to conduct audit, otherwise, employees will cover the faults.

Thai Binh: Low cost carriers will create competition, does Qatar Airways concern about this issue?

Respondent 6: Currently, I still believe that the shining period for low cost carriers has not yet been over. In fact, there are more new low-cost airlines in the world or merging airlines to be stronger. The popular names are Virgin, Spirit, Derry Air in our region, and Scoot from Singapore Airlines, VieJet in Vietnam; all these low-cost airlines are in their shining period. Especially, LCC is booming in the North East Asia market. There are so many LCCs in China and India. There are 5-6 LCCs in Malaysia and Indonesia competing directly with the national airlines.

For Qatar Airways, we do not have much concern about the LCC because firstly we fly international. Secondly, we fly long haul (around 7.5-8 hours). Qatar Airways' business model in Vietnam in particular and in Asia in general are long haul flights and we have different customer segments and profit target. Therefore, LCCs are not our direct competitors.

Despite the fact that LCCs in the world saying that they will compete strongly with legacy airlines for the long-haul flights, some airlines have failed with their models. Why? Firstly, because they do not have long-haul aircraft; they only have medium-haul and short haul aircraft; otherwise they have to add long-haul aircraft into their fleet, which will increase a lot of cost. Also due to the fact that they have to change crews, parking, landing, and many things. All of these things will be added to their cost, and you know, low cost airlines have to reduce everything.

Second, their customer cannot accept the price of long-haul flights. Even if the price is at the lowest rate, it cannot be cheaper than USD 500 for a long-haul flight. You know that the fuel price accounts for 40% of the ticket price, and the airline cannot gain profit from 60% of the ticket price. The remainder 60% is too little to bear for all costs. So, I have not seen any successful LCC models that fly long haul. Scoot or Arry Air only fly 4-5 hours, which means that they only fly within the region, they could not reach out globally.

Thai Binh: Does Qatar co-operate with VietJet?

Respondent 6: Qatar Airways has signed an interline agreement with VietJet. However, it is still at a limited scale, because VietJet is not strong enough to follow Qatar.

Thai Binh: Does Qatar bring international passengers to Vietnam, then VietJet continues to transport them domestically?

Respondent 6: The interline agreement allows passengers to book online. For example, if they want to travel from

Frankfurt to Phu Quoc, they can book the destinations directly and VietJet will be displayed on the system screen showing that they operate the domestic flights. However, VietJet is a point to point airline and the passengers cannot check through their luggage. They have to take out their luggage whether in Saigon, Danang, or Hanoi in order to continue to fly with VietJet. So, this is a crucial point of limitation. In addition, VietJet's aircraft are not in good conditions; they had encountered 2 problems within 12 hours. Within this month, VietJet has 3-4 problems in terms of aircraft, and they had lost some reputation in the market.

Thai Binh: Why are LCCs established by legacy airlines are less successful than independent LCCs?

Respondent 6: The majority is less successful because there is a clear trend.

For example, Scoot's model from Singapore Airlines has struggled for almost 10 years to generate profit. Singapore Airlines is smart to provide Scoot to fly their route network or other new destinations. Scoot will help Singapore Airlines to cover all small airports that they do not fly to. Singapore Airlines also accommodate conditions for Scoot to develop.

However, airlines who are under the umbrella of major airlines will have a tendency to merge because this business model cannot stand on its feet. It looks like a branch to support the major airline, in the event that the major airline does not see any profit, they will merge this airline into them.

The strong model would be the independent ones like Derry Air or VietJet. That's why SilkAir now is merging to Singapore Airlines to be stronger. The MandA trend is the global trend now. In addition, their management system is not so clear, leading to the ineffective mechanisms, then that needs to be merged. The core issue of the merger is to cut the personnel and costs and re-utilize the resources of the major airline. It's a way to dismiss employees and reduce personnel when the teams from 2 airlines are merged. And this is the natural process, and no one can deny, that's it.

The problem about the human resources is very important in the airline industry. When there is cost cutting, Singapore Airlines will gain a huge profit because costs are reduced. Previously, there were two managers for 2 stations, now they need only one manager for the whole team when merging. For Danang market, Qatar Airways has not yet opened the sales office there because they need to test the market for 6-7 months. Currently, they use our sales office in Saigon to run Danang's station.

Thai Binh: Is price the key factor for customers to purchase tickets?

Respondent 6: It depends on each market; and of course, price is the decisional factor. To an airline, price is the most influential factor. The corporate customers choose the familiar airlines because they have membership card. If they have a business trip in other region and we do not provide connections, then they will not choose us. Of course, they will choose their most suitable flight time too. But this is very ad-hoc.

Qatar is till the key choice when agents send quotations to corporate customers to choose. All companies now are in the pressure to reduce cost, not only airlines, and they need to take the quotation from the best airlines. These quotations are normal for major airlines. Then how to be on top of those quotations? We always have to offer the best prices, but Qatar Airways has recently changed their strategy. We do not need to offer the best price in the market because we have the pressure to increase yield. When yield increases, it will help to increase revenue and reduce the number of passengers.

Thai Binh: Do you think airlines will get rid of GDS in the future?

Respondent 6: I don't think it will happen in the Vietnamese market because currently 70-75% of the revenues of major airlines gain through agents. For LCCs, they will sell through their online portal and they do not use GDS. Our market is still new and not matured. The number of customers who are confident to buy ticket by credit card is still limited. Currently, it is easier to call the travel agent to help you to buy an air ticket, except people who have time to search online, but we prefer online customers because we will sell directly to them. Online customers would love to get promotions and do not want to spend USD15-20 dollars for agents. It will be fine if the company bears the agent's fee for the traveler, but if the traveler buys tickets for his or her whole family, this agent's fee will be very high.

Thai Binh: Does Qatar Airways do hedging?

Respondent 6: To major airlines, they need to hedge in order to stable their costs in the long term, around 5-10 years because the fluctuation of oil price is extremely high. Jet fuel used for aircraft is different from normal fuel; it is very easy to vapor and light in order not to increase costs. The luggage carried by the aircraft are heavy, that's

why the fuel should be light to balance.

Thai Binh: How do you see the outlook of the airline industry in the ASEAN region?

Respondent 6: The potential of Asia in general and ASEAN in particular is very large. However, the future will belong to low cost airlines in order to transport within the region. It will be very difficult to have newborn legacy airlines because the long-haul flight market is saturated. There are well-known major airlines, and new major airlines will not have room to act.

Qatar Airways and Emirates, who are the top global airlines have operated many long-haul routes in the world, and no new airlines be able to surpass them. So, it is certain that the market will belong to the low-cost carriers in the future, particularly in the emerging markets such as India and China, and the developing countries as Indonesia and Vietnam.

For example, Vietnam has recently welcomed Bamboo Airways. This is a new airline but not a major airline because there is only one national airline for each country. The rest are low-cost airlines despite the fact that Bamboo Airways does not categorize themselves as a low-cost airline. They choose their hub in Quy Nhon city, which will be very difficult because Quy Nhon does not connect to anywhere.

Thai Binh: Thank you for your time and sharing.

INTERVIEW 7

Interviewer	Thai Binh TRAN
Designation	• Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 7
Designation	• Director Level - Aviation Management Training Center – Kent International College in Vietnam
Date of Interview	• 17th January 2019
Mean of interview	• Meeting in Person
Location	• Kent International College’s Office – Ho Chi Minh City – Vietnam
Audio Record	• Interview is conducted in Vietnamese • Transcription is translated into English

TRANSCRIPTION

Thai Binh: Open skies policy encourages airlines to enter the single ASEAN market, do you see this is the threat or an advantage for airlines?

Respondent 7: In my opinion, the Open skies in ASEAN is both a threat and opportunity to airlines. For example, domestic airlines in the Vietnamese market only compete with each other; they do not compete internationally even in the domestic market. We can see this in the neighbouring markets; they allow foreign airlines to participate in the domestic markets.

This challenges domestic airlines, but also opens an opportunity for them, which is the enhancement of competition. When their competitive power is strong, a domestic airline can challenge an international market which is tougher. To my knowledge, concerning Open skies in Vietnam, the preparation to integrate domestic airlines and Civil Aviation Authority of Vietnam (CAAV) is not much, despite the fact that it will come in 2020. It is just one year more; this means that people had been thinking about it for 2 years, not without any clear preparations. Recently, as I know that the CAAV is progressing in terms of legal, playing yard for the competition but they do not provide enough information for airlines to prepare, leading to the unseen action from the legal side of the State.

The Open skies is also a threat for domestic airlines. For example, some countries feel threatened by foreign airlines when entering to their market, therefore, Vietnam is not an exceptional case. All airline leaders can see both factors; that will be challenges and opportunities. However, I see that Vietnamese airline leaders are braver to face the threats as compared to other countries.

Thai Binh: For example, do you see VietJet taking advantage of this policy to develop outside of Vietnam? I saw some developments in Thailand.

Respondent 7: Correct. They know this policy and they thought about the Open skies policy for the past few years, with plans to develop in Thailand. In fact, VietJet is not the only foreign airline to invest in Thailand. They have to establish a company in Thailand and invest in this company before they just can establish a joint venture. Vietjet Thailand was a joint venture with Kan Air at the initial stage. I am not sure about the business model of VietJet Thailand.

Thai Binh: Do you agree that technology will be a key factor to affect the airline industry?

Respondent 7: Yes, I do. Technology has changed the airline industry in the past decade. For example, self-online check-in; Asians are starting to get adapted with this technology. In the past, they think that they need to go to the airport to do the check-in. The online check-in the first technology. The second is the online ticket purchase and the third is the 360° online ticket sales, meaning that agents can be located anywhere in the world of being an agent of an airline, you only need to top up some amount of money through the airline system and you can sell anywhere to everywhere.

Thai Binh: Is this the new model or is this OTA model?

Respondent 7: This is not a new model; this is a new technology to help boost the sales. Currently, there are robots driving buses and trains; I wonder if there will have robots to pilot the airplane in the future. In fact, robots assist

a lot in the services. And new technology can help the airplane to position its location and fly at a lower height, allowing the pilot's eyesight to lower and the airplane is able to take off at a lower height. But you have to equip the necessary components for the aircraft. And the Wi-Fi technology also helps a lot in entertaining passengers and reducing the human elements. Perhaps, customers can purchase tickets more automatically, instead of just buying ticket online, they can buy from any kiosk.

Thai Binh: Would it be simple like buying a train ticket?

Respondent 7: Yes, I think so; because air transport will be more popular and easier; similar to the way we travel by bus. In the future we will have buses without drivers or the human driver will be replaced by robots. The development of technology is useful.

As to my knowledge, when VietJet began to apply the technology to the online sales, the proportion of online customers is increasing. There is a change in the interaction between the customers and the online technology. This proportion has increased 25% to 30% annually, including the online customers and online check-in, or add-on package purchase.

I think Vietnam Airlines is doing something similar. I am not sure about the exact data, but this proportion is about 30%, while 10 years ago when I were working at Vietnam Airlines, customers often think of going to the agents to buy tickets. Then we can reduce the number of 1st tier and 2nd tier agents that are selling in a traditional way. Within 10 years, the impact of the technology has been very useful and positive to both airlines and customers.

Online sales technology helps to enhance the knowledge of travelers. Before, they just think to go to the physical agents to buy tickets and previously the call center of Vietnam Airlines 320320 has to answer even the smallest queries. Nowadays, people are more knowledgeable. Passengers do not need to go to the counter to do check-in, unless they have luggage. They just need to pass through the security with the barcode and go straight to the gate.

Thai Binh: Senior Executive Level of Nokscot Airlines said the only obstacle is at the baggage dropping.

Respondent 7: Yes, it is correct. Technology also help in baggage safety. The United Airlines had applied this technology to re-weigh the baggage in the past 10 years. For example, if the check-in staff makes mistake, the barcode attached on the luggage will display information after being scanned, the staff can verify if the actual weight matches with the weight displayed on the luggage tag. Customer data will be retrieved randomly, I think it is good in terms of safety.

Regarding security, if the airlines use technology then the security body should be use better technology to discover risks for the sake of security. I think we can replace security agents with robots or replace the staff who stand at the check-in points to prevent the overweight hand luggage, even we can use robots to do check-in procedure, then we can reduce the number of manpower.

Thai Binh: Then we may create the unemployment?

Respondent 7: If you think positively, humans will work at a higher level. For example, an employee needs to get out to interact with passengers rather to sit and do the check-in or weigh the baggage. At this time, robots will do more accurately while the employee can smile, welcome guests and support in other issues.

The interaction between the staff and the passenger is 2.5 minutes for the domestic flight and 5 minutes for international flights. Then the employee needs to do more interaction with each other while leaving the manual jobs to robots who can work more accurately. One more thing, employees tend to make mistake in checking travel documents to enter the correct country. Secondly, employees may record the baggage data wrong, either the number of baggage or the total weight, not to mention about the negative issues that possibly happen at the counter. Therefore, robots can reduce the safety risk for the flight. Of course, I think we still need a pilot to process some manual jobs, still need cabin crew to serve the customers. But it is better to use the modern technology for the ground service and the ticket sales.

Thai Binh: The next question is about the strategies to optimize the operation in the competitive environment. Which strategy will be the most important for an airline? Or do they combine all the strategies?

Respondent 7: If an airline wants to enhance the differentiation, they will focus on the quality of service and marketing. If they want to optimize the cost, they will focus on the resources and key departments.

For an airline, the most 3 resources are; firstly, the aircraft, they will decide which type of aircraft to buy in order to optimize the cost; the airline who can make the right decision for this will be successful. This is not my own

idea, but this is the experience from Southwest Airlines. The success of Southwest Airlines is based on the optimization of the aircraft family, and I think Derry Air follows this model because they are the latecomer. The strategic decision is that they just make use of one aircraft family only. Second and third are the human factor, including pilots and technicians. Those people are very important that the airline has to invest on. For other human resources, it is easier to find and train them. In short, these are three key resources, that are aircraft, pilots and technicians.

Thai Binh: Do these resources make differentiation for an airline?

Respondent 7: Pilots and technicians do not create the differentiation, but they are the stable resource. Regarding the differentiation, the human resource can reflect through the cabin crew, ground service staff, or the type of service the airline follows, full-service, LCC or hybrid.

Thai Binh: Do all airlines cut cost to retain their business performance?

Respondent 7: This is an interesting question. It is correct; all airlines are moving towards cutting costs because it is very difficult to make profits in the airline business. In order to reach to the stability, all airlines will cut cost, but how to cut cost reasonably?

If an airline wants to move forward to the sustainable developments, they will cut cost at the redundant or wasteful aspects. They cannot cut the resources under the minimum limitations, but the cutting cost will make the airline to maintain their resources at the minimum level due to the security in operation. However, they always maintain at the minimum level, their human resource will be always in the exhausted condition, leading to mistakes and accidental occurrences. Then the optimization is the cutting cost at the redundant aspect.

Thai Binh: The new Senior Executive Level of Cambodia Angkor Air (K6) cuts all services in-flight though it is a full-service airline. Passengers had complained to me that they paid a lot for a ticket, but we did not give them even a tissue.

Respondent 7: There are two aspects of cutting cost. Firstly, you can cut the redundant aspect in order to increase the labour capacity, this is the positive point. Secondly, you cut the services that the customers do not need. That is how the LCC model was born. They just need to transport; they don't need to eat. When they want to eat, they will pay. When they want to use the blanket, they will pay. These are the different things, but if you cut whatever, it would be the case of K6. As to my knowledge, Derry Air cuts so much even it is vulnerable at the turnaround time. It is impossible to clean the interior of the aircraft within one minute.

Thai Binh: I saw their cabin crew collecting rubbish all the time while in-flight, so it would save the time for cleaning.

Respondent 7: Yes, they collect rubbish. But it is impossible for the turnaround time within 1 minute.

Thai Binh: Turnaround time should be 30 minutes.

Respondent 7: Yes, turnaround time is 30 minutes, but it consists of many phases, and each phase should consume a certain time. There should be at least 5-7 minutes for the cleaning. If they can cut anything in order to increase the capacity or salary for the employees, it will be very good. But they should not cut the rest time of the pilot, cabin crew and ground staff. In my opinion, threats will happen if they cut the rest time of the employees. And I think no one tell you this, even if you interview the airline, they will not tell you.

Thai Binh: What do you mean by the rest time? Don't we rest while working?

Respondent 7: It means when you finish your working time of a day, you need enough time to rest in order to continue the work next day. For example, I finish my shift after 8 hours or 10 hours, it depends, after that I should have a rest time of 12 hours, then continue to work. This 12 hour do not include the time that you leave the aircraft, the time you go to the office to sign off, the time you drive home, the time you eat, and after all it is the rest time. If the staff do not have enough rest time, they will be exhausted and will make mistakes.

Thai Binh: Yeah, I understand why cabin crew often came and complained to me. They do not have enough time to rest and had to inject medicine to maintain their health always. They asked me to report to Senior Executive Level about their situation.

Thai Binh: With LCC entering the market, will this force the major airlines to adapt to the new competition?

Respondent 7: In my opinion, no airline has the right to force other airline.

Thai Binh: I mean it's the trend.

Respondent 7: I don't think it is a trend. If I am a full-service airline, I have no fear of any LCC because the number of customers is segmented. For example, Singapore Airlines only serves the upper class, Bamboo Airways, which is following the hybrid model will focus on the average customer segment, and LCC will focus on the low-cost segment. Therefore, the low-price market is crowded, it's the LCC right to focus on that market. This is only the target market that the airline wants. There is no need to fear LCC, unless you lose your strategic point of view.

Thai Binh: What about if an airline wants to cover all the market segments?

Respondent 7: If I want to cover all, I also have an idea. I will establish 3 different airlines with different services. In Japan, ANA is a full-service airline, they have established an LCC called Air Do for the domestic market. Singapore Airlines has Scoot and Silk Air.

Thai Binh: Why doesn't these LCCs operate as efficiently as the independent LCCs?

Respondent 7: I see that Vietnam Airlines performs more efficient than Jetstar Pacific.

Thai Binh: Isn't Jetstar Pacific a subsidiary of Vietnam Airlines?

Respondent 7: Jetstar Pacific is not a subsidiary of Vietnam Airlines. Previously it was an independent airline, now is transferred to Vietnam Airlines to manage. It is not an LCC established by Vietnam Airlines, so we cannot compare Jetstar Pacific with other airlines.

Thai Binh: Or does Vietnam Airlines do joint ventures with Jetstar Pacific or have any shares at Jetstar Pacific?

Respondent 7: No, Vietnam Airlines does not joint ventures with Jetstar Pacific. Vietnam Airlines has joint ventures with Cambodia to establish Cambodia Angkor Air (K6). To your assessment, does K6 operate efficiently?

Thai Binh: It depends on the period. Previously it was efficient, I am not so sure about now.

Respondent 7: You can assess in a period of 5 years. At the end of the day, Vietnam Airlines is still more efficient in terms of the business model and human resources. However, in other markets, I see that the subsidiaries are more efficient than the parent companies, especially in Japan and Korea. Therefore, you cannot benchmark like this.

Thai Binh: I compare the LCCs established by the major airlines and the independent LCCs. For example, Jetstar vs Derry Air or Jetstar Pacific vs VietJet.

Respondent 7: No. It is not possible. You can only compare within the same business model such as LCCS or full-service at the same market to check the competitive capacity.

Thai Binh: How about comparing Jetstar Pacific VS VietJet?

Respondent 7: Yes, you can. But I do not understand your question quite well.

Thai Binh: My question is why LCCs established by major airlines are not as successful as the independent LCCs?

Respondent 7: But Jetstar Pacific is not established by Vietnam Airlines.

Thai Binh: OK, if we do not focus in Vietnam, can we look at other market?

Respondent 7: I have no idea about other markets. Actually, I have registered a course to learn from Mr. Kazuo Inamori, the former Senior Executive Level of Japan Airlines, who helped the airline to get profit within 1 year after 10 years of loss making. So, I will research his model in the future, for your question as I do not have experience in other countries, therefore, I cannot answer you. Your question is interesting, and I propose you to do interview in Japan.

Thai Binh: Do you think airlines will co-operate with one another instead of competing to one another?

Respondent 7: Yes. There are alliances such as OneWorld, SkyTeam and Star Alliance. I don't see LCCs have established their alliances.

Thai Binh: There is U-Fly alliance for low cost airlines.

Respondent 7: It's just new. I think it's around 2 years recently.

Thai Binh: Do you think even the airlines are in the same alliances, they still co-operate with airlines outside?

Respondent 7: I don't think so because there are certain rules to boost the development together.

Thai Binh: In theory, yes; but in reality, there are exceptional cases.

Respondent 7: Do you know any case? I think they co-operate under the form of interline or codeshare.

Thai Binh: Most of the airlines do codeshare and interline.

Respondent 7: Besides the rules regulated by the alliances, airlines can do interlines and codeshares with one another; even LCC and full service can co-operate together.

Thai Binh: Do you think airlines will open wider network because of the profitability, new customer target or the brand development?

Respondent 7: I think when the airline opens a route network, they want to achieve all three above factors. The first point is branding, the second is market and customer development, and third is the profitability. However, the profitability will be the last factor.

Thai Binh: Do you think airlines will get rid of GDS in the future?

Respondent 7: GDS has 2 elements. Firstly, is the strategy, secondly, the technique; and I don't know the technical aspect. I see it is still applicable. GDS connects 5 continents together. There are old countries in Europe and America, and they have not changed over 100 years. I don't think GDS will disappear unless there is a new model to replace, for example Facebook replaced Yahoo Blog.

Thai Binh: How does fuel price impact on the airline industry? Do airlines do hedging to secure their stable operation?

Respondent 7: In fact, the former CEO of Jetstar Pacific (name is hidden) has made a mistake in hedging in year 2000 something, when the oil went up strongly. If you open an airline at the period that the oil price is going up, so it would not be beneficial. This is a headache for airline managements because they cannot cut cost with the fuel price. If they do hedging, I am not sure how much percentage they can win, because we cannot predict accurately.

Thai Binh: So, what happened to that CEO?

Respondent 7: He was put in jail, but I think the reason is because of the mistake in predicting the oil price. In my opinion, the oil price is extremely important to any airline and it depends on the leaders of those airlines who want to do hedging or not, do they dare to decide in accordance to their assessment. But the oil price relates closely to the cost of an airline. As to my knowledge, the airline will cut cost involving the oil by calculating very detailed, in order to reduce the amount of oil. For example, how much oil will you save when you fly at every height level, the reduction of the load weight when the plane takes off and lands in will reduce the amount of oil.

Thai Binh: Do you mean the luggage is the load weight?

Respondent 7: Correct. In Japan, they even calculate what kind of paint will be used to paint the aircraft in order to reduce the consumption of oil. It means that the consumption of oil will increase when the weight is high. Airlines will balance the customer load and the luggage load over the total load weight of the aircraft and calculate the appropriate oil consumption. Then when they cut cost, they will request the pilot to fly at a certain speed and maintain a certain height in order to save the oil. Both pilot and cabin crew can participate in the cut cost program.

Thai Binh: Is it the Director of Flight Operations work with the pilot on the cut cost program?

Respondent 7: Exactly. This cutting cost measure could be applicable in the normal weather. In a turbulent weather, we consume more oil because the pilot needs to fly around to find the parking. You have to calculate the appropriate luggage and customer loads in order to have an appropriate amount of oil injection and withdrawal; fuel can only be used when you inject it to the aircraft, it cannot be used when you withdraw. For example, the withdrawal of fuel can be seen in this case; in the last-minute changes, you have to increase the number of passengers, or you increase the amount of cargo or luggage, you have to withdraw the necessary amount of fuel that you have calculated and injected before. You inject 2 tons with the condition that customer load will consume 1 ton, and luggage will consume 1 ton; but if your customers increase to 1.2 tons and the luggage will consume 1.3 tons, meaning that the allowed oil injection is only 1.5 tons or 1.7 tons. But airlines will limit the withdrawal of oil.

Now, returning to your main question that will oil impact to the airline industry. It has extremely impacted to the airline industry. But I cannot tell you how many cases are successful with hedging and how many cases aren't unsuccessful. You can find the data and find out the trend why airlines have to do hedging.

Thai Binh: Is price the main factor to influence to the ticket purchase behaviour?

Respondent 7: Price is the main factor to the large population. But to me, it is not a concern. What I am concerned is the service quality and the safety. I belong to the minor group who considers the level of safety, the reputation and the good service of an airline. To be objective, we can say yes for this question, but no to a certain group.

Thai Binh: It is good to follow your criteria for choosing a domestic airline. For international airlines, I see major airlines are doing the same. For example, Air France, Qatar, Etihad, Emirates, Cathay Pacific, all are similar; what I care is about the price among them.

Respondent 7: I would choose Air France among these airlines because Air France's safety is higher than the others. First, I choose safety. Second, I choose the types of passengers that fly in that airline. Why people don't fly with Qatar Airways but with Vietnam Airlines because passengers of Vietnam Airlines are deemed to be of higher position than those of Qatar Airways. Why people don't fly with Turkish Airways? Because their passengers are messy.

Thai Binh: I am satisfied with Air France, but I am not comfortable with Air France's ground staff and Terminal 2 at CDG airport is so crowded. I felt more comfortable with Qatar Airways and Terminal 1. But I saw Air France have crashed before while this has never happened to Qatar Airways before.

Respondent 7: Air France has been successful many times in releasing passengers when having problems, that's why Air France is highly appreciated in terms of technical safety. When I worked at Tan Son Nhat International Airport, many 5-Star airlines prefer to hire Air France's technical team to work for them because the team has been so good. Currently, there are Vietnam Airlines' technical team, Air France technical team and VietJet team. VietJet team just works for Vietjet. So, it depends on the position of airlines, if they have much money, they can hire Air France's team, if they have less money, they can hire Vietnam Airlines' team. We feel safe if the airlines can solve the problem in the event of encountering accident. I have not flown with Air France, but I flew many times with Lufthansa in Europe, and I am impressed with the services of Lufthansa very much. After they had problems with their subsidiary, German Wings, I am scared.

Thai Binh: Because the pilot of German Wings committed suicide intentionally, it's not the technical problem.

Respondent 7: After the problem of German Wings, Vietnam Airlines and other airlines regulated that there would be 2 pilots in the cockpit. If one pilot goes to the restroom, one cabin crew must be presented in the cockpit. It's funny that the cabin crew of VietJet when they don't know the procedure, instead of standing outside they sit at the pilot seat. They are not authorized to sit at the pilot seat.

Thai Binh: Yes, I know that. Especially for Cambodian cabin crew, they really love to sit at the pilot seat to take photos.

Thai Binh: How do you see the airline's strategy in using small aircraft with more frequencies and large aircraft with less frequencies?

Respondent 7: It depends on the strategy. The strategy for short haul will be based on the efficiency of the route, then the airline will invest on the suitable aircraft type. Second, if they operate both short haul or long haul, they will utilize the aircraft in accordance to the number of passengers. For example, it is sufficient for Vietnam Airlines to use the A320 to fly Saigon to Hanoi route. However, they also use A350 or B787 because they have a huge number of customers.

Thai Binh: The Vice President of Vietnam Airlines told me that they need to utilize the large aircraft for Saigon to Hanoi route after they came back from Paris.

Respondent 7: Correct. The airline has to utilize the aircraft maximum capacity. I know that Airbus family A319 – A321 will be utilized maximum 13 hours per day. I don't know about other Airbus A330, A350, A380 and Boeing B737, B747, B767, B777, and B787.

Thai Binh: How will the shortage of qualified employees impact the development of an airline?

Respondent 7: The qualified employees will include pilots, technician, top managers, and instructors. The biggest shortage is pilots, followed by technicians and instructors. In fact, instructors derive from pilots and technicians. When we have enough pilots and technicians, we will have enough instructors. The fourth shortage is the top managers; the reason of shortage is when the new airlines are established in Asia, they are shortages of those talent and they just recruit employees from other airlines. The newcomer Bamboo Airways is hunting employees from other airlines. If the airline source is insufficient, they have to hire external talent, which can work in the commercial department, HR, Finance. But for the airline professional, they need to hunt the people from inside the industry such as instructors, technicians, pilots and ground operations. If you hunt these people outside, you need to train them from scratch, and it takes lots of time.

Thai Binh: How do you find the outlook of the airline industry in ASEAN in the next 5-10 years?

Respondent 7: I think the industry will be very dynamic, there would appear more domestic airlines in Vietnam because the population of Vietnam is very large, and we still have very few airlines now. Second, the competitive power will be very active in terms of the positive aspect. Regarding the risk, it is not easy to get profit in the airline business. For example, there are 15 million people in Cambodia but there are 8 airlines now, while the population of Vietnam is 96 million people, and you have 4 airlines only.

Thai Binh: In fact, airlines in Cambodia are opened just to cover other activities behind.

Respondent 7: Whatever reason, I just mention about the number of airlines is opened. Therefore, the potential to open the new airlines in Vietnam is still positive, and there are also opportunities in the region.

Thai Binh: Thank you very much for your time and discussion.

INTERVIEW 8

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 8
Designation	▪ Manager Level, Cathay Pacific in Vietnam
Date of Interview	▪ 25th December 2018
Mean of interview	▪ Speaking via Phone – Viber
Location	▪ Ho Chi Minh City/ Vietnam – Binh Duong City/ Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Thai Binh: My first question is about Open skies. The Open skies policy will encourage airlines to join a Single Aviation Market. In your opinion, how do you find the Open skies policy impact on the strategies and the performance of the airlines?

Respondent 8: Currently airlines participate in their own alliance so that the customers can benefit with the airlines in the alliance with the same standard; customers can accumulate mileage points not only with one airline but with other airlines in the same alliance. In the past, if a customer often flies via one airline, he or she is considered a VIP customer to that particular airline. However, if he or she flies with other airlines, he or she will no longer considered as a VIP customer. In order to protect the benefits of the customers, airlines will join into a group that called an alliance. In Vietnam, most of the airlines join SkyTeam or OneWorld.

Thai Binh: Do airlines in the same alliance will do co-operations together? Can they do co-operations outside their alliance?

Respondent 8: Airlines have the right to choose the alliance to participate. in Vietnam, Vietnam Airlines joins the SkyTeam alliance. Airlines in the same alliance can do marketing or codeshare by selling seats to each other. Airlines in the SkyTeam alliance can co-operate with other airlines outside their alliance.

For example, Vietnam Airlines can co-operate with other airlines of other alliances in order to sell the tickets. This can happen and provides the passengers with more options. Alliances such as Star Alliance, OneWorld and SkyTeam were established to reward their customers so that customers can see their benefits more with airlines and allows airlines to sell tickets to each other through codeshare cooperation. Codeshare means you can buy tickets from Vietnam Airlines; you could fly with Air France or you can buy tickets from Cathay Pacific, but you can have seats at Vietnam Airlines, which means Vietnam

Airlines sell tickets of Cathay Pacific. This is one form of the co-operation.

Thai Binh: Do you think small airlines would do codeshare instead of merging?

Respondent 8: This is the current trend in Vietnam, but it is still quite vague. For example, there are low-cost carriers in the market. In the region, there is Derry Air as a low-cost airline they cooperate with VietJet but not so transparent on ticket sales; or Jetstar co-operate with a full-service airline in Australia in order to connect to Australia; this is also a form of co-operation.

To a corporation, forming multiple route connections is to let customers see that they are having a stronger network, they fly further, and customers have more options. The airline connects and co-operates with each other to portray the image that their airline is huge, and they can open a new market to develop. About the competition, major airlines have targets to different customer segments.

Thai Binh: For example, when Derry Air enter the Vietnam market, will they compete with VietJet or co-operate with VietJet?

Respondent 8: To my knowledge, they will cooperate with VietJet but this is not confirmed at the moment. The trend of co-operation is normal nowadays, if a new market entry works alone, then it would be difficult for it to survive.

Thai Binh: How about the route network? Do airlines open the new route to increase their geographic coverage?

Respondent 8: In my opinion, this is for two reasons. Firstly, they expand their area, but the trend is that airlines will find a way to open a wider network to gain profit and they can transport people to traveling destinations. For example, CZ (China Southern Airlines) flies 6 to 8 flights per day from Guangzhou to Shanghai because they see the increase in travelling; therefore, they must open the routes. Last year, Cathay Pacific launched 6 new travel destinations. Within a year after Cathay Pacific opened a new network, they can attract passengers to visit the new travel designations via a direct flight. Customers do not need to take the connection flight and can purchase a direct flight ticket, which is cheaper.

Secondly, the fact that opening the route network will attract more customers is because we can decrease the air ticket price for them. Let me give you another example. In the past, if you want to fly from Saigon to Davao, you will need to fly to Hong Kong first, then connect to Davao. If you want to fly from Saigon to Copenhagen, you will have to fly to Hong Kong, then connect from Hong Kong to Copenhagen via British Airways. The flight tickets with all the connecting flights will be very expensive. Now you can fly directly from Saigon to Copenhagen and you just need to buy one ticket and the price is very much cheaper.

Thirdly, customers who fly via a direct flight can have a better in-flight service because the airline can take care of them from the departure point till the arrival point. Customers feel safer when they have a direct flight; they will not have worries of being late or missing the flight connection during transit. If you miss the first flight of a different airline, their connecting flight via the second airline is not going to wait for you. Therefore, flying with one airline is definitely a better choice. At a moment, every airline sees the trend to economize; they cut off certain in-flight services. Airlines will still keep the core components such as the human factor; the transfer and pick-up service, but they will cut cost in other aspects such as meal, in-flight magazine or newspaper. Instead, they can provide you the Wi-Fi service like in Cathay Pacific.

Thai Binh: Does Cathay Pacific provide Wi-Fi free or collect the service fee?

Respondent 8: The Wi-Fi is free in business class, but a service fee will be charged for economy class. We see this as a strength because we will cut off unnecessary services and replace with a new service that is long term.

Thai Binh: Does Cathay Pacific have the strategy to penetrate into ASEAN market?

Respondent 8: To my knowledge, Cathay Pacific flies to Singapore 8 to 9 flights per day. Cathay Pacific flies to destinations in Vietnam such as Hanoi, Saigon and Danang; to other countries such as Singapore, Philippines, Malaysia and almost all other countries in ASEAN from Hongkong.

Thai Binh: Do you think service improvement; product differentiation and marketing strategy are key factors for airlines to reach profitability or other factors?

Respondent 8: Speaking about the profitability, I do not have a full assessment on it. Firstly, we should consider about the price because anyone who wants to travel, they will check the price first. Second, they will consider about the scale of the airline whether this airline is big or whether this airline is reputable. Thirdly, the routes provided by airlines are suitable to their travels are not. The customer will try to find a suitable route at the cheapest price and that matches to their schedules.

Thai Binh: So, is price the key factor?

Respondent 8: This is correct. So, the pricing should match the routes offered; and when the airline opens more route networks, they will be able to provide the customers with more options. Customers can then compare prices among the airlines and choose which airline to fly with. You could not say the service of this airline is better than that of other airlines; or base your assumptions from a comment online saying that a particular airline offers better services. This has to be based on your personal experience flying with that particular airline.

The first thing you'll check is about the best price and suitable routes that match your demand. Thus, these two elements will be the basis for you to select the airline to fly with. Second, to retain the customer, airlines will offer the services that whether it is convenient for you. For example, the speed and efficiency to purchase tickets, how fast the check-in or punctuality of boarding and flight times, in-flight service in terms of meals and comfortable seats, after flight customer care services, or will your luggage be intact after collecting from the collection belt. These elements of customer service will help retain customer loyalty to an airline.

For marketing, we can open the route networks and organize the events to let people know who we are. We can offer cheap tickets to agents; when agents get commissions from us, they will introduce our airline to their

customers. These are also sales tactics, with two points to impress customers. Firstly, best price accompanied with best route; secondly, efficient check-in service and high-quality inflight service; these are important factors for customers to think about the airline.

Thai Binh: Will low-cost airlines entering the market force major airlines to adapt and create differentiation?

Respondent 8: Major airlines will compete with low cost airlines by decreasing the price sometimes even cheaper than the price of low-cost airlines, this can also happen. For example, 17 years ago when we want to fly to Hanoi, we have to buy air ticket with the same price of 1 million VND for the economy class and 1.6 million VND for a business class. Now, due to increased competition, airlines have to break down many classes with different price ranges.

Another example. The lowest price now flying to Hanoi varies from 0 VND to 2.6 million VND, and now I see that there are eight or nine sub classes. The sub classes are defined with capital letters such as Y, N, Z, G, etc. Each letter will generate a different price. Letter G stands for Group and the group price is cheaper, but the travelers have to depart exactly in accordance to the stipulated travel time and date. Also, they must gather a large amount of people to get the group price; or a family group ticket including the parents and two kids will have cheaper price.

Prices will differ winter and summer seasons. During winter season, prices will be more attractive, so as to attract more customers. This is called special fares and this price is very competitive. If an airline wants to promote new destinations, they will also offer a competitive price. Traditional airlines have to offer many different price ranges or doing tour events to sell tickets. For upper class consumer, airlines do sell higher price to this target. High priced tickets will offer better conditions than lower priced tickets. When you change the date of travel, lower priced ticket will be charged additional fee while higher priced ticket is waived this fee, and high-priced ticket will offer the long-term usage and more benefits.

Thai Binh: Airlines these days even have 4 class categories in the cabin.

Respondent 8: Yes, there are four classes. Actually, there are only 3 classes in the system, that are first class, business class and economy class. Due to the economic downturn, airlines insert the Premium Economy Class between the Business class and the Economy class. The seat of the premium economy class is not much larger than the seat of the normal economy class. It is still economy.

Thai Binh: I see that different airlines have different standard of their classes. For example, first class of this airline is equivalent to business class of another airline.

Respondent 8: There are no common standards among airlines. Airlines are not similar to 5-star hotels; there is no rule that a first class or business class seat should look like this or that, or what the dimension of the seat should be.

