



UNIVERSITI PUTRA MALAYSIA

***KEY COMPETITIVENESS INDICATORS AND DRIVERS OF
FULL-SERVICE AIRLINES OPERATING IN MALAYSIA***

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FULL-SERVICE AIRLINES OPERATING IN MALAYSIA**

By

SEYYED ALI DELBARI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

July 2016

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment
of the requirement for the degree of Doctor of Philosophy

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July 2016

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Full-service airlines play a key role in creating a prosperous and successful tourism industry. They are now faced with fierce competition in domestic and international markets. However, there is a lack of knowledge concerning the competitiveness of full-service airlines. Hence, this research was aimed to identify the key competitiveness indicators and drivers of full-service airlines to help them to evaluate and improve their competitiveness, respectively. Using the Delphi technique at the first phase of the research, the study revealed that full-service airlines need to pay attention to the 12 key competitiveness indicators, including price, quality, profitability, productivity, cost, market share, timeliness, safety, connectivity, flight frequency, customer loyalty, and revenue growth to evaluate their competitiveness status against their rivals. Additionally, the research findings suggested that full-service airlines need to implement and manage the 15 key competitiveness drivers to reinforce these key competitiveness indicators and as a result improve their overall competitiveness. They include bargaining power of customers, bargaining power of suppliers, rivalry among existing competitors, physical resources, financial resources, human resources, technological resources, reputational resources, flight operations capabilities, engineering and maintenance capabilities, marketing and services capabilities, finance and property capabilities, personnel capabilities, government policies, and strategic alliances. Further, the results of the Analytic Hierarchy Process (AHP) technique at the second phase of the research revealed that profitability is the most important key competitiveness indicator, closely followed by productivity. In contrast, flight frequency is the least important key competitiveness indicator that was ranked twelfth. Furthermore, it was found that the bargaining power of customers is the most powerful key competitiveness driver, closely followed by financial resources. On the contrary, government policies ranked fifteenth has the lowest effect on the competitiveness of full-service airlines. The study also indicated the relative importance weight and ranking of the key competitiveness drivers with respect to their influence on each indicator. Furthermore, it determined the implementation priority of the key competitiveness drivers in terms of several groups using the Hierarchical Cluster Analysis (HCA)

technique. The findings of this research provide important implications for the evaluation and improvement of the competitiveness of full-service airlines.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk Ijazah Master Sains

**PENUNJUK DAYA SAING UTAMA DAN PENDORONG SYARIKAT-
SYARIKAT PENERBANGAN BERPERKHIDMATAN PENUH DI
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Syarikat penerbangan berperkhidmatan penuh memainkan peranan penting dalam mewujudkan sebuah industri pelancongan makmur dan berjaya. Kini mereka berhadapan dengan persaingan sengit dalam pasaran domestik dan antarabangsa, namun begitu, masih terdapat kekurangan dalam kepakaran berkaitan dengan daya saing antara syarikat-syarikat penerbangan berperkhidmatan penuh. Oleh itu, kajian ini bertujuan untuk mengenal pasti penanda utama persaingan dan pendorong syarikat penerbangan berperkhidmatan penuh dalam membantu mereka menilai dan meningkatkan taraf daya saing mereka. Dengan menggunakan teknik Delphi pada fasa pertama kajian, kajian ini menunjukkan bahawa syarikat-syarikat penerbangan berperkhidmatan penuh ini perlu memberi perhatian kepada 12 penunjuk daya saing utama, iaitu harga, kualiti, keuntungan, produktiviti, kos, bahagian pasaran, ketepatan masa, keselamatan, sambungan, kekerapan penerbangan, kesetiaan pelanggan, dan peningkatan hasil untuk menilai status daya saing mereka terhadap pesaing. Tambahan lagi, dapatan kajian juga menunjukkan bahawa syarikat-syarikat penerbangan berperkhidmatan penuh perlu melaksanakan dan menguruskan 15 pendorong daya saing utama untuk mengukuhkan penunjuk daya saing utama dan seterusnya meningkatkan daya saing mereka secara keseluruhan. Ia termasuk kuasa tawar-menawar pelanggan, kuasa tawar-menawar pembekal, persaingan di kalangan pesaing yang sedia ada, sumber-sumber fizikal, sumber-sumber kewangan, sumber-sumber manusia, sumber-sumber teknologi, sumber-sumber reputasi, keupayaan operasi penerbangan, keupayaan kejuruteraan dan penyelenggaraan, keupayaan pemasaran dan perkhidmatan, kewangan dan keupayaan aset, keupayaan kakitangan, dasar-dasar kerajaan, dan pakatan-pakatan strategik. Selanjutnya, hasil teknik Proses Hierarki Analisis (PHA) pada fasa kedua kajian ini mendedahkan bahawa keuntungan adalah penunjuk daya saing utama dan diikuti oleh produktiviti. Sebaliknya, kekerapan penerbangan adalah penunjuk daya saing yang kurang penting, berada di kedudukan kedua belas. Tambahan pula, didapati bahawa kuasa tawar-menawar pelanggan adalah pemandu daya saing yang paling kuat, diikuti oleh sumber kewangan. Sebaliknya, dasar kerajaan yang kelima belas memberi kesan paling rendah dalam persaingan antara syarikat-syarikat penerbangan

berperkhidmatan penuh. Kajian ini juga menunjukkan bahawa kepentingan relatif dan kedudukan pendorong daya saing utama kepada setiap penunjuk. Selain itu, ia menentukan keutamaan pelaksanaan pendorong daya saing utama dari segi beberapa kumpulan menggunakan teknik Hierarki Kluster Analisis (HKA). Kesimpulannya, dapatan kajian menunjukkan implikasi penting dalam penilaian dan meningkatkan taraf persaingan antara syarikat-syarikat penerbangan yang berperkhidmatan penuh.



