



**THE ECONOMIC IMPACT OF AIR TRANSPORT  
DEVELOPMENT AND CONSUMER CHOICE ON AIRLINE  
SERVICES IN THE SOUTHEAST ASIA REGION**

**A Thesis submitted by**

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## **Abstract**

Air transport plays an important role in a country's economic development. Because of post-colonial government attitudes, the civil air transport industry in Cambodia, Laos, Myanmar and Vietnam (the CLMV countries) did not develop from the 1960s onwards when compared with other countries in the Asia-Pacific region. The CLMV countries share a similar history in their political systems, the development of their aviation industries and their economic development in general. This study examines the air transport industry of the Southeast Asian region from two perspectives: (1) the relationship between air transport development, economic growth and inbound tourism in the CLMV countries; and (2) the impact of airline service quality on customer satisfaction and repurchase behaviours in Laos and Myanmar.

There is a bi-directional causality between air passenger traffic and economic growth in the long term. Inbound tourism has a significant impact on air transport demand in the long run but no significant relationship exists between the two in the short run. Air transport deregulation has a positive and significant impact on traffic volumes, particularly for Cambodia. Further reforms are still needed before such an outcome can occur in Myanmar.

The most important factor leading to airline choice for both Laos and Myanmar was brand credibility while the responses of air passengers demonstrated that product uniqueness was also of significant importance. Surprisingly, price and perceived value were not ranked as the most important influences of airline choice in these two low-income countries. Despite high service quality not necessarily generating repurchase behaviour, airlines need to understand customers' needs to ensure that their service quality matches customers' expectations to have a better chance of creating customer satisfaction. Because happy and satisfied customers are much more likely to re-purchase.

## Certification of Thesis

This Thesis is entirely the work of (Student name) **Colin Chi Hang Law** except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Principal Supervisor: **Assoc. Prof. Dr Shane Zhang**

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The student and supervisors signatures of endorsement are held at the University.

## Statement of Contribution

The following detail is the agreed share of contribution for candidate and co-author in the presented publication in this thesis:

### Refereed book chapter

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The overall contribution of Colin Chi Hang Law was 60% to the concept development, analysis, drafting and revising the final submission; Dr Shane Yuhua Zhang and Dr Anming Zhang jointly contributed the other 40% to concept development, analysis and reviewing the draft.

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## Glossary

ADB	Asian Development Bank
AGIF	Adjusted goodness-of-fit statistic
AIC	Akaike information criterion
AMOS	Analysis of moment structure
ARDL	Panel autoregressive distributed lag
ASA	Air services agreement
ASEAN	Association of Southeast Asian Nations: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, The Philippines, Singapore, Thailand and Vietnam
AVE	Average variance extracted
BR	Brand credibility
CAB	Civil Aeronautics Board (USA)
CFA	Confirmatory factor analysis
CFI	Comparative fit index
CLMV	Cambodia, Laos, Myanmar and Vietnam
CR	Composite reliability coefficient
CRM	Customer relationship management
CS	Customer satisfaction
DER	Air transport deregulation dummy
Đổi Mới	Economic reforms (Vietnam)
DU	Durability
EC	Ease of convenience
ECM	Error correction model
ECT	Error correction term
EU	European Union: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden
FDI	Foreign direct investment
GDP	Gross domestic product
GIF	Goodness-of-fit statistic
GROWTH	Economic growth rate
HKD	Hong Kong dollar (currency)
HQ	Hannan-Quinn criterion
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IFI	Increment fit index
Intl\$	International dollar (currency)
LCC	Low cost carrier
LP	Loyalty program
MAFLPAS	ASEAN multilateral agreement on the full liberalisation of passenger air services
MG	Mean-group

NFI	Normed fit index
PAX	Air passenger traffic
PGFI	Parsimony goodness of fit index
PMG	Pooled mean-group
PNFI	Parsimonious norms fit index
PR	Promotion
PU	Product uniqueness
PV	Perceived value
RD	Reliability and dependability
RFI	Relative fit index
RI	Repurchase intention
RMSEA	Root means square error of approximation
RPK	Revenue passenger kilometre
SEM	Structural equation modelling
SI	Service interaction
SIC	Schwartz information criterion
SQ	Service quality
THB	Thai baht (currency)
TOUR	Inbound tourism expenditure
UK	United Kingdom
UNWTO	World Tourism Organization
USA	United States of America
USD	US dollar (currency)
X <sup>2</sup>	Chi-squared

# Chapter 1

## Introduction

### Chapter outline

This chapter provides the introduction to and the background settings of the study. It explains the importance of the research topic and outlines the historical developments of air transportation in the area being studied. Also, the research questions, the research objective, and the thesis structure and layout are described.

### 1.1 Introduction

Improving transport connectivity is one of the major elements to increase economic growth in a country (Zhu et al., 2019). The development of civil air transport connectivity contributes to a country's economic growth by creating jobs, promoting trade and stimulating tourism. Air transport plays an important social and economic role, particularly in remote areas of a country (International Transport Forum, 2018; Zhang et al., 2017). It helps a country to diversify its economy and leads to increased and sustainable growth (IATA, 2019). The Asia-Pacific region is expected to achieve unprecedented long-term growth in aviation due to strong economic growth over the next decade. The region contains some of the poorest developing countries and they have limited air transport infrastructure. However, they show great potential for air transport with the advantages of tourism and investment attractions opening up due to policy reforms in recent times. The open market policy adopted by Cambodia, Laos, Myanmar and Vietnam (the CLMV countries) over the last two decades has facilitated the development of their aviation industries and attracted foreign and private investment. However, due to a lack of expertise and infrastructure, their aviation industries are lagging in comparison with other countries in the Asia-Pacific region (ADB, 2017). Aviation is making a significant contribution to economic growth and it is acknowledged that the CLMV countries have substantial potential for growth in both air passenger travel through tourism and trade (Rahman, Khatri & Brunner, 2012). Globalisation is generating demand for mobility and increasing tourism and trade have improved the economy and standard of living in many countries. Deregulation in the aviation industry has made the air transport market

more competitive (Horner & Swarbrooke, 2016). The increasing competition is resulting in changing consumer behaviours and the service expectations of air travel.

The CLMV countries are four of the fastest-growing economies in the Asia-Pacific region. This is reflected in the increasing number of middle-class travellers and the reduced prices for air tickets, which are both factors for stimulating air travel in the region (Mintel, 2012; Stiller, 2013; Heller, 2015; Jenkins, 2003). Things changed in the 1990s when the governments of Cambodia, Laos, Myanmar and Vietnam pursued an open market policy and opened their doors for international tourism and foreign investment, which have driven the demand for tourism and air transport (The Laotian Times, 2017).