Thai Binh: When airlines joining the same alliance, does this alliance regulate the class standard for airlines?

Respondent 8: No alliance regulates such kind of standards. This is up to the airlines themselves to decide.

Thai Binh: So how do we know if a lower positioned airline sells their business class with the price equal to that of high-end airline?

Respondent 8: It can happen, but normally, a business class ticket of Vietnam Airlines is cheaper than that of Cathay Pacific.

Thai Binh: In your opinion, will airlines spend money for advertising or focus on customer service improvement?

Respondent 8: Actually, airlines need to do both. If the airline wants customers to know them, it is necessary to do advertising. For the large airlines, they have been in the market for a long term, it is not necessary for them to do advertising. Rather, they will be doing travel events or roadshows every year. Customer service is always be focused on because airlines now are very competitive, prices are down to the possible lowest rates. We need to think how to improve the customer service experience.

Thai Binh: Do you conduct surveys to research on the customer behavior?

Respondent 8: Yes, we do it frequently and have assessments every month.

Thai Binh: Nowadays, airlines also use the mobile app. Is it an essential tool to communicate with customers?

Respondent 8: Oh yes, we do. The Cathay Pacific mobile app is very helpful to communicate with customers because customers can use the mobile apps or the website displayed on their mobile phone to buy the tickets or to do check-in online or to check the information about the baggage. So they can do everything with their mobile phone and customers do not need to go the airline's office or to call the airline, thus no waiting times needed. Currently, our office at the airport encourage customers to use the mobile app to do a check-in procedure and we also encourage customers to buy the tickets online and I'm sure that buying tickets online is much cheaper than buying the tickets at the airport. When they have finished the purchase, they can do the check-in by themselves; then they can print the boarding pass and go straight to the gate.

Thai Binh: Could we use the electronic boarding pass to board?

Respondent 8: For the international routes currently in Vietnam, electronic boarding pass is still not allowed. In reality, this was carried out in some countries. Actually, we just need to scan the barcode and then just go. In Vietnam we can do it for domestic route; for international routes, customers have to print out boarding pass. This is also a limitation for customers when they get out of the country.

Thai Binh: Do you think in the future, airlines still use print media or switch to digital media?

Respondent 8: In my opinion, the trend will move towards to digital. Airlines nowadays create electronic magazines and customers can download it to read in flight. Airlines still keep physical magazines because not all of customer can use the digital devices. Currently, Cathay Pacific does promotional advertising via the digital channels.

Thai Binh: Regarding Internet sales; in the future Internet sales will be increased and the physical agents will decrease?

Respondent 8: Nowadays customers can use smartphones to watch the advertisement of an airline. On Google, Facebook or YouTube they just click the advertisement to buy cheap tickets and it is as easy as registering a Facebook account.

For physical agents, I don't think they will disappear, but they may decrease a little bit because customers still need the services from humans and physical agent is needed by corporate or group customers; and this type of customers need the agents to have a specific office. In Vietnam, for example, small companies even do not dare to use the electronic invoice, as they are afraid of auditing by their Finance departments or external auditors.

Small companies still want to work with physical agents to get a black and white invoice. Actually, everyone uses electronic invoices nowadays, even the Vietnam Electricity also issue electronic invoices to us. Small companies as well as state-owned companies do not dare to buy tickets by themselves because they are afraid of making mistakes, and that's why they need the support of the agent. Therefore, printed air ticket as well as travel agents are still surviving.

Thai Binh: Do you think branding will play an important role for an airline? Will it impact to the loyalty and the attraction of customers? People often think major airlines have the same form of branding and they can take whichever airline, and the most importance consideration is the price.

Respondent 8: Yes, I agree that branding plays a pivotal role. However, there are still customers who only seek for the most prestigious airlines to fly for pride. They even buy business class tickets to fly on these airlines to show off during their business conversations with their business partners. Their business partners may ask them about the types of airlines they fly, which type of seats they take, the in-flight services etc.

Thai Binh: Regarding the website, is it correct that customers will like a full-fledged website than a lesser detailed functional website? The airline with a full-fledged website is deemed to be more reputable?

Respondent 8: Airlines now want to move toward to a full-fledged website. An example is Cathay Pacific's website. There is information such as a sale promotion, the basic functions as selling tickets and check-in, baggage claims to help customers to claim the lost baggage or broken baggage. There is also the automatic response function. For example, you may ask about the baggage, how can to pack the baggage to a certain destination, how much is the additional fee for an overweight luggage etc. There is also an automatic chat function to interact with customers. Customers can communicate any time without calling to the airline.

Thai Binh: Regarding the aircraft, do you think passenger will notice the type of aircraft that they are flying?

Respondent 8: Yes, because customers now are more knowledgeable, and when they care about the quality of their travel, then they will care to learn more about the type of aircraft they are flying on. As for Cathay Pacific, the aircraft fleet are the wide-body aircraft. Customers flying with us are quite contented and they do not question too much about the aircraft type. For other airlines using two types of aircraft such as the narrow body aircraft and the wide-body aircraft; narrow-body aircraft means the aircraft just has one aisle.

Thai Binh: Previously I worked at Cambodia Angkor Air and we utilized the ATR to fly from Saigon to Phnom Penh and many customers feel disappointed with the small aircraft.

Respondent 8: This is because ATR 72 is the turboprop aircraft and passengers compare with Vietnam Airlines who utilizes A320 fly from Saigon to Phnom Penh. Previously, Vietnam Airlines also used the ATR and Cambodia Angkor Air used the ATR then there was no comparison. Another point to note. When the airport is small it can only serve small aircraft but now the airport has upgraded its capacity, it welcomes bigger aircraft. So, it depends on the airlines; when the airlines utilize different kinds of aircraft, customers will make more demands.

Thai Binh: In the future airlines will have more services at the airport like automatic checking, automatic baggage dropping and immigration. So, do you think only the major airlines can afford it or smaller airlines cannot afford it; and this trend will be spread to all the airlines?

Respondent 8: I think this trend will be spread to all airlines in the future because when we do everything automatically, it will save a lot of human resources. This is the global trend and not only for the major airlines that can afford it. In Singapore, there is terminal 4; to my knowledge, this terminal four is fully automated terminal. In the future, the trend will be similar like this. For Vietnam Airlines, we can see that they equip the check-in kiosks at Tan Son Nhat International Airport; and we can see more check-in kiosks an automatic baggage dropping in many airports now.

I think that gradually all airlines will keep up with this trend and people will get used to it. At present, passengers know how to do the online check-in and airlines also encourage passengers to do the check-in online. Passengers should do it at home and freely to choose the seat. When the passengers are ready to do check-in procedure, it will be more convenient for the check-in staff to work; which means that the check-in staff have your available information and they don't need to record and verify your information into the system.

All the information is available, and it will be very convenient, and this reduces the waiting time. Therefore, it will be a trend that there will be no airline ground employees to do the check-in at the counter at the airport and help reduce cost.

Thai Binh: At the stage of weighing the luggage, is it necessary to have a person there to control over weigh luggage or it can be automatically? I'm not very sure about this phase.

Respondent 8: Regarding the automatic baggage dropping, in my opinion, passengers should be allowed to weigh-in accordance to the weight when they buy their tickets; then the luggage tag will be automatically printed out for them to attach to their luggage after the weight-in. If the luggage is overweighted, there will be red alert and the tag is not printed. Then, passengers will have to pay additional fee. If they don't pay the tag is not printed out because the luggage is overweight. Only after the payment is made, the passenger can scan the barcode and that allow him or her to pass through. Most of the time, people who drop off baggage automatically they rarely have overweight baggage because they travel so often, and they are so familiar with the procedures.

Thai Binh: The airline should provide the information online to instruct the passengers how to do.

Respondent 8: Yes. There will be an announcement online to educate the passenger on how to do the check-in baggage, how much weight that they are allowed to drop. This information will apply to the passengers, but for the passengers who rarely fly, they will go directly to the counter to get the support from the ground staff. This is the trend of the Vietnamese people.

Thai Binh: Regarding to the demographic, customers from different regions will have the different sentiments about the price and services of the airlines?

Respondent 8: I think it's correct because customers in different geographic region will have different sentiments and also the ticket price is different at different geographic points. For example, for the route Saigon to Hanoi, if you buy domestically you will have a different price as compared to buying the ticket overseas for the same route. This happens if you buy through agents but if you buy online so the price is the same because the online system is global.

Thai Binh: How about word of mouth? Do you think word of mouth has an impact to the reputation of an airline?

Respondent 8: I think yes. Nowadays people spread information through Facebook and to other social media, but it will be for negative news most of the time.

Thai Binh: Do you think it will be a key factor to affect to the purchase behavior? In my interviews with Qatar, they mentioned that even if you hear about a bad information of an airline via word of mouth, you might feel unsatisfied but the next day when you go, and you find a ticket is cheaper from that particular airline; then you still go with it.

Respondent 8: Yes, I agree. So, the most important factor for traveling with an airline is the price and the suitable flight itinerary. The negative comments are just the part and parcel of a service-oriented industry. Whenever passengers need to fly, they will still fly that airline.

Thai Binh: Thank you very much for your sharing on customer service aspect.

INTERVIEW 9

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 9
Designation	▪ Director Level, Cambodia Angkor Air in Cambodia
Date of Interview	▪ 16th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Highland Cafe – Ho Chi Minh City – Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Thai Binh: Can you please tell me more about the OTA model?

Respondent 9: OTA means Online Travel Agent; which is different from the traditional Travel Agent (TA). Don't confuse with the perception of TA as an online travel agent; some TAs just post information on their website for customers to book tickets. Then, they will print out the booking requests and manually book on the airline's booking systems for customers. This, in fact is not considered the real online process. This is just a connection between customers, agents, and airlines. As for OTA, my website connects directly to the booking systems of airlines, allowing customers to book through the airline's system. When airlines change price, my website also automatically changes. It is similar to Abacus, which is connect directly to airlines.

Thai Binh: Are Abacus, Amadeus, Galileo all GDS?

Respondent 9: Correct. They are all GDS. They only provide the platform to book seats. For us, we receive tickets from airlines to sell to customers. I am able to navigate the airline's system and I am the person who sell tickets to customers, while GDS only supplies the software to agents for navigating through the booking system. It is difficult, as customers cannot do by themselves. On OTA websites, the screen displays the departure and arrival destinations which is very easy for customers to book; while GDS software is only specially programmed for travel agents with technical terms; understood by the agents only.

Our OTA system is different, we have to transfer the IT language to front end (layman terms), make it easy for everyone to understand. Customers have just simple objectives when visiting an OTA; they just want to see the destinations, departure and arrival times and dates. The program will load many different flights, offering the filter function to choose cheapest flights or earliest flights. You can either filter by business class (C class) or Economy class (Y class), or even you can filter search just for Vietnam Airlines if you have a Vietnam Airlines' membership card. It is extremely convenient to customers. We also have a Call Center for customers to call if they meet any problem.

Airlines do not have a good call center culture as stingy; they will just have one customer service hotline in just one country, despite operating in many countries. For example, India. They only provide 1 telephone number, and when customers around the world dial to this number, they will encounter language issues, as some staff can response to the customers' language, whereas other cannot and may result in miscommunications and drop in customer service efficiency. And we serve only the local market (Vietnam), then our staff will converse in Vietnamese to response to their queries.

Thai Binh: Are there many OTAs?

Respondent 9: There are not many OTAs in Vietnam because this model requires high expenditure and does not gain profit. Here we have Gotadi, VNtrip, Atadi; foreign OTAs are stronger such as Ctrip, Traveloka, Agoda and Booking.com.

Thai Binh: How about Skyscanner?

Respondent 9: Skyscanner is one type of OTA, but they are more toward search engine. They collect all OTAs and allow customers to search. Regarding hotels, there are professional services such as Expedia, Booking.com, Agoda; and we try to co-operate with them to connect flights and hotel services to sell on our website. For example,

each hotel OTA has in hand 10,000 rooms with different prices. Thus, we should program a software to screen the cheapest rooms to offer to customers. If you book from Booking.com; today you see this hotel offers the cheapest rates, but tomorrow you will see their rates are higher than the offer from Expedia. For us, we can handle 100 rooms of each hotel. If we cannot sell off all the rooms by the end of the day, we can reduce prices in order to sell quicker.

Thai Binh: So, if I want to book flight to Hanoi, can I book via Gotadi, and need not go through Vietnam Airlines?

Respondent 9: You can use Gotadi. You don't need to check Vietnam Airlines' website because you can only see Vietnam Airlines' flights. At Gotadi, we display 10 airlines for your selection. Vietnam Airlines may offer you 5 million VND (Vietnam Dong) while VietJet offers 2 million VND, Jetstar Pacific 3 million VND. You can screen through all airlines for the cheapest prices. If VietJet's bookings are full, Jetstar Pacific may offer you only 1 million VND, but the next day VietJet may offer you 1 million VND as well. As you know, airlines will increase prices if their flights are nearly fully booked.

Thai Binh: Does Jetstar Pacific delay?

Respondent 9: Every airline delays. Airlines that operate many flights per day will have more competitive advantage; they will transfer you to the next flight. If the airline only operates 1 flight per day, you have to wait until the next day. For example, there is an airline that operates only 1 flight per week to Japan, in case of the delay, you have to wait until next week. So, having lesser operating flights will be a much disadvantage. In the case that K6 possesses only a few aircraft, if one of its aircraft breaks down, we can estimate that 20% of its fleet has broken down. Vietnam Airlines has 100 aircraft, if one is broken down then the proportion is only 1%. Then, the affect to Vietnam Airlines is very minimal.

Another example. A ticket selling through our OTA system is priced at 2 million VND, I will include a service fee of 50,000 dong. All information including fares, service fee and tax are displayed on the screen. If you book with a TA, they may add 1 million VND for a service fee, especially when they can get low fare tickets. A third example. Normally, a ticket costs 3 million VND. If the agent can hunt a low fare of 1.5 million VND, they may add 1 million VND to the service fee, and you have to pay 2.5 million VND in total. When you call an agent to book for the 10 a.m. flight, however, they may not tell you the 10:30 a.m. flight is cheaper. When you open the OTA platform, you can check 10 flights with little difference in prices and the service fee is very low.

Corporate customers now tend to move towards OTA. How do we do for them? We provide them the software, including the report function. We can permit the limit of 1 billion VND for the corporate customers to book on our OTA system through the software installed ON their PCs. Their Finance department can follow up on the booking status of other departments at an instant. Coca Cola mentioned they will know the purchase prices of the tickets after receiving the ticket claims from their 10 offices in Vietnam after 2 months. Therefore, the staff cannot cheat the company by marking up of 1-2 million VND for a ticket. If any corporation uses our OTA system, they can reduce their business travel cost by 30%. however, the top management of the corporates will like it, not the staff. So, we should target to the right corporates, especially foreign investment companies. OTA is now the new trend and used by LCCs. Jetstar Pacific has increased their revenues by 1300% within the first 8 months last year.

For OTA, we create an efficient, smooth running system, compared to a cold call job. You cannot employ so many employees to do 3,000 calls daily selling to customers. Having many employees means higher salary and office rental costs. And, as a matter of fact, an employee can do a maximum of 40 quality calls a day. However, IT is so efficient these days; we only need to an efficient key server to connect with our software, then to distribute to other online markets. Do you know who are the online markets? Online markets are the e-payment platforms such as MoMo, BankPlus, VTC Pay, Zalo Pay, etc. MoMo has a contract with us to sell tickets on their platform. Customers just need to open MoMo to make payment.

Also, Gotadi is connected the banks. Every bank now has a mobile application to accommodate its employees and customers to do e-payments. They design an air ticket purchase function within the app, and after the customers have selected their ticket, just a click to pay and payment will be automatically deducted from their accounts. We define these partners as the markets; being a distributor, we need to find these markets. MoMo is a very strong e-payment company which connects to hundreds of banks, and they can sell over 100 tickets to us daily. We are going to co-operate with Grab and PayPlus soon. PayPlus allows customer to book tickets and choose the "Cash payment" option. Within 5 minutes after clicking the purchase button, a customer representative from Viettel (investor of PayPlus) will come to collect payment at the customer's home. Viettel has deployed ground staff on the streets in every area to provide super-fast and efficient service. When the staff receive payment at your home, he will press OK, and the ticket will be automatically issued on your smart phone.

The trend now is that people are visiting the shopping malls at lesser frequencies; they are shopping online. Sendo, an e-commerce website, sells thousands of items including foods and meals. Even Grab now has expanded to Grab Food service to deliver food to customers. You can select various kind of food, prices and restaurant, click and a courier will bring the meals to you. Also, you don't need to pay anything to the the courier as you have paid on the system. Grab only offer food services within your resident area. All these services are very interesting, I sell over 1,000 air tickets per day on Sendo and Tiki e-commerce websites. They are willing to cover the expense for customers. For example, I sell a ticket for 2 million VND, but they re-sell to the customers at only 1.5 million Dong. They cover the expense of 500 thousand VND for customers, that's why they attract lots of customers. If you buy from VietJet at a price of 2.1 million VND, you can purchase at 1.5 million VND through our OTA or Sendo websites. So why should you buy directly from VietJet?

The reason why they cover the customer's expense is because they are now opening a campaign to extend the market scale, they need a to build an enormous customer database. When you purchase an air ticket, you have to declare your personal information. Only the air ticket can require customers to declare their information, and no one to be willing to declare their personal data if you sell them a cake. The customer will insult you and will never buy from you. A customer can benefit up to 20% of the value of the air ticket. For example, you buy the air ticket with us for 10 million VND; you get a profit of 2 million VND while you have to pay fully 10 million VND to VietJet.

Thai Binh: So, is that any difference given by the airlines or by the OTA, or Sendo to benefit the customers?

Respondent 9: It's either from the OTA or Sendo. They accept the losses to gain customers and market share. This derives from their marketing budget. Instead of using 10 billion VND to spend on advertising, they use this amount to give to customers. In time to come, TA will be gone in the future and LCCs are following OTA and e-commerce who support airlines. LCC does not give us any penny or commission, we have to mark up by ourselves. For the travel agents, if you don't give them commission, they will not sell for you because they are bearing cost for employees to sell; whereas OTA can approach to every house, customers can buy even at midnight or at 1a.m.; how can you call up an agent to buy a ticket at 1 a.m.? There are no staff service to service you. TAs limit their sales when they can only sell 10 tickets per day while OTA can sell even 1,000 tickets per day.

Thai Binh: So, TA will be phased out gradually?

Respondent 9: Gradually. If many online models are developed, TA model will be obsolete and disappear. However, current traditional travel agents still provide their services to corporate customers, the States, tours and remote areas. People in remote areas are not familiar with e-commerce. Firstly, tour companies are still not able to work with OTA and will need to keep going through TA. Secondly, we could not cover the whole market right now.

I am sharing with you my new plan. I am co-operating with a partner who connects to 1,700 enterprises. Each enterprise consists of up to 90,000 employees who mostly are Taiwanese and foreigners. If I am successful this partnership, I can approach millions of customers. If you are an TA, you cannot employ so many employees to approach these 1,700 companies, and more importantly you cannot enter the Economic zone in order to meet them. You have to work through the company that manage the economic zone to get 10 million customers and prevent other competitors from approaching them. Local OTA is very essential for a local market; we developed Vietnamese language to serve all Vietnamese customer segments and employ Vietnamese staff to response to the questions. If you create your service in English or Japanese, who will buy from you in the Vietnamese market?

As from my research, the new trend is that, even major foreign OTAs such as Agoda and Traveloka, when entering Vietnam, they must acquire a Vietnamese partner in order for them to gain a foothold of the Vietnamese market. You cannot bring a Chinese platform to work in Vietnam, for example if Ctrip wants to enter Vietnam, there should have CTrip Vietnam. Anyway, OTAs in Vietnam are open to sell tickets to foreign OTAs or to do co-operation partnerships. Language is very important; we cannot force all Vietnamese people to learn English just to buy tickets in English from Traveloka platform, which is in English language. The next business model will be inclined towards the online model. 30-40% of VietJet's sale revenues are generated from online portal and might increase to 60% in the future.

Thai Binh: Will the commission of 9% reserved for travel agents decrease?

Respondent 9: The commission had already dropped to a very minimal commission rate. LCCs mainly sells tickets through their websites and OTA, and only use travel agents to sell to customer segments that they cannot sell directly.

Thai Binh: Previously, travel agents select airlines to support, so how is the situation now?

Respondent 9: Traditional travel agents still select airlines to support. They will sell tickets for airlines whom they have acquaintance to. Traditional travel agents serve VIP customers, especially big bosses who do not want to use the software; they have lots of money and they do not want to purchase by themselves. They just call the travel agents to order the convenient flight time and good seats and TA has to manage to secure seats, even to the last resort of bribing airlines to gain priority; meaning to push out other customer bookings to secure their seats.

The VIP customers do not need the low-ticket price, they don't mind the price. For OTA, it is computerized; it cannot kick you out, it just sells tickets till the booking is full. Then, TA still survives thanks to those VIP customers, especially with State-owned companies. However, those people will have a tendency to be familiar with working smart phones. When you are so busy, you may not notice, but when you get familiar with it, you will become expert in a short time. Now there are digital banking systems that allow you to categorize your money within a bank account. They provide a savings category for you to do savings, and you can use the categorized saving amount to travel, to purchase food, to eat out, etc. Also, you do not need to tally your accounts each month. This e-wallet will automatically categorize for you when money is coming to your account. They allow you to spend within the categorized amount only, then you need to consider your daily expenditure for the sake of the future savings. However, this digital banking partner does not sell tickets well for me.

The reason is that, their target customers are middle class do not need low tickets while our key customers are young travelers searching for low tickets. Therefore, it is important to partner with the right markets in order to target to the right consumers. If you connect with the golf club, the targets are high net worth individuals (HNWI), then you need to think of other ways. Previously, you need to come to meet them personally or to send emails. Now the way of marketing has changed. Nobody reads printed stuff anymore. You should take advantage e-commerce and direct e-mails. How to draft an attractive email? The email should contain a special content, for example, Derry Air only offers special discounts for Vimo's customers in this month. So only customers of Vimo can get special offer in this month and the offer for next month will be for other customers. Therefore, customers of Vimo feel proud because the offer is reserved only for them, so they will read. No one would be interested if the offer's content is too generic. It will be no meaning if the offer is for everyone then, there is no need for Vimo to send such promotional emails to the customers. For example, Derry Air can co-operate with VinPearl to offer VinPearl's residents to travel with Derry Air at a special price of 2 million VND. Vinpearl's residents will feel proud to take this exclusive offer. This kind of offer will not be largely published and makes it easy for airlines to reduce prices, and that does not affect much to the market.

OTA has customer database, whereas TA hardly has any customer database, as all their jobs are done manually. If the responsible staff quitted the company, the company will be in trouble, because each staff will record their customer base in their own notebook and sell to their own customers. Even if he or she can sell to 100 customers, the staff can report to the agent that the number of customers is 10.

Thai Binh: Will OTA process data after collecting?

Respondent 9: Yes, we do. We categorize by customer demands; the kind of luggage the customers buy, the kind of prices customers will pay, ages and which the hotel categories the customers choose for their holiday or business trip. If customers prefer low cost, we only offer them 3-star hotels whereas customers flying via C class will be offered 5-star hotels. For example, if the customer who stays at 5-star hotel in Europe, we won't sell them tickets from Derry Air; only C-class tickets from Vietnam Airlines. We will omit this customer because he or she is not our target. The customer who can spend USD1,000 per day for accommodation, meaning that he or she has the spending power; we won't sell low cost ticket to him. We have to research our right target customer segments, then our software will be programmed accordingly to match all services, including air tickets and hotels together. That, in turn, will help customers to get all services at one place. They will not want to spend so much time searching for air tickets on one website, and then to another website for hotels separately.

Thai Binh: Do you co-operate with any insurance partners?

Respondent 9: Yes, we do. I have connections with them, and they are looking to co-operate with us. Local insurance providers are stronger than international insurance providers because they have the local knowledge.

Thai Binh: You know, Derry Air co-operates with Bao Minh Insurance Corporation to sell insurance services to Vietnamese customers.

Respondent 9: That is correct. If you do not have a local insurance partner in this market, then where can your customers go claim their insurance? You cannot fly to the US just to claim USD 200 if you buy insurance from an US insurance company.

The rule for the co-operation is to offer the convenience to customers, which is the first element to serve customers. As an agent, you should try to make your customers feel at ease and take advantage of the marketing fund from your partners. For example, we sell the air tickets, but our partner spends 100 billion VND to cover the expense for customers, as above-mentioned. We just follow their strategy and rely on their marketing funds to sell tickets. We cannot do by ourselves because we lack capital. Our capital was 50 billion VND at the establishment and has been pushed up to 100 billion VND, while Sendo can spend 100 billion VND just on advertising. We had spent 65 billion VND within the last 5 years while they spend 100 billion VND within a few months.

So, you may ask; why do we rely on their funds to develop? You need to use the partner's strengths, but you also should have a unique product or service to attract them to co-operate with you, so that they also think that they need such a unique product or service to attract their customers. They need a good product on their webpage to draw the attention from customers and we are their selection. Their responsibility is to draw the customers to their page. For example, when you open a supermarket, you should do whatever to promote it and to get your customers to patronize. If the parent company closes down, the subsidiary company will also close down. Thus, the parent company has the duty to do advertisement campaigns to draw the customer's attention. So, if this e-commerce website cannot draw customers, we cannot sell. If I connect with many websites that do not have customers, meaning that the markets do not have buyers, so how can I sell my tickets? For example, Paragon commercial center does not have customers; even the proprietor leases it with the low rates but there is no tenant, because they are unable to attract any customers. So, don't choose the weak markets to co-operate, you should choose the renowned markets. Firstly, my duty is to choose the good markets to connect to them; secondly, we can rely on their marketing funds; and thirdly how to make ourselves stand out in the market?

There are many airlines, why should they choose Derry Air? So, we need to show our unique selling points (USP) in order to be selected as their partner. There are many ways to be selected. The traditional way is to get the relation and bribe them with some money in order to get the partnership. The second way is to make our product user friendly and attractive to many customers, then they will co-operate with us as their partner. For example, everyone likes to buy Adidas apparel; not many people like An Phuoc apparel because of the low quality. Even if you can give the partner money to get a prominent retail positioning place at their marketplace, they will not agree if your product is not attractive. Also, you can only keep giving them money if you can sell at their place. If you cannot sell, it is in avail. So, now the sales concept for airlines has had changed a lot; you cannot apply K6's sales model here because it is not suitable.

Thai Binh: I have not updated Cambodia Angkor Air (K6) situation for a long time. How is K6 sales model at the moment?

Respondent 9: Firstly, K6 sells through BSP (Billing and Settlement Plan), secondly, through ETAT agents which are now no longer being used. Previously, ETAT agents used Abacus, now we no longer use Abacus, therefore, we no longer use ETAT.

We created a web portal instead to connect directly to K6's ticket reservation system. The agents now are required to top up a certain amount of money and this amount will be gradually deducted whenever tickets are reserved and issued. When the amount is almost depleted, the agents have to top up more to reserve the account. It means that K6 now collects money in advanced while previously, they collect payment once per month. The third way is to sell online through their website. So, when you sell online through website, this means that you will compete with traditional agents. Therefore, you have to define which method you want to sell. Selling online through your website is similar to selling through OTA. So, if you prefer to sell online, then OTA is more suitable to co-operate.

Previously, we think that TA will cover the market 100%, now we should omit this concept. When you define that you can only serve 30% of VIP customers, then you can delegate 30% of your sales to TA. It is inadvisable to set a high target for TA or give them so much hope then they think the airline will solely rely on them.

When you open the online sales, it is certain that customers will switch to online purchase, then the TA will complain that you are the person who get their customers. Therefore, you have to define with them at the beginning that they only take care of 30% of VIP customers, they should not care of other sales channel because they will be dead in the future.

So how should we support the TA to sell? The prices on the website has to be priced higher than the price offered to TA, in order to support them to get customers. In other words, you are killing your own customers who purchase online at a higher price, while in reality, customers who buy online expect to price to be cheaper! This concept was used previously to support the traditional travel agents. Actually, customers who are buying from the agents are lazy and considered as VIP customers, so they should be charged higher. Also, in the past, consumers used to think that they should buy from agents to have a lower rate than buying online. Actually, that concept was totally wrong because of the personal relationship between people that leads to zero orientation.

When the company does not set the orientation, it will cause difficulty to sales staff. Upon having the complaint from the agents, the sales staff will adjust prices to leverage agents up, instead of being happy to see them getting down. This is due to internal conflict. This conflict will be solved if you have defined at the beginning with the agents to let them to sell 30% of the market. This is the trend, which no one can deny.

In Japan, there is almost no air ticket agents in the market, except the tour agents selling air ticket and tour in the same package. We can offer to the tour agent at a cheaper price as compared to the market price, but the agent has to hide the air ticket price within their tour price. For example, the air ticket costs USD 500, the airline can sell to the tour agent USD 400, then the tour agent ought to hide the air ticket price and is not allowed to advertise the air ticket price of USD 400. The tour agent has to advertise their package tour including air ticket, hotel and tour of USD 700. The aim is not to let other airlines to know and to prevent them to compete with us.

In Japan, if customers want to buy air tickets, they can buy online; but for a tour package, it is more complicated because it adheres with hotels and tours. If the airlines can offer this kind of service, then the offline tour agents are going to close down. The tour has many options and quite complicated in organizing, then airlines still not offer these functions online for customers to choose. At present, airlines can only offer a package tour online organized for certain dates, customers can base on the fixed program and register. Airlines cannot offer tours to customers who want to customize their tour. If 1 million customers formulate 1 million tour programs, there is no way you can manage the personnel to serve them and even the system cannot run multiple coefficient tour programs.

Thai Binh: Now there is Option Town service, do you do the similar service?

Respondent 9: This service is dead. Previously, airlines are weak at this, nowadays airlines can do that by themselves, then they do not need Option Town.

Airlines can connect with OTA these functions and there is no room for Option Town. Jetstar Pacific is selling all of these services in their ancillary package. Airlines now are very hungry and getting losses, then they have to manage all kind of services to gain profits. Airlines see that duty-free products are bringing profit, they start to sell duty-free products in-flight. In general, airlines will sell all types of products that are profitable because the passenger transportation service is not that profitable.

The rule in the airline industry is the passenger carriage service will incur losses whereas the ancillary products will bring in profits. For example, Vietnam Airlines is lost with passenger carriage, but its subsidiary companies, such as ground service company, line maintenance company, cargo company are extremely profitable. Therefore, the total will be profitable.

The maximum profitable rate for the airline industry is 1% per year, including all services. Vietnam Airlines belongs to the Ministry of Transport; when they incur losses, they are waived of taxes. When they are waived of taxes, they will gain profit. For example, there are provinces in Vietnam which cannot develop and attract investors if there is no air routes to there. Then for the total 20 routes to develop, Vietnam Airlines will open 15 routes that are profitable, and 5 routes are compensated for the losses by the government. Actually, they will de-tax for these five routes to compensate for the losses. This is the political duty, then the national airline must never die. In fact, airlines bring values to the State 10 times than their own profits. For example, Vietnam Airlines transports a customer who bring USD 3,000 to Vietnam, this person only spends USD 500 on the airline, and the rest of USD 2,500 spent for restaurants and hotels; which helps to enhance the economy of the country. If there are no airlines, the country is dead. If the State can define this fact and compensate for airlines, then the economy is very good because airlines bring profits.

For example, China has just released a new policy. If an airline opens a new route, the government will sponsor them 30% of cost for the first two years, meaning that the airline will get USD 15,000 for each flight. The fact is that the airlines will lose USD 15,000 for each flight when they sell air tickets at very low prices to get customers, but the city will gain USD 50,000 from the customers' expenditure; then the city can compensate for the airline USD 15,000. The city collects taxes from tourism services and should share back to airlines to ensure their survival. Customers do not care about the cost of the airline when they have to operate a flight, they are only concerned about the air ticket price. Then airlines cannot sell higher price than their competitors. This policy is still in early stages, and not yet instill in other ASEAN countries yet.

Regarding the staff, in my opinion, I will pay the minimum wages to my staff but also, I do not limit the upper income. My duty is to guarantee the staff's living standard and not to limit their rewards. If they work hard and generate a huge revenue for the company, they can earn more income. Of course, when my staff can earn money, I can earn money too because the owner of the company has to reward me. If the staff is not fed well, how can

they go to sell for me? They should have enough food and dress professionally well in order to have be healthy and portray a professional appearance to go out to meet clients.

They should have enough money to pay tuition for their children. I can guarantee their children to study at normal schools, if they want to send their children to international schools, they have to manage by themselves by selling more. If they work for me and do not gain enough money for the tuition, nobody cares of their children at home; then how can they sell for me? Then they do not have time to go out to sell, they have to think of doing other things to earn money. So, this means that you have to pay the employees in accordance to their efforts, and they will bring you the highest efficiency. Secondly, regards to recruitment of talent, many people try to bargain every cent. If you recruit a good employee for 1 million VND, he/she will bring you 10 million VND. If you recruit an incapable employee, he or she will destroy you up 10 times more than his or her salary. When he or she makes a grave mistake, you have to compensate to your customers. Therefore, in my opinion, recruiting of talent is an extremely important factor.

Thai Binh: Derry Air told me that they have to recruit best people in order to achieve the best results.

Respondent 9: High salary is OK, because salary cannot compare to the efficiency. For example, you are Senior Executive Level and get USD 50,000 per month then you can generate USD 50 million. If the owner reduces USD 10K from your salary, you also can reduce USD 10 million from the revenues and the owner loses USD 10 million. Then they save USD 10,000 and lose USD 10 million. For such employees, you have to pay respectively, otherwise they will not work because the salary is not much compared to the revenues they can generate. The laborers who work manually are different because they are limited with the manpower, even you pay them 100 million VND, they are still incapable of doing more than that. You need to pay highly to the talents who work strategically.

I mention about OTA because their revenues are unlimited. If you can provide a good product, your revenue is unlimited. If you develop agents, you have to recruit so many agents. According to previous researches, people often go around 500 meters from their homes to do shopping. For OTA, you only need to set up one agent in one city and one employee for one small office. Previously, agents have to spend a huge cost to open a large office and employ many staff, and they hope to gain a lot from customers to cover their investment.

Thai Binh: What are the reasons low-cost airlines established by major airlines are not successful as successful independent low-cost airlines?

Respondent 9: Firstly, because their mentality is different. Secondly, these two airlines still want to connect with each other. Full cost airlines use different distribution system while LCC does not use GDS for GDS charges at exorbitantly high prices. For example, Cambodia Angkor Air sells one ticket to fly domestically at the price of USD10. They have to pay to Abacus USD 4, which means 40% of the price goes to the GDS service provider. LCC uses their own system and do not lose any cent. OTA does not charge airlines any cent, both parties sell independently; that's why OTA has its strengths. TA still uses GDS and airlines have to pay USD4-5 to GDS for each ticket per flight.

Let me give you another example. Abacus gets USD5, they have to share USD3 to TA. There are three to five GDSs in the market such as Abacus, GTT, Amadeus, etc. If the GDS does not share to TA, TA will switch to other GDS to book tickets to get the shares. For these major airlines, they want to diversify to reach all types of customers. In a full serviced airline, you cannot ask all customers whether they want to eat or not, and it is hard for people to watch other people eating, then they open an LCC for the budget conscious customers. So, the concept of the leader is mixed, affected by the consumption behaviour. I am not sure why they are less successful, maybe it is because of their human resources or their system has not been changed yet. Independent LCC as Derry Air stays focused and expands their scale and enhances their branding. No one knows Vanilla Air from ANA because they are not focused to push the Vanilla brand in our market. When you do not have adequate branding, no one would buy from you.

Thai Binh: Similarly, if we compare Jetstar with VietJet, very few people know Jetstar Pacific.

Respondent 9: Jetstar Pacific is a state-owned company and they have to carry a very large mechanism and it cannot decide quickly, but VietJet, as an LCC, they can decide very quickly. VietJet can do lobby to open routes while Jetstar cannot do that because it adheres with Vietnam Airlines and cannot be proactive. Jetstar uses a software managed by its global company, in which we cannot adjust some functions to accommodate agents because it is not allowed to adjust; while VietJet is more flexible to adjust for agents. It provides convenience for agents and customers to book. Jetstar Global is big but Jetstar Vietnam meets difficulties in the Vietnamese market. Firstly, it depends on Vietnam Airlines and is limited in procurement under the management of Vietnam Airlines. An example is Mr.X, former Senior Executive Level of Jetstar (name is hidden), was put in jail because he made

a mistake in hedging. So, you will only be arrested if you work for the State; if you work for a private airline, you are just dismissed because of your weak competence.

Thai Binh: Hedging is unpredictable, how come he was put in jail?

Respondent 9: Yes, he was arrested because the airline belongs to the State. He was accused of corruption practices. So, when working for the government, if you are successful then the company gains profit. If you fail, you are put in jail.

As for VietJet, the owner, who is the CEO, makes decisions herself and she will be responsible for the losses because that is her money. So, how can she go to jail if she makes a mistake in hedging? In this case, VietJet has more advantage than Jetstar Pacific because they can make decision by themselves. If the CEO of Jetstar Pacific is successful with the hedging, he only gets the applause while in the same case, the CEO of VietJet will gain USD10 million. We can encounter such risks while working for a state-owned company as the salary is not on par with the private sector. However, many types of employees are accepted in the government sector, their qualification and operational skills might not be that great, but they are good at dealing with relations and lobbying to their bosses. If they are leveraged by the airlines' leaders, then the company cannot develop strongly.

Thai Binh: About shareholders, do they touch to the operation of the airlines in Vietnam?

Respondent 9: For VietJet, it is yes, because the CEO is also the shareholder and she makes all decisions herself. About Jetstar Pacific, the shareholder is the State and they do not want to interfere.