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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

AHP	Analytic Hierarchy Process
ASEAN	Association of Southeast Asian Nations
CVI	Content Validity Index
CVR	Content Validity Ratio
HCA	Hierarchical Cluster Analysis
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
MCDM	Multi-Criteria Decision Making
SCP	Structure-Conduct-Performance
UNWTO	United Nations World Tourism Organization

CHAPTER 1

INTRODUCTION

1.1 Introduction

Tourism as a service industry has become one of the world major trade categories. As the United Nations World Tourism Organization (UNWTO) (2014) argues, tourism has turned into an important driver for socio-economic development by increasing export revenues, job creation, establishing enterprises, and development of infrastructures. Furthermore, the expansion and diversification of this industry in the last decades has posed it as one of the biggest and fastest-growing sectors of the global economy. According to the report of UNWTO, *Tourism Toward 2030*, tourism will continue its growth and the number of international tourist arrivals will reach 1.8 billion by 2030 (UNWTO, 2011).

Transport is recognized as an important factor contributing to the development of tourism industry. As Cooley (1894) stated transport has had an undeniable role in satisfying human needs to travel across time and space, involving travel for tourism purposes. Actually, a big proportion of the rapid growth of tourism is due to the new transport technology, which has enhanced the accessibility of destinations for tourists. Considering the historical background of tourism development shows that the evolution of transport has been a basic prerequisite for travel so that tourism could occur. Therefore, without transport as an infrastructure, tourism has not had possibility to be initiated.

Compared to the other modes of transportation, air transport is the most preferred form of transportation for most types of tourism, particularly long haul tourism and travelling to remote destinations, such as islands (Graham, Papatheodorou, and Forsyth, 2008). It is one of the major elements in the tourism industry, the world's largest industry, which takes nearly 11 per cent of consumers' spending and employs one ninth of global labor force (Hanlon, 2007). Air transport is now a big business, which plays an important role in contributing to economic development. Estimations show that it supports 29 million jobs (Forecasting, 2005). These jobs include direct, indirect, and induced occupations. Furthermore, it has catalytic effects on the professions of other economic sectors, such as tourism and jobs that are supported by spending of visitors who arrive at their destinations by air.

Airlines are one of the most dynamic firms in the tourism industry. Although the industry has been affected negatively by some crises, such as the September 11 terrorist attack in the USA, the 2003 Iraq war, and the SARS (Severe Acute Respiratory Syndrome) epidemic in the Asia in the last decade, they have continued their growth in the long-term along with improving economic growth, liberalization, globalization, development of international trade, and decreasing prices. As it can be clearly seen in Figure 1.1, considering inbound tourism by mode of transport revealed in 2013 slightly over half of travelers (53%) arrived at their destination by

air transport, while only 40%, 5%, and 2% of travelers used the other modes of transport, including road, water, and rail, respectively (UNWTO, 2014). Since tourism statistics show the pace of air transport is faster than the other ways of transport, the share of air transport in carrying passengers will continue to increase gradually in the future decades.

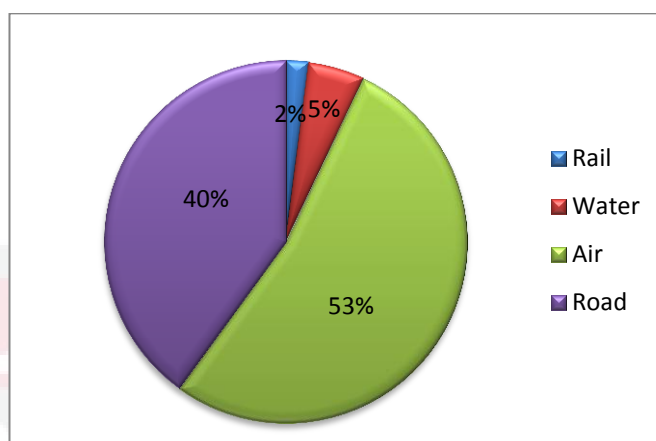


Figure 1.1 Inbound Tourism by Mode of Transport, 2012 (share)
(Source: UNWTO, 2014)

In spite of the past and anticipated challenges to the development of air transport, as detailed in Outlook for Air Transport to the Year 2025, the International Civil Aviation Organization (ICAO) forecasted a similar traffic growth by the year 2025. By that time, scheduled passenger traffic worldwide is expected to reach 4.5 billion passengers annually (Table 1.1).

Table 1.1 ICAO Schedule Passenger Traffic Forecasts - World (1985-2025)

	Actual 1985	Actual 2005	Forecast 2025	Average Annual Growth Rate (per cent)	
				1985-2005	2005-2025
Passenger- Kilometers (billions)					
Scheduled Service	1365	3720	9180	5.1	4.6
International	589	2198	6225	6.8	5.3
Domestic	776	1522	2955	3.4	3.4
Passengers Carried (millions)					
Scheduled Service	896	2022	4500	4.2	4.1
International	194	704	1950	6.7	5.2
Domestic	702	1318	2550	3.2	3.4

(Source: ICAO, 2007)

Table 1.2 also illustrates the conditions of air transport in Southeast Asia countries.