The governments of the CLMV countries also began to deregulate the aviation industry in the late 1990s to allow private organisations to start-up air transport services, and to increase the seating capacity in order to meet the increasing demand of air passengers. However, the four governments remain in full or partial control of their respective flag carriers in order to maintain influence over their air transport industry to ensure that the airline industry is serving the nation's interest.

There is a large amount of literature on the relationship between economic development and air transport demand (Baltaci, Yıldız & İpek, 2015 [Turkey]; Secilmis & Koc, 2016 [Turkey and European Union]; Abed, Abdullah & Jasimuddin, 2001 [Saudi Arabia]; Witt & Martin, 1987 [Germany and United Kingdom]; Carmona-Benítez, Nieto & Miranda, 2017 [Mexico]; Brida, Bukstein & Zapata-Aguirre, 2016 [Italy]; Hakim & Merkert, 2019 [South Asian countries]) and in the area of consumer behaviour and air transport (Baker, 2013; Steven, Dong & Dresner, 2012 [United States]; Pakdil & Aydin, 2007; Koklic, Kukar-Kinney & Spela, 2017 [Europe]; Chow, 2014; Jiang & Zhang, 2016 [China]; Hussain, Nasser & Hussain, 2015 [UAE] and Farooq et al., 2018 [Malaysia]).



However, no study has investigated the CLMV countries. The characteristics of the economic variables affecting air transport demand and the consumer buying habits in the CLMV countries might be different from those in other countries and regions.

There is a development gap in the air transportation industry between the CLMV and other Southeast Asian countries due to their differing political development and physical geography. The CLMV countries were closed off from the international community for several decades and their economic development has lagged behind other countries in the region. Also, the Southeast Asia Archipelago is divided into two sub-regions – Mainland Southeast Asia and Maritime Southeast Asia (Fifield, 1983). The Mainland Southeast Asia sub-region comprises Cambodia, Laos, Myanmar, Peninsular Malaysia, Thailand and Vietnam. The Maritime Southeast Asian sub-region comprises Brunei, East Malaysia, East Timor, Indonesia, The Philippines and Singapore. Marine and air transport have been playing an important role in the connectivity of the inhabitants of the Maritime Southeast Asia sub-region (Trace, Frielink & Hew, 2009). As a result, the air transport industries there were better developed than those in the countries of the Mainland Southeast Asian sub-region. Land-based transport has dominated passenger and freight transport in the Mainland Southeast Asia sub-region, especially in the CLMV countries where air transport is still considered a luxury commodity. The CLMV countries have unique conditions, including extremely low levels of economic development with per capita income at the start of the study period being below USD1000 per annum. However, in the past 20 years, they have been some of the fastest growing countries in the world and this has brought about the development of their aviation industries and related infrastructure. Due to historical and political factors, the CLMV countries were and continue to be amongst the least developed and poorest in the world. The aviation industries in the CLMV countries are at a disadvantage when compared with their higher-income Association of Southeast Asian Nations (ASEAN) neighbours like Singapore, Malaysia and Thailand (Rahman, Khatri & Brunner, 2012).

The governments of the CLMV countries have realised the importance of the aviation industry to their economic development. In 2003 they established the

CLMV Sub-regional Cooperation on Air Transport Group to promote air travel and freight movement between each country (Tan, 2013).

The CLMV countries share a similar history, including in the development of their aviation industries and economies. Historically, the countries were colonised by Western powers: Myanmar (known then as Burma) formed part of British India from 1824 to 1948, and Cambodia, Laos and Vietnam were part of French Indochina from 1887 to 1954 (Nair, 2016). The economic structure in the CLMV countries was similar with agriculture being the key industry and human capital development, especially through education and training, lacking (Rillo & Sombilla, 2015).

The cost of labour in the CLMV countries is relatively low compared with other countries in the Asia-Pacific region (Mathai et al., 2016). Post-independence, the CLMV countries were isolated from the rest of the world for a long period of time due to repressive communist regimes being in place (Banomyong & Ishida, 2010). However, they have all benefited from political liberalisation and rapid economic growth over the past three decades. Air connectivity for the CLMV countries was established in the 1980s after economic reforms were undertaken (Rahman, Khatri & Brunner, 2012). But little attention has been paid to the development of CLMV countries' air transport sector and its contribution to their economies. The literature documenting air transport development of a group of countries which share similar economic developments is particularly rare. This study aims to close the research gap by examining the determinants of air transport demand of a sub-regional market with a focus on the CLMV countries, especially the short and long-term relationships between economic growth, inbound tourism and air transport demand. This study also examines the factors affecting consumers' decisions to use air transport in Laos and Myanmar. There are few studies of consumer behaviour in the two countries and this study contributes to the limited knowledge of consumer habits.

## **1.2 Background and setting**

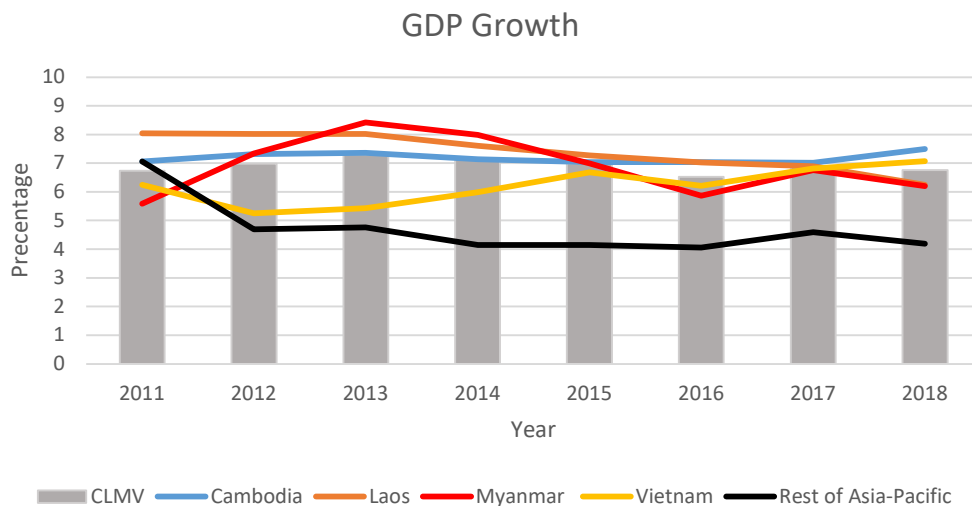
In 2018 the population of the CLMV countries was 165 million which accounted for 25% of the population of all ASEAN members and 3.6% of the total population in

Asia. The gross domestic product (GDP) per capita in 2018 was an average of USD1,986 which was much lower than the ASEAN average of USD12,979 and Asia’s average of USD17,909 (World Bank, 2019a).