The Minister of Finance only knows whether the airline gets profit or not; he cannot know how the airline is operated. The Ministry of Transport cannot know either. Those people will interfere only, when you acquire new aircraft, but the money to acquire aircraft is from the State, not from theirs. At the most, they will propose you to share some amount of money from acquiring the aircraft. That's it. They only interfere on the share's aspect, not other aspects. They don't help you about the policy, if they help, they will give you some priority for slots from time to time. The rest is your decision.

The problem is not about good or bad aircraft. The problem is how much they get. If the aircraft is bad but they can get much money they still approve, vice versa, if they don't get anything they don't care even if the aircraft is good. They will suspect if the aircraft is good or not, it might be good today but not tomorrow and they will bear the responsibility, so why should they approve? If they get USD 1 million, they will sign immediately. For VietJet, the owner can decide and hold responsibility. She will not buy bad aircraft because the bad decision will affect her business, not to other people. In regard to the State, people still do the bad things, within 10 decisions they will do 5 good decisions and 5 bad decisions, and they can corrupt from 5 bad decisions.

A good employee will quit the company if he or she is not treated well. Yet, the majority of bad employees survive. The bad employees rise fast because they are good at flattering the bosses, they have to corrupt and give money to the boss. At the state-owned companies, the more profits you gain, the more you have to do bad things leading to the losses and affect the company. For example, if Derry Air pays you USD50,000 per month, then you only need to focus to work and don't need to corrupt anything because you can enjoy your life with that amount. You even don't want to get from the agents because you have more than enough. If they just pay you USD3,000; you might get the favors from the agents then being affected, when you receive their favors, you will have to give them back a favour, you cannot escape. In summary, salary is important.

Thai Binh: How does Open skies policy affect airlines in ASEAN?

Respondent 9: With Open skies, stronger airlines will take advantage while weaker airlines are going to be eliminated because this is a very free yet competitive industry.

Thai Binh: The Senior Executive Level of NokScoot Airlines told me that even though you have the Open skies, but the most important point is the slot.

Respondent 9: That is correct. Stronger airlines that have good relations will get good slots. Weak airlines will lose out and be eliminated, because larger airlines, having built strong brandings already, compete with them. For example, Vietnam Airlines is very strong in the domestic market; if Derry Air enters the Vietnam market and fly Hanoi-Saigon route, this airline will compete with Vietnam Airlines directly. However, Vietnam Airlines is a very strong airline. They have good products and good slots; therefore, they will win over the foreign airlines. But in Cambodia, the foreign airlines entering the market will eliminate the Cambodian airlines. If Vietnam Airlines were to open a route to fly from Cambodia to China, Cambodian airlines will be eliminated.

Thai Binh: For example, if Derry Air enters Vietnam and Vietnam Airlines can prevent them to get good slots.

Respondent 9: Yes, then Derry Air should have local people to do lobbying against Vietnam Airlines. In fact, all are lobbying here. Actually, Vietnam Airlines has very little say about this. VietJet can develop because it is private, they do lobby well and will overtake Vietnam Airlines market share gradually. The key issue here is the relations. VietJet is also a domestic airline; therefore, Vietnam Airlines cannot dominate them as both airlines are Vietnamese airlines.

The foreign airlines will be at a disadvantage to compete in Vietnam because of national pride; the government will protect Vietnamese airlines (If the domestic airlines die, the Prime Minister will intervene and get the Civil Aviation Administration of Vietnam (CAAV) to protect the domestic airlines. Although VietJet is a private airline, it is also a Vietnamese airline and it gets the advantage, too. It cannot be killed by Vietnam Airlines because the Vietnamese people will sue. The Prime Minister has to ensure that foreign airlines will not eliminate Vietnam Airlines, as this is the national airline. However, domestic airline like VietJet can challenge Vietnam Airlines for market share since both are from Vietnam.

Regarding Cambodia, currently, only Cambodian airlines and Chinese airlines can fly to these two countries. If they allow Thailand's airlines to fly this route, Cambodia Angkor Air will be eliminated. Cambodia Angkor Air does not have enough aircraft to compete with them. If TG (Thai Airways) is allowed to fly from Siem Reap to China, then, K6 (Cambodia Angkor Air) cannot sell chartered flights. Thai Airways provides better aircraft, service and cheaper pricing as compared to Cambodia Angkor Air.

If an airline has many aircraft, then they will have lower cost. This is because one technician can do maintenance 20 aircraft, while Cambodia Angkor Air only have 6 aircraft, then the cost for technicians is getting higher. There are 10 technicians and each technician cares for one part such as engine or wing. One technician cannot oversee all aspects of an aircraft. Therefore, there should be 10 technicians. If you were to divide by 20 aircraft, the cost will be low. However, if you divide by 6, the cost will be high.

If Open skies is applied in Cambodia, Cambodia will be at a big disadvantage because the government does not protect the national airline. Whichever airlines pays more for the slots, they get priority. Thus, you see an influx of Chinese airlines dominating the Cambodian airline market share. In the China's viewpoint, Chinese protect Chinese airlines but at the Cambodia's point, the government does not protect Cambodia Angkor Air. Chinese airlines dominate all good slots in Cambodia, whereas Cambodia Angkor Air is unable to get a good slot in China. Therefore, I agree with Senior Executive Level of NokScoot. However, there is no meaning in terms of getting slots in a country as Cambodia because the government does not protect its national airline. In some countries such as Thailand, Vietnam and China, the government protects its airlines. Open Skies policy does not cover the protection, but the governments can do themselves.

There is another advantage. For example, Vietnam Airlines has 100 flights to fly domestically and if they want to compete with you, they will swap the flights within their 100 slots while you only get 1 slot to fly in and you cannot be flexible. If they compete with Thailand, and both airlines are issued the slots for midnight, Vietnam Airlines will use the good domestic slot to fly to Thailand and move the domestic flight to another slot. And if Thai airlines only get a slot for midnight, this is a big disadvantage because Vietnam Airlines already flies at daytime and customer prefer to fly at daytime.

Thai Binh: Who will approve the slots? Is it the CAAV?

Respondent 9: There are two bodies to approve the slots, that are the airport and the CAAV. The airport has to manage the operational time to arrange the slots and the CAAV will issue the license, but they will refer to the airport for the schedule. The airport can refuse the proposed timing because they are overloaded. However, they can insert the slot in between other two slots which has a length of 10 minutes. In the world, the airport can arrange one flight every two minute; but in Vietnam we can only arrange one flight every 10 minute.

Thai Binh: In case one airline is delayed and late, so how can it fly?

Respondent 9: It will be pushed at the end of the line. If you are in China and you fly late, you will lose your slot. They give priority to the punctual airlines. Sometimes, you are late only 10 minutes, but you have to wait until one hour later to fly or have to queue at the end line. If you get very good relations, you can be inserted in between. Vietnam Airlines has a major advantage because they have so many slots. If they see that any flight is delayed, they will push up a priority flight to replace. No one cannot deny them because the slots are theirs. For those countries having less flight operations, they must provide slots to airlines whenever the demand arises.

In Cambodia, its airport is empty, therefore they issue slots to Chinese airlines, but if you are in China, it's very difficult to apply a slot. In China, the government can cut slots of the airlines who operate inefficiently in that route and give those slots to other airlines that they are more efficient. In other countries, the state cannot interfere with the slots of the airlines. Airlines must manage their flights within their slots. In general, stronger countries have more advantages than weaker countries in the aviation industry.

In stronger countries, all the slots are reserved; then the Open skies has no meaning to them. Open skies only benefit strong countries with strong airlines. When strong airlines entering your country, they bring along strong branding and sell tickets at your market rate. For example, you fly to Thailand and Thailand is a strong country with its strategic hubs, how can you compete with the Thai airlines whereas you are so small; who will buy your tickets? TG (Thai Airways) can benefit the Open skies in Cambodia because they have strong branding; if they sell a ticket at the same price as yours, you lose. Whenever they have a new regulation, that regulation brings profit to the big players only. For example, between USA and Vietnam, the regulation will benefit USA.

Thai Binh: And how about the small countries; when they do not agree with all the clauses of the policy?

Respondent 9: They will have to compromise. For example, the bigger countries can offer sponsorship to the smaller countries to build an airport. In turn, smaller countries must return the favour; they can recruit labourers of the smaller countries, which means that the labourers can bring back income to the countries. Big countries will request smaller countries to sign off, and after getting the signature they will cut the offer. What is an ODA? ODA is a sponsorship to deal for conditions. Bigger countries can say that I can help you build an airport; you need to give me back some favours; this is the form of bribery. If your company builds the airport, you can earn USD 10 million, and you will need to return me something in kind; if you agree with this, I will approve the ODA project for you to implement.

There are many ways to give the shares to each other. This is the hidden co-operation in order to exchange the conditions of the government. It is easier to operate when you have so many legs, especially ODA will get the relationships with the government. For example, when you have USD 2 million and you cannot cover, you can cover it by a project, you need to establish a construction company and this company will be appointed for the project, not any other company. And you can appoint sub-contractors and that is your right. For example, if Japan is a country to give Vietnam an ODA project, Japan will appoint a company to be in charge of the project.

For example, Sumitomo company has the right to sign with your company as the sub-contractor. For state-owned companies, there will have ways to avoid the rule, for example, if a merchandise priced at USD 10, you can offer them USD 20 for the sales offer. When they sign for you the contract with the price USD 20, then USD 10 is for them. There are many different ways at high levels, even if you do the investigation, you cannot uncover anything. The last objective is always money because people have dealt with each other and connect to each other very tight. Open skies will bring advantage to strong countries with strong airlines. In the past, only the domestic airlines can fly domestically then Vietnam Airlines can develop, if TG (Thai Airways) was allowed to fly in Vietnam, Vietnam Airlines will be gone a long time ago because TG had more aircraft.

Thai Binh: Qatar flies from Phnom Penh to Saigon.

Respondent 9: This happened for a long time, but ticket sales are not very good.

Thai Binh: In fact, I prefer to buy ticket from Qatar to fly Phnom Penh to Saigon route.

Respondent 9: Correct. They cannot sell too expensive for this route, and this route caters for passengers from European countries. It is not important for them to sell this route; as a matter of fact. If they do not have many passengers flying from Europe, this route is worthless. They use the large aircraft with very high cost for the route Phnom Penh to Saigon which is very expensive. It would not be efficient to utilize the large aircraft; it takes long time to taxi but very little to fly in the sky.

Thai Binh: I understand they cater more to Europe passengers, but we can buy tickets from this segment and it is more comfortable with them than with K6 (Cambodia Angkor Air).

Respondent 9: Of course, if they don't have many passengers from Europe, they will cut off this route. They cannot increase the number of flights; if they increase to 10 flights, they will not be profitable. So, if there are 50 passengers flying from Europe, they can remain the route, otherwise they will cut. For example, if they sell a ticket for USD 100, they can get USD 10,000 when they have 100 passengers for this route while their cost is USD 30,000; if they keep flying, they will go bust. Their objective is just loading the passengers from Vietnam to Cambodia, and they are redundant of seats. They do not expect to earn too much with this route, which is not their key objective. I know they are bearing a very high cost for USD 40,000 each flight and they make a loss of USD

30,000; so why do they keep flying? Just the passengers from Europe will cover the cost for passengers of this route.

Thai Binh: So why they do not cut this route?

Respondent 9: They need to open this network, because with this route they can sell tickets from Europe. They fly just because of their branding and they can get the cheap fuel. You buy USD 150 a barrel in open market, but they buy only USD 20. In addition, you know that fuel cost 30% of the airline operational cost and for the Middle Eastern airlines, the fuel cost accounts only 10%. If your flight costs for USD 60,000 and their flight is USD 10,000 cheaper, you are not profitable.

When you fly long haul, the fuel cost will increase because when you fly longer you will stay less on the ground. If you fly one hour, the cost for the ground will be very high, for example USD 2,000. If you fly 10 hours, the cost for the ground is also USD 2,000; which means that the longer you fly, the cost for the ground is less. And the higher you fly; the cost of fuel increase up to 40% while their cost is only 10%. However, if you fly short haul, you will spend too much for the ground cost. For example, when you have a shophouse in front of the street and you open a coffee shop, you just sell the coffee and obviously another coffee shop owner cannot compare with you when he has to pay the rent for the location. You can sell USD 6 while he has to sell USD 20, he cannot make a profit. So, it is different because you have the advantage.

Thai Binh: Do you think airlines will invest on new aircraft in order to save cost?

Respondent 9: Nowadays, airlines will use newer aircraft more, because the old aircraft can be cheaper, but the maintenance will be very high. Derry Air uses the aircraft with a life span of 10 years only because the aircraft airworthiness during this time. Though the new aircraft is a little bit more expensive, they rarely break down. It is not as simple as thinking; you buy an old aircraft for USD 10, and you spend a maintenance cost of USD 20; which will be equal to the price of the new aircraft. It is not like that. When you have an old aircraft, you will have to fix it many times, leading to frequent flight cancellations or delays and that affects your image.

While another airline with the new aircraft, they can fly regularly, and customers prefer them because their aircraft is new, they feel safe, and this airline does not cancel flights. If you lease the aircraft, you can lease the new aircraft for USD 500,000 a month while other airline lease for USD 300,000 a month, they feel happier when they can save USD 200,000 but in the event of the problem, they have to spend at least USD 20,000 for repairs immediately. They will have to stop flying for one month. During this time, they lose opportunities to sell.

LCC always use the new aircraft, except for LCC in Africa which is not airworthy. Firstly, if you think you can save USD 200,000 by using the older aircraft, but if you need to fix the engine, it costs you USD 10 million for each time of fixing, then USD 200,000 is no meaningful. Secondly, you have to stop flying for one month which affects the airline image.

However, airlines are also analyzing if the aircraft with the lifespan of 5 years is still acceptable because total cost for the leasing and the maintenance is still cheaper than the brand-new aircraft. If you calculate like leasing an aircraft for USD 300,000 and maintenance cost for USD 100,000; in total the cost will be USD 400,000 which is still cheaper than the brand-new aircraft which costs for USD 500,000. When an aircraft encounter problem, you have to cancel the flights and compensate to the passengers; the cost might be higher than USD 100,000. But most importantly, the brand image will be tarnished and most of the airline managers do not think of that. In time to come, for each flight you will lose half of your passengers. Those people just calculate mechanically, and they do not get the concept of sales. They don't understand that sales are very difficult, you have to spend USD 10 million to do advertising in order to get customers, now because of cost cutting measures to save USD 1 million, you waste USD 10 million and lose passengers. They are unaware of the repercussions behind this.

Customers can be doubtful with your airline; they wonder you cancel their flight and they will lose their business contract which may be worth USD 10 million. This will result into them switching to other airlines despite higher fares. Regarding tourists, they can wait for 1 or 2 hours but you can only get cheap customers. However, customers travelling on a budget complain about your airline if you delay or cancel flights. When you delay or cancel their flights, they will not hesitate to complain about the airline and service. The rich customers might think differently; they know that when they buy cheaper tickets this means that they have to take a risk, then they cannot complain because it is their decision. But for passengers on a budget, they just only care of the cheap price and they don't know the reason why they get the cheap price. So, airlines need to educate customers, when they have some benefits, they must take risks.

Thai Binh: Do we need to advertise to business class customers?

Respondent 9: To business class customers, you don't need to do advertising; all they want is the service. But for economy class, you will need to do advertising as there is competition. Though airlines are competitors, they may co-operate to fix the pricing for business class tickets and customers will have no options.

Thai Binh: Airlines compete with each other, yet they still co-operate with each other?

Respondent 9: Correct. You remember when we had a price war with CZ (China Southern Airlines) to fly to Guangzhou, CZ has complained about our price, later they have to reduce their price to compete.

Thai Binh: Do airlines focus on marketing or human resources or must combine all factors to develop?

Respondent 9: For all airlines, operation is the most important; pilots and cabin crews are a must, and technicians must be qualified. For the sales and other departments, we just need the qualified people and don't need too many people. When the technology develops, the sales department should focus on making use of the technology for their sales. For marketing, we should use digital tools to advertise to customers. We have to do strategic and tactic marketing. Strategic marketing will enhance the brand to global scale, and tactic marketing will be used for each market.

So, when I work with agents, I understand what they need. We cannot only think of our airline but also need to think for the agents. Back to my OTA topic; in the past when agents sell tickets for Jetstar Pacific or VietJet, they collected a fee of 100,000 VND; now we also collect the same amount. So, it is the same if customers buy tickets from agents or OTA. OTA must have a call centre to solve the problem for customers, in order to reduce the queries for airlines. So, why shouldn't airlines offer us this fee? Airlines have to pay a 9% commission to agents, while to pay us they pay only 100,000 VND and we do not take any commission. And if airlines use the cheaper sales channel, they will be more efficient, if they use the high sales channel, they will bear high cost. However, if the airline does not give the agent commission, the agent will not sell ticket for them. For strategic marketing, you just need to follow the airline group's strategy, but for tactical marketing, you need to enhance the digital marketing strongly by connecting with OTA and E-commerce. You should reduce print advertising on flyers or magazine; no one reads printed stuff now. I never touched a printed newspaper for the past few years.

Why we need the printed newspapers is because we do not have Internet and have nothing to entertain the passengers. In the future, when we have the WiFi inflight, we no longer read the in-flight magazines. So, we can reduce the printing cost, just only the in-flight magazine, emergency flyer, exit door flyer, the rest is unnecessary. These will take time and cannot throw away right now. For example, Vietnam Airlines does not offer Wi-Fi, we just read the in-flight magazine for 10 times with a 10-hour flight. The trend now is digital marketing and we are reaching out directly to our business partners by email. We must create attractive content for the partners to send to their customers. For example, Tiki have 10,000 customers. we must a special offer to customers.

Thai Binh: For example, Derry Air now allows you to do automatic check-in and baggage dropping.

Respondent 9: Very good, and now we just scan our face for biometric immigration procedure.

Thai Binh: How about automatic dropping luggage, how can we do?

Respondent 9: I think there should still have the human factor to supervise the luggage dropping stage. Customers may cheat the automatic system by weighing the small suitcase and attach the tag to the overweight suitcase. Currently, you must lift your luggage to weigh and the check-in staff will attach the tag to your luggage, if your luggage is overweight you are required to pay the surcharge.

Thai Binh: Do you think in the future we just need a fingerprint, then ticket and boarding pass will be no longer used?

Respondent 9: In Japan, there is only one gate to do check-in, immigration and boarding. You just do the scanning of your identity card to the immigration then go through. The immigration officer has just one duty; that is to make sure your real face is in the same with the photo in your passport. The system will check the authenticity of the card and the human will check the face identity. If one of these two elements do not match, there will have a red alert and you will be arrested, you can't paste your photo on other people's card because all information inside the card will be displayed.

Thai Binh: Will airlines create differentiation to compete?

Respondent 9: Differentiation means you have to offer better services and better quality, not to be too strange and crazy. The differentiation must be positive and bring more convenience.

Thai Binh: For example, airlines offer the plug for mobile charging or Wi-Fi on flight.

Respondent 9: That is the upgrade of services and airlines will add elements into cost. You have to order a reasonable number of components in order to install on your aircraft and save cost at the same time. Or, you have to offer delicious meal, especially if you are an LCC, despite the low price but you have to guarantee the good quality. You cannot skimp on quality, otherwise the passengers will complain. You should understand such concept; you should give quality gift to your customers or should give nothing. If you give low quality gift, they will throw away because they will think that you disrespect them. For example, if someone gives you USD 100 for your birthday or wedding, it is acceptable; if they give you USD 5, you will feel insulted. Sometimes, people need the sentiment rather than material. If you cannot give the customers a valuable item, you should treat your customers well. In this way, customers will believe that you respect them, and at that time they do not think much about the value of the gift. When you treat people well, this is more valuable than the material. You can even pay lower salaries, but you treat your staff well, they will work for you. To some people, if you treat them well for 10 years, when you just hurt them with one word, all the 10 years of relationship building is thrown away. With exception of someone who is very calm may think over how well you treat them, most people will ignore.

The concept of spending much money sometimes is not better than the concept of how you spend money. This is the efficiency of low-cost airlines, meaning that spending less but more efficient. For example, you can give a small gift to a female customer telling her that she is one of 10 passengers who dresses the most beautifully in this flight, though it is not the fact but the customer just loves it; or to a male customer, telling him that he is one of the most polite passengers in this flight because you see him giving priority to other passengers, then everyone will try to dress well and be polite in your flights because they are happy. Customers feel proud to tell other people that only him get this gift because he is polite, and not everyone gets it. If you are able to lift up the value of people, you can save cost and even build a good rapport for your customers. This is more efficient than you just stand at one place and give gift to everyone passing by, which has no meaning and value. People all like to receive things, but if the gift is not valuable, they will throw away. Some airline managers just try to create some promotional gifts and distribute quickly to customers. There is a reason. They just order the gift valued 1 billion VND, but they can report 10 billion VND, and all the gifts are distributed, and no one will examine that. But if you build a house, and you corrupt the materials, in the event of problem you will be put in jail and cannot escape until 10 years. But for promotional gifts, you can get away with it. You can argue that you have distributed all and there is no proof. But, when you give gifts to your business partners, you are giving promotional discounts directly to their customers. Your partners will be happier because they can sell more tickets and get profit and they will not sign co-operations with other airlines.

Being a sales staff, he must understand his agents and what type of agents they are. The sales staff cannot report to you that he had met the agents and pushed the agents to sell; this has no meaning. The sales staff cannot only meet to invite the agents for a meal and then go back; he must identify a good agent, if an agent we work with is bad, or they do not know how to sell. He cannot tell the agent that this month you sell 10 billion VND, next month you must sell 11 billion VND. The agent does not know how to sell up to 11 billion VND. So, when you are a sales staff of an airline, you have to educate your agents about your products. For example, you can tell the agents about different prices of each flight, then the agents can advise their customers better. Customers might think that there is only one flight at 10 a.m., which is always full then the agents cannot sell to them. Therefore, agents can consult them about another flight at 7:00 pm and price is 50% cheaper than the 10 a.m. flight, then customers will think they can have big savings and agree to take the evening flight. Many sales staff do not know how to educate agents; therefore, agents cannot sell properly. The sales staff needs to understand the agent, the way the agent sells or what are their customer preferences. If he cannot understand his agent, he only delivers information. In this case, you do not need this sales staff, you can send an email directly to your agents. You don't need to employ such kind of employees because you just waste your money to pay his salary. If just to deliver the information, you can hire a Grab bike service to deliver the information for you, which is cheaper than paying the sales staff salary. This is also the waste of human resources and lack of training, which lead to inefficiency. If you spend money to train your employees, they can increase their work efficiency by tenfold.

Thai Binh: How do airlines reduce cost?

Respondent 9: There are many ways to reduce cost. Regarding techniques, there are hubs to gather aircraft. When you invest on the aircraft equipment, it is very expensive. You cannot open 10 places to do maintenance for your aircraft, because spare parts for aircraft must be enough. Sometimes the aircraft breaks the wings, sometimes it breaks the engine. For airlines, spare parts are located at the hubs. For example, airlines can replace the spare parts for their aircraft when they arrive to the hubs; or you have to partner with other airlines. In Japan, Vietnam Airlines partners with 5 other airlines to contribute spare part together. You may not use the spare part you contribute for a certain of time, but the other airline uses them. They return the same spare part right after that, so when your aircraft have problems you can have spare parts right away to replace. If you organize a maintenance company by yourself, it will cost you a huge capital, that's why airlines have to join together and contribute all kind of spare

parts. The maintenance companies are placed in many different hubs and it is better for you to join in hubs. Wherever your aircraft have a problem, you have spare part to replace quickly. You just contribute USD 5 million for every hub rather than to invest USD 100 million for one hub.

Secondly, airlines should contribute the spare parts for the same aircraft type. The alliance among airlines should have the same aircraft types, then you can save the cost. It has no meaning to co-operate when this airline uses Airbus and the other airline uses Boeing. Even though the engine costs USD 10 million, you will have to order it and place at the maintenance hub. Though the aircraft engine may operate for 10 years but it can shut down any time; once you have problem you have the available engine to replace right away, otherwise, it takes you one year to order the engine and you have to ground your aircraft for one year. You will not know which part of your aircraft will be break down and not all aircraft of all airlines will break down with the same spare part. For example, if you need to replace one screw and you should have the screw immediately in order to operate. Otherwise, your aircraft cannot be used, and you have to be grounded for 1 month waiting for the replaced screw, leading to the loss in business, and you may lose 1 million USD instead of a few thousand dollars for the screw.

That's why airlines have to co-operate with each other, though 5 airlines are competitors, but they are still partners in some aspects. You must accept to work with your competitors then airlines can partner with one another to share a common warehouse. For example, when you drive a Mercedes, you should join a Mercedes warehouse; when you drive a Toyota, you should join a Toyota warehouse because you don't know which part will break down and not every car has the same spare part, so there should have a common warehouse to save cost. When you use the spare part, you have to return to the warehouse for future usage. Small airlines will suffer a lot in terms of financing for the spare parts compared to major airlines, i.e., VietJet vs Vietnam Airlines.

Thai Binh: Which is the heaviest cost cutting program?

Respondent 9: Another way to cut cost relates to cabin crew team. If you manage well, you only need 15 people instead of 20 people for one crew per flight. If you manage the schedule well and allocate the duty for cabin crew and pilot reasonably, you can save lots of cost. I am not an expert on flight operation, but in terms of commercial aspect, you can cut the advertising cost. With the equivalent amount of money, you need to think how to use it efficiently.

There are two ways to cut cost, one is to do more jobs with the same amount of money, the other way is to cut money. Spending less money for advertising and giving the benefit to your customers, it will bring more efficiency rather than doing the massive advertising and does not bring any benefit to your customers. For example, previously I hired a company to create a website that draws a 1 million viewers, that company said OK with 1 million viewers and invited pupils and students to click the website. In the end, nobody purchased anything from the website. We also need the right target like age, sex, occupation and demographics etc. This is to ensure a successful online campaign to draw sales. If the website company gives a candy to a kid and ask him to click on the website, the kid cannot afford your air ticket.

That's why you need to target the right customers in terms of age, gender and income. If you keep sending spam mails to the target audience, they won't like and delete your mails right away. You have to make your email interesting that people should wait for yours because they expect some benefits or something interesting, which is more important and efficient. Why? Because some people cannot evaluate the minor details, they only think that reaching 1 million views means that they have reached the target, which is nonsense. However, it is not always good to cut cost, especially in Sales aspect. For example, you cannot cut the sales commission to get the target revenue because these 2 elements have to complement each other. If you cut it, then no agent will sell the ticket. In fact, cost and revenue should be linked together. In order to gain the efficiency, you must see if you invest on something, what it will generate for you, and see the fluctuation between the two factors.

For me, I will use technology as a foundation for sales and it will be a trend for the future. When we sell strongly through the system, our technology resources must be strong accordingly, and technology must link to the commercial concept. The e-commerce sales team must be bigger than the physical sales team, they must ensure the system run smoothly, especially at the booking and payment phase. For example, your server can only host 1 million unique IDs. If there are 1.1 million unique IDs the system will be stuck, then customers will switch to other airlines. And if customers encounter many problems with your website, they will be paranoid and will not buy more. Customers must be assured that once they purchase a ticket online, they do not lose money because of the system's mistake. It's difficult to claim back the money and may have to wait for 1 month to receive money back. Therefore, it is very important to invest on the system.

For our OTA, if we see any airline having troubles while linking with our platform, we remove them out of our system in order to prevent the mistake, the customers will have the options with the rest of the airlines. Do not try to save the money on the sales system, you will lose more than that in terms of revenues. Not so many people

understand this aspect. As a matter of fact, you should have a CTO (Chief Technical Officer) because he has an important role. He will estimate the enough IT staff to work on your system. Otherwise, it costs you a lot of money to pay the salary to IT staff whose salary are often higher. One more thing is that IT staff hate each other because everyone thinks they are good and try to hide their talent, then the CTO must be very good at managing, encouraging and coordinating them, otherwise the company will lose their competitiveness.

Now, airlines should communicate with agents through email and it is not necessary for them to meet in person. The sales staff of the airline should focus on the strategy and the agent training, instruct the agents the techniques to sell their ticket and to solve the problem, then agents feel safe to sell ticket for the airlines. Agents will focus on selling the tickets for the airline who provide them good information though this airline's flights are not so convenient of the price is higher than that of other airlines. Agents will be reluctant to sell for the airline who provide vague information because they try to avoid the responsibility if the mistake happens. For example, agents will sell tickets for K6 if the customers are travelling often because K6 provides better services among other airlines and agents have to retain this type of customers for the long term, but they will sell for Bayon Airlines if the customers are Chinese travelers. The agents don't care if any accident happens to those Chinese travelers because Chinese customers travel just one time to Cambodia and agents can earn more profit with Bayon Airlines.

For Chinese customers, they will fly only one time, though you try your best to serve them, they just fly one time, so why the agents need to take care of them? If the passengers met an accident while on flight, it's the airline to compensate, not the agent. If any delay happens, it's the responsibility of the airlines. The agent only sells the ticket, that's it. So, it depends on the type of customers that agents will support which airlines despites they earn less profit from K6 than from Bayon Airlines. On the other hand, tour operators take extreme care of Japanese customers because Japanese travelers are very particular about the airlines they are flying with. Therefore, it's up to each market characteristic, then the sales tactics are different.

Another way is to create a good working environment for the employees. You can save cost when your staff is happy though their salary is not so high, but they can enjoy their living and maintain their work efficiency the next day. If your staff can balance their life, they can focus on the work with the enough salary. If you are too strict, the staff will just sit in the office and do nothing.

Thai Binh: Low cost airlines entering the market will compete with major airlines. What will major airlines do to retain their business performance?

Respondent 9: In fact, major airlines now offer many kinds of prices. Major airlines include the in-flight meals, then they cannot reduce their price more. They cannot reduce the cost of ground and handling either because it is the standard price. They will lose some market share and cannot against the competition of low-cost airlines. They must accept to get rid of the low customer segment. However, major airlines classify their cabin into many classes, even though they sell the cheap price for those who sit next to the restroom. They set out the criteria for different types of customer. For example, those who purchase ticket at cheaper prices have to sit closer to the restroom, these seats are limited, too. They just want to diversify the price; they cannot sell all seats with low price because their cost is high. If the flight is not full, they just offer lower price to collect more customers. They are not the key competitors to LCC, unless their market is so weak, and they still have so many seats, they have to reduce price too low and fight with LCCs. If the market is good, major airlines have their own market and LCCs have their own market. For example, if a major airline still has 30 seats left, they only sell the 30 seats, they will not sell more because the yield will be decreased, leading to the losses. The major airlines dare not to lower the price too much and fight with LCCs because it will affect their customers who pay them the high price.

Thai Binh: Airlines now co-operate by codeshare, interlines and alliance, ancillary services and other tourism service, can LCCs do that as well?

Respondent 9: LCCs cannot do this. LCCs use their own system, they cannot connect through GDS to connect to major airlines.

Thai Binh: So how Qatar Airways connects with VietJet?

Respondent 9: LCCs affect to major airlines in the system. If you book LCC, you have to pay right away but for major airlines, they can reserve your booking a few days and can wait for your payment. This can affect the sales concept because two systems are different. So, it is risky to buy tour tickets with LCCs because they don't reserve the seats for you. For example, if you plan a tour 3 months in advanced, you can deposit the air ticket for 1 month, then you still have 2 months to do advertising of your tour. If you are not successful in selling your tour, you can return the seats in the last 2 months. If you buy from LCCs, you have to do full payment and you will lose out in the event that you cannot sell your tour. Therefore, you feel safer with full cost airlines though the price is a little bit higher.

Thai Binh: At present, do airlines prefer to open their own network or to do codeshare or interline?

Respondent 9: Now airlines are being restricted from flying freely. They just can fly from their original destination to another country and they cannot fly from another country to other country, that's why they have to do codeshare. Later with the Open skies you can fly freely, but for now, you are stuck by the regulations.

Thai Binh: So, airlines have to open a company, not a representative office at another country in order to continue their flight from that country?

Respondent 9: The company should be opened by the people from that country under the form of joint-venture investment. For example, Vietnam Airlines have to join-venture with Cambodia to establish Cambodia Angkor Air, and Cambodia Angkor Air can fly from Cambodia to China; or Derry Air, they must establish one company in each country dictated by the law, if there is no regulation, we will have Derry Air flying over the world.

In Vietnam, the foreign airline is not allowed to invest 100% capital, and they have to find a local company to cooperate, and their contributed capital can reach up to 49% only. The Thien Minh Group states 51% on paper, but in reality, Derry Air can contribute 70% of capital and holds the right of management. Derry Air can just buy the commercial right of Thien Minh Group and pour their money to Vietnam for the operation. Once Derry Air enters Vietnam, Vietnam Airlines will lose their market share, that why Derry Air was not allowed to come to the Vietnamese market sooner. Similarly, VietJet Thai is doing the same in Thailand and their purpose is to fly from Thailand to China. VietJet now is has a very strong branding, and the fact to open the airline outside the country for different purposes, that is to increase their stock values. For the investments, it is not only the economic purpose but it's also for the political purpose. If China wants to swallow up any airline in Cambodia, they just inject money which does not matter to them.

Thai Binh: Do airlines do hedging?

Respondent 9: If you are not expertise in hedging, you will lose. This is a double-edged sword. If you want a stable business in the long term, you should do hedging when you make a 1-year plan. But when the oil price drops, you cannot be profitable, but most importantly, you will be safe when if the oil price crisis happens, but your profit cannot increase. For example, if an airline plans their profit of USD 10 million but at the end of the year their profit reach to USD 50 million due to the decrease of the oil price during the year. But if you do hedging, you only get the profit of USD 10 million, but if the oil price increases, you will not lose.

Thai Binh: Can we do the inverse hedging?

Respondent 9: If you do the inverse hedging you have to pay very high fees and must be good at techniques. You have to catch up with the political situation because the world's politic affects strongly to the oil price. So, those who are good at hedging have to be good at politics, you cannot predict in the dark and get luck. You have to define your strategy; if your strategy is stable, you should do hedging; if you see that the oil keeps rising, you can do hedging. But if you depend on the fluctuation of the market, you don't need to do the hedging. So, it's the nature of hedging. And if the market is stable, you don't need to do hedging because you will have to spend the hedging fee. Normally, the large groups can win the hedging because they can get the political information in order to prepare. This is also a kind of purchasing stock. In a company, there will have a finance director to do the financial investments as well. If this guy can estimate the decrease or increase of exchange rates, he can generate an additional finance source for the company.

The most important thing is to define your strategy at the beginning. For example, for Japanese people, they need a stable long-term development. They only need 10% growth annually and don't need 100% growth. As an employee working in a large corporation, the more stable development of a company means that you are stable at your job position. In Korea, only the owners of the small company want to have to robust development because they are the people who manage their own companies.

For our OTA, we have defined to make loss for the first 3 years in order to get the customer data, then we sell the ticket cheaper than the airlines in order to attract customer; but we defined our objective is to sell the customer data to the foreign OTA in the future, not the air ticket. And, from this source of data, you can sell to large corporations in order to approach their brands to the right customer segments. Obviously, the efficiency will come later. That's why you can see that a company with a revenue for USD 450 million, but they can sell their company up to USD 2 billion thanks to their customer data sources, not the profit source.

Then, if a foreign airline enters Vietnam, they should let you know their strategy, whether they want to develop the market or open the route network; or to stable the two routes with the increase of customers. If they want the profit, then the focus will be on the profitable routes.

Thai Binh: Yes, so airlines opening the new route for the profit?

Respondent 9: No. It depends. For example, K6, we should fly on the profitable route. Every airline needs to fly on the profitable route, not only flies the political route. Regarding profits, we have many ways: you can make losses on a single route, but you can make profits on the major routes. For example, Vietnam Airlines flies from France to Vietnam; but they will not have passengers if they don't fly to Cambodia. Therefore, the route Saigon to Siem Reap might be lost, but the route Saigon to Paris is profitable. Then the airline can cover the losses of the single route with the profit of the long-haul routes. The reason is because the customers from France will not only travel to Vietnam, but they also travel to Siem Reap.

Thai Binh: Will this be similar for Qatar Airways?

Respondent 9: Vietnam Airlines is stronger than Qatar Airways. Qatar Airways only transports passengers from 10 countries from Europe to Cambodia; but Vietnam Airlines transports passengers from 10 countries from Europe to Cambodia and also from other countries such as Japan, Australia, America, New Zealand, Korea to Cambodia as well by connecting from Saigon. As they have a large route networks, that's why the routes from Saigon to Siem Reap are always full and Vietnam Airlines operates more efficiently than Qatar Airways.

As a matter of fact, the route Saigon to Siem Reap is not the main route but the supportive route. So, when the long-haul flight is profitable, it can make a profit of USD 100 million while the losses for the supportive route can be USD 2 or 3 million only because it is the short-haul route and we have to accept the loss in order to sell tickets for the long-haul route. For example, when customers patronize your restaurant, you should offer the drinks even though you cannot get profit from the drinks. You still need to sell the drinks, otherwise, customers will no longer patronize your restaurant. So, this thing will serve for the other things. If the customers get into your plane and you don't serve them a meal, when they get hungry, they feel frustrated and will never want to fly with your airline again. In short, what is the end of the objective? It's the profits. Regarding the political route, it has two objectives. Firstly, the political route is controlled by the State for political purpose. All the routes bring back the efficiency, including the supportive routes to support the long-haul routes as mentioned above.