Table 1.2 Association of Southeast Asian Nations (ASEAN) Air Transport (2011)

Indicator Name	Unit/Scale of Measurement	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
Air Transport Infrastructure											
Total Number of Airports	Count	1	8	245	13	28	32	85	2	35	21
Number of International Airports	Count	1	3	29	4	6	2	10	2	6	9
Number of Domestic Airports	Count	0	5	216	9	22	30	75	N/App	29	12
Air Transport Equipment (Aircraft)											
Commercial Aircraft Fleet	Count		N/Col	478		865	30	N/Col	203	321	97
Air Transport Evaluation (Traffic)											
Domestic Air Passenger Traffic	Thousand Person		172	71,421	463	34,431	1,602	41,785	N/App	36,324	12,159
Domestic Aircraft Traffic	Count		6,258	614,712	19,627	405	45,872	912,816	N/App	316,304	105,260
International Air passenger Traffic	Thousand Person		3,997	9,938	642	32,765	2035	16,241	49,910	64,324	13,203
International Passengers in Transit	Thousand Person		N/Col	62	85	385	N/App	N/Col	1,272	1,370	22
International Aircraft Traffic	Count		40,407	69,946		241	18,438	185,384	324,722	227,808	93,278
Others (Enterprises)											
Number of Airline Companies	Count		26	21	8	7	7	53	83	55	56

(Source: ASEAN-Japan Transport Partnership - AJTP Information Center, 2012)

N/App: Not Applicable N/Col: Not Collected

As it can be seen, indicators are placed in the first column in the left side of the Table 1.2 and in the next columns, figures display the status of countries with respect to each indicator. Airlines in the Southeast Asia region have grown strongly as countries of this area continue to develop their economic conditions powerfully. Since the ASEAN intends to reinforce business and leisure travel in the Southeast Asia, airline market will continue to grow further. Overall, air travel and traffic are projected to have an average annual growth rate of 6.5 and 7.6 per cent in Southeast Asia region over the next 20 years, respectively (Boeing, 2013). Among the ASEAN countries, Malaysia has one of the biggest tourism industries in Asia (Standard Chartered Bank, 2013) and attracted the greatest number of tourist in 2013 in ASEAN with 25,720,000 (Tourism Malaysia, 2014). With respect to the clear appeal of Malaysia as a tourism destination, Standard Chartered Bank (2013) forecasted for 2014 - 2015 a Compound Annual Growth Rate (CAGR) of 6.1% and 12.06% for domestic and international passengers, respectively.

Although airlines have experienced a continual growth in passenger traffic, they are now faced with more competition among themselves due to the quick increase in fleet size and flight frequency. Furthermore, deregulation and liberalization have enabled airlines to increase their capacity on the market and enhanced accessibility to the markets for more airlines, which resulted in stronger competition among them. This issue, in turn, has led to the bankruptcies of many airlines in Europe and US in the past decade, as depicted in Tables 1.3 and 1.4.

Table 1.3 Airline Bankruptcies in Europe

Year	Airline	Country	Event
1999	AB Airlines	UK	Bankruptcy
	Color Air	Norway	Bankruptcy
	Debonair	UK	Bankruptcy
2002	GO	UK	Merger with Ryanair
2003	Air Lib	France	Bankruptcy
	Buzz	UK	Merger with Ryanair
	Goodjet	Sweden	Bankruptcy
2004	Air Polinia	Poland	Bankruptcy
	Basic Air	Netherlands	Re-branded in Transavia
	Duo Airways	UK	Bankruptcy
	Germaia Express	Germany	Merged with dba
	Flying Finn	Finland	Bankruptcy
	GetJet	Poland	Bankruptcy
	Jetgreen	Ireland	Bankruptcy
	Skynet Airlines	UK	Bankruptcy
	V-Bird	Netherlands	Bankruptcy
	VolareWeb	Italy	Bankruptcy
	2005	Air Andalucia	Spain
Eujet		Ireland	Bankruptcy
Intersky		Austria	Bankruptcy
Maersk Air		Denmark	Merged with Sterling
2006	Air Tourquoise	France	Bankruptcy
	Air Wales	UK	Bankruptcy
	Budget Air	Ireland	Bankruptcy
	Dbá	Germany	Merged with Air Berlin
	Flywest	France	Bankruptcy
	HiFly/Air Luxor	Portugal	Bankruptcy
	MyTravelite	UK	Reintegrated into MyTravel
	Snalskjusten	Sweden	Bankruptcy
2007	LTU	Germany	Merged with Air Berlin

(Source: European Parliament, 2007)

Table 1.4 US Airline Bankruptcy Filings 2000-2005

Filing	Airline	Chapter filed	Outcome
29 Feb 2000	Tower Air	11	Ceased operations
1 May 2000	Kitty Hawk	11	Emerged from bankruptcy
19 Sep 2000	Pro Air	11	Ceased operations
27 Sep 2000	Fine Air Services	11	Emerged from bankruptcy
3 Dec 2000	Legend Airlines	11	Ceased operations
6 Dec 2000	National Airlines	11	Ceased operations
3 Aug 2001	Midway Airlines	11	Ceased operations
10 Nov 2001	Trans World Airlines	11	Acquired by American Airlines
2 Jan 2002	Sun Country Airlines	7	Liquidated
30 July 2002	Vanguard	11	Ceased operations
11 Aug 2002	US Airways	11	Emerged but later re-filed
9 Dec 2002	United Airlines	11	Still in bankruptcy
21 Mar 2003	Hawaiian Airlines	11	Emerged from bankruptcy
30 Oct 2003	Midway Airlines	7	Ceased operations
23 Jan 2004	Great Plains Airlines	11	Ceased operations
30 Jan 2004	Atlas Air/Polar Air cargo	11	Emerged from bankruptcy
12 Sep 2004	US Airways	11	Merged with America West
26 Oct 2004	Southeast Airlines	7	Ceased operations
30 Dec 2004	Aloha Airlines	11	Still in bankruptcy
14 Sep 2005	Delta Airlines	11	Still in bankruptcy
14 Sep 2005	Northwest Airlines	11	Still in bankruptcy