The CLMV countries form the fastest growing economic sub-region of the Asia-Pacific region. Their economic growth rates have outpaced all countries in Asia except China over the past 10 years. Among the poorest countries in the Asia-Pacific, the CLMV countries have in recent decades become more attractive to many foreign investors (The Economist, 2018). In 2018 Vietnam had the highest GDP of the four countries, followed by Myanmar, Cambodia and Laos (Table 1.1). There has been substantial economic growth in the CLMV countries over the past decades (Figure 1.1). In 2015, Cyclone Komen hit Myanmar, and the resulting flooding seriously damaged most parts of the country and affected its neighbours (Macgregor, 2015). This has slowed the economic growth of the CLMV countries and Myanmar has suffered the most.

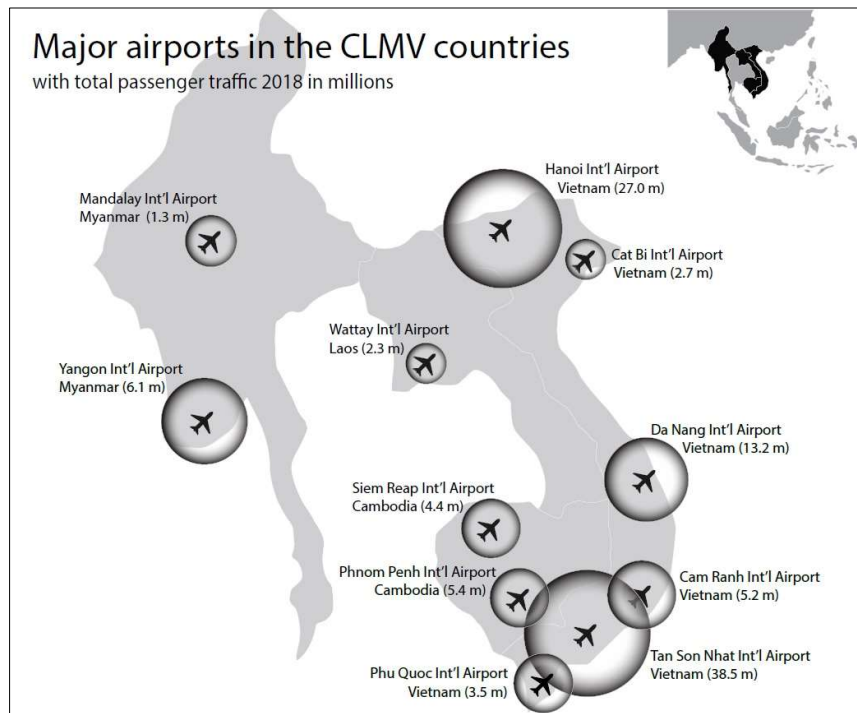
**Table 1.1:** GDP of the CLMV countries in 2018. (Source: World Bank, 2020)

Rank	1	2	3	4
Country	Vietnam	Myanmar	Cambodia	Laos
GDP (USD, billion)	244.95	71.21	24.57	18.13



**Figure 1.1:** Comparing the gross domestic product growth rate of the CLMV countries and the Asia-Pacific region. (Source: World Bank, 2020)

The market-oriented reforms in the CLMV countries in the 1980s have fostered economic growth in the region. New policies were implemented to attract foreign investment and the relaxation of immigration procedures have facilitated tourist arrivals (Chheang, 2013). The reforms created significant growth in the number of flights and passengers, and the amount of cargo carried. The main international airports in the CLMV countries are presented in Figure 1.2. The registered air carrier departures in the CLMV countries rose from 65,700 in 1970 to 372,743 in 2018. The number of air passengers increased from 1.9 million in 1970 to more than 53 million in 2018. In 2018 Vietnam accounted for more than 47 million (88.57%) of the air passengers, Myanmar 3.4 million (6.42%), Cambodia 1.4 million (2.66%) and Laos 1.3 million (2.36%) (World Bank, 2019b). Air cargo traffic increased from 7.4 million tonnes to more than 488 million tonnes in the same period. In 2018 Vietnam accounted for more than 481 million tonnes (98.58%) of air cargo, Myanmar for 4.74 million tonnes (0.97%), Laos for 1.53 million tonnes (0.31%) and Laos for 0.67 million tonnes (0.14%) (World Bank, 2019c).



**Figure 1.2:** The major international airports in the CLMV countries. (Source: World Bank, 2020)

Economic reforms in the CLMV countries over the past three decades have led to the rapid development of the civil aviation industry. Air transport deregulation has also been a major contributor to this development. One of the greatest events in the airline industry worldwide was the passage in the USA of the Airline Deregulation Act in 1978 (Zhang & Round, 2008). Other countries followed suit in the following two decades and relaxed controls over fares, routes, services, ownership and entry (Zhang et al., 2017; Wang et al., 2018; Law et al., 2018). Zhang and Findlay (2014) argue that of all the reforms in air transport policy, relaxing ownership control was central to expansion. Once ownership control is loosened, it is likely that government interference will be reduced and further liberalisation measures would be expected to follow, including allowing multiple designations and granting flying rights on international routes to private carriers.

Air deregulation has led to remarkable changes in the airline industry. The introduction of newcomers has created a competitive airline industry. Air travel has become more common and customers today have many choices of service providers (Law, 2017), which has created significant pressure on airline companies. In a highly competitive business environment, retaining existing customers and attracting new ones is important. Understanding customer needs and fulfilling them by offering high quality services is the key to success (Robledo, 2001).

### **1.3 An overview of CLMV air transport and tourism industry development**

The tourism and air transport industries in the CLMV countries have lagged behind other countries in the region. However, the tourism industry has been one of the fastest growing industries in the CLMV countries and it has directly and indirectly contributed to the regional economy. The tourism industry has been the major foreign-exchange-earning source since 2000 and it is continuing as a major revenue source for the CLMV countries (Lim & Nyunt, 2010). To support the tourism industry, the CLMV governments have facilitated air transport through air deregulation and the implementation of the CLMV agreement on the Air Transport sector (ASEAN, 2016a). This section provides an overview of developments in the economy, tourism and air transport for each of the CLMV countries.