Second is the aircraft; if you fly the aircraft 500 hours, so each hour will cost USD 5,000. If you fly 300 hours, then each hour will cost USD 7,000; because you have the fixed cost to lease the aircraft for USD 300,000 for each aircraft per month. If you fly 10 flights per month, the aircraft cost will be USD 30,000; if you fly 100 flights per month then the aircraft cost reduces to USD 3,000. For example, if the aircraft cost is USD 5,000 you don't have profit, but if you fly more, the aircraft cost lowers to USD 3,000 then this route is efficient. Similarly, you recruit the cabin crew and pilot and let them fly for only 10 hours, then you have to pay them USD 15,000; you will lose. Then, you have to fly as much as possible in order to decrease cost, because one pilot should fly at least 80 hours for us to cover his salary. The rental office and the salary paid for 100 staff is a fixed cost, the leasing aircraft is a fixed cost, then you cannot fly only one flight, you must fly a lot to decrease the fixed cost.

Thai Binh: How about the cost for fuel?

Respondent 9: This is the operating cost accounting for 30%, and you have to pay for the fuel cost in any circumstances, then you have to reduce to fixed cost by allocating to the number of flights. Thereafter, you can reduce your ticket price. That means you have to ensure the minimum hours for an aircraft to fly, if you want to increase one aircraft, you have to estimate the number of flights for that aircraft and your route networks have to be spread across.

Thai Binh: So, airlines will use small aircraft with more frequencies or large aircraft with lesser frequencies?

Respondent 9: It depends on the distance between two destinations that airlines will use small or large aircraft. In case the market is good, the airline can use the Airbus to replace the ATR because the cost for the Airbus dividing by the number of seats will be cheaper than ATR, because ATR has less seats. However, if you can sell only 10 seats for Airbus, you will lose; but if you sell 10 seats on ATR, it is OK. The issue is that you have enough customers to fly the large aircraft or not. If you have enough customers, using a large aircraft would be more efficient because when you land or take off, the cost will be the same because the office, staff, pilot, crew are the same. Therefore, the most importance is the number of passengers. If the load factor is 70% for both type of aircraft, then using the large aircraft will be more profitable.

Thai Binh: Somehow the airlines want more frequencies.

Respondent 9: It depends on each market and customer demand. If you have enough customers you can fly large aircraft, like the route to Japan, the B747 is utilized always because the airline has a huge number of customers. The issue is the market. When you fly the small aircraft, it is because you just open the new market and do not

have so many customers, everyone prefers larger aircraft when the number of customers increase because the large aircraft brings more profit. If the customers are so crowded, you can even fly with B777 and the cost per seat is lower. You don't need to fly so many flights. But if you have only 100 customers, you cannot fly 300 seat aircraft, you will lose. You know from Tokyo to Osaka, Japan Airlines always use B747 to fly because there are 500 passengers for each flight and they operate flights after each 30 minutes. And if you use the large aircraft you only use one pilot while using small aircraft you need 10 pilots which render the high cost. So, for large aircraft, you need to ensure 80% load factor, under this rate, you should use the smaller aircraft. It relates to many elements, not only the small or large aircraft, it depends on the routes. And slot is the important point. You must make sure to get slots for every flight; the airport might prevent you if you fly too much within a day. ATR has explained that small aircraft will be suitable for the new route, exploratory flights, less customers. The trend is that when the airline has full customers, they will swap to large aircraft. And most importantly, you have to cover the whole market. If you do not upgrade to larger aircraft, another airline will use large aircraft to fly your route and customers will switch to that airline.

All the airlines do research and they will fly the profitable routes. If they see your route is profitable, they will jump in immediately. They don't let you sit there to enjoy the profit with your small aircraft. Therefore, you should maintain 60% load factor and there is no competitor on the route because they find that the route is not much attractive, and they could not gain profit when sharing this market. But if you push to 80% of load factor, your competitors jump in. So, you must be aware that your competitors are sitting next to you. There may also be spies in your company and they will ask you which route is profitable, then you must secure your information.

You can only get the profit for the first year because your competitors have not reacted to the market yet, but the second year they start to jump in and share the market, then you need to dominate the market and apply all the good slots, make the customers to be familiar with your product only then the competitors have no way to enter the market. The most dangerous competitors are the ones who have not exploited their aircraft capacity fully, then they try to fly more on your routes to share your market because they will not increase the fixed cost, they just add more fuel to fly. When you want to open a new destination, a quick way to have a decision is to look at your competitor's route network and their performance, you don't need to spend much time for the research. If Derry Air enters Vietnam market and share the routes with Vietnam Airlines, it is not easy for them when Vietnam Airlines has already occupied all the good slots. After that, Bamboo Airways might look at Derry Air's strategy and follow them.

Thai Binh: Do you think airlines will get rid of GDS in the future?

Respondent 9: The trend is the reduction of GDS. LCCs will use their own system. Vietnam Airlines gradually cut GDS and allow agents to access their inventory system. Currently, airlines still use GDS because GDS has their own agents. If you get rid of them right away meaning that you will omit certain market segment. For example, VIP customers often buy tickets through travel agents, and the travel agents buy from GDS. Those customers often buy with high price and you cannot cut this customer segment which is important in contribution to your sales. However, GDS will be omitted gradually in the future and because there are more GDS in the market now, their commission is gradually reduced, too. Soon, airlines will sell tickets to OTA in order to reduce the GDS. And LCCs they have defined their strategy at the beginning, then they don't need to connect with GDS. But high-end major airlines will never omit GDS because customers from GDS bring high values. VIP customers need the human service and do not care about the money.

Thai Binh: How about price? Will customer purchase the air ticket based on the price factor?

Respondent 9: No, I don't think so. For business purposes, it will depend on the customer demand. Unless the airline provides many flight schedules, the customer will consider the price first. For tourism, the customer will not choose the nighttime to fly because they will incur additional cost to book a hotel and, more importantly, worry for their safety. They should fly in daytime to enjoy the noon and the evening times because they can check-in the hotel from 12 p.m. onwards. People feel happy to start enjoying their tour after checking into the hotel. The price also affects to the tour, conference, or business itinerary. Each customer demand is different, and it depends on the target customers, therefore price is not the key factor to choose the flight. Price affects only when the difference is quite large among airlines. For example, a price for direct flight is always much higher than the connecting flights for international long-haul routes, then up to the disposal income, customers accept the cheaper price since they do not travel so often with this route.

Thai Binh: Does the shortage of pilot affect airlines?

Respondent 9: Very much. When you lease an aircraft, you should utilize its full capacity. If you do not have enough pilots to conduct the flights, you will incur losses. For example, you need to utilize an Airbus at least 280 hours per month to get the efficiency. If your pilots only fly 100 hours, your losses will be huge. And if you do not

have enough pilots, you cannot open new route networks either.

Thai Binh: Respondent 4 said that we have to employ the pilots globally.

Respondent 9: Correct. Some airlines have their own seasons. For example, Cambodia's seasons are quite different compared to Vietnam. The winter season in Cambodia is dry and the summer season which is rainy that nobody flies. However, we get lots of passengers to fly in the summer season, between May to July. In Vietnam, due to tourism; we have to co-operate with Cambodia in terms of pilots. Their pilots will fly for Vietnam Airlines in the summer in Vietnam, and pilots from Vietnam will fly in the winter season in Cambodia. You need to find partners to co-operate so that there are enough pilots for both seasons, otherwise you have to pay them the salary if you don't use them in the low season. For Western pilots, they don't fly in the winter season in Europe because of the nature constraints, therefore they switch to fly in Asia. When the summer season comes, they back to Europe to fly at better weather rather than enduring the hot season in Asia. However, one more point is that it will cost millions of dollars to repaint the aircraft and to apply the license to fly in other countries, then the airline leaders should consider the efficiency. Some airlines can't be bothered to paint their aircraft and just paint their airline name only to economize the cost. As for K6, it is not good to name Cambodia Angkor Air because it will be difficult to rent the aircraft to other airlines in Europe because people will think this airline derived from a poor country, they perceive Cambodia is not a safe country; whereas the other airline named Sky Angkor Airlines seems to be more neutral.

Thai Binh: Thank you very much for your sharing.

Respondent 10: Of course, yes. If the fare is too high, the demand is getting down. For example, if you want to go to a beach for Sihanoukville and compared to Thailand, the fare is much cheaper than Thailand, so passengers will tend to visit Sihanoukville.

Thai Binh: Some countries in the ASEAN region operate monopolies with local or regional major airlines given preferred standing or exclusive territories, leading to the prevention of entering a new market. In ASEAN countries we have monopoly operation with local or regional airlines, like Vietnam Airlines, and so on. They will prevent the new entrants.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I don't think so because if you don't let the other airlines coming to Cambodia, mean that you cannot fly to another country also.

Thai Binh: Shareholder's influence and their financial support are strong enough to protect the carrier from competition. I mean the share holder here can be the government or a group of financial institutions. They have powers and can protect the airline they invest on.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes, if you stand by the shareholder side, I think this point should be yes, because they want to protect their benefits only. I agree.

Thai Binh: The supplies of fuel will affect strongly on the yielded elasticity estimates and rising oil prices will affect tourism demand.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think it is not much because fuel prices is universal and increase globally. It increases in Cambodia, Vietnam, Taiwan and everywhere else, so it will be a big affect to traveler demands. It is not a big problem, because when you need to travel, you will have to do so whatsoever the fuel prices.

Thai Binh: Customer satisfaction will affect the general perception of the airline through word of mouth. Their concerns on the carrier reputations, fleet or security will affect strongly to the airlines.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I strongly agree. It depends on the customer purchase behavior, not only because of the price. Some Cambodians are very rich. I heard from EVA Air; they told me a Cambodian family wants to see dentist and fly to Singapore. So, I think they can afford it for the fare, they will also look at quality and quantity.

Thai Binh: Low cost carriers will grow and be a new trend in the future for they draw lower fares in order to keep their seats full.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think yes, because in Taiwan, we also face the same situation. I mean, the national carrier, they also have a sub company, called budget airline. The budget airline, they are more focused on young people, and not really focused on the business travelers flying budget airline for their business trips.

Thai Binh: Low cost carriers are also expanding into long haul flights, and this will increase competitions and force airlines to distinguish themselves among rivals.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I don't think so, because the budget airlines mostly use A320 or A321 only. The seats are limited and there is no business class, they are built and catered for economy class seats. So, it is very uncomfortable to sit for long haul. Even for me, I won't consider taking a budget airline for a long haul. For long haul, I have already paid a lot of money for the fare. I don't care if the fare is very low a not, I just want to enjoy the service. For an 8 to 10 hours flight, for me to sit in the narrow body plane is very uncomfortable.

Thai Binh: Air fares would continue to be impacted by weak economy and security concerns.

Disagree Agree

1 2 3 4 5 6 7

Respondent 10: Yes; certainly. The political issue, financial and terrorism issues as well.

Thai Binh: Demographics of the customers will affect on the airlines since customers can be price-sensitive travellers. For example, travelers in Cambodia, will they be different from travelers from Vietnam? Cambodia travelers will love to have cheaper price tickets, because their income is lower.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes, I agree.

Thai Binh: The development of technology such as artificial intelligence (AI), biometrics, blockchain, internet has made the operation of large airlines and airports efficiently and gain a competitive edge. Small airlines that cannot afford these technologies in ASEAN region will strongly being affected. You can see the likes of SilkAir, Derry Air, Singapore Airlines; large airlines. They can deploy these technologies in their airports, compared to Chinese airlines or K6 here.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: For technology, I don't think so will be a big issue. I give it a 1. If you are telling the purchase distribution, maybe yes. Before, if a traveler wants to buy a ticket, they will have to go through the travel agent or airline counters. But right now, it has shifted. For China market they have shifted to mobile devices already. But, for the technology in the airline I don't think much difference, as compared to 15 years ago. I think they are all the same, they use the same aircraft model, so nothing has changed.

Thai Binh: Employee satisfaction will have a positive effect on the airlines' performance and customer satisfaction.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes, I totally agree.

Thai Binh: The shortage of qualified employees, managers and pilots will affect on the development of the airlines. Especially, the reputation of pilot skills will impact on the sales of the airlines, especially from young candidates. This aspect, I had heard from customers that they are worried about the pilot reputations. Before, I rarely heard about that, but nowadays, customers have concerns about this.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Oh really? I think yes.

Thai Binh: For example, Cambodian customers mentioned that they are afraid of Vietnamese pilots, and they trust Chinese pilots more. I don't know about Chinese pilots, but the pilots from the Chinese Airlines they feel their taking off and landing skills are much better.

Respondent 10: That depends. Sometimes, some Cambodian pilots also have good skills, whereas some Chinese pilots may not have good skills.

Thai Binh: Financial difficulties will cause pressure for the airlines and prevent new opportunities. Then, the airlines need to possess a healthy finance in order to maintain its good performance. This means the finance will cover the operations or invest in new technologies and new aircraft.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes. If you don't have enough money, you cannot maintain anything.

Thai Binh: Airlines will benefit from dropping oil prices for the next five years. Then, small airlines will benefit accordingly to maintain their performance. This is because current oil prices are not dropping, and we are not sure if they are going to rise up again tomorrow. Small airlines will not reduce prices and keep the differences of the oil price fluctuations to maintain their performance.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think you can say like this.

Thai Binh: Wide body aircrafts are preferred by customers than narrow body aircrafts. This is from the consumers' perspective but for the airlines they have their own objectives to choose the relevant aircraft for smaller groups.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Sure, if the fares are all the same, everybody will choose to fly on a wide body aircraft.

Thai Binh: New invested aircrafts are much preferred by customers.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I don't think so.

Thai Binh: The website for an airline including sufficient features such as information, ticket bookings, web check-ins and seat selections would drive traffic and customers as compared to a less-functional websites. For example, you can compare Thai Airways and Cambodia Angkor Air websites.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Agree.

Thai Binh: Technical innovation relating to convenience and comfort, check-in process, mobile integration will gain competitive advantage over competitors.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes. Comparing two airlines, one airline has a mobile device function, while another doesn't have. Definitely, I will choose the one which is more convenient.

Thai Binh: Customers they want to fly from point A to point B; for example, from Phnom Penh to Saigon, only K6 flies this route. Whenever passengers want to travel from Phnom Penh to Saigon, only K6 appears in their minds.

Respondent 10: Of course, if K6 is the monopoly only, but how about the other competitor? Of course, I will choose whoever has better technology; easy to make bookings and check-ins. But monopoly like K6, which just operates this route only, I don't have another choice then.

Thai Binh: Brand image plays an important role in identifying the airline's position. The brand will have a positive effect on the airline's sales and draw customer loyalty.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes. Compared to K6 and CZ, more passengers will take CZ. It's a very good example.

Thai Binh: The sales through digital retailing distribution channel will increase remarkably and become the key channel to serve travellers. I agree with Raphael to change digital retailing distribution, for example search engine, to GDS.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes, like Sky Scanner

Thai Binh: He mentioned that in the future airlines want to cut cost from this channel.

Respondent 10: Yes. Because the airlines don't have a lease; therefore they don't need to pay the salary for this team to maintain. They just outsource for GDS, so for a platform like Ctrip or Skyscanner, these are much easier.

Thai Binh: And they start to focus on their website?

Respondent 10: Yes.

Thai Binh: So, this one you will agree with 5 or 6?

Respondent 10: 6.

Thai Binh: Airlines still have to employ third parties to sell flights in order to optimize their sales though they prefer the direct distribution channel. For example, through travel agencies, or GDS.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I totally agree. Yes.

Thai Binh: Since the competition rises in the whole region, airlines will reserve more budget to spend for marketing activity over their rivals.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes. I think not only aviation. Every industry is the same. As all the aircraft came from the same company; which airlines marketing do well, I think most likely if the staff are not old.

Thai Binh: Customer data is an important resource and play a crucial function in all aspects relating to retailings, dynamic pricing and management.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes. You need data; no data, no analysis.

Thai Binh: Small airlines should merge or doing codeshare, instead of competing in order to maintain their performance.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes, small airlines like K6 should codeshare with certain airlines to expand their market, I think it's quite good.

Thai Binh: Or they are going to disappear themselves?

Respondent 10: Yes.

Thai Binh: Airlines will put their collaboration efforts to whom they have a closer opportunity and more beneficial commercial relationship rather than joining the alliance network. Airlines will seek the partners for interlines directly rather than joining the alliance network. Currently, there are 4 alliances; Star Alliance, OneWorld, SkyTeam and Skytrax.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: For me the joining airline alliances is much faster. For this question, I am not sure.

Thai Binh: Currently, most of the carriers are owned by governments or by a group of stakeholders, the ownership will open to public shareholders in the future.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: The shareholder is normally a group. If a government is powerful and rich, they don't need. But the shareholder groups are very rich, too.

Thai Binh: They can pour millions of dollars, right? Everyone who operates an airline are billionaires.

Respondent 10: Yes. Sometimes, the government does not have much money to support the airline, but the group is very rich like, JC International Airlines. Yes, it depends.

Thai Binh: The stakeholders have the influence on the operation of the carriers or support them on high level issue.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Because some of the stakeholders not interfere with the operations. Operations will be managed by the Senior Executive Level.

Respondent 10: I think so. Yes. So, there will not be conflict of interest.

Thai Binh: Lower cost airlines will continue to play a role in moderating ticket costs, even mergers will cut the number of major carriers and reduce competition.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think so.

Thai Binh: Do you think the major carriers will merge themselves?

Respondent 10: In Taiwan, yes.

Thai Binh: To reduce the competition?

Respondent 10: In China, China Airlines (CA), they merge with Tigerair Taiwan.

Thai Binh: This means that CA acquire Tigerair Taiwan? The CA is a major airline, right?

Respondent 10: Yes.

Thai Binh: They acquire so they can be a major airline, right?

Respondent 10: Yes, you can say that. The CA group has a national carrier, an also have a budget air. Some airlines are also do like this but failed.

Thai Binh: Full-serviced airlines will shift their strategy toward the low-cost airlines in order to reduce cost.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I don't think so.

Thai Binh: Full serviced airlines will replace smaller jets with larger planes to increase the number of seats and match fares offered by low-cost carriers.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I don't think so they will replace with smaller jets. Different markets will have different segmentations.

Thai Binh: While airports engage airlines to develop their networks by introducing the opportunity, providing robust traffic and yield forecast, setting out key economic and leisure indicators, small airlines in ASEAN are not capable to expand their networks, then they would ask for the protection of the government and limit the competition in the region. Everytime I participated in an aviation conference, the airlines were approached by the airports to introduce the opportunities, the routes, economic and leisure statistics in order to attract the airlines to fly to their destinations. Also, for example, Cambodia Airports, they are inviting all the airlines to fly there. As for K6, they cannot expand their network, and they asked for the protection of the government, to limit the competition in the region, to prevent the entry from other airlines.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: K6 is a national airline, the Cambodian government have the right to protect their national airline. This is to prevent some small airlines to come and setup in Cambodia. If the Cambodian government opens opportunities for all the airlines, I think the government is corrupted already.

Thai Binh: Actually, in the past 2 years, 7 new Chinese airlines had opened.

Respondent 10: Yes, this is Cambodia's weird point. They cannot accept all these airlines to challenge the national airline. Even in Taiwan, we do not allow this.

Thai Binh: Financial and reputation risks are key concerns for airlines when opening new routes, then airlines seek for airports that would become their hubs only. When an airline is invited to open a new route to a new destination by the airport, they will do the analysis and iron out any concerns, and these destinations will become their hubs. This is for their operation guarantee for long term. If not, it is hard to maintain on a long term basis. For example, Ho Chi Minh City can be a hub; Singapore can be a hub.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I agree with this one.

Thai Binh: K6 can fly to HCMC and Singapore, rather than choose to fly to Laos.

Mr Jacky: Yes, It's a tendency, and as dream for airlines to establish hubs to fly to different countries. I agree.

Thai Binh: Influenced factors beyond the airlines and airports' control such as unpredictable fuels and controversial government taxation, leading to the negative impact on route development. Then carriers will simply hold on their routes and not actively look at new destinations, even in the region. This means, due to many elements, airlines will stick to their current routes rather than to expand to other destinations.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think so. The airline planning department should be very careful and as many factors may impact the launch of new routes.

Thai Binh: While traditional marketing communication channels including print advertising, newsletters, and sales missions are still employed, digital marketing and social media be a key trend to enable airlines to consistently reach their customers more often, to build and strengthen relationships on a multi-platform basis.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: Marketing now turns to digital than a traditional one.

Respondent 10: Yes, I agree.

Thai Binh: Internet sales can reduce labor costs and increase market share and profitability. Physical agents will be cut off in the future.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Yes.

Thai Binh: I mean travel agents, and for tour groups, they still need to go through travel agents.

Respondent 10: Yes, right now, from my experience, Ctrip sells tickets only. They do not handle groups. It is not easy as groups have many details that need to be customized and fulfilled. These are not easy to be fulfilled by computer. So currently, computer systems cannot handle visas and group bookings.

Thai Binh: Airlines would invest largely on mobile technology for this will be an essential tool to connect with customers for ticketing and travelling.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: I think it is a trend. Before, the business model was B2B, not it shifted to B2C. For example, EVA Air, they cut off the agents and sell the tickets on their website the same price as the price agents quote. So, passengers will go straight to book on their website.

Thai Binh: Airlines will improve customer service rather than pouring budget on advertising activities for customers' words of mouth would be more effective in drawing new customers and customers' loyalty. Here,

Raphael suggested not to mention word of mouth, as this does not bring any big effect on new customer/customer loyalty. However, he mentioned that I can say, airlines will focus on customer service for provide services for ancillary revenues to attract new customers.

Disagree Agree
1 2 3 4 5 6 7

Respondent 10: Mostly, right now, they focus on other forms of income. For example, alter the meals, get rid of your luggage, or pre-order a seat. These are the main incomes sources for airlines. The behaviours will be shifted to these aspects. Because I am working for GDS the airlines share with us, so yes, I think will be the trend will be for all airlines. If you have this extra service, yes, it's quite good.

Thai Binh: Airlines will conduct more researches and deliver surveys to passengers in order to study passengers behaviours and adjust customer service. They believe that passengers have a second wallet to purchase better service and more comfort.

Disagree Agree
1 2 3 4 5 6 7

Thai Binh: This is also included in my previous list of questions. That means, airlines will conduct more studies inflight and to study the customer consumption habits in order to adjust their services.

Respondent 10: Yes.

INTERVIEW 11

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 11
Designation	▪ Manager Level, Cambodia Angkor Air in Cambodia
Date of Interview	▪ 7th June 2018
Mean of interview	▪ Speaking via Phone – FB Messenger
Location	▪ Phnom Penh/ Cambodia – Hanoi/ Vietnam
Audio Record	▪ Not available ▪ This interview is both note taken and sent via FB Messenger

TRANSCRIPTION

Thai Binh: Do you think the ASEAN Single Aviation Market (ASEAN-SAM) will lead to grow and open more competition in ASEAN?

Respondent 11: The ASEAN region categorizes the countries by numerics and population, low to relatively low cost and efficiency labor resources. That is a condition for various influx of tradings and investments, then comparison of GDP as compared to other ASEAN countries, including the growth of the aviation industry. Government owned companies that are used to be under the protection of the respective companies will prefer to support the free trade and the overall development of the economy by removing barricades and obstacles that hinder the growth.

Thai Binh: Open skies policy will allow large airlines in the Asian region such as Japan and China to take freedom rights in ASEAN region, leading to the threats to small airlines?

Respondent 11: I agree on the aspect that big airlines constitute major threats to small airlines and airlines from smaller countries in the ASEAN region, since they are strong on many aspects. Moreover, the main passenger influx usually comes from a bigger country to a smaller country, and big airlines profit from this when they are the national or local companies with understanding of customer and familiarity.

However, big airlines may be less flexible as compared to smaller airlines, and they don’t give priority and special privileges to small market segments. This is especially when smaller airlines can compete with low air fares as their key selling points. Furthermore, even if the Open sky policy applies, the 7th and 8th freedom rights are still the hardest to get. In addition, bigger countries like China and Japan will be the first ones to try to protect these rights.

Thai Binh: Will government regulations such as taxes, carbon emissions will lead to increasing cost of air travel and the depress in travel demand?

Respondent 11: Theoretically, different kinds of taxes and fees make travel costs higher. However, they usually are regulated by the government with assurance to be within the acceptable frame which does bring down the travel demand, which may be the key income source for smaller countries.

Thai Binh: Some countries in the ASEAN region operate monopolies with local or regional major airlines given preferred standing or exclusive territories, leading to the prevention of entering a new market.

Respondent 11: Yes they do and still will do. But the level of protection would not be excessive due to the free market trend over the world.

Thai Binh: Shareholder influences and their financial support are strong enough to protect the carrier from competition.

Respondent 11: Of course that is very important. However. That is not enough. Aviation is the overall picture requires know-how and joint efforts from many departments relevant parties such as airline top management, ground service, fuel supplier, tourism board, tour partners, and the government.

Thai Binh: The supplies of fuel will affect strongly on the yield elasticity estimates and rising oil prices will affect on tourism demand.

Respondent 11: Yes, the fuel constitutes around 40%-55% of the total cost of the aviation industry. So, basically a big increase or decrease of fuel price can affect the air ticket price. However, do remember that air carriage only occupies 30%-40% of the total travel cost. This is especially for countries such as Thailand who know well how to tweak the overall "package price" in accordance to the market.

Thai Binh: Low-cost carriers will grow and be a new trend in the future for they draw lower fares in order to keep their seats full.

Respondent 11: Low-cost carrier is not something new in the travel world nowadays. Though their service quality and fleet management tend to be ameliorated step by step, the low price does not allow them to invest largely to reach the standard of full-cost carriers. Each carrier, be it LCC or full-cost carriers, targets its own market segment. The competition only happens on the segment standing between high and average standard.

Thai Binh: The development of technology such as artificial intelligence (AI), biometrics, blockchain and internet increased the efficiency of large airlines and airports and gain a competitive edge. Small airlines that cannot afford these technology in ASEAN region will be strongly affected.

Respondent 11: The Industrial Revolution 4.0 is something that will radically change the way how the business world is run and evolves. Any business that does not prepare for it will soon be deeply affected or eliminated.

Thai Binh: Decreasing oil prices will benefit airlines for the next five years. Then, small airlines will benefit accordingly to maintain their performance.

Respondent 11: Not sure about the 5-year term. In fact, the oil price had increased from USD 52 in 2017 to USD 70 in 2018. So I disagree.

Thai Binh: Wide body aircrafts are preferred by customers than narrow body aircrafts.

Respondent 11: For sure, bigger aircraft means better convenience, larger space and higher safety. But it also depends whether what type of flight the plane is used for. A rule of thumb; long haul flights will be wide body, short haul flights narrow body.

Thai Binh: New invested aircrafts are much preferred by customers.

Respondent 11: It depends on the perception of the customers on which criteria count first. As a matter of fact, I will say maybe 1 out of 20 passengers will know what type of aircraft they are flying on. They will not fuss about it, as their main objective is to fly from point A to point B safely.

Thai Binh: A well designed, user friendly airline website that includes flight information, ticket bookings, web check-ins and seat selections will help drive traffic and customers than a less-functional website.

Respondent 11: Any airline website is a credible source for making booking. However, a good website design and user friendly interface will go a long way to capture more potential customers. Also, attention span of consumers these days are very short. A longer longer time is enough to turn them off and to switch to another direct competitor or OTAs.

Thai Binh: The sales through digital retailing distribution channels will increase immensely and become the key channel to serve travellers.

Respondent 11: Yes, I can tell you several key factors. Firstly, travellers are increasingly more receptive to online shopping and cashless payments. Secondly, artificial intelligence (AI); where automation, chat bots, learning from past retail shopping experiences can help understand and predict what a customer is looking for the next time they are on a retail website or sets foot in a store. Thirdly, virtual reality retail; a passenger can visualise where they can sit in an airplane, of understand a product better before purchasing, without the need to set foot into a physical store. If all these are done well, they will provide a seamless retail experience to customers.

Thai Binh: Airlines still have to employ third parties to sell flights in order to optimize their sales though they prefer the direct distribution channel.

Respondent 11: This is true. Firstly, machines still can not replace human work. Secondly, not everyone is tech savvy. Thirdly, third world countries do not have the financial muscle to implement these systems.

Thai Binh: Since the competition rises in the whole region, airlines will reserve more budget to spend for marketing activity over their rivals.

Respondent 11: It depends on the short-term and long term planning policies of each airlines. Some will focus more on social media, some will focus more on direct mailers, some will focus more on TC commercials. These, all also will depend on geography. Different forms of campaigns in different forms not uncommon, based on the HQ or country office initiatives.

Thai Binh: Customer data is an important resource and play a crucial function in all aspects relating to retailings, dynamic pricing and management.

Respondent 11: Codeshare is the way to ameliorate the flight network, but the co-operation must be based on a win-win scenario. This means that if one wants to get something, one must also have something to give in return. Merging is another question, which is much harder than codesharing, and is harder than merging in other fields of economy.

Thai Binh: Small airlines should merge or doing codeshare, instead of competing in order to maintain their performance.

Respondent 11: Each airlines will consider efforts and benefits of a cooperation (SPA or codeshare) or an alliance (SkyTeam, Star Alliance). More often than not, full service airlines will join alliances. However, there is also another alliance which LCCs can join. Value Alliance is the first pan regional LCC alliance which has 8 members as of now.

Thai Binh: Currently, most of the carriers are owned by governments or by a group of stakeholders, the ownership will open to public shareholders in the future.

Respondent 11: Yes, the trend is opening to public ownership. However, this is not widely adopted as yet, and will only be applicable to LCCs such as Derry Air, VietJet and Cebu Pacific.

Thai Binh: Full-serviced airlines will shift their strategy toward the low-cost airlines in order to reduce cost.

Respondent 11: If full-service carriers turn strategy to low-cost carriage, then they will be eliminated, because they will lost their own identity and values. More often than not, we see subsidiary airlines under these full-service carriers setting up their own LCCs to compete with the true blue LCCs to compete on short haul routes and cost. More often than not, they lose out.

Thai Binh: Full serviced airlines will replace smaller jets with larger planes to increase the number of seats and match fares offered by low-cost carriers.

Respondent 11: It depends on policies of each airlines for each period of time and market and routing. Moreover, upgrading to bigger planes leads to higher supply, lower frequency and lesser flexibility .

Thai Binh: While airports engage airlines to develop their networks by introducing the opportunity, providing robust traffic and yield forecast, setting out key economic and leisure indicators, small airlines in ASEAN are not capable to expand their networks, then they would ask for the protection of the government and limit the competition in the region.

Respondent 11: I do not fully agree. Airlines, big or small also count on government support. However, smaller airlines should look into strengthening their own domestic markets and nearby shorthaul flights before extending to medium or long haul flights to compete with the bigger airlines.

Thai Binh: Financial and reputation risks are key concerns for airlines when opening new routes, then airlines seek for airports that would become their hubs only.

Respondent 11: Most airports slots are full, and will need to expand a new terminal to diversify the types of flights. For example, (Kuala Lumpur International Airport) KLIA of Malaysia created KLIA 2 to accommodate mainly for LCCs and domestic routes. Don Mueang Airport of Thailand also caters to LCCs and domestic flights. A diversification of airlines are always welcome; this boost the connectivity of the airport. This, in turn can create more job opportunites and tourism for the country.

Thai Binh: Airlines will improve customer service rather than pouring budget on advertising activities for customers' words of mouth would be more effective in drawing new customers and customers' loyalty.

Respondent 11: Both are equally important. Great customer service results in customer retention and loyalty. Advertising activities are based on either country initiatives, or HQ initiatives. Also, advertising activities are very diversified; top of the mind reminder, awareness of new routes, or working with a micro-influencer of travel blogger to spread the news of airline and destination awareness. Basically, they go hand in hand to create a win-win situation for customers.

Thai Binh: Airlines will conduct more researches and deliver surveys to passengers in order to study passengers behaviours and improve customer service. They believe that passengers have a second wallet to purchase better service and more comfort.

Respondent 11: Airlines must constantly innovate and improve on all aspects, not just in technology, but more into talent training and retention, pilot training and overall customer service etc. Surveys are a good point to do; but also, they must hear from internal staff feedbacks, and not just complaints over the phone, check-in counter or via social media platforms. If a passenger feels valued and appreciated, they will not hesitate to pay more for a top notch service and comfort.

Thai Binh: Thank you very much for your contribution.

INTERVIEW 12

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 12
Designation	▪ Senior Executive Level – Vietnam Aviation Academy (VAA)
Date of Interview	▪ 18th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ VAA’s Office – Ho Chi Minh City – Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Thai Binh: Do you see Open skies bring advantage or threat to airlines?

Respondent 12: In my opinion, there is no transparent view by Vietnam to prepare for the market integration. The airlines in Vietnam do not see the clear picture when mentioning about the Open skies policy. In theory, this policy will bring advantage if your competitive power is good, vice-versa. There will have limitations if the improvements of our airlines are slow. For example, we can consider the efficiency of the largest airline locally, which is Vietnam Airlines. I do not need to mention much but only one critical point; that is the number of personnel, despite the fact that they have segregated the personnel from other relating services, and do not count them as official headcounts. Their headcounts against the number of aircraft are still huge; whereas other airlines, for example, VietJet has this ratio much better than Vietnam Airlines. However, VietJet still has many internal problems themselves. They will have many challenges to compete with other international airlines who have a sustainable growth and a long history in the long run.

Thai Binh: Currently, technology impacts positively to the development of the airline industry with the improvement of ticket sales system and the upgrade of aircraft. Do you agree that technology would be a key factor to develop the airline industry?

Respondent 12: Yes, this is a fact. Technology will change many things and we can see it clearer in the operational segments. The application of technology in management will depend on human mentality and adaptability. According to my assessment, the mentality and adaptability of managers towards technology is still limited in Vietnam, thus the management system and its functions will not work as to our expectations.

Thai Binh: Which key strategies do you find airlines will focus on? For example, human resources, technology, or marketing? Which domain is the most importance to airlines?

Respondent 12: In fact, it depends on each airline. It is difficult to tell in general, there is no common problem to solve. Currently, in my point of view, due to the new elements in the airline business in Vietnam, the race goes towards the market factor; opening of new routes to dominate the market share. This seems to be the main trend. A great example is the development of VietJet. When VietJet entered the market, they opened new routes at all costs to boost their network rapidly. Because of this, other airlines joined in the race, including Vietnam Airlines. Currently, the trend to dominate the market share is the key trend for airlines operating in Vietnam.

Thai Binh: Airlines open new routes for profitability, is there any other purpose?

Respondent 12: I think it’s not really true. Obviously, VietJet has to calculate their short-term and long-term profitability among other things. For example, they have to cover their geographic for a certain period, then the profit factor has to be on par to boost IPO and gaining trust etc. You can see the similar findings in real estate industry. If you observe the big groups such as Vingroup or FLC Group, they are creating market coverage and brand awareness in the market. Now, we cannot tell how they get the profit or how they need to pay off in the future because we do not have enough duration of time to access. Then, it is not correct to improvise that airlines only open new routes for the profitability.

Thai Binh: Airlines will create their differentiation such as to improve their services, or to have appropriate marketing strategy, do you think these will be the success factors for airlines?

Respondent 12: All the things relevant to marketing will have a clear effect. For instance, the commercial department of VietJet is doing well because they have done dynamic marketing activities, but it is not enough. This is only a short-term gain in awareness.

The brand perception of low-cost airlines is not much because we do not have enough historic data to evaluate this. These low-cost airlines appeared in the Vietnamese market for only 5 - 7 years, and it will not affect to the Vietnamese people. Vietnam Airlines is now the major market player who also offers flexible pricing policy. Furthermore, media and marketing have two aspects, the first one is to distribution to media for for better brand identity; the second one is to prevent bad publicity. VietJet is one of the few airlines who do well at this.

However, in regard to long-term, the reputation of an airline will look towards safety. The safety issue is difficult to measure, and in Vietnam market, the consumers are not really aware of safety. The price factor, marketing campaigns, brand image, and bonus will impact to the purchasing behavior, but those people are not really the target customers of airlines in the long run. In Vietnam, the regulations about safety configurations are not very strict. We do not have enough historic data to provide assessment now, and obviously the commercial aspect will impact strongly to the success of airlines currently.

Thai Binh: Do you think low cost airlines will create the competition in the market, then major airlines have to improve and create their own differentiation?

Respondent 12: Sure. In fact, currently, VietJet has rejected the low-cost model and they said that they are the new generation airline. For example, the new established Bamboo Airlines considers itself hybrid, similar to Toyota when they were changing. Currently, only Jetstar Pacific in the market is still consistent with its low-cost model. Jetstar Pacific has followed the safety criteria professionally and became a market leader in safety, surpassing even Vietnam Airlines. This is because they are involved with Qantas in operation system. As a matter of fact, they say they are low-cost, actually their cost is high. Of course, according to their philosophy, low-cost now has proved nothing. In economics study, we should consider about the scale, and their scale may not be big enough to balance to their cost in operations. And in Vietnam, we do not really need low-cost, but when there is new entry, it is inevitably for bigger airlines, such as Vietnam Airlines, to adapt and compete.

Thai Binh: When a new airline is established, it will create its own customers as a new generation for doing marketing?

Respondent 12: Of course. Each airline will have to choose their target customers, but it will depend on each market. For example, I don't see Bamboo Airways having a clear strategy. They said they will fly from the destinations that resorts are based in. One reporter has said this strategy is impossible because no one will fly from this resort to that resort.

Thai Binh: Then the number of customers will be less.

Respondent 12: When Vietnam Airlines adapts to new market conditions, they will compete directly and don't need to go through any subsidiaries. As for VietJet, they will create a certain target group of customers at the beginning, there are the people who have never flew before, but this target group cannot guarantee them numbers in the long term.

In airline economics, if the airline cannot develop the ancillary products, and their ticket price is sold at a standard price, the capacity must be over 75% to recover cost. Previously, when the fuel cost has decreased, airlines reduced fuel cost when they utilize new aircraft. However, the scenario will be different after 5 - 10 years. If they are still using the strategy to reduce ticket prices as previously, I am afraid that they will meet difficulties in the long-term. Our regulations about competition and accounting are still leap years away. This have helped new airlines to gain profits for a certain period. This is my own opinion.