(Source: US Government Accountability Office, 2005)

As the definition of industry refers to “a group of companies that are related in terms of their primary business activities” (ValueClick, Inc., Investopedia US, 2013, “Definition of Industry”), the competitiveness of industries is dependent upon their firms competitiveness. Then, to create a competitive industry, there is a need to determine firm factors that improve the competitiveness. Tourism industry is not also an exception in this regard and if it is to continue to grow, the competitiveness of tourism firms should be enhanced and sustained. Air transport, which facilitates accessibility between countries and their internal destinations, is one of the pillars of the index of travel and tourism competitiveness. In this pillar, the quantity and quality of the air transport, including domestic and international flights, are evaluated (World Economic Forum, 2012a).

Despite the key role of full-service airlines to create a prosperous and successful tourism industry, they are now encountered to the numerous competitive challenges. This subject is even truer for Malaysia Airlines, the only full-service airline in Malaysia, which is now faced with tough competition from low-cost airlines in the domestic market in addition to its peers in the international market. Hence, this research intends to explore key indicators, which help to evaluate the competitiveness status of full-service airlines and identify key drivers, which assist full-service airlines to improve their competitiveness.

1.2 Statement of the Problem

As Citrinot and Bailey (2006) argue there are some signals that the airline market has reached its maturity. Some of these signals are related to the increased competition from full-service airlines on mutual routes. In addition, full-service airlines are encountered with the decreased market share due to the fierce competition from low-cost airlines. This increased competition, like any competitive market, will lead to excess capacity in the short-term and then occurring bankruptcies, acquisitions, and mergers.

Southeast Asia sky was dominated by some full-service airlines (known as flag carriers) by 1997, which economic crisis taken place. The economic crisis and its consequences led to deregulation and liberalization in several countries of ASEAN, including Malaysia and have formed a new competitive environment for ASEAN airline industry (Damuri and Anas, 2005). Until this year (1997), Malaysia Airlines was the dominant airline in Malaysia. However, as a full-service carrier it operates now in a highly competitive home market (CAPA Centre for Aviation, 2014a). Malaysia Airlines has been faced with more intense competition than most of its peers in the region because the largest low-cost airline of Southeast Asia, AirAsia is established in Malaysia (The Financial Times LTD, 2014). AirAsia has increased its domestic market share from 10% in 2002 to 60% in 2012 (Figure 1.2). As it can be clearly seen, a large part of this increased market share has been done at the expense of decreasing the domestic market share of Malaysia Airlines. Furthermore, Malaysia Airlines is concerned about competition from the new entrant, Malindo Air that offers similar services and serves its seven routes (CAPA Centre for Aviation, 2014b).

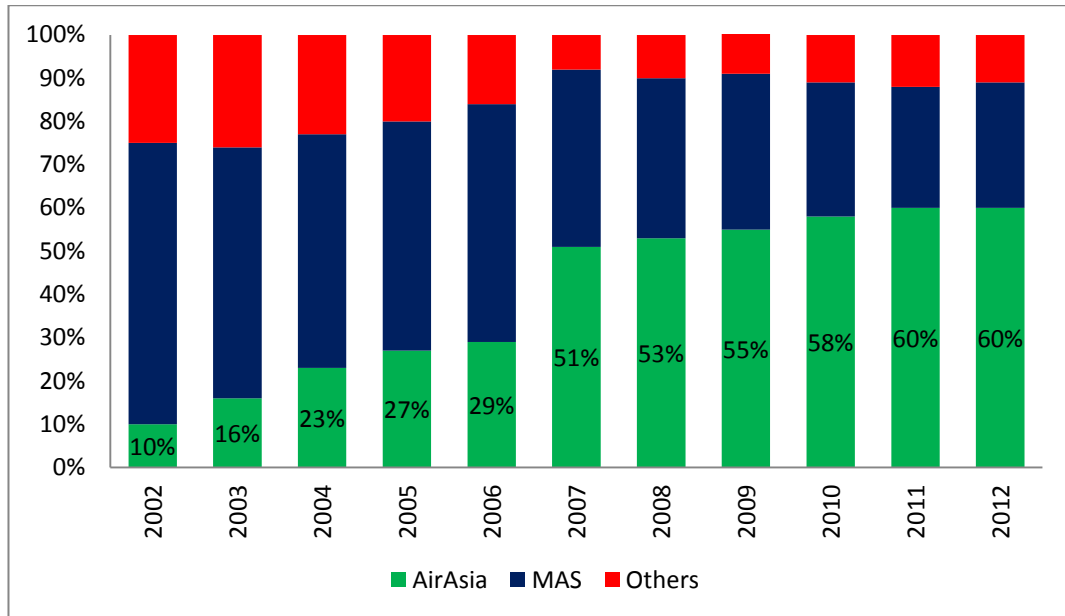


Figure 1.2 Domestic Market Share by Passenger Numbers
 (Source: Standard Chartered Bank, 2013)

Similarly, Malaysia Airlines has been faced with intense competition by several airlines in its international market. As displayed in Figure 1.3, the international market share of Malaysia Airlines has been decreased from 59% in 2003 to 29.2% in 2012.