### 1.3.1 The Kingdom of Cambodia

During the French protectorate era (1863–1953) the Kingdom of Cambodia was seen as an unimportant territory. With limited investment, Cambodia was less developed compared with other French territories in the region such as Annam. However, it was still one of the most famous tourist destinations in Southeast Asia (Chheang, 2009). The country’s economy has been affected by conflicts and warfare between the 1960s and the late 1980s which halted the development of the aviation and tourism industries (Carney, 1977). In 1981 the newly formed government in Cambodia began to transform the country’s economy into a free market one which has since driven economic growth (Chhair & Ung, 2013) and enabled the tourism industry to be redeveloped. Tourism has grown steadily at a rate of 5–7% annually over the last ten years and reached about ten million in 2016 with Siem Reap drawing the greatest number of tourists (Sokunthea, 2016). According to Knoema (2020), the tourism industry contributed 32.8% of Cambodia’s GDP in 2018 which is the second largest sector of the economy after agriculture. Figure 1.3 shows the increasing number of tourist arrivals and the growing contribution of the tourism industry to Cambodia’s GDP between 2009 to 2018.

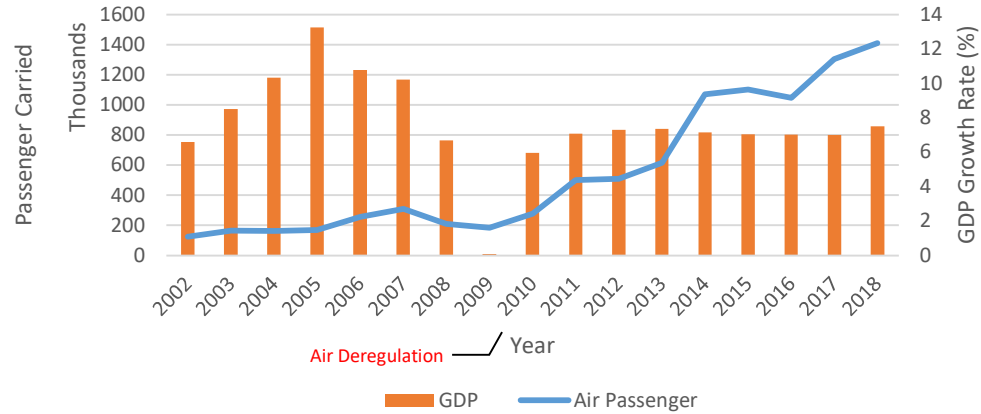


**Figure 1.3:** The evolution of tourist arrivals and the contribution of travel and tourism to the GDP in Cambodia between 2009 and 2018. (Source: Knoema ,2020)

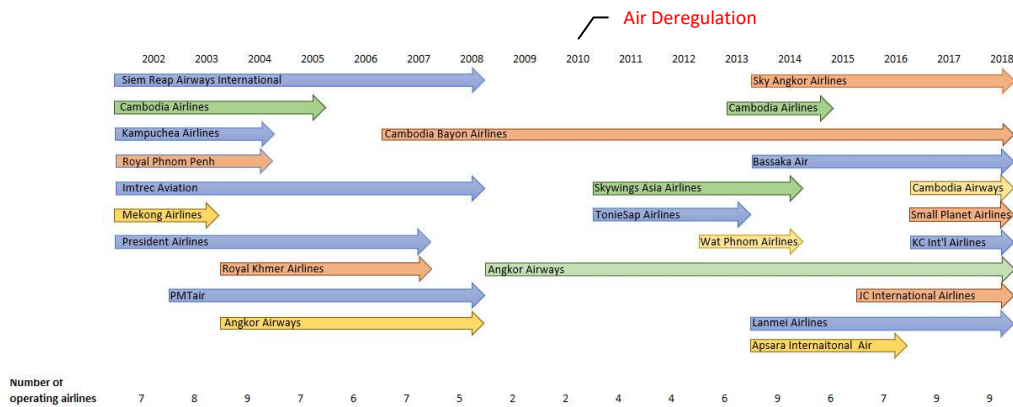
The economic reform in Cambodia has attracted foreign investment and international tourists, which have driven the country’s economic growth. The number of international tourist arrivals has increased from 176,000 in 1994 to more than 6 million in 2018 (Ministry of Tourism, 2018). The implementation of the free market

economy also allowed foreign direct investment (FDI) in the tourism and hospitality sectors. Between 1994 and 2011 the total FDI in the tourism sector accounted for 49.6% of all FDI in the country (Brickell & Springer, 2017). There has been increasing government expenditure to improve the tourism infrastructure as tourism has been identified as one of the priority sectors for the country (Smith, 2010). These factors have benefited the country's economy through job creation and increased disposable income (World Bank, 2019d).

Foreign investment has supported the development of the Cambodian airline industry. The industry became very active with many airlines emerging after the country adopted an open market policy and removed foreign ownership restrictions in 2010 (CAPA, 2017; Maierbrugger, 2017). Many airlines in Cambodia were set up with the assistance of funding from foreign countries, including Australia, China, Thailand, Singapore and Malaysia (Dennis, 2018; Woodsome, 2003; Xinhua, 2017). However, many of these airlines were short-lived and ceased operation due to the intense competition. The overcrowded sky gave the Cambodian aviation industry a reputation of unreliability with frequent cancellations and delays (Khmer Times, 2020). Figure 1.4 shows the number of air passengers in Cambodia and its GDP growth rate between 2002 and 2018. The slowdown of the economy in 2009 was due to the global financial crisis. Figure 1.5 shows the number of operating airlines in Cambodia between 2002 and 2018. In 2002 there were seven airlines operating in Cambodia. The number of airlines decreased to two in 2008 due to an economic recession affecting the country's economy. Since the deregulation of the air transport industry in 2010, the number of air operators increased to nine in 2018.



**Figure 1.4:** The evolution of air passenger traffic and GDP in Cambodia between 2002 and 2018. (Source: World Bank, 2020)



Remark: Cambodia Airlines suspended operation in 2005 and resumed in 2013. The company ceased its operation in 2015.