Thai Binh: Do you think that airlines are seeking corporations rather than competing? For example, through codeshares, interlines, or with other sectors in order to develop their ancillary services?

Respondent 12: This model is going towards to the future. However, there are certain rules. There are rules for airlines to join alliances; it's about the core business. Other services are being shared among airlines in Vietnam such as training and maintenance. The concept about win-win situation should be applied in a constrained country as Vietnam. If we are to compete at all cost, this will only bring harm. I think co-operation will be good for the future; whoever is good at whichever, can share their services with others.

Thai Binh: Do you think airlines will co-operate to offer a common price in the market?

Respondent 12: There are certain rules that forbid the co-operation to dominate the market. That's why there are associations for every industry. The association's role in the transportation industry in Vietnam is not so strong. Association is not born to either diminish the competition or divide the market, but to balance the market at a relative level. The associations do not implement strongly their role and they do not have a strong voice. As a result, we do not see a compromise among the common service providers in our country, leading to the story that the service providers will compete among themselves; whoever has strong financial backings will stay and direct the market and this is not good. However, I have not seen a common vision for the whole picture of the aviation industry in Vietnam.

Thai Binh: Do you think airlines will get rid of GDS?

Respondent 12: It depends on each airline, but airlines will not get rid of GDS at the moment because the system is good. Regarding the ticket bookings through websites, even if we locate the servers here, the fact that it is still difficult to book air tickets on the websites because of certain network and infrastructure issues. Airlines should use these platforms to reach wider sales and let the intermediate parties to enjoy the fees, which is reasonable.

Thai Binh: Regarding fuel price, how does it impact airlines? And will airlines do hedging to secure their operations?

Respondent 12: Fuel price impacts strongly to airlines because it accounts for 30% of the cost of operation. The fuel price has been low recently offering the advantage to airlines, and VietJet has taken this advantage. Hedging is a financial tool to bring the stability for the fuel price. State owned airlines such as Vietnam Airlines and Jetstar Pacific are afraid of this tool, it will be OK if they gain profit from it, vice versa, they will take risk of being found guilty and jailed. In hedging, there are some problems that can be abused. I think this tool should be applied in management; however, it is relatively limited in Vietnam because the airlines depend on the government's capital.

Thai Binh: This is similar to the bond security.

Respondent 12: This tool is also risky because it is based on the projection, and we are not 100% sure.

Thai Binh: There are 2 types of aircraft employed by the aviation industry; wide body and narrow body depending on their routes. Do they prefer more frequencies with small aircraft or less frequencies with large aircraft? This issue will depend on their strategy or depend on the operational routes?

Respondent 12: We don't have a common policy for this question. The airport is overloaded because airlines are utilizing small aircraft to increase their capacity. One of the solutions to solve the overload of the airport is to use larger aircraft, but this is not considered the main element to reduce the overload because it also depends on each airline. I see the trend that airlines are using wide body aircraft to fly long-haul flight, and to make the flight safer.

Regards to the overload of the airport, we should consider other factors as well. For example, in order to solve the traffic jam in the city, we should not allow the massive development of Uber or Grab services; even in the most developed countries, they should consider about this. Vietnam has not yet been recognized as a market economy; our policies are not clear enough. For example, if you want to reduce the overload of the Tan Son Nhat airport, why don't you give priority to the wide body aircraft, and limit the narrow body aircraft? Because if we want to reduce the overload in this period, then airlines must accept it. You should have policies to encourage or ban; all measures must be reasonable and should not be interfered. For example, Singapore with an internationally recognized economy; it taxes cars at the highest rate in the region. So, who says that Singapore is not a market economy? Because our policies are not targeted, this leads to the embarrassment for airlines to equip their fleet.

Thai Binh: Regarding the shortage of qualified employees and pilots, how does this issue impact to airlines?

Respondent 12: People always say that human is the important factor. In fact, to have a strategy about the human resources in Vietnam in both short and long terms, I see that all stakeholders including the government bodies do not pay attention to this issue. For instance, even the key resource as pilots, we are even not aware of the fact that it would be dangerous if we do not have a long-term strategy, because we largely depend on foreign captains.

Why there are more foreign captains than Vietnamese captains? Because they have a very different career orientation than ours. As a result, the input quality and those who follow this profession are very limited, people consider this is a special profession and very few people notice the special nature of this profession, and we are using the pilot talents from many different countries. Despite these measures, the standards among these pilots are very different. When the market fluctuates, it is projected to have the increased shortage of pilots in Arabic countries and the Pacific region, airlines will compete with each other by wages for pilots.

And because we do not have a long-term national strategy for this issue, I predict that airlines in Vietnam will pay more for this problem. At present, VietJet bases on the recruitment agencies to employ pilots from Russian speaking countries. Pilots in these countries can retire at the age of 45-50 years old and already being captains, then they can move here to fly, etc. Also, they employ co-pilots who are cadets needed the training progress.

From my observation, we can see this clear picture in the next 5-10 years; many co-pilots will be Vietnamese, but very few will become captains, because the initial thinking and orientation towards this profession. The government does not truly invest in the aviation industry, and these cadets have to finance themselves for an unstable future. After passing some certain criteria, they are admitted to Vietnam Airlines. The excellent cadets will get bored after a while, due to lack of opportunities, and move on to join other industries. Then, in the long term, the number of qualified Vietnamese pilots will decrease drastically.

As for the young cadets aged 18 or 19, they might have a clear passion about this profession. Secondly, they ought to have sufficient money to accept the risk that if they can pass the cadet examinations, or if they can apply for a suitable job, and lots of other cost factors as well. As a result, in neighboring countries as Japan and Australia, though they are capitalized countries and market economies, they have recognized this problem in recent years and have built a strategy to build up a strategic pilot team for the country with the financial contribution from the states and airlines.

Also, those who attended the cadet program have been selected fairly in order to establish a base pilot team. For example, the Japanese aviation schools have tested the cadets very strictly and those cadets never have to worry about money. The government will spend 1/3 of the budget to finance these schools, 2/3 of the budget will be provided by airlines when they receive candidates. If they want to receive 50 cadets this year, they have to donate tuition fees for those schools, which is very transparent. As a result, they are proud that they will have a strategic pilot team each year. And the Ministry of Transportation in South Korea has followed this model and develop a strategic pilot training program for South Korea. They have passed a floating period and recognized such issues.

Currently, cadet pilots have to fend for themselves, leading to too many barriers, not only in the airline industry but also in other industries as well. People feel that it will take a long time to stabilize the pilot force in Vietnam as we are very dependent on the foreign pilots. Of course, for now, we are now dependent on them. For example, in a small airline as JetStar Pacific, when pilots asked for leaves because of illness, the airline has to cut flights. As for international airlines, if pilots are going on strike, the airlines will have to cancel flights. In Vietnam, we have yet set any regulations about strikes, then we are still not afraid. In my opinion, this issue will be very crucial, this also applies for qualified core pilot team as well. When there is a new airline entering the industry, it will cause chaos.

We should seek the co-operation among schools and enterprises to provide the sufficient human talents. Currently, it is difficult to develop a highly qualified team in this industry. This issue also applies for maintenance engineers, middle and top managers. This will have a negative impact if we do not choose the qualified people; and if we choose the less qualified people then it will lead to certain detrimental effects. The most worrying impact will be aviation safety.

Thai Binh: How do you see the outlook of the aviation industry in ASEAN in the next 5-10 years?

Respondent 12: I think when the fuel price is still stable, the airline industry will be very dynamic in the next few years. The industry depends too much on the fuel price. We have enjoyed the advantage recently when the economy has recovered after the downturn, and the fuel price has been stable at a low rate, so activities in the airline industry are going well.

Now, we are stepping into an unstable period. I am concerned about the East Sea problem which will relate to the fuel issue in the region and the control of the skies, and this is unpredictable. In general, people say that the airline industry is growing and booming, but there might have problems if China and other neighboring countries start to dispute about the control of the skies, then countries in ASEAN are affected strongly because they must fly pass this area. I am not too optimistic about this issue because there are just too many unstable elements.

Thai Binh: Thank you very much for your time

INTERVIEW 13

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 13
Designation	▪ Manager Level, Vietnam Aviation Academy in Vietnam
Date of Interview	▪ 17th January 2019
Mean of interview	▪ Meeting in Person
Location	▪ Joy Garden Cafe – Ho Chi Minh City – Vietnam
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Thai Binh: Do you see the Open skies policy will bring threat or opportunity to airlines in ASEAN region?

Respondent 13: In ASEAN, most of the countries will sign the Open skies policy if they can benefit from it. In Europe, the economy of the countries in the region are quite equivalent; therefore, it is easy for them to sign the policy. In ASEAN, the gaps between the economies and the airlines are too huge. For example, within 4 countries such as Laos, Cambodia, Myanmar and Vietnam, they haven't signed anything together yet though they have meetings together for 20 years, because the airline benefits among these 4 countries are not equivalent. For major airlines, they can profit from the Open skies from the signed agreement. However, the countries should be equal too, leading to a force to sign together, now the gaps are too large.

For example, in ASEAN, Singapore, Thailand, Vietnam, Malaysia are the countries that have a good aviation industry. Other countries like Myanmar, Indonesia; Indonesia has many airlines but the competitive power as compared to other countries is very low. Laos and Cambodia do not have the advantage. So, I don't think these countries will sign. The single market in ASEAN can be grouped by countries having the developed aviation industry and countries having the lesser developed aviation industry. It will be easier for them to sign when they can have the mutual benefits.

Thai Binh: Cambodia has signed, but Malaysia, Indonesia and Philippines did not sign all the agreement.

Respondent 13: Some countries will sign in accordance to the trends of the world. Even though Laos and Cambodia signed, they did not gain or lose anything from this agreement. Concerning the transport aspect, they will benefit something. But if the gaps are too large, they might find ways to refuse or prolong the duration to sign.

Thai Binh: What types of technology will airlines invest in? For example, aircraft type, distribution channel, customer service? Do you think technology is the key factor to impact on the airline industry?

Respondent 13: Technology plays a crucial role in the airline industry. Regarding the aircraft, the synchronization among the aircraft in the world is high, when mentioning about the model of the aircraft, customers will know some type of aircraft such as B787. Only customers who travel a lot, they will notice the equipment inside the aircraft in terms of seat, Wi-Fi, in-flight entertainment screens etc. Normally, customers only know a few types of aircraft and do not question too much because aircraft look so similar. However, in order to encourage the sales policy as well as the customer experience, sales systems should turn to online systems and be able to solve lots of problems. Secondly, that system can support to the revenue support system at the highest level.

In Vietnam, people have thought of the revenue management issue, but they still base on their manual experience more. I see that people have not utilized all the functions of this software but to focus only on the sales section, and the most important point is how to transfer all the configurations of the sales to the revenue management system.

Thai Binh: Do you think airlines will combine all strategies for the business development?

Respondent 13: Correct. Each airline should position themselves and have a long-term strategy. As I have read in the articles, even though in Europe, they mentioned that the airline industry is the service industry, but price is the most important factor. Customers always complain about the services of the airline but if they see the price of that

airline is competitive, they still purchase tickets from that airline. Though they may still complain, they still purchase, especially in the developing countries such as ours. This is the most extremely important factor.

An airline has to portray their brand image and positioning consistent from the beginning to the end. For example, at the initial phase of VietJet's establishment, people often questioned that why Vietnam Airlines did not have any reaction to compete with VietJet. From the dominant market share, Vietnam Airlines has lost and shared the market to VietJet 50:50, and sometimes Vietjet dominates the market.

Till this period, I see that they are still consistent in their strategy but now it seems that they start to invest professionally. They start to approach the new notions that they have never done before but worked by their own experience. For example, the notion of customer experience, when enhancing the service quality people can discuss about this or that criteria, but they recognized that Vietnam Airlines offers very good customer experience. They position themselves as a 4-Star airline from marketing, customer service and customer experience. They don't use the cheap marketing tactics such as shocking cause like VietJet. Their strategy is consistent though there happens some hiccups during the process. Recently, Vietnam Airlines introduces Vietnamese food in-flight.

Thai Binh: How do they introduce?

Respondent 13: They introduced "Cloud Pho" which is the traditional noodle soup served in the sky. They invited a famous chef to cook the "Pho" in the plane. They introduced famous Vietnamese fruits to customers, too.

Thai Binh: They might do that on long haul flight.

Respondent 13: Through the advertising of Vietnamese food and fruit, they introduce Vietnamese cuisine at the same time, in accordance to their previous slogan "Bring Vietnam to the World". So, I see that their steps and details are very consistent.

Thai Binh: Are these things their differentiation? I think they do everything lightly and try not to cause shock like VietJet.

Respondent 13: Correct. They ignore the other airline's activities; they just focus on their own way. For example, for the U23 Football Prize in China in the past, VietJet shocked the Vietnamese people with the bikini girls welcoming the football team in-flight since Vietnam Airlines has lost the contract to transport the football players. We did not know the reason how VietJet could take this contract from Vietnam Airlines. When VietJet saw that the football team of Vietnam gradually won matches after matches and the football team's reputation is raising up, they tried to gain the contract at all cost, though the contract had been previously signed with Vietnam Airlines, to transport the football players back home.

I saw the reaction of Vietnam Airlines; they do not need to give any explanation to the Vietnamese people. They proved that they have a higher position than VietJet. After that, VietJet's activities were against by the society and the General Department of Sports and Physical Training did not dare to sign the next contract with them. Then, at the later AFF Suzuki Cup, Vietnam Airlines was granted to transport the team to Bacolod, The Philippines. Vietnam Airlines performed better by flying directly from Hanoi to Bacolod to accommodate the football team at the local airport which has never welcomed any international flight before. When the Filipino football team fly to Vietnam for the match, they used their airline and stopped over at 2 transit hubs and it took them at least 19 hours to arrive to Vietnam. If in a normal case, we have to fly Hanoi to Hong Kong, then from Hong Kong to Manila then to Bacolod (Negros Occidental province) but Vietnam Airlines opened the private flight to transport the Vietnamese team within 4 hours only. After that people questioned why the Vietnamese team flew to the Philippines for 4 hours only while the Filipino team flew to Vietnam for 19 hours, after that the media figured out the fact and then automatically glorified Vietnam Airlines. This differentiation happened 3-4 years recently, in the past their strategy was not clear, it was purely a national airline. The new Senior Executive Level of Vietnam Airlines, Mr. Duong Tri Thanh, has set a very clear strategy now.

Thai Binh: Are product differentiation, customer service improvement and marketing strategy are the key factors to reach the profitability?

Respondent 13: I think all these elements will help the airline to maintain the customers. Regarding the profitability, it depends on one more element that the revenue management department should co-ordinate with other departments like Marketing, Strategy and Customer Service to retain the customers.

Thai Binh: Do all airlines try to cut cost in order to maintain their business?

Respondent 13: When low cost carriers (LCC) enter the market, everyone emphasizes the term “low cost”, they are joking that there is no LCC or high cost carrier because all airlines need to find ways to cut cost. I find the most important term is “appropriate”, whatever we do we should calculate an appropriate cost in order to suit our customer demand. Even though you cut cost, you should do it moderately to your customer segment.

Thai Binh: Derry Air said that not because they offer low cost service, meaning that they offer low quality, but they provide more options to customers.

Respondent 13: Correct. I wonder who translated “low-cost” into the Vietnamese term such as “cheap priced airline” while we have a proverb like “You’ll get what you pay for”, then in the customer’s mind or in the employee’s mind from that airline, “Ah, it’s cheap”. Customers of Vietjet, VietJet initially positioned themselves as a low-cost airline, will think that they have to take risk because they fly with the low-cost airline.

But for customers of Vietnam Airlines, the ticket price maybe equivalent to that of VietJet, will complain immediately because they think they expect the higher quality. The rule of low-cost airline is just to break down the product, they sell the core product first, and if anyone have more demand they will add on. If you compare the core product of the low-cost airline and the core product of the full-service airline, they are the same, then the quality must be similar and have the same value. The value in the airline industry will include the safety, timeliness and accuracy; then all the elements would be the same. Low-cost airlines just offer more options whether the customer want to bring more luggage or want to eat in-flight or not. Then passengers just cut such cost.

Thai Binh: I never want to fly with low-cost airlines before but now I can re-consider, if I fly to Hanoi for one day without much luggage, I can choose Jetstar Pacific rather than Vietnam Airlines.

Respondent 13: Many colleagues mentioned that Jetstar Pacific is more stable than VietJet in terms of safety, service, and price; but their marketing is not as good as Vietjet. That’s why VietJet can impress the customers. Jetstar Pacific is an investment from the State with the fund accounted for 70% while Jetstar Pacific accounts for 30%.

Regarding safety, all airlines in Vietnam have to reach the stringent standards of the Civil Aviation Authority of Vietnam (CAAV) or International Air Transport Association (IATA), but in reality, everyone can see that the duration to utilize the aircraft at low-cost airlines are much higher than that of the traditional airlines. For example, Derry Air announces that their aircraft are utilized 12 hours per day; VietJet is a little bit lower, around 10-11 hours; Vietnam Airlines 8 hours. I don’t know much about technology; I wonder if 12 hours are the maximum utilization of the aircraft or not; or it can endure longer hours. But if the aircraft is utilized at its maximum capacity daily, the aircraft will be worn out after a certain of time.

An example in the maintenance task, 25 years ago, there was an airline in Asia that crashed; the investigations indicated that certain parts of the aircraft were damaged and hastily repaired, although the repairs were not successfully completed at times. I wonder how it could pass the security checks every time.

Thai Binh: One of the interviewees revealed to me that the technician of one Chinese airlines in Cambodia had once feedbacked that he saw the aircraft is not airworthy, but the airline permitted the plane in question for flights.

Respondent 13: In certain positions, the employees who have the good skills, they can enhance the service quality, vice versa, the service quality is just down; however, we have to manage tightly the elements that affect to safety. To some aspects, customers will question, how safe is it to fly on low-cost airlines? This is the question with certain basis.

Thai Binh: Do you think LCCs entering the market will increase the competition and force major airlines to adapt the market and diversify their products?

Respondent 13: Of course, when there are new competitors, then the price sensitivity is very high. For LCCs, their most competitive advantage is the price, therefore, traditional airlines are forced to change their policy and strategy in order to adapt the market.

As from my observation in the market, traditional airlines thrive to adjust and maintain their service quality. Second, they also break down the cost in an appropriate level. For example, they cut the services in the short haul flights in order to provide the best price. For major airlines, the margin cost is often low; then if they adapt well, they still retain their customers because their service quality is better than that of LCCs. When their margin cost is low, they can offer the low prices; and even if they manage well, they can offer lower prices than LCC. That means the average cost of LCCs cannot be lower than the margin cost of the product of major airlines. If the major airlines adapt the market well, I think they will also be successful.

In another aspect, if LCCs can develop, then I think they have a very transparent strategy. For example, I also study how Derry Air developed in the beginning and keep growing until now while other LCCs cannot. I see one interesting point from Derry Air; that is, they focus on the niche market where few people come to these destinations or other airlines do not fly to. Second, Derry Air has the strategy to turn this niche market into the traditional market and they invest on that locale in order to turn that locale to the destination. When the passengers increase, they become the main transporter to that destination. I see that they are proactive with this strategy. In the Vietnamese market, certain airlines also follow this strategy, but it seems not so completely. I saw that Vietnam Airlines also signed with some local partners to be a main transporter; Jetstar Pacific does the same; but the effort to turn those locales into the real destinations is not as strong as Derry Air. Derry Air finds the new destinations with less competition.

Another example with People Express Airlines in America. People Express Airlines chose a wrong strategy. They developed very well at the beginning but later they competed with American Airlines by flying routes where American Airlines was operating strongly. With the margin cost advantage, after a year, American Airlines can offer the lower price and better service quality than People Express Airlines, then customers switch to American Airlines and People Express Airlines went bankrupt. When I compare People Express to Derry Air, I see that Derry Air has been as successful as People Express Airlines at the initial stage, but Derry Air can move to a higher level when they develop their niche market and turn this market into a big market. They are not silly enough to compete with other major airlines.

Thai Binh: If they enter Vietnam and fly domestically, where do you think they will be flying? Because all major routes are covered with Vietnam Airlines. I wonder if VietJet and Vietnam Airlines will fly the same domestic network?

Respondent 13: No. For Vietnam Airlines, besides the profitable routes, they are forced to fly other routes despite the profitability or not. For example, they have to fly to Dien Bien, Thanh Hoa, etc. VietJet has more advantages; they only fly to the routes that they can gain profit.

Thai Binh: My question is, if Derry Air enters the Vietnam market, 3 airlines will have to share the same routes.

Respondent 13: Of course, this can be. But it's not three, it would be 5 airlines in Vietnam.

Thai Binh: I wonder how the niche market for Derry Air in Vietnam is if we don't have enough airports.

Respondent 13: The local airports are not full, except the airports in Saigon and Hanoi. I even heard the news yesterday that Vietravel has the intention to establish Vietravel Airlines, and they will be based in Hue. At present, the airports in Vietnam do not operate at the maximum capacity. Second, all of them have yet to be expanded. The Phu Bai airport in Hue is planned to expand 5 million hectares per year. In Can Tho city, an international airport was built. For Vietravel, these are the preparation steps when they set up chartered flights from Can Tho to Dalat. They gradually approach the airline operational management in order to open more routes. Can you imagine that an international airport that can accommodate 5 million passengers per year, but they only host 17 flights from Can Tho to Taipei, Taiwan in a year?

Thai Binh: Who travels from Can Tho to Taipei? Do they transport Taiwanese passengers to Can Tho?

Respondent 13: The customer target is the Vietnamese brides to Taiwan. 13 chartered flights before the new year are from Taipei to Can Tho. This is a classic example to show that the local airport is not yet fully utilized. Even if we have 3, 4 or more airlines flying to this airport, it is still empty. When Tan Son Nhat International Airport is overloaded, we have thought of moving some airlines to base in Can Tho.

Thai Binh: So, if I want to travel abroad, I have to depart Can Tho?

Respondent 13: No. Instead of parking at Tan Son Nhat International Airport, the airplane will have to park in Can Tho and depart from Can Tho. Then we will have one more point.

For example, the airlines have to increase flights during the New Year period and Tan Son Nhat International Airport is overloaded, instead of having the route from Saigon to Hanoi, we will have the route from Can Tho to Hanoi. Then the passengers who locate near to Can Tho, they don't need to go to Tan Son Nhat International Airport; they can choose to depart from Can Tho; especially customers in Long An and Tien Giang, where the distance to transport to Can Tho or Saigon is the same. The airport capacities in Vietnam is still redundant. In the case of Derry Air, they may target the destinations like Dalat, Phu Quoc; they can make the routes like Can Tho to Phu Quoc, Can Tho to Dalat or Dalat to Phu Quoc.

In Vietnam, there are more than 20 airports and that is quite a lot. Now, most of provinces have their own airports. And each one is upgraded with the average passengers of 5 million people, then 5 airlines do not make any sense. The international tourist arrivals to our country was 17 million people last year and there are not many travelers flying domestically, then the airport capacity is still empty.

Thai Binh: Why LCCs established by major airlines are not as successful as independent airlines?

Respondent 13: For major airlines, LCCs established by them will have some certain dependence. They are considered the supplement, not the independent airline. Second, there are stepping products between the two airlines. For example, Vietnam Airlines and JetStar Pacific compete with each other in some aspects, i.e, in terms of price and products. Air France, the national airline of France, which is a traditional airline, now offers air ticket prices without luggage. That's why major airlines consider this as supplement services or products, then their activities are not strong as the independent LCC.

Thai Binh: Do you think airlines will co-operate or compete with each other in the future?

Respondent 13: The airline industry requires the co-operation. With the tough competition as now, this co-operation is more crucial. For example, in the past airlines just co-operate on the route network, now they have to co-operate on the services and identify the service quality. They have to share the common suppliers and infrastructure; this is the way to cut cost together.

Thai Binh: Now they compete with one another about the price, do they co-operate to fix the price? Then customers will have no option.

Respondent 13: If they do like that, they will turn this to the same situation in the 20th century, that is the monopoly groups. To other aspects, though they compete with one another, but they have their own market segments. For example, an airline in Europe can choose one airline in Southeast Asia and one airline in Northeast Asia, who has their own advantage, to co-operate with. When they co-operate to create the advantage, this advantage will become a global advantage, and each airline will have its strengths in their region.

Thai Binh: Airlines open their route network for what purpose? Profitability, brand development or politics?

Respondent 13: Only national airlines open for the political route. Normally, when an airline co-operates with other airlines, the main purpose relates to the profitability which is coming later; the first objective is to satisfy the demand of customers. For example, if the amount of customer travelling to a certain region is not large enough, the airline will not open the route to that destination. But if they do not open the route to that destination, and they don't co-operate with another airline in the region, then they cannot meet the demands of this small group of customers. If they cater to this small group of customers, then they cannot develop to cater to bigger groups. In my opinion, when an airline can co-operate with another airline, they can satisfy the demands of customers despite the customer base size. Base on this foundation, they will have the opportunities to expand their business scale.

Thai Binh: Do you think airlines will get rid of Global Distribution System (GDS) in the future?

Respondent 13: In my opinion, GDS plays an important role until this moment. If the airlines distribute by themselves, they will act as the producer and the seller, so they have specialty through an intermediate distribution channel. At present, thanks to the Internet, airlines can expand their sales channel directly. However, in another aspect, they do not solve all problems. Suppose that they only remain their ticket sales office and the internet sales channel, this means that they will be in charge of the sales totally.

However, in the development of the society, the company needs to outsource the sales channel in order to create multilevel sales channel. You can see that the majority of airlines previously held on to some service by themselves, i.e., telephone sales, now many airlines outsource this service to another call-center, which means this is the intermediate sales channel. So, it is impossible to get rid of GDS totally and I don't think airlines will distribute all by themselves.

Thai Binh: Do you think fuel price will impact to the airlines? Do airlines hedge in order to secure their stable performance?

Respondent 13: The fuel price impact greatly to the airlines. It depends on each airline; the fuel cost accounts for 25% - 35%. So, on average, it is 1/3 of the cost, so when the fuel price increases to double, 3 times or 4 times; then it will affect the airlines badly. If the fuel price increases by double, then the ticket sales just can only recover the total cost and there is no profit.

Regarding hedging, it depends on the airline's prediction of the increase level of the fuel price. The increase or the decrease fuel prices will depend on some countries who specialize in doing this by cutting some productivity to increase the price. This is not an easy issue.

Thai Binh: Is price the key factor to influence to the purchase behavior?

Respondent 13: As I have mentioned before, price is the key factor over the quality concern. In the event that the quality is not so good, people can ignore this element and still buy the cheaper price.

Thai Binh: How does the shortage of qualified employees and pilots impact the airline industry?

Respondent 13: Currently, the shortage of pilots is the crucial issue. In the airline industry, it takes time to train a pilot. For example, Vietnam Airlines takes 4 years to recruit, train the pilot, and allow him to work. At the initial stage, the pilot is required to accumulate thousands of flying hours to become a more professional pilot. So, we can expect to have a qualified pilot for an average time of 7 – 10 years. Currently, due to the emergence of many new airlines and the overwhelming demand, airlines have come to the situation that they have to poach personnel from one another. Even in Australia, there is still a shortage of pilots though they have the long-term path of investment on this resource. So, this is a big issue. Second, other positions will affect to cost and skills. In the past, it takes 3 – 6 months to train for an employee in order to meet the standard, now under the pressure of the shortage of human resource, the training time is reduced to 1/3 compared to previously.

For example, cabin crew are trained for 2 months or 45 days; they cannot be professional as before. People need time to consume the knowledge and the skills, they cannot take 3 shifts from early morning to evening for the training. It cannot compare to the fact that you only get the training in one shift only and the duration of training is prolonged. Obviously, the development of the airline industry and the increased demand challenge the airlines to ensure their development and the guarantee of quality.

Thai Binh: How do airlines balance the utilization of narrow body aircraft and wide body aircraft?

Respondent 13: I think it will depend on the demand of the route, as well as the number of passengers. If there is a large demand of travelling from point A to point B, airlines will invest on the wide body aircraft. If the demand is lesser, they can use narrow body aircraft.

Another aspect is the frequency. For example, an airline flies one flight in the morning with the large aircraft consisting of 300 seats to offer the comfort. But if they focus only on the frequencies to satisfy the demand of the passengers, they can use small aircraft. Currently, I see that airlines balance the usage of these two aircraft. Airlines can fly one flight with the wide aircraft and many other flights with small aircraft in order to ensure the transportation of a large number of passengers and the diversified frequencies. If the passengers travel frequently, they prefer to fly with the wide body aircraft to have more comfort. You cannot only focus on the wide body aircraft and cannot ensure the frequencies while frequencies are very important in competition.

Thai Binh: What is your outlook about the airline industry in the future?

Respondent 13: The airline industry is still growing. With the large population in Vietnam, around 90 million people, while the tourist arrivals only amount to 17 million people, the potential is very huge. Second, if we consider in ASEAN, we see the overall economy is developing, the transportation cost from Vietnam to other countries is somewhat cheaper than the cost to travel domestically. In the next 5 years, the ASEAN market will grow strongly.

Thai Binh: Thank you very much.

INTERVIEW 14

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 14
Designation	▪ Chief Air Safety Investigator – Safety Investigation Authority – Finland
Date of Interview	▪ 15th March 2019
Mean of interview	▪ Meeting in Person
Location	▪ State Secretariat of Civil Aviation’s Office - Phnom Penh - Cambodia
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: How does safety regulations affect to the airlines business?

Respondent 14: Well, of course, let’s say, safety. It costs money for the airlines and the aviation industry. On the other hand, by investing to safety, its of course accident is a million times more expensive. It’s about preventing major accidents. So, that’s the basic thing and looking at all other industries, not just aviation. Aviation has been all the while ahead of other industries in safety regulations and so on. And the only point on the regulations is that flying should be safe. Yeah. So I think, if there was an accident, it's always so bad for the business; people try and start avoiding flying and so on. That's not good. But, it's always a balance between safety and the economy, the money making the business.

Thai Binh: Yeah. And, for the airlines, for example, low cost airlines, they always employed old aircraft operations. How would a regulation restrict and affect their business?

Respondent 14: Oh, yes. Of course, but I think it's kind of a standard. Every airline should understand the system anyway. So I don't see that it's part of their business. It's because they have been for decades. They have safety regulations in place. Nowadays, through safety management system, SMS, there's more responsibility inside the airline to look, there's safety issues and so on. So they're sort of limit how much you can, let's say, produce safety regulation by the authorities. So, nowadays it's more like, it's the companies. Airlines internal safety system is also very important part, not just the regulations. Well, SMS safety management system itself, it's regulated. That's mandatory. And then of course you need, you need resources. So, that means you have to spend money on this safety in the airline and like I said in the beginning, it's less expensive to invest in safety than have an accident. So, that's the point.

Thai Binh: Yeah. I see that large airlines, they reduce the lifespan of the aircraft for five to seven years, and then they would transfer aircraft to other airlines in the less developed countries.

Respondent 14: Let's say five to seven-year-old aircraft. This is still new. In my point of view, because you have to understand that all the changing of engines and components and so on. It's kept new. So I say like 20 year old aircraft is still okay. So, it is quite interesting, this restriction here, the 15-year time regulation. Well, maybe they will sell them forward them to some other countries. But of course, when you buy an aircraft for an airline, and it's used, you have to be very careful that it's all the maintenance documents and everything has been done according the regulations. So, of course it's a long process to buy an aircraft if it's used. So, it's not that lots of checking and that's means you must have experts in the airline who can really check that aircraft that everything is okay according to regulations and all the maintenance history and so on. But this is interesting. Let's say interesting restriction is 15 years.

Thai Binh: So how do manufacturers affect to the airline business? So for the case of Boeing, currently, many countries suspend the model 737 MAX 8; like China, Singapore, UK, even EU, I know this morning, even Boeing, they grounded this aircraft model.

Respondent 14: Yeah, totally. It's practically the whole. It's tough playing anywhere in the world at the moment. So, this is a very exceptional case. Yeah. so of course, it means lots of work in the airlines now to figure out how to continue the work because in the airlines they don't have spare aircraft, sitting and waiting. They are so expensive. So this is very expensive decision to ground aircraft. So, it's going to be interesting to see that, are they asking money from Boeing? Yeah, probably. So, that's something I don't know how to, I have never done a deal if we have to and I don't know the deal has some kind of a warranty or something.

Thai Binh: I see that for America and Canada, these countries are using this model more than other countries, but they don't have any problems. But the problem is from Indonesia, in Ethiopia, this is also because of the pilot, they are not familiar with the new technology.

Respondent 14: Yes. Actually, yesterday I read some reports from USA that the same thing happening; that nose down effect. And, I read those reports and they have been fast and correct by putting off the autopilot. It's matter of training. Well, it starts from the manuals. The manuals have to be clear on what to do in the situation that you have this kind of problem immediately. Of course, the training, you should have that option. You should do it in the simulator. Because twice a year, normally a pilot goes for simulator training, it's a matter of many things. But, the overall, the big effect to all these airlines, it's really going to be very expensive because they have to cancel many flights.

Yes. I think there are something like 360 planes around the world at this point on the 737 MAX. So that means of course inconvenience for the passengers who had bought tickets, the cancellation and maybe they have to re-route people that cost lots of money. So, it's a very expensive project. But, of course there's whole lots of pressure for the manufacturer at this point to modify the flight control system or whatever. It's related to angle of attack, information and because I'm very familiar with that system because I've done all kinds of things in my mind, my life. So, that's a big issue.

Thai Binh: I have done some interviews with other people, except pilots. For example, people from Airbus, they come to train for the aircraft in Cambodia, they do not pay too much attention to the training. They just play on their phones. I think it's maybe something similar in Asian countries or other countries. They did not pay too much to the training program on how to use the new technology.

Respondent 14: Yeah, of course. That's, I cannot say anything about the quality of training hearing in this part of the world. I know now I was in a training session in the airline in Finland, Finnair. They gave actually a lot of additional training, not required by the regulator there, and they had lots of training devices to get familiar with the computers and so on. Not your simulators. They have this, what I played also with the FMS (Flight Management System) and so on. So, and they were all very always open for pilots. They can go voluntary in the evening after work or something to test the play with that if there's something in mind. So, of course the airlines should support the idea that and be very active.

The airline is, should be like, weekly bulletins, things like that. Hey, by the way, something has happened in and around somewhere in the other country or something. Did you notice? So, kind of a safety alert can be done also in the airline. So, I don't know the system here, but, that's great. I used to produce those in Finnair, because how I saw that. In South America there was an Airbus problem and then I brought the short summary, and it was distributed to all pilots. So, they can identify what's happening around the world. So, we have to be very active on the safety issue especially. And that doesn't cost money well itself, but the true official trainings are very important part of the whole business. And it's continuous training. I mean, it's twice a year, three times a year, whatever you have to do. So, I would probably, if I was in the airline and developing system, I would invest quite a lot for training because that's a very important part of the safety.

Thai Binh: Nowadays airlines have to cut costs. How do pilots support to the cut cost program, regarding the fuel consumption?

Respondent 14: Well, I have lots of experience on this issue from my airline time. Uh, it's not always that you just try to save fuel. Sometimes you spend 2,000 Kg of fuel to speed up, well you cannot do much, but in the long flights you can put a little bit more power on and actually burn more fuel to be on time so the passengers can have a connection to the next flights. So, that's more expensive than spending 2,000 Kg of fuel extra on the flight. So, it's always balancing and that means, if there is operational control center in the airline and they normally give some suggestions through the airline system, so they sent messages to the aircraft that okay, if you save five minutes, we can try these transferred passengers can jump into the next plane.

So it's matter of coordinating all the time. So and of course, for example, Finnair flies 19 destinations to Asia, seven in China, then Bangkok, Singapore, Hong Kong, Ho Chi Minh City and maybe in the future Phnom Penh, Japan, many destinations and they fly a lot. So, they are kind of, all the pilots know exactly that if they are 20 minutes late, for example, okay, let's speed up. But of course, in short flights, you cannot do much. You cannot hurry because it doesn't have any effect. But if you have a 10-hour flight, then you can base on your fuel. Sometimes, they request extra fuel already before departure because they know they will be late. So, there are many things to what balancing with the fuel concern.

But, basically nowadays, the good thing is, let's say the approach to the airport, they are completely different from what they used to be. Because the computers all the time calculate you can save fuel during approach, making a

fuel-efficient approach. At least in my country, it's in Europe, I think it's everywhere that you can continuous descent approach. So, you call the time you are descending until you land so you don't get these levels where you have to add power and so on. They try to avoid that. So, there are things that also an air traffic control system and procedures now in place, at least in Europe, that support to saving fuel, it's not just the pilots. So it's balancing between schedule.

Thai Binh: So, is it also balancing between the weights, the weight of the goods and passengers with the fuel?

Respondent 14: Well, of course, when you have more weight than the aircraft, it needs more fuel consumption. That's natural. So, if you have more weight, lucky if you take this 2000 kilos of fuel that means that you consume more all the time.

Thai Binh: Some people told me that, if you put more weight, you have to take out the fuel to balance?

Respondent 14: Oh yeah, when you're talking about maximum take-off, maximum take-off weight. Yes. That's true. Maybe it depends on the aircraft type, and how long the route is. So, sometimes yes, you have to limit something to be under the maximum take-off weight. Yes, that's true. But yes, when you have more weight, your fuel consumption will be higher. But, on the other hand, of course, if it's like cargo, if you bring like food, well you don't have to bring here any products from other countries probably. But, many times like, there's lots of cargo in downstairs, like we get tomatoes to Finland from Spain. So, of course they calculate that, how much they charge for that. That, it's once again, balance, but it's normally nowadays since it's not the maximum take-off weight. It's a limitation in smaller aircraft, mainly. I know of course, if you're flying shorter routes, like from Phnom Penh to Siem Reap, you don't need much fuel. So, you can put all that cargo, what is required to take there or passengers. It's a complicated issue. But, I hope I explained something about it.