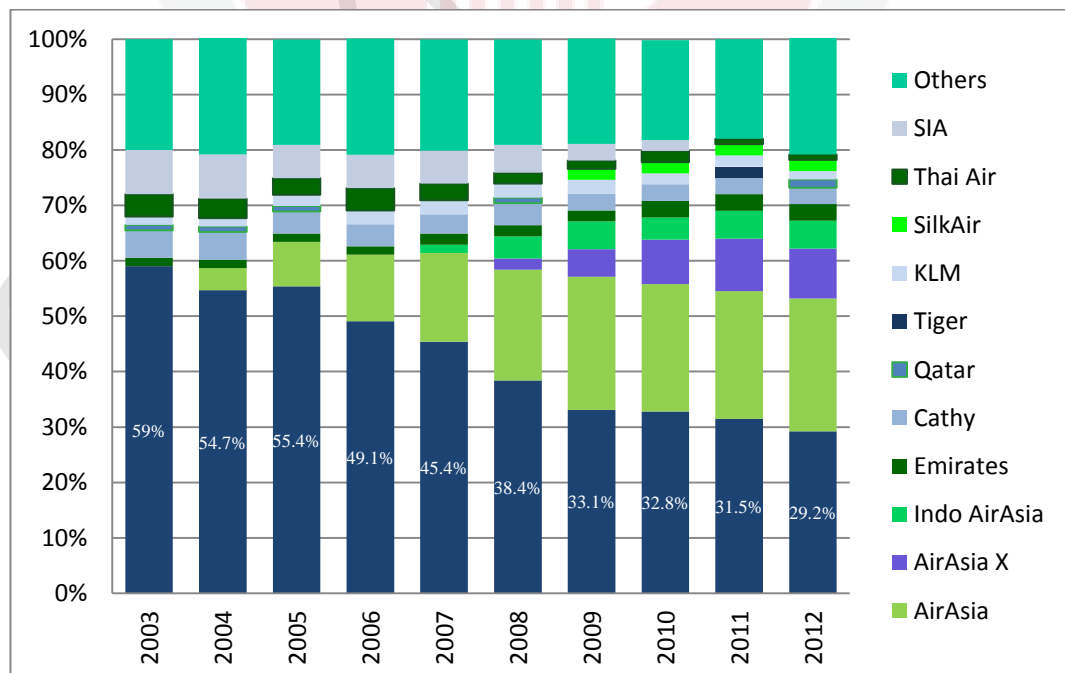


Figure 1.3 International Market Share by Pax Numbers at KLIA

Regarding the fact that Malaysia Airlines focuses more on the Asia-Pacific market, it is faced with the toughest challenge by both low-cost airlines like AirAsia, and full-service airlines like SilkAir, a regional subsidiary of Singapore Airlines and Thai Smile, a new unit of Thai International Airways, which are similarly increasing their focus on Asia (CAPA Centre for Aviation, 2014a).

Following the intensified competition and heavy losses resulting from it (RM 2,521,325,000 in 2011), Malaysia Airlines implemented a major restructuring program in late 2011, which included cutting unprofitable routes and costs in a bid to avoid bankruptcy (CAPA Centre for Aviation, 2014a). Nevertheless, Malaysia Airlines is not yet profitable and posted high losses of RM 430,738,000, and RM 1,168,839,000 for 2012 and 2013, respectively (Figure 1.4), and remains as one of the most unprofitable carriers in Asia (CAPA Centre for Aviation, 2014c; Bloomberg, 2014).

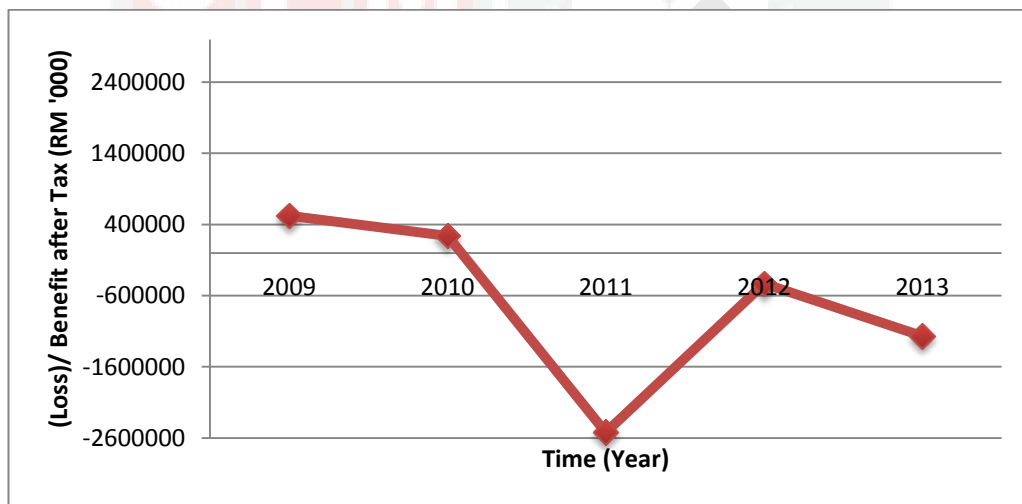


Figure 1.4 Malaysia Airlines Loss/Benefit after Tax, 2009-2013
(Source: Malaysian Airline System Berhad, 2014a)