**Figure 1.5:** Airlines operating in Cambodia between 2002 and 2018. (Source: Logistics Cluster, 2020)

### 1.3.2 The Lao People’s Democratic Republic

Laos formed part of French Indochina following the Franco-Siamese war after which France took over Laos from Siam in 1893 (Ooi, 2004). The French put most of their focus on Cochinchina, Annam and Tonkin (now Vietnam), leaving Laos as the least developed country in the region (Stuart-Fox, 1995). The development of the aviation industry in Laos was influenced mainly by Western countries during the French Indochina era. The government developed the industry for the military to use as a tool of power (Manchon, 2013). The military was using aviation to connect the

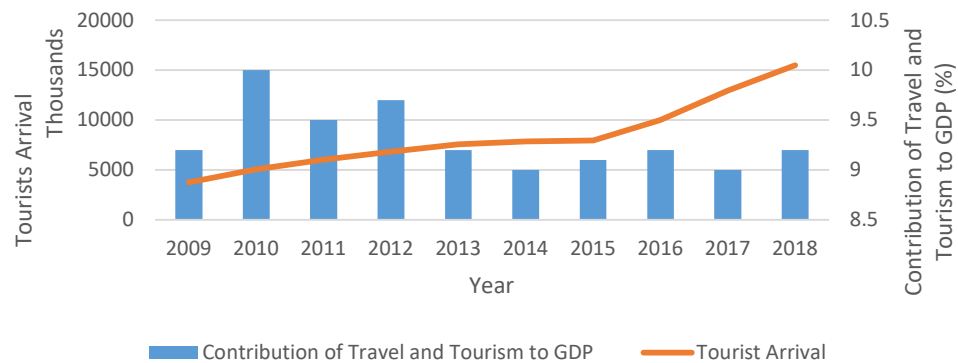


colonial outpost with France and to shift supplies within the country. Laos was granted independence as a constitutional monarchy, the Lao People's Democratic Republic, after the first Indochina war (1946-54). The Communist Pathet Lao movement came to power in 1975 and isolated Laos from the rest of the world. In that totalitarian period people were sent to rural areas for re-education (Gwertzman, 1976). But many of the middle class and educated inhabitants did not trust the communist government and fled the country: 10% of the population had left the country by 1977 (Dearborn & Stallmeyer, 2016). The totalitarian regime prohibited travel and the aviation industry came to a standstill.

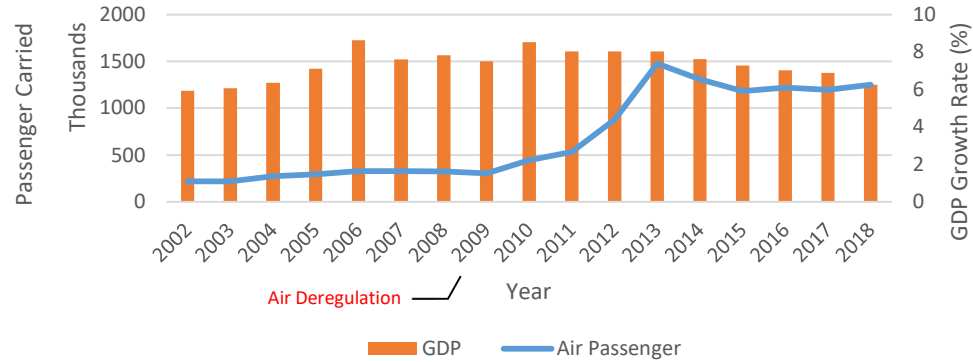
In 1986 the Laotian government announced the implementation of market reform policies and private enterprises were now permitted. The transition to market-oriented reforms was aimed at restructuring Laos's economic system and improving the country's economic performance by attracting foreign funding (Bourdet, 2000). The reforms motivated foreign investment and cross-border trading and the country reopened its doors to international visitors in 1989 (Yamauchi & Lee, 1999). The Laos trade market was further liberalised after the country joined ASEAN in 1997.

A new economic development plan announced by the government in 1986 directed more attention to the tourism industry (Aneksuk, 2006). The air transport industry in Laos was one of the least developed compared with surrounding countries due to the long-lasting closed country policy. With the tourism industry becoming one of the key new economic pillars, the government invested significantly to improve tourism and air transport infrastructure. As of 2018 the tourism industry has contributed 13.7% to the country's GDP and generated more than 385,000 jobs in the country (Pongkhao, 2018). Figure 1.6 shows the increasing number of tourist arrivals and the percentage of the tourism industry's contribution to the Laos GDP. Figure 1.7 shows the number of air passengers in Laos and the country's GDP growth rate between 2002 and 2018. The decline in the number of air passengers between 2013 and 2015 was because the Laos aviation industry was affected by political unrest in Thailand which affected the busiest international air route in Laos (Vientiane–Bangkok). The reform also restructured the aviation industry by accomplishing air deregulation in

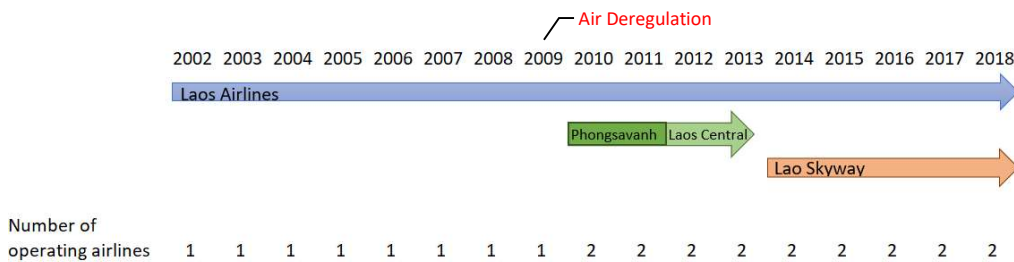
2009. In 2010 the government approved an air operator’s certificate for the privately owned Phongsavanh Airlines (later renamed Laos Central Airlines) (Kaveeicitchai, 2012; Phongsavanh Group, 2019). This low-cost airline changed the Laos aviation industry from a monopoly to a competitive market. Figure 1.8 shows the number of airlines operating in Laos between 2002 and 2018. Airlines in Laos are facing intense competition with other long-established traditional and low cost carriers in the region. These foreign airlines are serving more destinations and operating with larger fleets, which has attracted many international long-haul connecting customers through hubs at Bangkok, Ho Chi Minh City, Singapore and Kuala Lumpur. The Laos flag carrier, Laos Airline, is operating at a disadvantage as it is one of the smallest carriers in Asia with four A320 aircraft and seven ATR turboprops which limits its operations (CAPA, 2016). In addition, ASEAN’s open skies policy has made it even more difficult for Laos Airlines to compete in the market (Vientiane Times, 2017).



**Figure 1.6:** Tourist arrivals and the contribution of the tourism industry to the GDP of Laos between 2009 and 2018. (Source: Knoema, 2020)



**Figure 1.7:** The evolution of air passenger traffic and its contribution to the GDP of Laos between 2002 and 2018. (Source: World Bank, 2020)



Remark: Phongsavan Airlines was rebranded as Laos Central Airlines in 2012.