Thai Binh: So, do you think that technology will impact positively to the airline development? And how does the aircraft innovation impact the airlines business?

Respondent 14: Well, of course, if you have smart systems, like I said, you save more, you get more efficient engines for example. So, they consume lesser fuel. That's clear. There's a big difference between, let's say I did the Airbus 350 course last year and an Airbus 330 compared to Airbus 350. I think its fuel consumption is something like, could it be like 25% less with the same way? And at same performance, so that the innovation is, of course, very welcome to the airlines that you have a more economical, better engines for the other innovations. Like I said about doing this automatic approaches, continuous decent approaches that requires from the aircraft. Well it has been in place for 15 to 20 years already in the Airbus aircraft, for example.

So, that's one thing. And of course then under safety wise, which is my area, all the innovation in a way, it goes to that there came the so-called caste system that you know, the collision avoidance system probably saved the aircraft because now you get warnings and you can see the other traffic around you. It wasn't that like that in let's say 20, 25 years ago. Also, now you have a ground proximity warning system which warns you about mountains and terrain that's mandatory in every aircraft or nowadays. Then there's also a mandatory supplied data monitoring. So, we are talking about this black box which is actually orange. So, the same data nowadays is stored in the quick access recorder. And if inflight, it's downloaded to the company's server in the computer and they can pull all the general way of what is the safe, well, it's mainly for safety, but they can follow also the fuel consumption and so on are different rules.

So like I investigated one case; not last year, but the year before. It's so that the black box data goes automatically to the company.

Thai Binh: So, you don't need to search for it?

Respondent 14: No, you don't have to plug in anything. And so, it's transferred once you land, like in this aircraft that was a Canadian built-in passenger plane, when the door is opened, it sends the data to the company. So, because the incident happened in Finland, but they had immediately known that the improper action was in Ireland or in a different country. So, nowadays, all these kinds of innovations are really helpful. And then on flight planning and flight operations, it's called like electronic flight bags. So they are using iPads or computers in the aircraft too. So that's to calculate everything I need.

It helps in many ways of reducing mistakes. So, lots of good things are there in place, but that means the pilots must be trained well to use them and then so on. But, it's really helpful. Like in that Airbus 350, there's no iPad or laptop anymore. It's actually the computer in the cockpit. So, it's just one display and a keyboard. So, you don't need them separate laptop with you at all. So, that's a big step forward. Also, I noted, which I always said that most difficult part of the flight is to taxi in the big airport and now when you have that A350, you have a display that

shows all the airport map and you know, all the time where you are even in, especially in the low visibility, whenever there is fog and you don't see anything, you still know exactly where you are.

So, it's really good. I need help. Helps and especially my area is the safety and it improves safety a lot because that reduces the risk of a runway incursion, you know, going to the runway without permission, which is dangerous basically.

Thai Binh: President Trump posted on Twitter, he said that aircraft technology is too complicated and not every pilot needs that.

Respondent 14: Actually, I don't know, probably he didn't invent that phrase himself. Somebody probably told him that. But it's partially true. I can see that the basic risk there is that because pilots are only monitoring what's happening. Everything is automated in the air they're using auto pilots. And so, if something comes up and auto pilot disconnects, you still have to know how to fly the aircraft, but that's something, what you can train your practice in the simulator and then basic flying skills still the pilot needs, we have that.

So, what is a coming now? I think it's already, man. No, it's coming, but we do it in mandatory in Finland that we have we talk about, it's called Upset Recovery Training. So if they're playing goals, some trains, attitude, nose down, nose up or bank, all the pilots before they get their license, they have to go through this Upset Recovery Training. So, they actually using an aerobatic plane and to practice that, you know, test non level flying. But also they have to do recover the aircraft from the different aptitudes and that can be done to certain extent also in the simulator, just to certain extent. So, they get all the pilots, at least in Finland, they get that Upset Recovery Training. I have done a semi-structure that, so turning aircraft in that some way and we need that thing, the air force all the time because maybe we have flown, I've to assume you have, there are no computers limiting your flying because it lets you do whatever. So, it's even more important in that. So, it's a good thing. But yes, you need training on this in a way. All the innovations have to be very clear. That's like in this B737 MAX 8. These nose down things, that they have to be trained really well, of course, I hope the software change in the future will eliminate this issue completely.

Thai Binh: And regarding other regulations are Open skies and environmental regulations. How do they impact to the airlines?

Respondent 14: Well, if I understand this correctly, this Open Skies area is a new step, you'll get more. You can get direct routes. There are tourists. So Open skies hopefully means that you are able to fly directly. So once again, that saves money and time. Some problem, this is in Europe. Many airlines put their schedule's very tight. Like, if you fly to some destinations, they expect that you to turn around and, on the ground, like in 25 minutes. It's impossible. So that's something nowadays because the business people in the airlines tried to get everything very tight then, but you're always a little bit late and flying and that's basically if you can have direct routes that you don't have to do many clearances, it's all saves time and fuel and everything.

Thai Binh: Actually, the large airlines, they wish to do so. But the government, especially the least developed countries, they tried to protect the airlines and they try many ways, not to issue the slot to prevent this agreement to happen.

Respondent 14: I don't know what is inside on this idea overall, but if it helps on establishing direct flights and so on, that would be great. In Europe, actually it's in Brussels, there is an air traffic control. Main air traffic control is there.

Thai Binh: Europe is more open.

Respondent 14: Because it's very old. Everything is open.

Thai Binh: All the countries are equal, similar.

Respondent 14: No, they are not similar, but the air traffic control system covers the whole Europe. One system. So, European countries are actually quite different when I look from Scandinavia from the north, it's life, the systems are very different in Italy and Greece and way of thinking is different. But yes, basically we have opened, if I understand correctly, we have this Open Skies. It's one big airspace for the whole of Europe. And they've controlled in Brussels. I've been there, it's called Eurocontrol. So, if you want to study more just go to Eurocontrol webpages. So, to just to get the idea. So basically, I would say it's probably an advantage. But I don't know the regulations or what is there.

Thai Binh: And what about the environment regulations, impacts to the airlines, concerning the carbon emission and the taxes on the country that leads to the cost endured by customers?

Respondent 14: Yeah, it's something, of course, I'm sure all the airlines are following very closely. Well, the regulations and taxes on national level and of course they want to advertise if they buy a new aircraft. They want, of course, to get more economical and less carbon emission engines on those. Nowadays, it's really important but maybe they are afraid of taxes because if there are lots of taxes for passengers to pay, not the airline. So, that means higher ticket prices and so on. So, I would say that's a threat for airline business. So, that's clear. So one way to encounter that is, to buy of course, new aircraft, which are all the time more economical and they're less carbon emission. So, but it's something every airline has to take these issues very seriously. Let's say there are lots of information about the environmental issue, ICAO or webpages, for example, hopefully it's not a big problem for traffic because I think the pollution overall is coming from the other industries like car driving and others from the ground.

Thai Binh: How does the fuel price affect to the airline industry?

Respondent 14: It affects a lot. If you raise 10 cents per liter on fuel, that means billion on the big airlines, immediately more cost, and they are very careful when they buy the fuel and when they refuel. So, let's say, if fuel is cheaper here in Phnom Penh. And they fly to Bangkok and back and Bangkok is more expensive. They do so, this is just an example. They fuel here so much that they can fly back, for example. So, it comes even its heavier the aircraft. So, but they have to calculate it very carefully that the seats, is it cheaper to fly that with that carry that fuel from Bangkok and back? Or if the fuel is cheaper in Bangkok, they fuelled there and maybe fly two, three routes after that. So, it is, and they make deals, with different companies, we have three people in the airline just making fuel deals. So, I didn't even understand anything about it, but it's very complicated calculation, what to do or where to fuel or refuel the aircraft. But basically, if the fuel price goes up, that means lots of expenses for the airline. So, and of course now they are flying a test, flying a new fuel made out of natural, what is it called that?

From Greece. They produce like animal fat. And, then from agricultural, like olive oil, basically those, they work in the aircraft. So they are now testing those a lot. So they are actually flying some flights with that. So, aviation industry is looking different options to this basic oil. Or, what is used now, so there's all the time development going on that, so, looking at other options because maybe we ran out of fuel, real fuel sometimes in the future, but maybe not the very close future. It's has a very big effect.

Thai Binh: Do you think, in the future, customers would care more about the carrier's reputation in terms of safety more than prices?

Respondent 14: It depends on the customer. I know that many customers are very cautious about how they choose what they like? Personally, I'm ready to pay a bit more to fly with a good airline that has a good reputation. And, I haven't been giving lots of lectures when I was working in Finnair on public, on the safety, the thing is actually that it's not the history.

It's a matter of the safety. You have to look the future, how to stay safe. But the customers are looking at, okay, this company had an accident 10 years ago. This is a terrible company. But maybe it's the safest airline after that accident. So, I hope you understand what I mean. But we should do the look at the history. We should look how seriously the safety system is working in the airline. Of course, basic customer doesn't know that. But that's the issue that we have to always see in the safety area. We have to look the future history. It's nice to look afterwards, but we should be, we always should look that, okay, tomorrow we have to fly also safely. So, many customers at least, what I know in Finland, they are ready to pay a bit more, if the airline has a good reputation.

Thai Binh: Yesterday, the prime minister of Malaysia, he said that the Malaysia Airlines maybe closed down or be sold to the other shareholders, but the fact that this is the National Airline. How can they transfer to others?

Respondent 14: Probably may be seeking more money.

Thai Binh: Last year, they poured around USD \$1.5 billion.

Respondent 14: That's not much. It depends on the size of the airline, but basically, it's a quite small money. But like investing safety is something that you, could invest when you invest in the safety, your reputation will go higher and you can put a few dollars on the ticket price probably, I think. But nowadays, because accidents are very rare, in practice, people probably forget the idea when there's one accident, but people like in Europe think, okay, that's happened in Ethiopia. Yeah, it's in Africa. Then, that happens in all kinds of accidents, so it's also the kind of an attitude problem that, or accident in Indonesia, who cares at that in Europe or in Finland? That's they had that accident a few years should go. That's okay. Maybe they are very cautious when, if they have to fly to Indonesia, so what then they are probably okay.

There have been many accidents in Indonesia for example. Then they kind of stopped thinking that, okay, I want

to fly British Airways or Qantas or whichever airlines fly there. But it's something, if the accident happens near you, that that's when people get cautious. So that's I've seen that. And when discussing with people and even media actually, if they wanted me and they sent me a message that could I come to a Finnish TV to comment on this Boeing 737? I said, no, I'm in Cambodia. Sorry. So, I'm quite often commenting this on TV. And the dialogue, because I don't know anything about that investigation. I'm just telling them, you know, what can be found from the information we seen in the black box and how they use that for to find out what happened. And so, I never comment on other airlines or safety level or anything. I have to be very neutral, as a chief investigator. So, especially now when I'm working here for ICAO it's something, I have to be very careful not to say anything.

Thai Binh: So, is it good for Mr. Tony Fernandez, Group Senior Executive Level of Derry Air, I read his book, he said that, if you sell the ticket for \$400 people will concern if the price is good to purchase or not, because they concern of their safety, but if you sell any \$40 so people will not care about that. They just look at the price.

Respondent 14: Exactly. That happens all over the world. So many people want to buy the cheapest possible ticket then that's it. But people are different.

Thai Binh: The majority that price is the most factor?

Respondent 14: It could be. I believe that. Yes, But, also that depends where you fly And, so if who fly like, these local flights everything has been okay. No good history. So, it's natural, that makes sense to choose the cheapest option to fly. So, I'd be applying not to Africa, so I said, I'll take British Airways, so nothing else. So, well, I flew there with the local airline, I was kind of looking very carefully because how the things are done there. So, you know, like basically, I agree with you that it's money and money matter a lot. But if the dependency is smaller than \$40, \$400, it's like, if it's 350 or 400, then it's, you know, then they may choose to be more expensive. But if the difference is very big.

Thai Binh: Actually, the first time I flew with Derry Air to meet the Senior Executive Level of Derry Air for the interview, I wanted to experience that. After I'm back and I read his book, I should consider what he said. Actually, they're using very high technology. They utilize their aircraft with a high duration, and there is short time between the relax and the utilization of the aircraft.

Respondent 14: Oh, okay. So they fly a lot. Same thing in Finnair, we have the probably the highest on the long-haul flights that they are up in the air about 18 hours per day. So, the long-haul flights, like it was A350, it's average is 18 hours per 24 hours. So, it's only six hours per day on the ground. So that's it. That's very high number. But then you have to always think that you must have enough pilots that they can rest. So, that's one issue is over all the time, the duty limitations.

Well I know some for cabin crew. So, there are very strict rules and then I know many aviation doctors very well and they have done lots of studies on fatigue. So that's another issue when you get more and more routes, more flights, and your business is doing well with lots of passengers. They cannot keep up on getting enough pilots. So there's a limitation. Even you can buy an aircraft and let's say in one week, but it takes a few years to get pilots and Captains four to eight years. So, it's not that easy. So that's one critical issue in the airline, which is expanding, you know, all the time getting more flights and so it's easier to buy an aircraft and getting new pilots.

So I know that, I don't know here in Cambodia, they may have also pilots from all around the world. But of course, you must have attractive salary comparable to somewhere else. So because the salaries are the pilot salary side, at least in China, Singapore, quite high.

Thai Binh: So, is the shortage of pilots now an issue?

Respondent 14: Oh yeah, that's an issue around the world. How to get good pilots. And that's a recruiting and selection or pilot is you have to be very careful to get pilots who passed the psychological tests and skill. That's very important. So, not everyone can be a pilot. So, that's something the selection system has to be there. The same applies for air traffic controller, so whatever. So while in a critical job, so that's one pilot shortage is something which is a worldwide problem. Because all the time, more and more aircraft are in the air. So, and now everyone's having to push up the duty rosters up to the limit all the time. And if you do it a very long time, we talk about, not just the fatigue for one night, it's the long-term fatigue that's more dangerous.

You get the exhausted completely from that, that we have seen that already times. And, so that's why I have a psychologist and I have an aviation doctor in my investigator unit. So if there's a fatigue issue in some serious incident or accident, we would look at that very closely. But I need special experts to work on the fatigue issues. So, I know from my life I'd been flying, so it's something else to take a two o'clock in the morning, we'll take off

but it's then nine o'clock in the morning. So, that you know, it depends on what time of the day you have fly and how many.

Thai Binh: Do you sleep when the aircraft is in the automated mode?

Respondent 14: There's a certain rule that where you can do the kind of, we call it micro sleep. But it has to be very well-coordinated with the other pilot. And if there are in the long-haul flights, there are three, two captains, one co-pilot, or at least that's in Finnair. And, there's a good bed.

Thai Binh: At least one should be awake.

Respondent 14: Yes. And actually, when you have a bed back there, all the time one pilot is completely asleep. He's not needed, but you know, in a 2-seater, when there are only two pilots in the cockpit, you can take a micro sleep or 20 minutes or something. So that's a certain system for that, so that both are not sleeping. That's not good. So, but there are many issues on that. So it's complicated area, this aviation industry and for as an investigator, I have to be prepared to investigate all kinds of aspects on this business. And then because many things, quite often, let's say things we investigate are related somehow to human factors. So it's a human before behavior and we have to look the training, we have to look to fatigue. We'd always been; I opened the case, I want to get, I want to have a relax last 30 days. What kind of work he has been doing or how the crew has been doing? And so it's very important.

Thai Binh: Thank you very much for your time.

INTERVIEW 15

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 15
Designation	▪ IOSA Auditor – Aviation Compliance Solutions (ACS Pyt Ltd.) in Australia
Date of Interview	▪ 16th December 2018
Mean of interview	▪ Speaking via Phone – WhatsApp
Location	▪ Ho Chi Minh City/ Vietnam - Melbourne/Australia
Audio Record	▪ Interview is conducted in Vietnamese ▪ Transcription is translated into English

TRANSCRIPTION

Respondent 15: Do you want me to speak about my background? I had worked for Vietnam Airlines since 1994. I worked at the ground operations. In an airline, there are many departments in at the operations side. The first department is the Co-operation Organization, second is the Flight Operations. in the flight operation there is another division called Dispatcher. Dispatcher will guide on ground and pilots will operate in the sky. And then, there are maintenance crew which will do the maintenance for the aircraft, and the cabin operation, then the ground operation and a cargo operation and the aviation security. So these are eight apartments in the operations side of an airline, and I specialize in the ground operations and the Aviation security.

Thai Binh: How do you find the Open skies policy affect to the airlines?

Respondent 15: In fact, Open skies will bring advantage to airlines. With the Open skies policy, EU and US are considered as each single market. So, from the US you can fly to many destinations in Europe. Therefore, one country is considered one destination; a flight from US to any destination in Europe, as well as flying from one destination to another destination in Europe, will be considered as domestic destinations. Domestic destinations relate to the traffic right. The European market now more open than any other markets. For example, regarding the routes in Europe and the US, the Open skies in Europe will bring advantage to European airlines much more than in the US. However, the European airlines can only fly to one destination in the US market. Therefore, I'm not sure if they are allowed to continue flying from a destination in US to another destination in US because this is not allowed. This belongs to the domestic traffic right; a full-service airline is not allowed to operate domestic flights in another country. For example, in Vietnam, Vietnam Airlines is only allowed to fly from Hanoi to Kuala Lumpur or Saigon to Kuala Lumpur, and for Malaysian Airlines, they are not allowed to fly to Saigon then fly from Saigon to Hanoi because this is a domestic traffic route. It's not natural to have the Open skies and it takes a very long time to have it agreed. At the beginning, there were only codeshare co-operations among countries. Codeshares between two airlines and then codeshares among many airlines. From the codeshare co-operations, airlines are building a higher model, that is the buy share. In the past, you only have codeshare. At the higher level, you can buy share of an airline. For example, Air New Zealand can purchase a certain number of stakes in Singapore Airlines. Another example is Vietnam Airlines; previously Vietnam Airlines did codeshare with other airlines. Now, they permit other airlines to purchase shares, ANA (Air Nippon Airways) wants to buy shares and become a strategic partner with Vietnam Airlines.

What does this mean? It does not only mean the traffic right, but it also means the possession of an airline. When the partner has a possession in an airline, it will help the airline to develop strongly in terms of the international routes to make the route network stronger. In the past, airlines established codeshare co-operation in order to buy seats from each other; but at the moment they move up to the alliances and these alliances were born since 1998. The first alliance was OneWorld, then Star Alliance and SkyTeam. Currently, these alliances are very strong. Recently, China Southern Airlines announced that they will leave Star Alliance; perhaps they are affected by the environment or they have a new orientation. However, until this moment Open skies create advantages in terms of codeshare which means buying seats among airlines and then the airlines can operate two flight codes for one flight with one aircraft. The next step is to buy shares and the last step is to join the alliances. These are the effects from the Open skies.

Thai Binh: I did research on the ASEAN region, but the level of each country is not the same, especially when there are countries that have slower development in the airline industry such as Cambodia, Laos and Myanmar. Do these countries gain any benefits from this Open Skies policy?

Respondent 15: In fact, in ASEAN when people discuss about economic issues they have not mentioned much about the Open Skies policy. In reality, you see the flight operations in Derry Air; their flying frequencies within the region is very high. For example, when you check the schedule of Derry Air flying to Saigon, they fly three or four flights for a day while other airlines from other countries flying to Malaysia with only one flight. Also, Vietnam Airlines fly to Kuala Lumpur only one flight per day and Derry Air flies to Vietnam three or four flights per day. This is the policy of that airline; which means that the Open skies policy will create an advantage for a certain aviation group to develop. Also, this is to create a franchise business model in the aviation industry. In fact, Derry Air is the only airline that creates airline franchises to other countries; they do have a share in those franchises by leasing the aircraft.

Thai Binh: Do they do the operational management?

Respondent 15: No, Derry Air does not. In Jetstar, they do a operational management. Derry Air and Jetstar are quite different until this point. You see that Derry Air franchises up to 10 countries; Derry Air flies short haul but Arry Air flies long haul. In Malaysia there are two Derry Air airlines; Derry Air and Arry Air. When they franchise to Thailand, they also have two Derry Air airlines, that is Derry Air Thai and Thai Arry Air.

Thai Binh: So, does the investor in the franchised country invest all the money and do the operation by themselves?

Respondent 15: No, it's not like that. For a company in the country, they don't have enough capital to set up an airline. They only have a certain capital; and Derry Air will cooperate to develop that brand so Derry Air will contribute capital but under the form of aircraft leasing and all of the Derry Air brands will be considered is the contributed capital. Only by having the Open skies, Derry Air can do this strategy. The sky in Vietnam is only half opened. Why is Derry Air and Lion Air so successful? If you look at this region, Jetstar from Australia; they just franchise in 3 countries with Jetstar Asia in Singapore, JetStar Pacific in Vietnam, and in Jetstar in Japan. However, I don't know Jetstar in Japan is operationally ready a not. They also do the franchise of Jetstar in Hong Kong but was failed. Now, back to the Open skies. The Open skies create a strong advantage. An example is Lion Air. Lion Air is still a very strong airline group; they have franchise in Thailand that is Thai Lion Air and in Malaysia that is Malindo Airlines.

Thai Binh: One Senior Executive Level mentioned that the most important element is the slot, not the Open skies.

Respondent 15: That's why many countries have to build an airport for low-cost airlines. Why Thailand can develop its airline capabilities so aggressively is due to having two airports in Bangkok; Savarnahbumi International Airport and Don Mueang Airport. Firstly, Don Mueang Airport has been closed for two years and was re-opened for low-cost airlines to operate. Don Mueang Airport is very crowded; so then whether you have slots or not, a country has to arrange with the airports for those airlines to get slot to fly. As for Kuala Lumpur, there are two airports; Kuala Lumpur International Airport (KLIA1 and KLIA). KLIA2 is for low-cost airlines.

Thai Binh: Will Vietnam have two airports in the big cities?

Respondent 15: In Ho Chi Minh City, there is only one airport, that's why airlines cannot develop more. Tan Son Nhat International Airport is small and gets very congested.

Thai Binh: In the future, when the airport in Long Thanh city is finished, will Tan Son Nhat International Airport be reserved for low-cost airlines?

Respondent 15: Similarly, in Melbourne when I was living there, the airport in Melbourne is overloaded and now they had renovated the Avalon airport. Avalon is very well-known as the venue for the Australian International Airshow, which happens every two years. The Avalon airport has been turned from the International Airport to transfer or low-cost airlines.

Thai Binh: Regarding regulations, besides the Open Skies regulation, do we have other regulations in terms of safety and environment?

Respondent 15: At present, IATA (International Aviation Transport Association) gives out two standards, which means two systems for the safety standard. The first standard is IOSA (International Operation Safety Audit). If any airline wants to join IATA, they must adapt to IOSA. Currently, all airlines must get IOSA. The second standard suggested by IATA, though not many airlines implement, is the Environmental Standard. The environmental standard means the carbon emission of the aircraft, which is released into the environment. There are more than 230 airlines participating in IOSA, but there are not so many airlines to participate the environmental standard.

Thai Binh: Then airlines who adapt the IOSA will have more opportunities to join the alliance.

Respondent 15: Correct. Currently, airlines are required to adapt the IOSA in doing codeshare.

Thai Binh: For the newly established Chinese airlines operating in Cambodia, I think they haven't adapted the IOSA yet. So which regulations do they have to adapt to?

Respondent 15: They have to follow the regulation in Cambodia rather than the international regulations.

Thai Binh: So, is it mandatory for them to register the IOSA?

Respondent 15: Currently, some regulators require airlines to have IOSA.

Thai Binh: My next question is about technology. Concerning technology, airlines will invest on the distribution system or aircraft. Airlines can also cooperate with airports to invest the facilities located at the airports such a check-in or dropping baggage or immigration. Do you think technology will have a positive impact to the development of the airline industry?

Respondent 15: I think is correct because technology has supported a lot for the development of the airline industry. For example, they can employ the biometric in the immigration process and the check-in procedures will be faster and the customers will clear the customs quicker. Technology helps a lot for airlines. In the past up, you check the passenger's information manually by tearing the boarding pass and now everything is computerized, so technology helps airlines to identify the passengers faster than before and easier, so this is the fact.

Thai Binh: Concerning airlines, do you think which strategy would they focus on, for example, marketing strategy or human resources strategy or do they combine on the strategy together?

Respondent 15: In my opinion, in order to operate well, they have to combine all of the elements. But, for a new airline, they have to focus on one strategy in order to make the airline being known. For example, Bamboo Airways. Bamboo Airways is the new airline so let's see how it adapts to the environment. So, normally there are two type of business models for airlines adopt; one is LCC, the second is full-service. However, this airline follows the hybrid model; that is the combination between the low cost and full-service. The full-service airline that provides lots of services in-flight are known as traditional airlines. The full-service airlines consider business class their traditional service while they position economy class is the low-cost service. For a new airline, let's see which business model and direction they would like to follow. Since then, they will think of the investment of aircraft, human resource organization, sales organization and marketing. Regarding human resource, pilots in our region are not socialized, which means that the airlines recruit the cadets and then send them for training. This means they will do the training for the pilots in advance. So, even if you have the aircraft or not, you still have the pilots.

Thai Binh: Is the shortage of pilot the hot issue?

Respondent 15: No, I don't think so. I don't see there is a shortage of pilot, there are foreign pilots that can be employed from other countries. The main issue is on salary and benefits.

Thai Binh: Airlines will focus on the marketing strategy, customer service and product differentiation. Are these factors the main actors that will affect the development of an airline?

Respondent 15: I think they would develop their product orientation. From the product orientation, they can define the marketing strategy. Sometimes the airlines just follow the traditional ways of other airlines instead of thinking what kind of products they would like to create. In general, we don't see much difference between the airlines. In fact, they have very much different in terms of the dedication. For example, airlines nowadays all invest on the aircraft B787 or A350. But the key difference is the type of the seats. You can search about the seat configuration on the Internet and the seat dimensions were made by the aircraft manufacturers. What are the airline products? The airline products consist of the hardware and the software. Hardware is the interior of the aircraft and the software can be translated as the meal, the services from the cabin crew, and the in-flight entertainment.

Thai Binh: My opinion is that those products should be attractive and special to attract the customers. On another hand, the low-cost airlines entering the market increase more competition and force major airlines having to be differentiate themselves in order to attract more customers.

Respondent 15: I think low-cost airlines have their own position, and traditional airlines still have their own market. The only thing traditional airlines will lose is the market share. If they want to take back the market share overtaken by the low-cost airlines, they can also establish a low-cost airline. All the large major airlines, they also

have a subsidiary airline. The main airline is the major airline and another daughter airline is the LCC. For example, Qantas in Australia having Jetstar as the LCC daughter company.

Thai Binh: I know that the Singapore Airlines having Scoot and Tiger Air; Air France having Joon and Transavia; but the problem is the LCC of major airlines are not as successful as the independent LCC. For example, VietJet or Derry Air, they position themselves as an LCC at the beginning, that's why they stay focused and they enhance themselves very strong.

Respondent 15: The reason is the way of management, maybe they cannot split entirely the concepts between the two airlines.

Thai Binh: And airlines will cut cost to maintain their operation, in your opinion which type of cost they are cutting?

Respondent 15: They will cut cost by retaining the core components, for example, the core components of an airline are the flight operation and the cabin crew. Then they can outsource the jobs of other departments. For example, the maintenance ground. The pioneer airline that kickstarts this cut cost model is British Airways. In the past, people think that an airline must have 8 departments as I mentioned above, but currently airline leaders think it is not necessary to keep or to remain all eight departments because they would be a burden for the airline. So, they can split the departments separately to outsource. Previously, airports are regarded as the border gate, so they belong to the government; but the new concept from UK argues that only the sky belongs to the government. This is because the sky is the border gate, and the airport is on the ground, and that will belong to the commercial aspect. Therefore, the policy makers split the governmental management and the airport operation separately, and airports can be privatized in the future.

Thai Binh: Even though airlines are very competitive, they still seek for the co-operation through the codeshare, interlines, or joining alliances, or partner with tourism services to increase their ancillary revenues.

Respondent 15: This is correct. Despite of them being competitors, they still can co-operative. For example, on the route from Vietnam to Narita in Japan, Vietnam Airlines and ANA are competitors but they co-operate by buying airline seats from each other through codeshare and even that ANA buys 11% of shares from Vietnam Airlines and become a strategic partner of Vietnam Airlines.

Thai Binh: Do you think airlines will increase their network to increase the geographic coverage?

Respondent 15: No, I don't think so. I don't think airlines just open the network in order to increase their geographic network. If the route is not efficient, they will cut right away. Only the airlines that belong to the government and are directed by the government to open the routes for political or diplomatic reasons, they must increase the geographic coverage. For the commercial airlines, they just think about the route profitability. They just think about the commercial aspect; if the route is profitable, they will fly, if not they will cut. So, you can see that Etihad Airways had cut the route from Abu Dhabi to Vietnam which had been operating for 20 years till last August because they feel that their sales revenues are not in their expectation. Therefore, they will close it down. Why do airlines need to increase the geographic coverage and have to endure the losses, I don't think so.

Thai Binh: So, to open a new route, airlines will create a new generation of travelers for the new destination. For example, NokScoot Airlines can encourage the Thai travelers to visit China to go for an adventure, or Joon from Air France was established to serve for young people that is called millennium generation.

Respondent 15: I think that the first objective to open the LCC is about the commercial aspect. They open to fly certain routes in order to get the profit, after gaining the profit they will have a new idea. I know NokScoot is a joint-venture airline between NokAir of Thailand and Scoot in Singapore, but if you can look at their network, they only fly from Bangkok to China. I think that NokScoot from the Singapore side wants to have a commercial aspect in the Chinese market or maybe because of the type of aircraft. NokAir's aircraft fleet is for short and medium haul flights. They don't have aircraft for the long-haul flights. I see that NokAir uses B737. Previously, airlines think that they should have many types of aircraft, but the current trend is that airlines will only use one or two types of aircraft only, because of the maintenance cost. If a new airline is just established, it will cover the cost of maintenance, so the strategy to partner Scoot with its long-haul aircraft capabilities to support NokAir.

Thai Binh: Correct. Senior Executive Level of NokScoot Airlines told me that NokScoot only operates the widebody aircraft, supported by the Singapore side.

Respondent 15: The only thing is that when two airlines partner, they should reach to a co-advantage.

Thai Binh: Concerning about the fuel price, it will affect to all airlines, so do all airlines have to do hedging?

Respondent 15: No. It depends on each airline strategy, not all airlines have to do hedging. Hedging is also risky.

Thai Binh: Regarding the price, is price the key factor to impact on the consumer behavior? Some people will care about the price but there are also people will care about the schedule of the flights.

Respondent 15: Correct. I agree that the demand of the customers is more important, so I would take the example of myself when I fly, I think of my convenience more. For me, I prefer direct flights as compared to a connection flight, despite the higher price, but I prefer convenience. That's why traditional airlines still survive. Otherwise, low cost airlines will take all the market share, so the price factor will depend on the target of the travelers. Similarly, to a restaurant, there are people who like to eat at an economical price and others who like to eat at a higher price. So, this depends on the demand of each person so that's why each airline has their own target customers.

Thai Binh: Do you think GDS will be disappeared in the future because airlines prefer to sell directly to customers?

Respondent 15: I think this is correct because the Internet and online payment system gateways are very advanced now. As long as they are secured, then we do not need GDS in the future because the consumers now are getting smarter and technology savvy. So, now if the GDS can get the offered price cheaper than the price displayed on the airline websites, they can still survive. GDS must co-operate with other partners under various forms to retain the customers. They will create a combination of the hotel and air tickets that offers convenience to customers, then customers will still buy from GDS. If customers only want to buy either just air tickets or hotels, they can purchase directly from the airline or hotel website. You can book a combo that will be cheaper through Expedia.

Thai Binh: Normally airlines will utilize the smaller aircraft for more flight frequencies, and large aircraft for lesser frequencies. How will airlines utilize the aircraft in the future when there are so many airlines to compete and it is more difficult to get the slot?

Respondent 15: I think that it also depends on the route that the airlines should use which type of the aircraft. For example; when I fly from Melbourne to Seoul, there are many airlines that offer cheaper prices, but I prefer to fly on an A380. Also, it depends on the route that the airlines will choose the aircraft and to serve the preference of the customers. Regarding the slot, for landing and taking off, you could use whichever type of aircraft.

Thai Binh: I mean that when we have less slots, we need to use the larger aircraft to increase the capacity.

Respondent 15: I think that it will depend on the long-haul or the short-haul of that the airlines should use the appropriate aircraft; A320 or A321 cannot fly long haul flights or you cannot use the A320 consisting of 180 or 200 seats to fly Saigon-Melbourne, lasting eight hours. This is impossible. Even though you may not have so many customers, you'll need to use the wide body aircraft to fly the long-haul flights because a small aircraft cannot fly long-haul flights. For example, on Melbourne route you need to use the aircraft A330 at least.

Thai Binh: Do you think customers nowadays know more about the type of aircraft when they are flying on? In my interview, one of the interviewees saying that there are some customers to notice that but 95% of customers will not care about the type of aircraft when they are flying.

Respondent 15: I don't know; but for me I do care about the aircraft type when I fly.

Thai Binh: How do you find the outlook of the airline development in ASEAN region?

Respondent 15: It is a very great opportunity for the airline industry in ASEAN. Vietnam now has a population of 95 million people, but we have only three or four airlines; Vietnam Airlines, Jetstar, VietJet and Bamboo Airways as a newcomer. Therefore, the potential for the Vietnamese market is still very huge as well as in for the ASEAN region. In reality, air transportation is still very much safer than ground transportation.

Thai Binh: Thank you very much for your time.

INTERVIEW 16

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 16
Designation	▪ Aviation Magazine Editor
Date of Interview	▪ 13th December 2018
Mean of interview	▪ Meeting in Person
Location	▪ Starbuck Cafe – Phnom Penh – Cambodia
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: For Open skies regulation factors, do you see this as an advantage or threat to airlines in ASEAN?

Respondent 16: You know, the analyst, Alan Tan, from Singapore? I completely agree 100% with him that the Open skies policy is going to create winners and losers. I really strongly agree exactly on that, and it is kind of like Darwin’s Natural Selection. That is exactly what we need, especially in this part of the world, where there’s such a discrepancy between airlines. The industry is very fragmented.

So, on one side, we have the full-service carriers such as Singapore Airlines (SQ), Malaysia Airlines (MAS), Philippine Airlines (PAL), Garuda Airlines (GA); they are really focused in safety and standards, and they’ve taken efforts to improve. We have low-cost carriers such as Derry Air, Cebu Pacific and VietJet. Again, they are really focused on safety and standards. That’s what the general public needs. That’s what they need as nations.

For airlines, for the airline management that are looking to expand their footprints or investments, or to move investments, I think yes; Open skies is going to eliminate some of the bad seeds. The players that are not focused on safety and standards will not put in the effort of investment back into creating an airline for the travelers and public.

Vietnam Airlines (VNA) is for the people; VietJet is for the people. SQ is for the people; Scoot is for the people. I think it is a good thing, and that’s seamless. And then, there’s also greater threshold that they are general public. Yes, its’s a threat to those airlines that have not met the standards. Essentially, that will be my nutshell answer.

Thai Binh: Technology focus on distribution system and aircraft, 2 key factors.

Respondent 16: Right. I am not familiar with the distribution system, because I’m not on the airline side.

Thai Binh: We can skip this.

Respondent 16: Yes. Maybe you can tell me more about it.

Thai Binh: I mean, the airlines will focus on their websites, to provide the functions for passengers to do check-ins, seat selections, to purchase tickets, and also, they will invest on the Global Distribution System (GDS) to work with third parties. And also, they will have the other technologies like blockchain, biometrics to support in the immigration at the airport side.

Respondent 16: Yes, the nice thing about this again, winners and losers come out of that. And then, when the winners emerge, then you’ll know that is the airline you wanted to choose. Because they invested on these, and they recognized the needs to invest in that. This is because, it is for the people essentially.

Thai Binh: Airlines are going to invest on the types of aircraft that economize fuel and to maximize the efficiency in immigration.

Respondent 16: Right, so the next generation of aircraft, yes, definitely, it is positive for the industry, because it’s a first-time flyers market here. But, at some point, we’re going to demand services that we see in the West. Right now, it’s a first-time flyers market, and we grab the cheapest tickets. Maybe grandmother wants to go from the countryside to the city; she is just going to grab the cheapest one because it is almost the same cost of a bus. But,

at the same time, as technology progresses, it's going to weed out airlines that are not investing in that. You see, in Cambodia, for the longest time, you couldn't book a ticket online for JC international flights.

Thai Binh: Yes, and even for payment, you have to use the Chinese payment system.

Respondent 16: Yes. Chinese comes out as the first language, and when that first happened, everybody hated them for that. And, they say, that's the Chinese airline.

Thai Binh: Last time, I wanted to book with JC International, to fly from Phnom Penh to Bangkok, but I couldn't. I think they cater only to Chinese passengers. I couldn't do the payment!

Respondent 16: I tried to book on Cambodia Airways, and I couldn't do it. I mean, that's ridiculous.

Thai Binh: Maybe they segment to the local passengers only; not open to everyone.

Respondent 16: It is ridiculous; it just misses the whole point. When they do that, they're not understanding where they are and the market needs. They have total disregard for the market. They are missing the market because they think that is not important. If you go on JC International, or another airline; and you cannot book on the website, how is that possible?