Actually, one of the main reasons of the decreasing profit of Malaysia Airlines after 2009 and its heavy losses in the past three years is fierce competition from its rivals and lack of competitiveness of Malaysia airlines in its domestic and international markets. The Chief Executive Officer of Malaysia Airlines, Ahmad Jauhari Yahya commented this issue clearly on the full year's performance, as follows:

We knew 2013 would be a challenging year of intense competition which would impact yield. The full year performance of making a bigger loss in 2013 compared to 2012 demonstrates the challenges brought on by intensifying competition leading to lower yields. Even in our own market, locally and regionally in ASEAN, we have seen much additional capacity injection. Many airlines are investing heavily in new aircraft and new products and services. This has resulted in a significant increase in capacity and aggressive competition in fares and value proposition to attract and keep market share. With intensifying competition, we expect the pressure on yield to

continue (Malaysian Airline System Berhad, 2014b, “Malaysia Airlines Improves EBITDA 36% to RM254.0 Million, but Records RM1.2 Billion Loss for FY 2013”).

Furthermore, as one of the analysts of the Standard & Poor's Equity Research, Shukor Yusof commented “the financial outlook, notwithstanding the MH370 incident, is dismal” (Dow Jones & Company, Inc, 2014, “Missing Flight to Add to Malaysia Airlines' Financial Woes”). Regarding the additional capacity flooding into the market and fierce competition from the low-cost and regional carriers, it is predicted that Malaysia Airlines cannot break even in 2014 and continues another year of losses in 2014 (Kenanga Investment Bank Bhd, 2014; CIMB, 2014).

On the other hand, ten countries of the ASEAN, including Malaysia intend to create a Single Aviation Market (SAM), which is called as ASEAN Single Aviation Market (ASAM) by 2015 (ASEAN Secretariat, 2011). According to this policy, airline industry will be fully liberalized among member countries in the ASEAN region, which allows ASEAN airlines to operate in the region without any restrictions. This issue, in turn, will intensify competition and create even a more competitive environment for all ASEAN airlines. However, for Malaysia Airlines this subject will have worse consequences because the domestic and ASEAN yields of Malaysia Airlines are now suffering the most pressure due to the increased competition (CIMB, 2013).

It is clear that the continuation of the current situation of poor competitiveness of Malaysia Airlines will eventually lead to its bankruptcy. Therefore, despite the existing competitive challenges faced the Malaysia Airlines, its Chief Executive Officer, Ahmad Jauhari Yahya said on the full year's performance “we maintain our commitment to remain competitive” (Malaysian Airline System Berhad, 2014b, “Malaysia Airlines Improves EBITDA 36% to RM254.0 Million, but Records RM1.2 Billion Loss for FY 2013”).

As Dragicevic, Armenski, and Jovicic (2009) stated it is obvious that avoiding the difficulty of competition is not possible and for acquiring and retaining customers in this competitive market, the fundamental task of Malaysia Airlines and other similar full-service airlines is to understand how to evaluate, enhance, and sustain their competitiveness. Therefore, there is a need to explore factors that can help full-service airlines to measure and improve their competitiveness status. Two concepts are of particular importance in this regard, including competitiveness indicators and competitiveness drivers that are quite distinct from each other and have different implications (Altomonte et al., 2013). Competitiveness indicators indicate the competitiveness status of full-service airlines with different degrees and full-service airlines can evaluate their current situation of competitiveness using them and become aware of areas which are weaker than others and take remedial actions to reinforce them. However, these amendments will not be possible, unless full-service airlines know on which internal and external factors and to what extent they should emphasize. Competitiveness drivers are keys to this issue. They drive the competitiveness of full-service airlines and improve indicators by which overall full-service airlines competitiveness can be measured.

Despite the importance of factors affecting the full-service airlines competitiveness, unfortunately there is a limited body of knowledge concerning this subject. However, there are some studies that focused on the performance evaluation of airlines and factors influencing the choice of airlines. Although, these studies revealed some aspects of full-service airlines competitiveness, but there are three gaps in the literature relating to full-service airlines competitiveness. First, most of these research are limited to customers' ideas and did not include the interests of airline firms and airline experts (e.g. Chen, Peng, and Hackley, 2008; Ershad, 2007; Park, 2007; Park, Robertson, and Wu, 2006; O'Connell and Williams, 2005; Kim, 1996; Proussaloglou and Koppelman, 1995; White, 1994; Good, Wilson, and Mc Whirter, 1985). Second, they emphasized single measure and did not reflect the overall competitiveness of full-service airlines (e.g. Chen and Chang, 2005; Janic, 2000; Oum and Yu, 1998, 1995; Good, Roller, and Sickles, 1995; Windle and Dresner, 1995; Bureau of Industry Economics, 1994; Truitt and Haynes, 1994; Young, Lawrence, and Lee, 1994; Bureau of Transportation and Communications Economics, 1993; Good et al., 1993; Schefczyk, 1993; Encaoua, 1991; Windle, 1991). Third, these studies did not assume a clear distinction between competitiveness indicators and competitiveness drivers (e.g. Torlak et al., 2011; Lee et al., 2005; Chang and Yeh, 2002; Good and Rhodes, 1991), in spite of the fact that these two concepts have different implications for the competitiveness of full-service airlines. To close these gaps, this study solicited the viewpoints of airline experts from three sectors of industry, government, and academia, and used firm competitiveness definitions, and the theories, models, and frameworks of the Market-Based view and Resource-Based view as theoretical bases in identifying the indicators and drivers of full-service airlines.