**Figure 1.8:** Airlines operating in Laos between 2002 and 2018. (Source: Logistics Cluster, 2020)

### 1.3.3 Republic of the Union of Myanmar

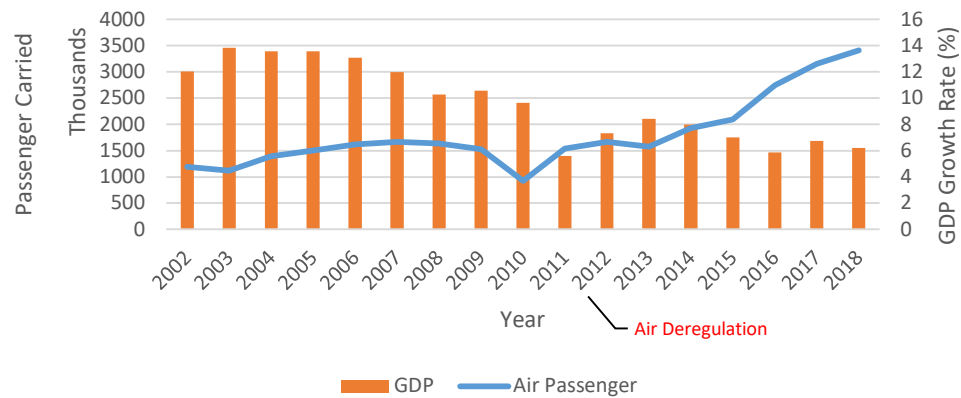
The Republic of the Union of Myanmar was a province of British India from 1824’ stated earlier; and to 1948 (Myint-U, 2008). After World War II Myanmar was granted independence from British rule and it transformed to a closed country in 1962 after the socialist party began running the country under a military dictatorship (Devi, 2014). The military government adopted autarky rules which isolated the country from the rest of the world (Brown, 2011). Government policy limited foreigners from entering the country and the approved entries were limited to a stay of 24 hours which eliminated tourism (Devi, 2014). With the lack of international travel, airlines terminated flights with Myanmar and civil aviation activities were limited (Holsti, et al., 1982; British Chamber of Commerce, 2017). In 1997 Myanmar joined ASEAN in an attempt to establish closer relationships with neighbouring countries (Guyot, 1998). From 2010 Myanmar has progressed with

reforms after a civilian government came to power. A major change has been the policy towards tourism. The government relaxed the rules over visa applications and so international tourists have been attracted (Parker, 2016). In joining ASEAN Myanmar also entered its multilateral agreement on the full liberalisation of passenger air services – ASEAN’s open skies policy (ASEAN, 2010). In 2012 the Myanmar government relaxed its foreign investment laws for the aviation industry. Foreign investment in the air transport business was allowed, although the investors are required to join in a partnership with the local entity with an equity share of not more than 80% (Crouch & Lindsey, 2014). The new policy has attracted foreign funding to develop the country’s aviation industry. Myanmar has undergone further political and economic reform since the election in 2015. The reforms have achieved strong and continued economic growth for the country: the growth rate has outpaced most other countries in the region (ADB, 2019). One of the main sectors contributing to the growing GDP in Myanmar is tourism (Thomas, 2019). The increasing demand for international travellers has benefited the country socially by creating jobs and business opportunities. According to a report by the World Travel and Tourism Council in 2018, the tourism industry has contributed 10.14% of the country’s GDP and generated over 300 million job positions which is equivalent to 9.9% of its total employment (World Travel and Tourism Council, 2018a). Figure 1.9 shows the number of tourist arrivals and the contribution of the tourism industry to Myanmar’s GDP between 2009 and 2018. The number of tourist arrivals decreased significantly in 2015 due to the Rohingya refugee crisis which affected the tourism industry (The Financial Express, 2017). Better living conditions and a higher disposal income have also encouraged outbound travel which has created an increasing demand for aviation. To cope with the demand, new airlines were established but this created an overcapacity issue for the industry (PricewaterhouseCoopers, 2018). Figure 1.10 shows the number of air passengers in Myanmar and the country’s GDP growth rate between 2002 and 2018. The country’s economy was affected in 2009 by the global financial crisis which caused higher fuel costs that drove up inflation and led to a decrease in the number of air passengers. The aviation market in Myanmar has become very competitive. Figure 1.11 shows the number of airlines operating in Myanmar between 2002 and 2018. Besides the competition locally, the airlines are

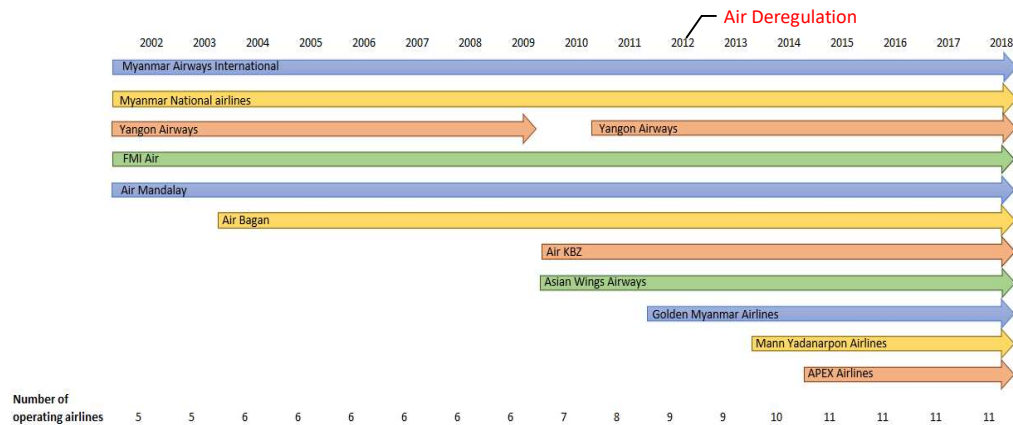
facing intense competition from long-established airlines in neighbouring countries over the international routes (Gilmore, 2016).



**Figure 1.9:** The evolution of tourist arrival and contribution of the tourism industry to GDP in Myanmar between 2009 and 2018. (Source: Knoema, 2020)



**Figure 1.10:** The evolution of air passenger traffic and GDP in Myanmar between 2002 and 2018. (Source: World Bank, 2020)



Remark: Yangon Airways suspended operations from December 2010 but restarted operations from October 2011.