Again, technology is going to weed out the winners and the losers. This means we separate the winners from the losers. Yes, many people here go to the travel agents here, but now, you've got very savvy, smart youth. You know, I have kids asking me for online courses, computer-based training courses. They don't want to drive half an hour through the traffic to the travel agent. So, I think that technology will have a positive development on those strong legacy carriers, also for full-service and low-cost. Yes, I think it just separates the competition.

Thai Binh: How do you find the small airlines, from Chinese investors that appear in the Cambodia market?

Respondent 16: I think, it is a way to spread investments. We see the Naga World with Basakka Air, we see their prints with Cambodia Airways. Whoever is behind JC International, it's not about building a carrier such as VietJet, or Derry Air. I mean, they call themselves boutique; they do not call themselves low-cost. I don't know why; they amaze me, the Chinese.

Thai Binh: Boutique airlines is like Bangkok Airways; they stay between low-cost and full service.

Respondent 16: But we do know that Bangkok Airways is an excellent airline. We cannot compare these airlines to Bangkok Airways. Bangkok Airways had made a lot of mistakes as well. I think the Chinese airlines are in complete disregard for Cambodia, and the Cambodia market as well as the integrated ASEAN market. JC international definitely wants to expand to different destinations in South East Asia. But their target is Chinese. And, I think there is some legacy issues with senior management. Maybe if we have younger Chinese, we can have more innovations, creativity. But that's not happening; and I don't see these carriers surviving, as we prepare for Open skies. I heard that Lao Skyway; they are going to have flights in Cambodia and that's because of Open skies bilateral agreements. They fly the MA60.

Thai Binh: Laos Airlines?

Respondent 16: It's called Lao Skyway. It is a smaller carrier.

Thai Binh: Lao Skyway?

Respondent 16: Yes, they're going to be operating here. So, Lao Skyway is a small operator who flies one or two MA60. Maybe, Derry Air will come in. I mean, they've trying to come in.

Thai Binh: Cambodia is too small, and Derry Air may not come. Derry Air is in Vietnam already. They fly from Vietnam to Cambodia.

Respondent 16: Yes, and they can fly Hanoi or Ho Chi Minh to Phnom Penh to Phnom Penh or Siem Reap. We'll all fly Derry Air. I will totally fly Derry Air. I'll never have to fly any Chinese carrier.

Thai Binh: Do you like to fly with MA60?

Respondent 16: I have never flown; It's funny that I have a picture of me with an MA 60; I have never flown on an MA 60 just because it's longer and the ticket price, to be honest, is ridiculous. From Phnom Penh to Siem Reap,

if I have to spend hundreds of dollars, I will fly K6. Yeah, I know, maybe K6 always delay, but if I have to spend that money, I will do that. ...I don't have anything against the aircraft itself, but it's longer and more expensive.

Thai Binh: But you can choose Qatar Airways to fly from here to Ho Chi Minh City. Then you are not going to choose K6 because price is the same.

Respondent 16: So I would choose Qatar because of the delay factor. I flew to Hanoi, and they delayed the flight, and I missed my meeting.

Thai Binh: With Qatar?

Respondent 16: No, it was with K6. They delayed for 5 hours, K6 always delay the flights. I heard many stories, but I don't share those stories. It's nobody's business and I think general public shouldn't know. It sounds funny, because it sounds like I believe in censorship and I'm kind of that. Not everybody understands. I will fly with Qatar over K6 because I don't want to deal with the delay, and I am so tired on airplanes; I just want to get there. Sometimes I chose to go to Saigon on a bus. I can watch the movie and read, as this is the only time to do such things. Also, I chose to take a bus to Siem Reap; and this is the only time I can listen to music, read a book and sit 6 hours by myself and nothing to do. Just self-care.

Thai Binh: Yeah, it's just a bit longer.

Respondent 16: With Open skies, we are going to see Middle East airlines coming in, such as Emirates and Qatar. They have the money, and they also have government backings, and there is where the winners and losers come in. When they come in, they will also bring safety and standards, and there is no reason Cambodia AngKor Air, KC International Airlines or JC International Airlines cannot compete if they want. But they are not in the market.

Thai Binh: Do you think they are going to disappear after a few years?

Respondent 16: Yeah. I think so. For JC International Airlines, their backing is the casino and the hotel business. They wanted to do charter helicopter and private jet with Cambodia Airways, but, unless they have fresh creative, innovative young people or open-minded people if they will not survive. And I think they will face a safety crisis; they do not have the international standards of flying. So, if they are flying to China, you know, they will get delay between 2 to 5 hours and then they have to fly back. You wouldn't be able to do that in the West. And the pilots, they have to wake up for another flight when they get called in.

Thai Binh: In K6, the crew did a flight to China and after 30 minutes the same crew flew back. They don't have time to rest and even not to get out the aircraft.

Respondent 16: They don't have time to rest, my pilot friends told me they have to wait 1 to 3 hours in China and then fly back.

Thai Binh: I am the person who get complaints from the crew, they want me to report to the Senior Executive Level. I listen to them.

Respondent 16: In K6, they hire some very experienced foreigners; they also have problems with not so good foreigner. They hired some not so good employees.

Thai Binh: I don't know now how they work, but before at my term and my Senior Executive Level term, it was really good, because we started to open the relationships with the Ministry of Tourism, with Cambodia Airports and we joined many international conferences in ASEAN, in the US and we met a lot of business partners from other airlines. We were dynamic before.

Respondent 16: Yeah. My friend he said he was a captain he has to quit because of safety concern with ATR, but A320 is OK. It's the ATR.

Thai Binh: We have 1 or 2 new ATR.

Respondent 16: Maybe little things is not a little thing, for example, no oxygen. So, the captain mentioned that he cannot fly and they said no problem; they get a Vietnamese pilot in instead. Yes, if you are a Westerner, you are an experienced pilot you would say no. Maybe you are a young Western or Asian pilot, it doesn't matter which country. They want the hours; they don't know how to speak up. The older ones, they will say something. They say, we won't fly, the airlines will say, oh, no problem.

Thai Binh: Yes, younger pilots they want to accumulate their hours.

Respondent 16: They want to accumulate; they don't want to complain. You are a young person; you don't want to cause trouble. I know some pilots, they were pushed t in to be a pilot, and they have no intention to be one. Maybe they can change in the future as they get older.

Thai Binh: As you had mentioned, human resource is a key factor for the success of an airline. Besides human resources, which element will be the key strategy for the operation in a competitive environment?

Respondent 16: When you look at Derry Air, they got it. They are such a dynamic airline. They involve their employees; they create beautiful place to work in. Of course, nothing is ever perfect, but they have tried, in the marketing they portray themselves as a fun airline, as an engaging airline. There is this guy in Singapore, he talks about airline marketing and I do have to agree, you know you have to engage with your audience, especially here if you want to break in the emerging market, you have to engage.

When I see Derry Air and I say meet so and so and who is the engineer, they are very engaged in it. They invested so much money. Cebu Pacific as well. Also, VietJet with their calendar girls. Whether we agree to take the advertisement or not, it's certainly captured the community people; they think it's funny or what not. So, investing in marketing and creative ways. Then, invest in human resources, definitely. Especially, the Lion Air crash is a spotlight back to South East Asia, specifically in Indonesia.

Thai Binh: One of the interviewees said that the crash is not because of the aircraft itself but also because of the pilot. If the pilot does not crash this one, he will crash another one.

Respondent 16: We have to wait for the investigation to come out.

Thai Binh: But they haven't investigated it.

Respondent 16: Yeah, we have to wait for the report to come out which will last for one year. Usually those reports take one year. I can't comment on that.

Thai Binh: But I saw the pictures; they're so horrible. The airplane was flying up and turned its body and crashed.

Respondent 16: Yes; it was at an altitude of 5,000 feet. I don't really comment on accidents until the report is out.

I've been to an aircraft crash site; I spent 2 weeks on a barge in Laos. This is because an ATR 72 crashed into a river. 70% to 80% of plane crashes are due to human error. I feel bad for Indonesia, because they had done significant work in the last 10 years to improve their safety. And this happened. We all can learn a lesson from that. Each country should be paying attention to this; we should talk about this. My dream is Cambodia, Vietnam, Thailand, Indonesia, Philippines, South East Asia meeting together, not to point fingers, but to study aircraft accidents, especially this recent crash. They should study together to analyze what went wrong and how to avoid this.

Thai Binh: And we have seen many crashes in recent years in South East Asia.

Respondent 16: Yes, I mean statistically.

Thai Binh: Ever since I joined the industry, I have heard of crashes in Laos, Indonesia, Myanmar, Malaysia and Indonesia.

Respondent 16: Yeah, Myanmar, they had been such a closed country. Since 2012 they really opened the industries, similar to here, the human resources, also getting parts into the country or whatever sanctions before. Myanmar in the past, they have aircraft and other issues, yeah, I don't think they have the lowest statistics of accidents in the world. We cannot be 100% say what we cannot definitely repeat the same accident.

So, now we have a next generation aircraft coming out and the big thing for airlines such as Singapore Airlines, Vietnam Airlines to get the next generation aircraft. And the next generation aircraft takes a lot of skills. To fly a Boeing 737 Max takes a lot of skills. The pilots are lying that they had put in the significant hours; they weren't inexperienced pilots; they accumulate a lot of hours. So when a pilot in the cockpit, he undertakes a lot of pressure, maybe he didn't know. Maybe he feels it is a human factor issue. But we should be studying this.

It is important that we get the next generation aircraft, and airlines must provide the training. Airlines also must self-regulate whether the pilots are actually taking the training. I can sit in a training and not paying attention. I've

seen Airbus come in for training, and all the engineers are sleeping or playing on their phones. The trainer has a French accent which is already very difficult for them, and they can't really understand what he was talking about; thus, they cannot focus. Their mentality is like, "I'm just getting paid, I'm not their father or mother, so they don't want to listen". So, they go back to the airlines and they just check the box that they took the training. But no. They sat for the training, but do they really understand? That's the huge thing that we are going to see. We've the Airbus training coming, it's not like one has to do a written test. But definitely, you have to do some checks. Also, I cannot pay you USD 40,000, and I don't have to pass that. You will just let me pass. If I want to be a Captain, the airline will pay you USD 40,000 and you will be Captain. This is a huge problem. It doesn't mean that this doesn't happen in Europe; it does. Of course, this happens all over the world. But we'll have to start talking about this. I don't know how, as this is a political problem and issue. You know, I can pay to become a First Officer. And I will pay Bassaka.

Thai Binh: Really?

Respondent 16: Yes. Airlines like Singapore airlines will not do this. Airlines like Malaysia Airlines, Qatar Airways and Vietnam Airlines will never do this. This is a huge problem, and they don't see anything wrong with it.

Thai Binh: Yes.

Respondent 16: I wanted to be a Captain; I'll pay USD 40,000. I haven't earned the right to be a Captain, I can just pay for it. This is what we're facing. And, if I've a logbook, just say I've 5,000 flight hours; who's going to check? I can just show, I one my checklist 6 months ago, it's all fine. Who's going to check? So, we have these problems; and it's not just a Cambodia problem. It's a problem all over the world!

Thai Binh: Yes.

Respondent 16: We have these problems; if something happens here or happens elsewhere, this is a human factor problem. This could be one contributing factor; you'll never know about this, and you'll never learn from this. So, this is a huge problem facing the aviation industry globally. You know, it is highly regulated in USA. I have heard of students paying off Federal Aviation Administration (FAA) examiners in USA.

Thai Binh: Really? I thought that USA regulations are very strict.

Respondent 16: You'll think it is very strict, but if I am an FAA examiner, and I have USD 100,000 in front of me, why not? And I just need to sign off, wherever you're from Vietnam, China, Taiwan. Are you really going to say no to USD 100,000 on the table?

Thai Binh: I know of such cases in Vietnam, but I can't believe this can happen in USA!

Respondent 16: It happens in the USA. Yes. Greed is greed; it has no color, no religion, no culture.

Thai Binh: Yes.

Respondent 16: It doesn't matter which country you're from. Greed is greed. Yes. It happens all over the world and it's not widely talked about. We know, and we'll never get rid of this problem, but we can have laws to prevent these. We cannot eliminate these, but we can stop these rights now and get the airlines to say no. But this is a big business for Bassaka. Pay me USD 100,000 and why not? If that goes into somebody's pocket, yes. This is what we are dealing with. Greed is greed; it is everywhere.

It's just more frequent in Asia, and more frequent in Philippines and emerging economies. And airlines here actually promote that. I had parents writing to me through Aviation in Asia, saying "Do you know any airlines I can pay to fly?" I said no, I will not endorse that. And, when you're doing "pay for fly", you're destroying an industry of these hardworking people. You need to earn that, it's all about safety and standards.

You know, carriers like Derry Air can't get away with that. As for VietJet, not sure. VietJet is USD 120,000 to "pay to fly". For Vietnamese, it's cheaper; it's about USD 40,000. So, it's a business. And then, they complain, "We have a shortage of pilots etc.", when you're creating a corrupt industry. I don't know if Derry Air does or not. I will imagine that they don't, they're the people's airline.

There are other airlines that definitely do that. If I want to be a pilot, I'll say, "I'll definitely pay you; we can just make a deal between you and me." The airlines don't even have to know. So, you know that there are deals often being made under the table. When we have a crash, the factors, you'll never know. They won't stop making air

crashes investigations on National Geographic. There are so many scenarios that lead up to an air crash accident. These are factors we'll really need to pay attention to. These are unrelated to your question.

Thai Binh: It is okie. I have many interviewees to supplement to many parts of the questions.

Respondent 16: I really think these need to be addressed. Pay to fly, pay to be a cabin crew. You know, bring my nephew in and work here, but knows nothing about the aviation, but go ahead, hire this guy. I have a flight dispatcher from K6 writing to me 2 years ago and said, "How does the pilot know which runway to land?" You are a flight dispatcher and you don't know? He mentioned, K6 doesn't teach this.

Thai Binh: No one teach?

Respondent 16: No one teach!

Thai Binh: I don't know if the manager teaches them or not; for flight dispatchers, they mainly work on a schedule.

Respondent 16: Yes. My pilot friends have to check all the time the loaded balance and load sheets. The worker will give it to the pilot; and he'll say it is wrong. It is not a K6 problem; it's an industry problem. This is because the airlines do not invest in their people. Also, they do not test them.

Like as I mentioned, the Airbus class. So you went for the class, but you learn nothing. Maybe your English language is not so good, maybe your uncle got you in, your auntie got you the job. And, you're just there to collect the paycheck, take a selfie, look at airplanes. One thing about the airlines here; they're not focused. This is where we're going to see winners and losers, because, exactly as you had mentioned; I hire my cousin from the countryside who have no knowledge about aviation industry. This was what happened in my last company; I was having an argument with the Senior Executive Level over this issue. One day, somebody just showed up without an announcement. Just collect the paycheck.

Thai Binh: Everyone is the same.

Respondent 16: That is such a bad excuse. This is one of the reasons why pilots want to create an association, come together as companies and discuss best practices and standards, and have a talk about these issues. This is because the people I'm associated with, they're old school people with old school ideas. It doesn't matter how old you're.

Thai Binh: This topic is sensitive; maybe you hit their sore point.

Respondent 16: The people we aligned with, all agreed. It is a very sensitive topic, and we all agreed. Moving forward, all agreed on this. We're trying to create standards, so we can change. Whatever they want to do, they do. But what we wanted to do, we've to regulate ourselves, how we can create the standards, not by hiring our relatives. It should be "Oh, I know somebody you can hire to move this." Hopefully, the organizations that are joining; yes, they seem to recognize these. I'll have to deal with it; perhaps just one or two of the countryside relatives. I hope to bring this up in a very diplomatic manner. If not, then fire me, and this is what happened in my last company.

It's like "pay to fly". You've no idea, when you've no profit, when your airline is this and that, and everyone complains, look internally at the company. But they don't get it. They don't understand, because it's so ingrained in their psychological or culture aspects. We see this more in Asia, though this happens all over the world.

Thai Binh: I think there is some misconception.

Respondent 16: This is a huge misconception. These people will go; they'll retire. After 10 or 15 years, it will change, but never ever disappear. This is very common in this part of the world, still, it is also common in other parts of the world. It's not tolerated so much in America and North America, but it still happens. In Europe, it does happen. Therefore, your business will never be 100% as best as it can. That's the bottom line. Unfortunately, it can create a lot of suffering for other employees. It's not a hardworking place, it's not built on skills and the energy is not there to deal with these problems.

Hopefully, the younger generation, when they started to see these, they'll see that this does not work. This is a huge problem here; we also see this in Malaysia. It's all over. It's everywhere in Asia, therefore this is not a Vietnamese or Cambodian problem. This is a problem over various continents. In the Americas, it is much more transparent, and I think, one of the interesting things about Asia, corruption is very transparent here. You know what you're dealing with.

Thai Binh: Actually, in Cambodia.

Respondent 16: Yes, so at least you know what you're dealing with. Maybe there is corruption in Canada, but it's under the table; nobody talks about it. You don't know how to react and how to respond. But here, they all say to me, "You know Jennifer, we have to give a percentage to bla bla bla." And at least I know exactly what I want, and what I'm dealing with. So, when they come back and say, actually, you need to give more. I said no. This is enough. We have to draw the line somewhere. So, I don't like that conversation with somebody.

Maybe not the senior people, but the younger people are talking about it. The pilots and cabin crew are talking about it. The ones that have worked from the bottom upwards are talking about it. Those people, who are in the position of power, and many of them who will be in the position of power one day, as long as they don't lose sight of who they are, and their values, it can change little by little. It's not going to be a perfect system. But, the next incarnation of K6, maybe will be different. Japan and China are like this. You can understand which carriers failed, which ones are having the rumours and complaints, unhappy work environments. There's the general public care. They just want the cheapest tickets and the best flight times.

Thai Binh: Do you think that price is the key factor to influence purchase behaviour?

Respondent 16: In the emerging market, yes. Even if you're a young person in Canada, you'll also want to find the cheapest flights. Even for me, I also look for the cheapest flights first. I see so many flights going back to Canada, and I see which is the cheapest flight and the best connection. Sometimes, I take the cheap flights because I know the connection is like 10 to 14 hours in Shanghai. I will be thinking; I need a break, and need not have a direct flight to Canada, I cannot do it anymore. I can spend the 6-10 hours in Shanghai shopping. I always do that. This time, I go to Japan; I take a 3-day break. And then I go from Japan to Vancouver, then back from Vancouver to Japan for 1 week, and come back.

Thai Binh: From here to Bangkok is also cheap. You can benefit from that. Flying to China and many other cities.

Respondent 16: You know, I hate flying to Bangkok, because I always fly there; I'm so tired of it. But yes, I try to avoid Bangkok. Now, I try to fly to Hong Kong, Japan or Korea. Yes, please send that to me, because I'll probably fly from here to somewhere.

Thai Binh: Low-cost airlines will increase competition, and they'll force legacy airlines to differentiate themselves. Major airlines have to classify many different classes to cover each segment of customers. Sometimes, they offer cheaper tickets than the low-cost airlines. They provide more services; they try to please the passengers to maintain their customer segments. Otherwise, they'll transfer to low-cost. Or, the major airlines, they'll operate their own low-cost subsidiary airlines.

Respondent 16: Yes, It's like Singapore Airlines and VietJet. So, what's the question? Do I think?

Thai Binh: Yes.

Respondent 16: I mean yes. They do. I totally agree with you. And I wonder, if it's just like working class and middle class? Let's say, you go with Derry Air. For example, if that is the only thing you know, then you'll fly Derry Air. And that's fine. But now, let's say, you used to take Derry Air, and now you take Singapore Airlines. They give me a warm towel, nuts, and this and that. Somebody has to be really into that to pay for those services.

Like, I'm going to take a cheap flight, if a low-cost carrier offers a cheaper ticket, I will go with the cheaper one, especially in this region. If I am going on a long flight, yes, I'll look at the prices. I tried to look for the prices from Japan to Vancouver; it was so expensive. I ended up going with China Eastern. I hate that airline. It's crowded, the food was horrible. I know what to expect.

Thai Binh: I flew with China Eastern once, the taking off and landing procedures are scary.

Respondent 16: It is like Cambodia airways here. I mean, China Eastern is a safe airline. This is an interesting thing. China is so strict with their airlines in China. Once they come here, they stepped outside the usual strict regulations. But, you can still complain to the regulator, and the regulator will check them. China is pretty good; I haven't had any problem with China Eastern. I also flown with China Air; the big 3, China Southern as well. They're much cheaper than Cathy Pacific, and Cathy Pacific is not that great anymore. They used to be so fantastic and nice.

The flight from Japan to Vancouver is really so expensive. Even for me, it's pricey. I was a single mum and also finding the cheapest ticket prices for my kid. People who like these legacy carriers; they can afford it. This is for that segment. But I think that segment is shrinking. It is growing and shrinking in some way. The ultra-rich, now,

they're chartering their own private jets. This type of airlines will always attract the businesspeople. But the 99%; the rest of us, we're looking for the best flights and the best connections. So yes, I totally agree with you. I mean, they're always in competition. So, maybe they'll do codeshare, but the reality is for the bigger airlines, it's all for themselves essentially. Yes, of course you need to do codeshare; the industry makes you do that. That make sense.

Is it Qatar that left OneWorld recent? Qatar has their own problems recently. Everyone is in competition with one another. But, you know, you got Singapore who did the NokScoot. That is a co-operation or was that "save the company"? I think, these forms of alliances are "save the company".

Thai Binh: Will some airlines prefer to widen their network, instead of flying a few usual routes? For example, small airlines like JC International, KC International, Bassaka or K6, they can make profits if they fly domestic. But now, they want to expand their networks to China and other countries. Maybe this will not be profitable anymore. But they want to prove to others that they are large airlines. They try to show off.

Respondent 16: They try to show off? Yes, I mean, any of these airlines here cares about their competitor positions. They don't care at all; it's not even about the tickets. It's all about money laundering. If we've airlines attached to casinos, this is the easiest way to launder money.

Thai Binh: They have projects to fly the Chinese people to gamble here.

Respondent 16: They do. Yes, I have a pilot friend who is in Hong Kong. He flies the private jet, bringing the passengers here. The company put him in NagaWorld. I haven't been to NagaWorld for a long time. I went at 11.30 p.m., there were sex trade workers and young gangsters. And, the sex trade workers are all Chinese. The hotels are full of Chinese sex trade workers. So, it is sex and gambling. Coverage for competitive positions or profits, they don't care.

Thai Binh: Especially, in Cambodia, but not true in other countries.

Respondent 16: Of course, Derry Air is both. This is what I think; Derry Air will say they are not. I think this is just for Derry Air and the solid carriers. But these airlines are not even airlines. It's just in the name. But they're an airline. But they're not serious about their marketplace position.

You know, Cambodian Prince, who owns Cambodia Airways, they have the hotels and casinos in Sihanoukville. For JC, they have also opened their casinos. For Bassaka, they created the exact replica of NagaWorld. But, the big-name airlines in the region is different. Indonesia has some weird airlines that serve remote regions that are not so safe. They're not ferrying people to casinos, but it's still wonderful money laundering. Same with Myanmar, it's like money, guns and gold go through Myanmar all the time.

Thai Binh: Myanmar employ the professionals from Western countries.

Respondent 16: They definitely do.

Thai Binh: I saw they work with the Canadian people.

Respondent 16: Yes, they work for that kind. I have a friend who was working for MAI Air. MAI Air shut down since then, but they do employ Westerners because they lack the resources. Also, they weren't opening up the country to tourism. They are like these silly little airlines here, in other countries as well.

Thai Binh: MAI?

Respondent 16: Myanmar Airways International. I know this one. But who are behind these airlines? The ambassadors, the tycoons, stuff like that. The easiest way to transfer money is the airline. Airlines and casinos.

Thai Binh: Do you think the shareholders should be involve in the airline operations?

Respondent 16: Sometimes, we do see that. This is bizarre; that shouldn't happen in business, where you've your shareholders involved in the business. But yes, that definitely happens. However, if an airline goes public, they can't do that. You know, it's against the law and securities.

Thai Binh: Airlines are going to public, it's hard to happen, right?

Respondent 16: You can't; you're going against the law.

Thai Binh: Maybe they've different shareholder groups? Like, going to public?

Respondent 16: Like an IPO? Yes. If you do an IPO or something like this, there's no way. Vietnam Airlines is going public, I think.

Thai Binh: No, they'll privatise.

Respondent 16: They'll privatise?

Thai Binh: No, I think it's just a part of it.

Respondent 16: Okie, just a part of it.

Thai Binh: They sold the shares to ANA.

Respondent 16: Okie, we are stuck in Cambodia; that can't happen. You can't have your investors as part of your airline. I'm really anti airline here, because there's no benefit. This just increases nepotism and corruption. This makes a poorer workplace for the hardworking people, from where they come from.

Thai Binh: Do you think the aviation industry in ASEAN; in the near future, people in ASEAN region can work together? For example, I work in Cambodia, I can work in Malaysia. Even I can work in Indonesia, not to be constrained in my country?

Respondent 16: I think so, because new generation, every young generation; they're so connected, so creative and so open.

Thai Binh: For example, Cambodian people won't want to employ Vietnamese because they're afraid they'll take over their places.

Respondent 16: Yes. Cambodians are different, because only 22% of the country is urban. So, we have that issue. And then, we have the stereotypes on what has happened in the past. At the same time, we became more educated. As we become more connected, those barriers will naturally disappear. The urban kids now, they don't care about the past.

Thai Binh: Now Vietnamese can work in Singapore and Malaysia.

Respondent 16: Yes.

Thai Binh: Even in Thailand as well.

Respondent 16: Yes. I think I was the only bi-racial family in my neighborhood. There was so much racism against me and my family. I had my son when I was quite young. My son was born in 1994 and he had a united nation of friends. Over in a 15-year period, it changed. It was so super racist when I was growing up and this is Canada in the 1980s and then in the 1990s, it's totally different. I have no friends; how can my son have so many friends?

It's like, this kid is from Vietnam, another kid is from Cyprus, and another from Kenya. Yet another is half Taiwanese, half British. Nobody cares; and it's kind of cute, because they're all racist to one another from a funny, cute way. They went the other way, and I think this is what is going to happen in ASEAN. Kids play video games when they're kids. Like those online video games, you're play against a kid from Vietnam, come sit down and play together whatsoever. Basically, you're bridging that gap.

On my Facebook page, my number one fans are from Cambodia, number two are from Philippines. I think number three might be Laos or Myanmar. People talk among one another and share information. I think, we're breaking down barriers. The kids will be breaking down their own barriers. Cambodia is kind of unique, because we still are on the rural side; 22% are urban. But all the young people that I met are really open; I see kids coming out, I see girls telling their parents off; and end up getting beaten and the process repeats again. I see we've a lot of education. I see Filipino engineers working in Cambodia. We have Indonesians as well.

Of course, these doesn't happen overnight. I don't know how long these will last. You know, Steven Hopkins mentioned 100 years, but the vibrant young people, getting together in the tech industry, cover all these tech conference all over the world. They are going to lead this change. We see the tech world are full of brilliant minds from ASEAN. Indonesia, Thailand and Singapore have very strong tech arenas. They don't want to be like their

parents. I certainly don't want to be like my parents. My son is better than me. Each generation gets better and better. This is what I think. I have hopes; maybe a bit optimistic.

Thai Binh: Do you think airlines among countries in ASEAN, they will merge together, or they will co-operate to create new airlines? For example, NokScoot is a joint venture between Singapore and Thailand.

Respondent 16: Yes.

Thai Binh: Do you think, in the future, there will be more such examples?

Respondent 16: Yes, I think so. We've to create all those opportunities for people to come together. Definitely yes.

Thai Binh: But there should be more budget airlines?

Respondent 16: It will be budget airlines. This generation comes out with their own idea of a budget airline. Maybe in the next 5 to 10 years, we'll see something else in the market. I wouldn't be surprised if the next generation creates something innovative that we never thought of. Something will happen; that's what I think. Perhaps a spin on the low-cost, I don't know. I mean, now I see what's happening in aviation business. Kids these days are very wealthy; maybe they don't want to buy an aircraft. Maybe they'll do a different timeshare of an aircraft.

The millennials have different needs than us. They're more concerned about the environment; they may not fly unless it's solar powered. It like some new movement will happen. I think this is where we're moving towards in the near future. Young people will come out with something creative to avoid the increase in fuel costs. Just like how the smartphone changes the world. It's a phone still but is different. Low-cost change us, so let's see the next reincarnation of low-cost. Maybe the next 10 years, especially if more and more people in this region flies. Maybe we'll have a timeshare of the commercial aviation aircraft.

Thai Binh: What is your outlook about the airline industry in ASEAN?

Respondent 16: Linking back to the first question, there are going to be winners and losers. I look forward to that.

Thai Binh: Is the market still growing?

Respondent 16: The market will grow; it's a huge population here. Aviation is continuing to shift eastwards; we're going to have more maintenance here as well.

Thai Binh: The small countries, like Laos, Cambodia and Mynamar, the aviation industries will develop?

Respondent 16: Maybe in the next 25 or 30 years.

Thai Binh: 25 years?

Respondent 16: When those people retire, they'll be old. And, we have too many legacy issues. When their sons and daughters take over, we'll see changes. But until then. This is one of the reasons why I'm creating an association with other groups, so we'll be stronger together, so lobby against the government. And also, to bring in the sons and daughters who are old enough and push changes, all to come together. Until the people at the top retire in Myanmar and Laos; Malaysia and Indonesia have legacy problems as well, it will take the top to retire too.

Thai Binh: But, ASEAN, compared to Europe or US, how long more does it take for us to catch up?

Respondent 16: It's hard to predict; they also have their own problems. In terms of safety?

Thai Binh: The market, the operations, the professionalism? Or each market has their own dynamics?

Respondent 16: I think this market has its own dynamics and will have winners and losers. At the top of the spectrum is Singapore Airlines. At the bottom of the spectrum are some airlines in Cambodia, Indonesia and elsewhere. Its fragmented, and I think this region will always stay fragmented. In terms of social economics and developments, I don't think that will go away ever. It's like comparing with United States, you have got like California, which is very liberal; Southern Albama, they are very conservative. And, they are all in the same country but 2 totally different cultures. You have Hanoi and Saigon; you mentioned the differences. I don't think

that is going to go away. I think they'll get a little better if people don't think of the marked differences, especially here. You know, you have to have a political willingness; and without the political willingness, that's it. Now, Cambodia has only been in the process of development in the last 20 years because of decades of conflict. But the issues that're happening here; let's see the political willingness. I think we need to look toward the young people; the sons and daughters of these people will be leading the next generation. I do have hopes we can make significant changes, but I will not see that happening in the next 15 or 20 years.

Thai Binh: Thank you very much.

INTERVIEW 17

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 17
Designation	▪ Director Level, ATR – Airbus - France
Date of Interview	▪ 5th April 2018
Mean of interview	▪ Response via email
Location	▪ Paris/ France – Toulouse/ France
Audio Record	▪ Not available

INTERVIEW RESPONSE

Thai Binh: Do you think the ASEAN Single Aviation Market (ASEAN-SAM) will lead to grow and open more competition in ASEAN?

Respondent 17: Single aviation market does stimulate traffic development through less regulated competition. I tend to believe that some countries do not really protect their airlines but they wish to expand their domestic network first, in order to avoid their main platform being overshadowed by other overseas destinations.

Thai Binh: Open skies policy will allow large airlines in the Asian region such as Japan and China to take freedom rights in ASEAN region, leading to the threats to small airlines?

Respondent 17: There is a big risk when negotiating traffic rights with third parties as a single market. Yes, its true, smaller airlines will face the imminent threat; they have to either merge to compete, or have very strong investment backings to improve their overall services to compete.

Thai Binh: Will government regulations such as taxes, carbon emissions will lead to increasing cost of air travel and the depress in travel demand?

Respondent 17: I believe there is eventually an equilibrium between the various factors, but it is up to each country's government's interest to develop air connectivity for induced economic benefits.

Thai Binh: Some countries in the ASEAN region operate monopolies with local or regional major airlines given preferred standing or exclusive territories, leading to the prevention of entering a new market.

Respondent 17: I have no case in mind where a route is allocated to a single operator. There are still countries with a dominant operator but this is more related to route maturity level. Usually main destinations are served by other carriers, be it full service or low-cost.

Thai Binh: Shareholder influences and their financial support are strong enough to protect a carrier from competition.

Respondent 17: Only government owned airlines are allowed to do so. National airlines are the pride of a country; they have to ensure their utmost survival at all cost. An example will be Malaysia Airlines. They had gone through crisis after crisis, and the government bails the airline out each time.

Thai Binh: The supplies of fuel will affect strongly on the yield and rising oil prices will affect on tourism demand.

Respondent 17: Usually, fuel prices increase when economy is flourishing (more energy demand) which leaves some margins for the airlines to pass part of it to passengers. Rising oil price will eventually trigger the improvements of fuel efficiency in aircraft technology.

Thai Binh: Customer satisfaction will affect the general perception of the airline through word of mouth. Their concerns on the carriers' reputation, fleet or security will affect strongly to the airlines.

Respondent 17: Social media is the way to go in my opinion. These days, almost everyone will go to Facebook or Twitter to air their unhappiness about their experience with an airline, be it customer service, flight delays, unhappiness during immigration checks, unfriendly flight attendants etc. This definitely will have a major impact

on airlines. An example is the David Tao incident which sparked a PR crisis for United Airlines. This incident created a very negative perception of the airline not just by overseas passengers, but by fellow Americans too.

Thai Binh: Low cost carriers will grow and be a new trend in the future, as they charge lower fares in order to keep their seats full.

Respondent 17: We had shifted from an era where air travel is counted as a form of luxury travel. Nowadays, air travel is more of a form of transportation from one end to another, no difference from a car.

Thai Binh: Low cost carriers expanding to long haul flights will increase competitions and force airlines to distinguish themselves among rivals.

Respondent 17: I believe there are more segments in long-haul passenger profile which helps support a larger variety of business models. Better service quality, better airline food, comfortable seats with more leg room are ways full-service airlines will compete with LCCs who charge for everything on a flight.

Thai Binh: Air fares would continue to be impacted by weak economy and security concerns.

Respondent 17: Fares are driven by several key factors, such as supply and demand imbalances, over competition as well as market stimulation generate new air travellers.

Thai Binh: The development of technology such as artificial intelligence (AI), biometrics, blockchain and internet increased the efficiency of large airlines and airports and gain a competitive edge. Small airlines that cannot afford these technology in ASEAN region will be strongly affected.

Respondent 17: This innovation are highly valuable in the complex environment of large airlines. Smaller airlines can be much less sophisticated yet not losing the efficiency of the larger airlines. They may be less optimised but, I remain doubtful of the added-value at this level. Proper management remains the key.

Thai Binh: Employee satisfaction will have a positive effect on the airlines' performance and customer satisfaction.

Respondent 17: This is very true; not just in airlines, but as in any company, small business, multinational companies (MNC) as well. Having an overall employee satisfaction boosts the airline's operational efficiency as well overall morale and positive image to consumers. This, in turn will help create a highly positive customer satisfaction and will invoke the top of the mind reminder when passengers are looking to book an airline to their desired destinations, be it for business or leisure.

Thai Binh: The shortage of qualified employees, managers and pilots will affect the development of the airlines. Especially, the reputation of pilot's skills will impact on the sales of the airlines, especially from young cadets.

Respondent 17: This is indeed very true; human talent for this industry is very important. With effective employees, line managers, top management as well as well qualified pilots are definitely part of parcel of the overall package. As mentioned above, all these will have an impact on passenger decision if they will select your airline over a competitor.

In regard to pilots, there are a shortage of pilots, especially well qualified pilots. Yes, airlines may have training cadets, but they will still need experienced pilots with clean flying records to fly the aircraft impart good flight knowledge to the cadets.

Thai Binh: Airlines will benefit from oil dropping prices for the next five years. Then, small airlines will benefit accordingly to maintain their performance.

Respondent 17: This is not really true, as it hinges on the demand and supply of the flights themselves, when oil is going up again.

Thai Binh: Wide body aircrafts are preferred by customers than narrow body aircrafts.

Respondent 17: It depends on the flight routes actually. Wide body aircraft are used mainly by full-service carriers for mid to long range flights. Narrow body aircraft will be used by airlines who fly shorter range destinations, particularly the LCC.

Thai Binh: New invested aircrafts are much preferred by customers.

Respondent 17: Who would not like to fly in a newer aircraft? New aircraft would be like brand new cars.

Thai Binh: A well designed, user friendly airline website that include flight information, ticket bookings, web check-ins and seat selections will help drive traffic and customers than a less-functional websites.

Respondent 17: I will say, being user friendly is the most important feature passengers nowadays are looking for. Yes, you may have a very informative website. However, if the information is cluttered, and passengers have a hard time to find the information they seek, this will turn them off immediately. I am sure you had booked some flights on user friendly websites and not so user friendly websites. You can tell the difference immediately.

Thai Binh: Innovative technology relating to convenience and comfort, check-in process, mobile integration will gain competitive advantage over competitors.

Respondent 17: To a certain point, I agree on this. These days, many airlines are experimenting with self-check-ins, online check-ins, and going paperless on the boarding passes. However, technology is not always full proof, and when a software glitch arises, human interaction is still needed to resolve the issues in check-ins, verification of passenger information, etc.

However, if your destination is only covered by an LCC, or a chartered flight, and full-service airlines do not fly there, then the technology innovations as mentioned in your question may not count. More often than not, they are not that technologically advanced.

Thai Binh: The sales through digital retailing distribution channels will increase immensely and become the key channel to serve travellers.

Respondent 17: I will not fully agree with this. There are still passengers who prefer to shop at duty free counters at the airport, have a physical feel of the products they are eyeing before making the decisions to purchase. Digital retailing will happen more when a passenger is in a hurry or buy in-flight. If digital retailing is the next big thing, then physical duty-free shops will no long exist.