Regarding the gaps in the past studies and acknowledgment of this fact that full-service airlines and more particularly Malaysia Airlines now suffer from a lack of comprehensive knowledge concerning factors which can assist them to overcome the challenges created by their competitors, this research intends to identify which key indicators should be considered to evaluate the competitiveness of full-service airlines and which key drivers are responsible to improve full-service airlines competitiveness.

1.3 Significance of the Study

The airline market as one of the sectors of tourism industry is a big market having a key importance for the economy of countries directly (Nanthakumar, Ibrahim, and Harun, 2008; Ige and Odularu, 2008). Competitiveness in this market is a primary concern for full-service airlines, because they are outward-oriented firms and therefore they should compete globally. To cope with the difficulties of competitive environment, full-service airlines should reinforce their competitiveness, so that they can survive in the business.

The idea of competitiveness, which has achieved a world reputation in the recent years, includes the improvement of abilities to obtain and maintain a good position over other competitors (Katic ´ et al., 2011). At present, this concept has become

critical for full-service airlines, since it motivates them to exceed the expectations of their customers, which in turn, will lead to their balanced growth and fiscal sustainability.

The analysis of the competitiveness of full-service airlines can contribute decisively to the prioritization of actions taken and the allocation of resources that will benefit the company sectors (Barbosa, Falcão de Oliveira, and Rezende, 2010). On the other hand, the degree to which a full-service airline can benefit from air passenger market potential depends greatly on its competitive position in comparison with its competitors.

Above all, competitiveness is an important factor that positively influences the growth of the market share, profitability, cost, and productivity (McFetridge, 1995). It prompts full-service airlines to be innovative in creating those products, which satisfy the needs of customers in a better manner than their competitors do. This, in turn, increases the loyalty of passengers, provides a guarantee for full-service airlines against possible losses resulting from decreased market share, and expands their life cycle.

Contributions of this research can be discussed from two viewpoints of theoretical and practical. Theoretically, utilizing the definitions of firm competitiveness and the Market-Based view and the Resource-Based view, this research contributes to the full-service airlines competitiveness literature by exploring and prioritizing those key indicators and drivers that may be more appropriate for evaluating and improving the competitiveness of full-service airlines, respectively. It will also help to assess the interaction between key indicators and key drivers of full-service airlines competitiveness and their effect on overall full-service airlines competitiveness using the Analytic Hierarchy Process (AHP) framework that is proposed in the research. Furthermore, the findings of the research contribute to the literature of tourism competitiveness by providing a more exact view of full-service airlines competitiveness and its indicators and drivers as one of the main pillars of the Travel and Tourism Competitiveness Index (Crotti and Misrahi, 2015).

Practically, the research can have important applications in the field of management and planning of full-service airlines, especially for Malaysia Airlines when it prepares its strategic plans to cope with the challenges resulting from fierce competition in its domestic and international markets. Identifying and prioritizing competitiveness indicators enables full-service airlines managers to better understand the most important areas of organizational performance which full-service airlines should examine and upgrade them. Additionally, it helps full-service airlines managers to analyze overall competitive position based on competitiveness indicators and their respected relative importance weights, and monitor them continuously to become aware of their competitiveness level. It also assists policy makers in the government sector related to civil aviation to assess the effectiveness of policies formulated for full-service airlines. Moreover, government policy makers, planners, and practitioners in the tourism sector can use the indicators to evaluate the competitiveness of tourism industry in a more comprehensive manner. On the other

hand, identifying and prioritizing competitiveness drivers with respect to competitiveness indicators can help full-service airlines managers and planners to better formulate competitiveness improvement strategies for full-service airlines. Furthermore, it will help full-service airlines policy makers and managers to plan and manage organizational actions effectively the quantity and quality of the air transport and allocate resources rationally to improve full-service airlines competitiveness. Finally, it assists government policy makers, planners, and practitioners in the tourism sector to improve the competitiveness of tourism industry through focusing on drivers contributing to the enhancement of the competitiveness of full-service airlines.

1.4 Scope of the Study

This research was aimed to achieve a deep understanding of the concept of full-service airlines competitiveness with a specific focus on full-service airlines that are now operating flights to and from Malaysia. The competitiveness of full-service airlines can be evaluated and improved using key indicators that indicate the competitiveness status of full-service airlines and the key drivers that can drive the competitiveness status of full-service airlines, respectively. To achieve the purpose of the research, the study was conducted in terms of two phases of qualitative and quantitative to explore and prioritize the key competitiveness indicators and drivers of full-service airlines from a managerial perspective in Malaysia. Therefore, the study elicited the opinions of airline experts consist of managers, officers, and lecturers, including those full-service airlines that have attained the biggest market share in Southeast Asia region and Malaysia (Malaysia Airlines, Emirates, Cathay Pacific Airways, Singapore Airlines, Thai International Airways, and Garuda Indonesia), government organization responsible for operating full-service airlines in Malaysia (Department of Civil Aviation, Malaysia), and academic institutions providing airline-related programs and courses in Malaysia (Aviation Management College and Universiti Kuala Lumpur-Malaysian Institute of Aviation Technology (UniKL MIAT)).

1.5 Purpose and Objectives of the Study

This study is a sequential mixed methods research, which includes two phases. At the first phase, a qualitative exploration of key competitiveness indicators and drivers of full-service airlines was done by collecting qualitative data from airline experts in Malaysia. Then, key competitiveness indicators and drivers identified in the qualitative phase were prioritized in the second phase that is quantitative to determine their final priority. Furthermore, the second phase shows how indicators and drivers are related to each other and influence on overall competitiveness improvement of full-service airlines. The reason for collecting qualitative data initially is that independent variables are not known.