**Figure 1.11:** The airlines operating in Myanmar between 2002 and 2018. (Source: Logistics Cluster, 2020)

### 1.3.4 Socialist Republic of Vietnam

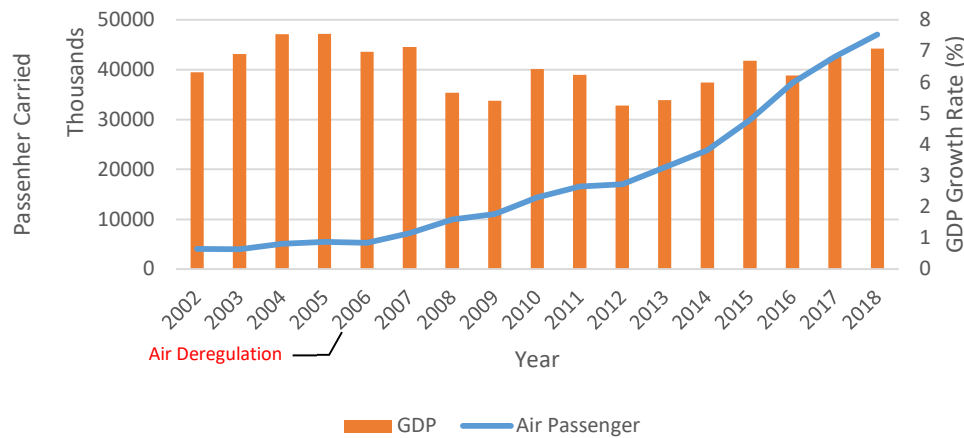
After the first Indochina war (1946–54), Vietnam was separated into two countries, North Vietnam and South Vietnam, and the majority of air transport activities took place in the south as that was where the capital of French Indochina had been located. Vietnam’s aviation industry has not developed as smoothly as that of other countries in the region. Due to political issues, the industry was deterred for almost three decades. The development of Vietnam-based airlines was minimal between 1975 and 1994 due to the trade embargo imposed by the US (Vries, 2004). The Vietnamese government initiated a major economic reform program in 1986, ‘Đổi Mới’, which has changed the country’s economic condition. The Đổi Mới program has shifted the country’s economic policy from a controlled economy to a market-driven economy. Competition between the private sector and state enterprises in non-strategic sectors is allowed (Arkadie & Mallon, 2004).

The Đổi Mới program has facilitated Vietnam’s tourism industry by attracting foreign investors to invest in the country. The environment of the aviation industry changed after foreign investment was approved. The development of business relationships has increased air travel movement between Vietnam and other parts of the world. Over the last decade the number of tourist arrivals increased steadily. As of 2018, the tourism industry has contributed 10.4% of the country’s GDP (World

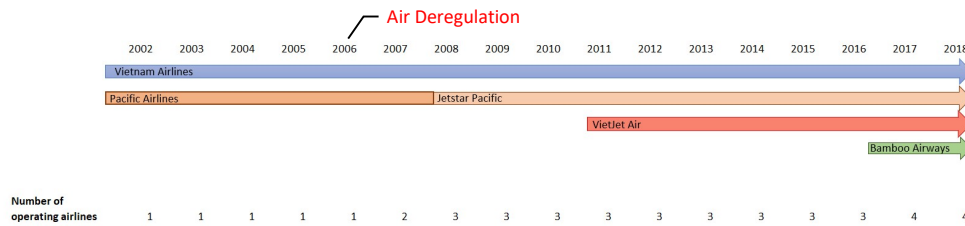
Travel and Tourism Council, 2018b). Figure 1.12 shows the number of tourists increased at an average of 18% annually between 2009 and 2018. Figure 1.13 shows the number of air passengers in Vietnam and the country's GDP growth rate between 2002 and 2018. A dramatic change to the aviation industry took place in 2007 when the Vietnamese government sold 27% of the government-owned Pacific Airlines to Qantas (Australia) and so formed Jetstar Pacific, a move which initiated air deregulation (Reuters, 2007). The industry further expanded when a fully private airline, VietJet, gained approval to operate in 2007 (Savchuk, 2017). Figure 1.14 shows the number of operating airlines in Vietnam between 2002 and 2018. Vietnam's tourism industry has experienced a steady growth over the last decade and air transport is a key component in this.



**Figure 1.12:** The evolution of tourist arrivals and the contribution of the tourism industry to GDP in Vietnam between 2009 and 2018. (Source: Knoema, 2020)



**Figure 1.13:** The evolution of air passenger traffic and GDP in Vietnam between 2002 and 2018. (Source: World Bank, 2020)



Remark: Pacific Airlines operated under Vietnam Airlines and was renamed Jetstar Pacific in 2008, VietJet gained approval to operate in 2007 and service launched in 2011.

**Figure 1.14:** Airlines operating in Vietnam between 2002 and 2018. (Source: Logistics Cluster, 2020)

## 1.4 Research objective and research questions

### 1.4.1 Purpose of this study

The CLMV countries have the highest economic growth in this region of Southeast Asia. However, few studies have been conducted in this part of the world. This study aims to close the research gap by investigating the relationship between air transport and economic growth in the CLMV countries and air passenger purchasing behaviour in Laos and Myanmar. The purpose of this study is to understand the impact of air transport on tourism and economic growth, and the motivational factors affecting a passenger's choice of airline. Although some airlines have conducted their own research on consumer behaviour, the data have not been disclosed. Thus, this study serves to explain how the aviation industry can further develop the tourism industry in these countries. It also provides airline marketing and public relations departments and other tourism-related businesses with more insights into this area and enhances their knowledge of these markets. The findings of this study added value to the limited knowledge of consumer behaviour in the air transport sector of the studied countries. (Laos and Myanmar)

Moreover, as air transport plays an important role in a country's economy, this study gives government authorities evidence to develop policies to promote tourism and to set appropriate regulations to ensure safe, secure and sustainable aviation and tourism industries.



#### 1.4.2 Research objective

This study examines the economic and tourism benefits of air transport in Cambodia, Laos, Myanmar and Vietnam (the CLMV countries). Southeast Asia is a region with increasing air travel demands due to the growing number of international tourists and the expanding local middle classes. The study focuses on the CLMV countries where the majority of air travel growth in the region is expected over the next decade. Each of the four countries has a unique culture, language and way of life, but they share a similar pattern of economic development, tourism growth and aviation industry evolution. The study also examines customers' purchasing intentions for air transport services. These motivational factors are especially important because the deregulation of the aviation industry in the CLMV countries has created a competitive market for new and old airlines and, in order to maintain competitiveness, the airlines have implemented different customer relationship management programs to develop a closer relationship with their customers.