Thai Binh: Airlines still have to employ third parties to sell flights in order to optimize their sales though they prefer the direct distribution channel.

Respondent 17: This is true and will never go away. For tech savvy passengers, they will usually go directly to the airline website to book their flights. Alternatively, they will go to third party websites such as Booking.com, Expedia, Traveloka and the likes of these to book, hoping for a cheaper price deal. Also, online travel agents as well.

Thai Binh: Since the competition rises in the whole region, airlines will reserve more budget to spend for marketing activity over their rivals.

Respondent 17: This is true. Be it new players in the market, or established players, it is a necessity to market their activities, be it via ATL (above the line), or BTL (below the line). With the rise of micro-influencers and travel bloggers, this is another venue where airlines tap on these influencer or blogger followers to spread their marketing promotions in a subtler way.

Thai Binh: Customer data is an important resource and play a crucial function in all aspects relating to retailings, dynamic pricing and management.

Respondent 17: This is a very important resource, but many airlines do not have the right talent to do it right. Although on regional and short haul it needs to prove its added value vs added complexity.

Thai Binh: Small airlines should merge or codeshare, instead of competing in order to maintain their performance.

Respondent 17: Each airline has its role and value (network diversity is the key). The main problem here is the complexity (MandA, rebranding, talent retention or cuts, infrastructure and IT costs). Airports can play a role to simplify interlining.

Thai Binh: Airlines will put their collaboration efforts to whom they have a closer opportunity and more beneficial commercial relationship rather than joining the Star Alliance network.

Respondent 17: Alliances are too complex and costly while not agile. Even airlines among the same alliances may be direct competitors and may not share the same ideology to work together.

Thai Binh: Currently, most of the carriers are owned by governments or by a group of stakeholders. The ownership will open to public shareholders in the future.

Respondent 17: It depends. Government controlled airlines will always be under government control with little or no external stakeholders on board. However, airlines that are owned by stakeholders may be more open to welcome public shareholders in the near future.

Thai Binh: Full-serviced airlines will shift their strategy toward the low-cost airlines in order to reduce cost.

Respondent 17: It depends on which segment, this will happen if they want to do more on short haul flights.

Thai Binh: Full serviced airlines will replace smaller jets with larger planes to increase the number of seats and match fares offered by low-cost carriers.

Respondent 17: Alternatively, they may partner with low-cost carriers to do this.

Thai Binh: Airlines will improve customer service rather than pouring budget into advertising activities, as word of mouth would be more effective in drawing new customers and customers' loyalty.

Respondent 17: With a competent CS, overall in-flight services, tip top management handling, as well as with the relevant uses of advertising be it online, or on-ground, they can go hand in hand. Both will be combined through application providing part of the service while developing brand.

INTERVIEW 18

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 18
Designation	▪ Manager Level – Cambodia Airports in Cambodia
Date of Interview	▪ 11th May 2018
Mean of interview	▪ Response via email
Location	▪ Phnom Penh/ Cambodia
Audio Record	▪ Not available

INTERVIEW RESPONSE

Thai Binh: How are the development of Cambodia Airports in recent years?

Respondent 18: Last year, 8.8 million passengers travelled through the airways of Cambodia, landing in the airports of Phnom Penh, Siem Reap and Sihanoukville, resulting in a year-on-year increase of 25%. During this period of time, cargo shipments grew to a record 65,000 tons, by an almost 40% increment. These huge increases did not come by accident; rather, were the result of successful strategies to develop a robust air connectivity and sufficient airport infrastructures to handle future growths.

On one hand, it was the materialization of the blueprint of what Cambodia Airports had rolled out with the Ministry of Tourism, Cambodia, as well as all stakeholders in the tourism industry. Together, the combined efforts to promote Cambodia as an up and coming travel destination have yielded a double-digit tourism growth for almost a full decade. It was also the result of our development strategies that aim to welcome more airlines, open new routes and increase flight frequencies.

Thai Binh: Are the airports renovated for the anticipated development of airline infrastructure as well as new airlines setting up in Cambodia?

Respondent 18: Since 1995, the development strategy to build and upgrade Cambodia’s airport infrastructures had been the core of Cambodia Airports’ airport development strategy. VINCI Airports (top 5 global player in the international airport sector), a subsidiary of France’s VINCI Group (largest construction company in the world by revenue) that is dedicated to airport management, holds a concession to operate the 3 international airports, namely Phnom Penh International Airport, Siem Reap International Airport and Sihanoukville International Airport has allocated USD 2 billion to develop the 3 airport networks by the end of its concession period in 2040.

In 2017, Cambodia Airports completed a USD 100 million upgrade of the terminals at Phnom Penh and Siem Reap International Airports. These 2 upgrades helped to double their capacity to handle over 10 million annually and rolling out new additional services. The boarding concourse, providing new arrival areas and improving the domestic departure terminal was commissioned in December 2017 as the phase two expansion.

Sihanoukville’s International airport is currently underway renovation upgrades and is expected to be completed within the next couple of months. This renovation project includes expansion of the terminal to handle more inbound and outbound passengers, rolling out a wider range of services, as well as extending and reinforcing the airport’s runway to accommodate bigger aircraft. The newly upgraded airport will be able to handle over half a million passengers annually and accommodate wide body aircraft from long haul flights.

Thai Binh: Which factors help to make the airport operations more efficient?

Respondent 18: Increasing capacity is not simply about building infrastructures; it is also about developing exceptional human resources, improving operational efficiencies and streamlining processes. Also, expanding capacity is not just a numbers game; this is also an expansion to revamp and roll out top notch customer service quality and the ability to manage peak traffic conditions. As we upgraded the airport’s infrastructure to handle double the capacity, we also develop exceptional human resource training, so as to help improve the customer service, technical, security capabilities and technological processes to accommodate higher number of passengers. The direct beneficiaries of these improvements are Cambodia Airport’s customers. As a whole, everyone from the staff to the passengers will benefit from this major infrastructure upgrade.

Thai Binh: What kind of benefits does Cambodia Airports bring to customers and airlines?

Respondent 18: in 2015, a socio-economic study was carried out. It was found that Cambodia's three international airports activities resulted in USD 2.7 billion; equivalent to 17 percent of the country's total GDP. The study also found that It also found that these 3 airports combined, provided employment to 1.7 million Cambodians; equivalent to 20% of the Kingdom's working population. In order to optimize the development of the aviation sector and maximize its socio-economic benefits, it is therefore utmost crucial to maintain the unity of the Kingdom's airport network. This is a critical point, where operating and developing these three international airports as a network creates more opportunities in terms of connectivity.

A distinguished advantage is in route development; having the same operator handle both international and domestic air traffic gives airlines a better perspective when discussing new route expansions. For example, a carrier seeking to launch an international route to Siem Reap can also discuss with the same operator the possibility of adding a domestic leg to Sihanoukville. This way, we are able to sell Cambodia not only as a short travel destination for just two or three days, but for a full week.

Cambodia Airports can also leverage on the worldwide network VINCI Airports, its parent company. VINCI Airports, a top five global player in the international airport sector, manages the development and operation of 46 airports in France, Portugal (including the Lisbon hub), the United Kingdom, Sweden, Serbia, Cambodia, Japan, the United States, Dominican Republic, Costa Rica, Chile and Brazil. Served by more than 250 airlines, VINCI Airports' network handled 195 million passengers in 2017. Through its expertise as a comprehensive integrator, VINCI Airports develops, finances, builds and operates airports, leveraging its investment capacity, international network and know-how to optimize the management and performance of existing airport infrastructure, facility extensions and new-build construction projects.

Cambodia Airports has had 23 years of successful partnerships, providing our customers with a high level of quality, and we still have room to develop even more. A key component of the airport development strategy is by investing in exceptional human talent; recruiting and training staff to properly handle the airport operations. Digitalization of the 3 airports, such as providing self-check-in kiosks and more digital signages to provide passengers with relevant information in their national language, are also part of the whole upgrade process.

Thai Binh: How do the airports support the airlines in Cambodia?

Respondent 18: by working closely with all those stakeholders involved in maintaining traffic volumes, the marketing teams of VINCI Airports are committed to offering airlines the most appropriate routes. In fact, supporting tourism, especially regional tourism, is one of the main priorities of this policy: (Familiarization) FAM Trips for tour operators, especially for those based in China are conducted on a regular basis. This is basically to help boost tourist traffic at Siem Reap (which serves the Angkor temple Heritage site) and Sihanoukville (an increasingly popular coastal resort city). Also, we organize roadshows in India, Indonesia and the Philippines to promote Cambodia as a tourist destination in the emerging markets.

INTERVIEW 19

Interviewer	Thai Binh TRAN
Designation	▪ Doctorant – CEREGE – IAE Poitiers – University of Poitiers - France
Interviewee	Respondent 19
Designation	▪ Senior Executive Level, Fubong Bank in Hong Kong Industry Evaluation – Aircraft Leasing
Date of Interview	▪ 13th October 2018
Mean of interview	▪ Speaking via phone – WhatsApp
Location	▪ Paris/ France – Hong Kong/ China
Audio Record	▪ Interview is conducted in English

TRANSCRIPTION

Thai Binh: Can you share with me an overview how aircraft leasing works?

Respondent 19: Do you mean aircraft leasing works in China?

Thai Binh: Yeah, either in ASEAN, Asia or China or Japan; in your experience.

Respondent 19: Ok, I will talk about aircraft leasing industry in China, as I work for leasing company in Guangzhou, China. The aircraft leasing industry is growing in China and I believe it will be in Asia. In China, the main aircraft for leasing are mainly from Airbus and Boeing. The overall industry is growing and a lot of financial leasing companies in China were established recently; many of them also focus on aircraft leasing whereas others focus on other industries.

Thai Binh: How does the role of the bank coming on the play of aircraft leasing?

Respondent 19: Actually, the financial leasing companies in China, they act as financial institutions. They will ask finance from banks and then they will finance the aircraft leasing. There are two types of financial leasing; one is financial lease and another one is operating lease. When a financial leasing company understands an airline company's needs for aircraft, they will discuss and sign an agreement for the financial lease or operating lease. After that, they will go to the bank and ask for financing. In China, some development and policy banks, for example, Exim Bank of China or China Development Bank, they are very supportive for the aircraft leasing.

Thai Binh: Are the aircraft leasing the latest models or the older models? What is the average life span of a leased aircraft?

Respondent 19: In China, we noticed that a lot of airline companies will prefer new aircraft models because there is due to safety reason required by the Chinese government. The average lifespan for an aircraft in China is about 7 years, but you know for one aircraft you can use up to 25 years.

Thai Binh: What type of aircraft family that the airlines will lease?

Respondent 19: Both Boeing and Airbus. And the new aircraft models.

Thai Binh: As I know that aircraft leasing company will not lease A350, A380 and B787, which are the biggest aircraft nowadays, they just lease the small ones.

Respondent 19: Yes, it depends on the demand, but I notice that it is the common ones, not the big ones.

Thai Binh: So, between LCC and full-service airlines, who will lease the aircraft more often?

Respondent 19: I think most of the airlines they have the demand for aircraft leasing because, you know, for each aircraft requires a lot of capital and then normally they prefer to have the support from the financial leasing companies. Otherwise, they will just directly deal with the banks, but this will lead to very high financial leverages.

Thai Binh: So where is the source of the aircraft for leasing? For example, financial companies can purchase new aircraft for leasing, but aircraft can derive from other sources such as from other airlines whom phased out the aircraft from their fleet.

Respondent 19: Normally in China, the aircraft comes directly from Boeing and Airbus, not from second hand.

Thai Binh: That means the aircraft are brand new, right?

Respondent 19: Yes, brand new aircraft.

Thai Binh: As I know that Japan is a pioneer aircraft financing, and lately China had overtaken Japan as the dominant player in this area. What are the key differences in terms of financing by these two countries?

Respondent 19: For Japan, I did not have many information because I worked in China. In China, due to the large population and the major demand for tourism, the number of air travelers is huge daily, so that's why the air travel is the big demand in China. That's why you see a lot of aircraft demand in China. The airlines need the support from the financial leasing companies in order to mitigate their leverage, and then to lighten their financial burdens.

Thai Binh: Do you think fuel hedging will impact on aircraft leasing?

Respondent 19: I don't think aircraft leasing involves in any hedging, because the aircraft leasing the main source is the financing of the aircraft, and the airline companies they act like lessee and they pay rental to the financial leasing company, it mainly involves in other issues rather than hedging.

Thai Binh: How about the process of leasing an aircraft? How much does an airline pay per month for leasing? How is the procedure and what is the condition?

Respondent 19: The financial leasing company and the airline company they will get into an agreement and there are some terms and conditions in the agreement, including the tender and then the amount of financing, and then other relevant terms involving in the aircraft industry. So, for details I could not disclose too much but it mainly some major terms in the contract which involves the repayment term, the financing amount and the tender and some others, for example, insurance, maintenance and many other issues relating to the aircraft.

Thai Binh: Normally how much the airline will pay? As I know that about USD 200,000 a month.

Respondent 19: It depends on the amount and it is agreed by the airline company and the financial leasing company. The amounts are different for smaller aircraft and larger. So, it depends and financial leasing company; they need to calculate themselves that the repayment that the airline can cover enough, or the cost involved for the aircraft.

Thai Binh: After 12 years the aircraft will belong to the airline, right?

Respondent 19: It depends on the financial leasing term at the end of the contract, they will transfer the title and the ownership of the aircraft to the airline company. There is subject to other terms and conditions as well.

Thai Binh: Can the airline lease the aircraft in short term or temporary?

Respondent 19: I don't think so, it will take at least a few years, up to 10-12 years.

Thai Binh: So, it not like the aircraft leasing having the available aircraft and they can lease to the airlines for 3-6 months?

Respondent 19: I don't think so, because leasing an aircraft involves a lot of money, and drafting the contract and the agreement is very complicated. I don't think it will take a very short term.

Thai Binh: If an airline wants to lease an aircraft from the financial company, so they need to be sponsored by a bank or a larger airline behind them?

Respondent 19: It depends on the terms and conditions in the airline company and the financial leasing company. If the airline is not a strong brand, I don't think so. It is subjective to the agreement between two parties.

Thai Binh: When I worked for Cambodia Angkor Air and Cambodia is a very weak country, we do not have enough prestige to lease an aircraft, that's why we have to do it through Vietnam Airlines.

Respondent 19: Yes, it depends on the brand and the reputation of the airline.

Thai Binh: It is not easy to just go and rent, right? And how about the aircraft leasing market at the moment? I mean the aircraft leasing companies have raised up a lot and merged a lot. Can you tell how is this market now compared to the airline's demand?

Respondent 19: I left the financial leasing for a while, so I do not have the latest information, but when I was working there in 2015, there are quite a few companies involved aircraft leasing in China including the banks and the government; and also, many other small financial leasing companies but they are backed by the government.

Thai Binh: Do aircraft leasing companies only lease in China or lease to other countries as well?

Respondent 19: It is not just limited to China, sometimes they will do in other countries. In my previous post, we have a deal involving in Dubai. So, they can find the business anywhere they can do it. There is no limitation for this business.

Thai Binh: Do you think airlines in ASEAN countries will lease or buy the aircraft?

Respondent 19: We did not have business with ASEAN countries before, I don't have more information about this.

Thai Binh: Thank you very much.

SURVEY QUESTIONNAIRES TO CAMBODIAN AND VIETNAMESE PASSENGERS

Dear Colleagues/ Friends,

Please let me take this opportunity to introduce myself, I am Thai Binh TRAN, PhD student at University of Poitiers, France. I would like to invite you to give your opinions about your selection of an airline whenever you travel by completing this questionnaire. The objective of this questionnaire is to support to my dissertation relating to the strategic decision of an airline in ASEAN region. The questionnaire is Respondent 1 and completely confidential. It will take approximately 5 minutes to complete. Your participation is entirely voluntary. Thank you for your co-operation. Your responses are welcomed until 31st March 2018.

1. Which airline that you mostly choose to fly within ASEAN region? (One selection only)

- | | | |
|---|---|---|
| <input type="checkbox"/> Vietnam Airlines | <input type="checkbox"/> Bangkok Air | <input type="checkbox"/> Silk Air |
| <input type="checkbox"/> Singapore Airlines | <input type="checkbox"/> Cambodia Angkor Air | <input type="checkbox"/> Tiger Airways |
| <input type="checkbox"/> Malaysia Airlines | <input type="checkbox"/> Garuda Indonesia | <input type="checkbox"/> Laos Airlines |
| <input type="checkbox"/> Derry Air | <input type="checkbox"/> Vietjet Air | <input type="checkbox"/> Jetstar Asia Airline |
| <input type="checkbox"/> Thai Airways | <input type="checkbox"/> Jetstar Pacific Airlines | <input type="checkbox"/> Other |

2. Why do you choose to fly with this airline? (3 selections maximum)

- | | |
|--|---|
| <input type="checkbox"/> Member of Frequent Flyer Program | <input type="checkbox"/> It provides flights with the least number of stop-over |
| <input type="checkbox"/> Being recommended by travel agents | <input type="checkbox"/> The only with seats available |
| <input type="checkbox"/> It is a part of your tour package | <input type="checkbox"/> You are satisfied with its services |
| <input type="checkbox"/> It is the cheapest airline | <input type="checkbox"/> To support your national airline |
| <input type="checkbox"/> It is the reliable airline/ least cancellation | |
| <input type="checkbox"/> It is the safe airline | |
| <input type="checkbox"/> It provides convenient flight departure/ arrival time | |
| <input type="checkbox"/> It provides convenient connection | |

3. What is your frequent class of travel? (1 selection only)

- Business Class Deluxe Economy Class Economy Class

4. What are your main purposes when travelling? (3 selections maximum)

- | | |
|--|--|
| <input type="checkbox"/> Business | <input type="checkbox"/> Leisure/ Tourism |
| <input type="checkbox"/> Education/ Employment (long term) | <input type="checkbox"/> Visiting friends/ relatives |
| <input type="checkbox"/> Attending Conference/ Workshop | <input type="checkbox"/> Other: _____ |

5. How would you reserve the ticket? (1 selection only)

- | | |
|--|--|
| <input type="checkbox"/> Through the airline's website | <input type="checkbox"/> At ticketing agent/ travel agency |
| <input type="checkbox"/> Through travelling websites | <input type="checkbox"/> I have other people to reserve |
| <input type="checkbox"/> At the airline's ticketing office | |

6. How would you rate the website of this airline? (regarding speed of navigation, user interface design, clear information, purchased, sear selection, check-in functions)

Too bad							Excellent
1	2	3	4	5	6	7	

7. How would you rate the price offered by this airline compared to others within the same itinerary?

Less competitive							More competitive
1	2	3	4	5	6	7	

8. How would you rate marketing/ advertising activities of this airline?

Too bad							Excellent
1	2	3	4	5	6	7	

9. How would you rate the reputation of this airline? (regarding brand, safety and services)

Too bad							Excellent
1	2	3	4	5	6	7	

10. How would you rate about queuing time to check in for the flights with this airline?

Too bad							Excellent
1	2	3	4	5	6	7	

11. How would you rate the check-in staff of this airline?

1	Too bad	2	3	4	5	6	Excellent	7
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12. How would you rate the business lounge services operated by this airline? (regarding ambiance, food, drink, staff's attitude, if you have used it)

1	Too bad	2	3	4	5	6	Excellent	7
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13. How would you rate the convenience of this aircraft? (regarding seats, entertainment screens, toilets)

1	Too bad	2	3	4	5	6	Excellent	7
---	---------	---	---	---	---	---	-----------	---

14. How would you rate the cabin crews? (regarding appearance, communication skills, service)

1	Too bad	2	3	4	5	6	Excellent	7
---	---------	---	---	---	---	---	-----------	---

15. How would you rate the food service on the flight? (regarding sufficiency of food, presentation of meal, taste of meal, quality of tablewares)

1	Too bad	2	3	4	5	6	Excellent	7
---	---------	---	---	---	---	---	-----------	---

16. How would you rate in-flight entertainment services?

1	Too bad	2	3	4	5	6	Excellent	7
---	---------	---	---	---	---	---	-----------	---

17. What type of aircraft would you prefer to fly? (3 selections maximum)

- | | | |
|--------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> ATR | <input type="checkbox"/> Airbus A380 | <input type="checkbox"/> I do not pay attention, or I don't know the aircraft types |
| <input type="checkbox"/> Airbus A320 | <input type="checkbox"/> Boeing 747 | |
| <input type="checkbox"/> Airbus A321 | <input type="checkbox"/> Boeing 777 | |
| <input type="checkbox"/> Airbus A330 | <input type="checkbox"/> Boeing 787 | |
| <input type="checkbox"/> Airbus A350 | <input type="checkbox"/> Other | |

18. What type of airlines would you prefer to fly? (1 selection only)

- | | |
|---|---|
| <input type="checkbox"/> Full-service airline | <input type="checkbox"/> Low-cost airline |
|---|---|

19. How would you love to fly the low cost airlines? (Please rate all factors)

1	Never	2	3	4	5	6	I always choose low-cost airlines	7
---	-------	---	---	---	---	---	-----------------------------------	---

ABOUT YOURSELF

20. Gender (1 selection only)

- | | |
|-------------------------------|---------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female |
|-------------------------------|---------------------------------|

21. Age (1 selection only)

- | | | |
|-----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> Under 20 | <input type="checkbox"/> 36 – 50 | <input type="checkbox"/> Over 65 |
| <input type="checkbox"/> 20 – 35 | <input type="checkbox"/> 51 – 65 | |

22. Location (1 selection only)

- | | | |
|------------------------------------|-----------------------------------|--------------------------------|
| <input type="checkbox"/> Vietnam | <input type="checkbox"/> Malaysia | <input type="checkbox"/> Other |
| <input type="checkbox"/> Singapore | <input type="checkbox"/> Cambodia | |

23. Occupation (1 selection only)

- | | | |
|---|---|------------------------------------|
| <input type="checkbox"/> Government Officer | <input type="checkbox"/> Staff | <input type="checkbox"/> Housework |
| <input type="checkbox"/> Professional (e.g. doctor, lawyer, teacher...) | <input type="checkbox"/> Student | <input type="checkbox"/> Other |
| <input type="checkbox"/> Manager | <input type="checkbox"/> Technical worker | |
| | <input type="checkbox"/> Retired | |

24. Monthly Income (1 selection only)

- | | |
|--|--|
| <input type="checkbox"/> < USD 500 | <input type="checkbox"/> USD 3,001 – 4,000 |
| <input type="checkbox"/> USD 500 – 1,000 | <input type="checkbox"/> USD 4,001 – 5,000 |
| <input type="checkbox"/> USD 1,001 – 2,000 | <input type="checkbox"/> > USD 5,000 |
| <input type="checkbox"/> USD 2,001 – 3,000 | |

LIST OF PREVIOUS RESEARCHES ON AIRLINE INDUSTRY IN ASEAN AND ASIAN REGIONS DURING 2002 – 2019

	Authors	Researches	Journals
1	Tae Hoon Oum and Yeong Hoek Lee	The Northeast Asian Air Transport Network: Is There a Possibility of Creating Open Skies in the Region?	Journal of Air Transport Management 8 (2002) 325 – 337
2	Peter Forsyth, John King, and Cherry Lyn Rodolfo	Open Skies in ASEAN	Journal of Air Transport Management 12 (2006) 143 – 152
3	Anming Zhang, Shinya Hanaoka, Hajime Inamura, and Tomoki Ishikura	Low-cost Carriers in Asia; Deregulation, Regional Liberalization and Secondary Airports	Research in Transportation Economics 24 (2008) 36 – 50
4	Alan Khee-Jin Tan	The ASEAN Multilateral Agreement on Air Services: En Route to Open Skies?	Journal of Air Transport Management 16 (2010) 289-294
5	Jirawat Anuwichanont	Examining The Relationship Between Commitment and Airline Loyalty and the Moderating Effect of Uncertainty Avoidance	Journal of Business 7 Economic Research – September 2010, Voume 8, Number 9
6	Chee-Wooi, Hooy and Chyn-Hwa, Lee	The Determinants of Systematic Risk Exposures of Airline Industry in East Asia	World Applied Sciences Jornal 10 (Speial Issue of Tourism and Hospitality): 91-98, 2010
7	Khalil Ahmad and M. Mukhtar Khan	A Comparative Analysis of Productivity of Airline Industry: Evidence from Selected Asian Airlines	International Journal of Business and Social Scicence, Vol. 2No.15; August 2011
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AIRLINE GLOSSARY

Airline designator	Code designated by IATA to identify an airline (e.g. QF for Qantas Airways).
Airport code/designator	A three-letter code used to identify an airport (e.g. SYD for Sydney, JFK for New York John F Kennedy Airport).
AK	Derry Air
ASK	Available Seat Kilometres: the measure of a flight's passenger carrying capacity. Calculated by multiplying the number of seats on an aircraft by the distance travelled in kilometres. Used to measure an airline's capacity to transport passengers.
ASAM	ASEAN Single Aviation Market
ASM	Available seat mile: the measure of a flight's passenger carrying capacity. Calculated by multiplying the number of seats on an aircraft by the distance travelled in miles. Used to measure an airline's capacity to transport passengers.
ATC	Air Traffic Control.
ASA	Air Services Agreement.
ASEAN	Association of South East Asian Nations.
Bumped	Airline jargon for a passenger being offloaded from a flight. Most commonly due to a flight being oversold, although 'bumped' can also mean being 'upgraded' or 'downgraded' where a seat in your booked class is not available.
BSP	Billing Settlement Plan. BSP is a system designed to facilitate and simplify the selling, reporting and remitting procedures of IATA Accredited Passenger Sales Agents, as well as improve financial control and cash flow for BSP Airlines.
Booking	The allotment in advance of space or weight capacity of goods.
CAAV	Civil Aviation Authority of Vietnam
Carrier	An industry term for 'airline'.
CASM	Cost Per Available Seat Mile: used to compare costs between airlines with the lower the CASM, the lower the cost of transporting a passenger.]
Cabotage	The right of an airline of one country/territory to carry domestic traffic within the territory of another carrier.
Consolidators	Third party distributors of airfares, usually to travel agents and travel product wholesalers. The fares are usually discounted compared to the 'published' fares set by airlines. Consolidators rarely sell direct to consumers.
City Pair	Term used for cities of departure and destination, e.g. Sydney to London.
Codeshare	Term used to describe an arrangement where one airline sells seats (the marketing carrier) on a flight operated by another airline (the operating carrier). Both airlines display their respective flight numbers. This is particularly common within airline alliances, such as Star Alliance. e.g. Qantas operates QF1 but codeshares this flight with British Airways, who sell seats on the flight as BA7321.
Cargo (CGO)	Also referred to as "goods", means any property carried or to be carried on an aircraft, other than mail or other property carried under terms of an international postal convention, baggage or property of the carrier; provided that baggage moving under an air waybill or a shipment record is cargo.
Customs	The Government Service which is responsible for the administration of customs law and the collection of duties and taxes.
Deregulation	Refers to the deregulation of airline markets and the removal of government controls on pricing and routes permitted to fly.
Destination	The ultimate stopping place according to the contract of carriage.
ETA	Estimated time of arrival.
EU	European Union.
EUROCONTROL	European Organization for the Safety of Air Navigation.
Flight Plan	Specific information related to the intended flight of an aircraft.
Fleet	The number of aircraft operated by an airline.
Flight number	A designator number assigned by an airline to a flight.
FSC	Full-Service Carrier
Airlines 'Freedoms'	Rights granted to a commercial airline of a country/territory to enter and land in another country/territory.
First Freedom	The right to fly over a foreign country/territory without landing there. e.g. Sydney-Singapore flying over Indonesia.
Second Freedom	The right to refuel or carry out maintenance in a foreign country/territory en route to another country/territory. e.g. London-New York with a refuelling stop in Ireland.
Third Freedom	The right to fly from one's own country/territory to another. E.g. Qantas carrying passengers from Sydney to London as an Australian airline.

Fourth Freedom The right to fly from another country/territory to one's own. E.g. Qantas carrying passengers from London to Sydney as an Australian airline.

Fifth Freedom The right to fly between two foreign countries or territories while the flight originates or ends on one's own country/territory. e.g. Northwest flying Sydney to Tokyo before flying to Los Angeles.

Sixth Freedom The right to fly from a foreign country/territory to another while stopping in one's own country/territory for non-technical reasons. e.g. Qantas operating an Auckland to Singapore flight via Sydney.

Seventh Freedom The right to fly between two foreign countries while not offering flights to one's own country/territory. E.g. an American airline offering flights between China and Japan but not to America.

Eighth Freedom The right to fly between two or more airports in a foreign country/territory while continuing service to one's own country/territory.

Ninth Freedom The right to do traffic within a foreign country/territory without continuing service to one's own country/territory. e.g. An Irish airline operating services between Paris and Frankfurt.

Flight Sector/Segment Non-stop operation of an aircraft between A and B with corresponding departure and arrival times.

FDR Flight Data Recorder.

FMS Flight Management System.

Ground Handling Operator Company that provides ground handling support services to airlines. These may include catering, cleaning, passenger check-in and ticketing and engineering support.

General Sales Agent (GSA) An agent authorized in a country/territory to handle an airline's export sales/services.

GDS Global Distribution System.

GPS Global Positioning System.

GPWS Ground Proximity Warning System.

Hub A major airport used as a 'base' for an airline from where they fly to other destinations within their network. Also usually a base for flight crew, cabin crew and maintenance.

ICAO International Civil Aviation Organisation. A UN specialized agency who are the global forum for civil aviation and works to achieve safe, secure and sustainable development of civil aviation through co-operation amongst member states.

IATA carrier A carrier that is a member of the International Air Transport Association (IATA).

Interline Using multiple airlines to fly from A to B where the various airlines used have a formal ticketing and baggage transfer relationship. E.g. A ticket for travel from Sydney to Beijing with Qantas and China Eastern Airlines via Shanghai. Qantas carries the passenger from Sydney to Shanghai and China Eastern Airlines carries the passenger from Shanghai to Beijing. The passenger's luggage is checked in at the start of the journey with Qantas and is handled by the airlines until arrival in Beijing without the passenger having to re-claim the luggage.

IATA International Air Transport Association.

ICAO International Civil Aviation Organisation.

IOSA IATA Operational Safety Audit.

ISO International Standards Organization.

K6 Cambodia Angkor Air

Joint Services Agreement (JSA) The co-ordination of products and services between two airlines in a particular market. These include scheduling, marketing, sales, freight and customer service activities and usually require regulatory approval. Examples include Qantas and British Airways on the Sydney to London 'Kangaroo route', British Airways and American Airlines across the Atlantic and Delta Airlines and V Australia across the Pacific.

LCC Low Cost Carrier

Load Factor Load factor represents the proportion of airline output that is actually consumed. Load factor is usually calculated by dividing RPKs/RPMs by ASKs/ASMs.

Long Haul A long-distance international flight. Typically, inter-continental and of at least six hours in duration.

Montreal Convention The Montreal Convention is a treaty adopted by the International Civil Aviation Organization (ICAO). It amended the provisions of the Warsaw Convention's regime concerning compensation for the victims of air disasters.

Minimum Connecting Time (MCT) The least amount of time an airline allows for a passenger connecting between flights at an airport. If a shorter period of time is used by the passenger, it is referred to as an 'illegal connection' and the airline may not accept liability for a missed connection.

Net Fare Fares available for sale specifically by a distributor/s that are negotiated between the individual distributor and the airline.

Network Airline term for destinations an airline flies to.

Non-endorsable ticket A ticket issued by an airline that cannot be used to fly with another airline.

Overbooking A practice adopted by airlines where more seats are confirmed on a flight than available on the aircraft. Based on the assumption that a variable percentage of confirmed passengers "no show" for the flight.

Offloaded An airline term used to describe where a passenger has been removed from a flight just before departure. The most common reasons are flight over-booking or passengers being late for boarding.

Open Skies Refers to a bilateral or multilateral agreement for air transport providers where government regulation of activity between parties is minimized, e.g. EU/US open skies agreement.

Published fare A fare “published” by an airline and available for sale to everyone (as distinct from “net” fares) either directly by the airline or a third-party distributor (e.g. travel agent).

PNR Passenger Name Record. An airline industry term for a passenger’s reservation file with an airline identified by a six-figure alphabetical and numerical code.

QR Qatar Airways

Route Consecutive links in a network served by single flight numbers, e.g. QF1 operates SYD/BKK/LHR as a single route.

Rerouting The route to be followed as altered from that originally specified on the AWB.

RASM/RASK Revenue per Available Seat Mile/Kilometre: Operating revenue measured on a unit basis, determined by dividing operating revenue by available seat miles/kilometres (ASM/ASK). Used as a like for like unit revenue comparison between airlines.

Short Haul A short flight usually domestic or regional on nature, typically lasting less than six hours in duration.

Segment A clearly identifying part of a journey usually between two cities and involving one departure and one arrival. It is distinct from a ‘flight’, which may incorporate stopovers even where only one flight number is used.

SIA Singapore Airlines Group

Transit A period of time spent between flights.

Tariff The published rates, charges and related rules of a carrier. Movement of cargo from one carrier to another against transfer manifest.

Transferring Carrier The participating carrier transferring the consignment to another carrier at a transit point.

Transit An enroute stopping place where cargo remains on board.

VNA Vietnam Airlines

XW NokScoot Airlines

Yield Airline term for revenue per unit, e.g. revenue per mile per passenger.

Yield Management: The management, by airlines, of revenue based on the assumption that:

- There is a fixed amount of resource available for sale (e.g. the number of seats on a plane)
- The resources are perishable, and time limited after which they become valueless (e.g. airline seats unsold on a flight perish once the flight departs)
- That the cost of the seat (the common resource) is variable depending on the terms of sale (e.g. airlines reduce the unit price on flights where there are many unsold seats and increase the unit price on flights where there are few available seats, thereby maximizing the amount of average revenue generated per seat mile on a particular flight).

RÉSUMÉ

L'objectif de cette recherche est d'étudier les réponses stratégiques des compagnies aériennes de la région de l'Association des Nations de l'Asie du Sud-Est (ASEAN) face à la création d'un marché unique de l'aviation civile intégrant dix pays membres. Nous cherchons à aborder cette problématique en adoptant un cadre d'analyse fondé sur la transformation des capacités dynamiques d'une organisation et le modèle Environnement-Stratégie-Organisation (ESO) de Milliot (2013, 2014). Nous utilisons quatre études de cas pour explorer les actions spécifiques à envisager face aux impacts de l'environnement externe ; les cas étudiés sont ceux de Vietnam Airlines, Qatar Airways, Derry Air et NokScoot Airlines. Notre enquête empirique est fondée sur l'analyse de documents, des entretiens avec cinq cadres supérieurs des compagnies aériennes étudiées et 14 experts régionaux et internationaux de l'aviation civile. Pour valider les résultats du point de vue de la demande, une analyse par clusters en deux étapes est proposée. Elle s'appuie sur des données collectées auprès de 444 voyageurs cambodgiens et vietnamiens résidant au Cambodge, au Vietnam et dans d'autres pays qui utilisent les voies aériennes comme moyen de transport dans la région de l'ASEAN. Les résultats indiquent que les changements technologiques, les forces politiques mondiales, les forces juridiques, les gouvernements, les actionnaires, les fournisseurs, les concurrents, les distributeurs, les clients et les employés sont des attributs clés de l'environnement externe qui interagissent de manière complexe. Ces parties prenantes sont à la source des impacts les plus significatifs sur les stratégies développées par les compagnies aériennes de la région de l'ASEAN. Cette étude empirique indique que le processus d'adéquation stratégique dans l'industrie du transport aérien de l'ASEAN doit associer cinq types de stratégies, notamment une stratégie de croissance des entreprises, une stratégie d'innovation interne, une stratégie de gestion des coûts, une stratégie de gestion des parties prenantes et une stratégie d'innovation technologique. Ces stratégies sont mises en œuvre et combinées pour être en adéquation avec les forces environnementales externes et faciliter l'ajustement organisationnel nécessaire pour assurer aux compagnies aériennes une meilleure compétitivité.

Mots-clés : changement environnemental, adéquation stratégique, impacts des parties prenantes, compagnies aériennes, région de l'ASEAN

ABSTRACT

The objective of this research is to examine the strategic responses of air carriers in the region of Association of South East Asian Nations (ASEAN) when associating with opening up the ASEAN Single Aviation Market (ASAM) among ten member countries. We are seeking to address this matter by generating an analytical framework based on the dynamic capabilities transformation of an organization and the guidance of the Environment-Strategy-Organization (ESO) framework developed by Milliot (2013, 2014). We employ four case studies to explore specific actions against the external environmental impacts; the case studies are Vietnam Airlines, Qatar Airways, Derry Air, and NokScoot Airlines. Our empirical survey is based on the analyses of the documents, the primary interviews with five top executives of the case-studied airlines and 14 regional and international aviation experts. In order to validate results from the demanding perspective, a Two-step Cluster analysis is proposed with data collected from 444 Cambodian and Vietnamese travelers residing in Cambodia, Vietnam and other countries who use airway as a mean of their transportation within ASEAN region. Results indicate that technological change, global political forces, legal forces, governments, shareholders, suppliers, competitors, distributors, customers, and employees are the key attributes of the Stakeholder environment, which depict the most significant impact on the strategies developed by ASEAN-region airlines. This empirical study indicate that the process for strategic fit in the ASEAN airline industry must involve five types of strategies including a business growth strategy, an internal improvement strategy, a cost management strategy, a stakeholder management strategy, and a technology innovation strategy. These strategies are implemented and combined to achieve a strategic fit in confronting with external environmental impacts and obtain an organizational fit to head the airline toward a better competitiveness.

Keywords: environmental change, strategic fit, stakeholder impacts, airlines, ASEAN region