The general objective of this study is “to identify and prioritize key competitiveness indicators and drivers of full-service airlines”. To achieve this general objective, the following specific objectives are designed for this research:

- 1) To identify key indicators for evaluating full-service airlines competitiveness.
- 2) To identify key drivers for improving full-service airlines competitiveness.
- 3) To determine the final priority¹ of key indicators of full-service airlines competitiveness.
- 4) To determine the final priority of key drivers of full-service airlines competitiveness.

1.6 Research Questions

Some full-service airlines seem to be more competitive and successful than others in the airline market. The identification of competitiveness indicators and drivers and exploring interaction between them are critical steps in evaluating the level of competitiveness of full-service airlines and finding ways to enhance it. Because of different interests of customers, the variety of full-service airlines competing for domestic and international travelers is now much more than before. The pressure of fierce competition is compelling full-service airlines to assess their competitive abilities continuously and invest on them to survive and prosper in the airline market. Accordingly, this research identifies and prioritizes the key competitiveness indicators and drivers of full-service airlines. The study is conducted by research questions rather than research hypotheses. The research questions are designed in line with the research objectives. They include the following:

- 1) What are the key aspects of competitiveness (indicators) full-service airlines should emphasize to evaluate their competitiveness status?
- 2) What are the key internal and external factors (drivers) full-service airlines should capitalize to improve their competitiveness status?
- 3) How is the final priority of key aspects of competitiveness (indicators) of full-service airlines?
- 4) How is the final priority of key internal and external factors (drivers) influencing the competitiveness of full-service airlines?

¹- Final priority is an accepted term in AHP that refers to the aggregation of local priorities of alternatives (Ramanathan, 2001). It can be computed using the principle of hierarchic composition. The equivalent terms are Global or Overall Priority (Saaty, 2003).

1.7 Operational Definitions of Concepts

- **Competitiveness:** “The ability of a firm or a nation to offer products and services that meet the quality standards of the local and world markets at prices that are competitive and provide adequate returns on resources employed or consumed in producing them” (WebFinance, Inc., 2014, “Competitiveness”).
- **Firm Competitiveness:** “Capability of a firm to sustainably fulfill its double purpose: meeting customer requirements at profit. This capability is realized through offering on the market goods and services which customers value higher than those offered by competitors” (Chikán, 2008, p. 24).
- **Airline:** “Company that provides regular flights to take passengers and goods to different places” (Oxford University Press, 2011, “Airline”).
- **Full-Service Airline:** “An airline that focuses on providing a wide range of pre-flight and onboard services, including different service classes and connecting flights” (German Aerospace Center DLR, 2008, p. 5).
- **Indicator:** “A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect changes connected to an intervention, or to help assess the performance of a development actor” (OECD/DAC, 2010, p. 25).
- **Driver:** “An aspect of a business that affects a change on another aspect of the business. A driver is most commonly a factor that contributes to the growth of a particular business” (WebFinance, Inc., 2014, “Driver”). In other words, Driver is “people, knowledge, and conditions (such as market forces) that initiate and support activities for which the business was designed” (WebFinance, Inc., 2014, “Business Driver”).
- **Analytic Hierarchy Process (AHP):** AHP is technique for “measurement through pairwise comparisons and relies on the judgments of experts to derive priority scales” (Saaty, 2008, p. 83).

1.8 Organization of the Study

This dissertation is divided into five chapters. Chapter one provides an introduction to the subject matter and includes titles, like research problem, significance of the research, research purpose and objectives, research questions, and operational definitions of concepts. Chapter two involves a comprehensive and critical review of the literature from the airline strategic management and competitiveness disciplines. It shapes the context in which the research was conducted. Chapter three has to do with research methodology. It considers in detail the research design, including the qualitative and quantitative phases of the sequential exploratory design of the study, and the validity and reliability of the measurement instrument. Chapter four provides the results of the qualitative and quantitative phases of the research with respect to the research objectives determined in chapter one. In this chapter, the procedures of data analysis are explained and the findings of the research are presented. Finally,

chapter five presents a summary of the study, addresses the research questions clearly and provides a discussion about the findings of the present research compared with those of the previous studies, and provides some recommendations for full-service airlines and future research.

1.9 Summary of the Chapter

The business of full-service airlines has become increasingly highly competitive due to the rapid growth in passenger traffic, and deregulation and liberalization of air transport. Therefore, achieving and maintaining competitiveness has turned into a critical challenge for all full-service airlines, particularly Malaysia Airlines that is faced with tough competition from its rivals in domestic and international markets. To be sustainable and viable in the long-term, full-service airlines have to neutralize the challenges brought about by competition through enhancing their competitiveness level. The main purpose of this research is to identify and prioritize the key competitiveness indicators and drivers of full-service airlines. Accordingly, a qualitative exploration of key indicators and drivers of full-service airlines competitiveness will be done by collecting qualitative data from airline experts in Malaysia. Then, the key identified competitiveness indicators and drivers will be prioritized in the next phase (quantitative) to rank them from the most important to the least important. Furthermore, the interaction between the key indicators and drivers will be investigated to understand how the competitiveness drivers affect the competitiveness indicators towards the competitiveness improvement of full-service airlines. In this introductory chapter, problem statement, study significance, purpose and objectives of the study, research questions, operational definitions of concepts, and organization of the study were discussed in detail. In the next chapter, the literature review will be presented.

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