This thesis examines two different views of air transport: (1) the relationship between air transport developments, economic growth and inbound tourism, and (2) service quality and customer satisfaction in air transportation. This study aims (1) to understand air travellers' attitudes and behaviours through examining economic growth and tourism development of the CLMV countries and (2) to determine the captivating and influential factors that satisfy a traveller's travel experience in Laos and Myanmar. Laos and Myanmar were specifically chosen for this study due to the lack of previous research that examined consumer behaviour in those countries, especially in the transportation sector. Given the similar size of their land boundaries and the urban population ratio in Laos and Myanmar (World Bank, 2018), the results of this study provide some insights into the air travellers' behaviour in the region, thus adding to the existing knowledge in this area.

The findings from this study will provide evidence to policymakers who make decisions on the impacts of air deregulation. Appropriate policies will be suggested for policymakers to implement to boost their respective aviation industry and to develop their country's tourism market for secondary and tertiary destinations. In

addition, the results will enable government authorities and airlines to understand the behaviour of air passengers in these low-income countries. This will allow them to acquire an appropriate customer relationship management program so as to attract customers to purchase and repurchase tickets, and so develop an attitudinal loyalty, in order to develop their aviation industry further.

### 1.4.3 Research questions

This thesis investigates the impact of air transport developments and consumer choice behaviour in the CLMV countries by examining the relationship between their aviation industries, economic growth and tourism sectors, and explores the factors motivating a customer's choice of airline with a focus on the following research questions (RQ):

- RQ1 How do air transport services influence economic growth and tourism development in Cambodia, Laos, Myanmar and Vietnam?
- RQ2 What factors influence passengers from Laos and Myanmar in their choice of an airline?; and
- RQ3 What motivates customer loyalty to particular airlines?

## 1.5 The research structure

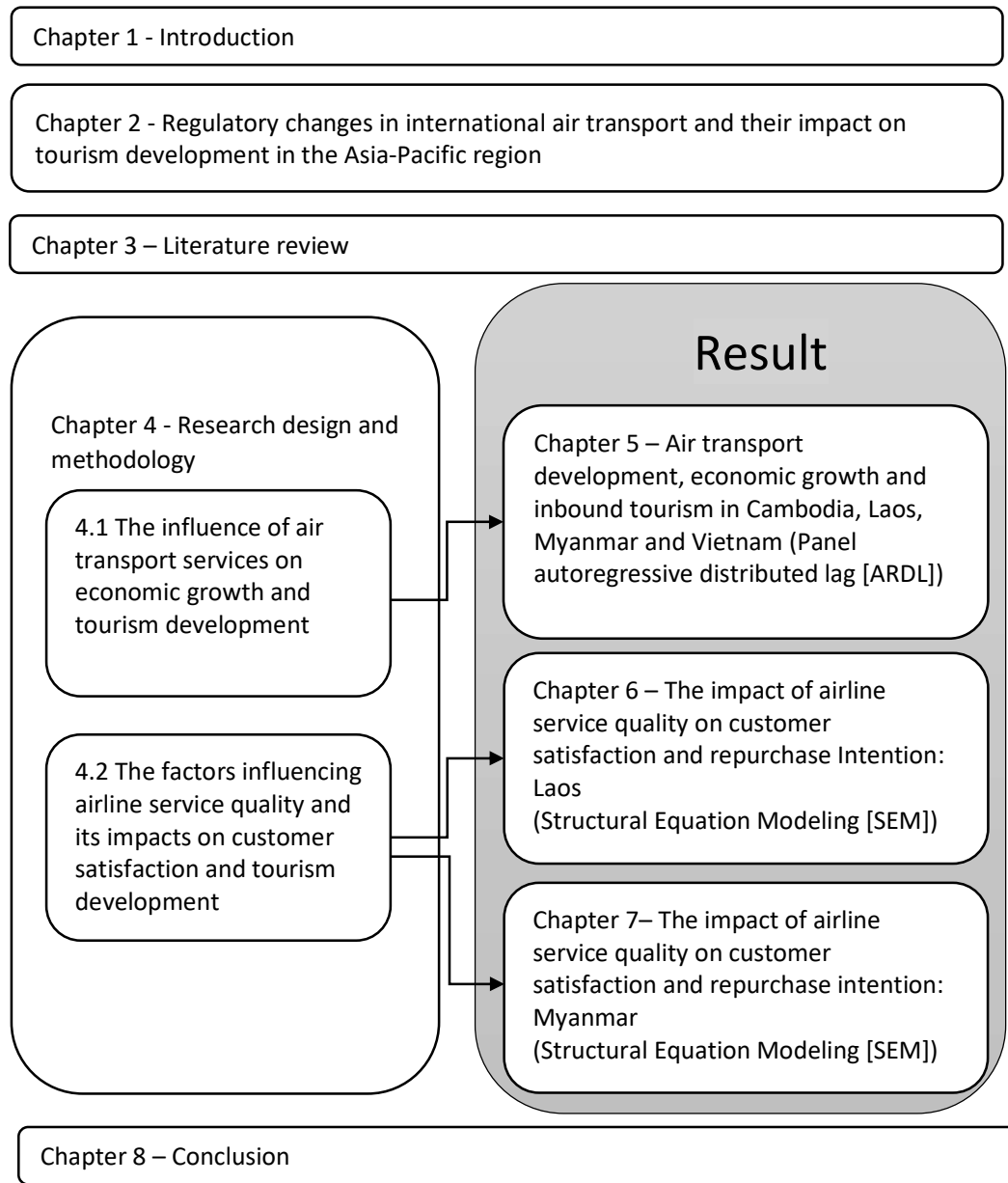
To answer the research questions and to fulfil the research objective, this study is structured as follows:

- Chapter 1 – Introduction
  - This chapter provides the introduction, background settings, research objective, research questions, the thesis structure and layout.
- Chapter 2 – Regulatory changes in international air transport and their impact on tourism development in the Asia-Pacific region
  - This chapter gives the background to air transport deregulation in the Asia-Pacific region in recent decades. In addition, it illustrates the impact of air transport deregulation on the tourism industry.
- Chapter 3 – Literature review

- This chapter explores the previous studies to obtain an in-depth understanding of the topic and highlights the research gaps in the existing knowledge.
- Chapter 4 – Research design and methodology
  - This chapter explains the development of the research design and the methodologies adopted in the study. This chapter is divided into two parts:
    - 4.1 The influence of air transport services on economic growth and tourism development; and
    - 4.2 The factors influencing airline service quality and its impact on customer satisfaction.
- Chapter 5 – Air transport development, economic growth and inbound tourism in Cambodia, Laos, Myanmar and Vietnam
  - This chapter gives the results and discusses the findings of the relationship between air transport development, economic growth and inbound tourism in the CLMV countries using a panel autoregressive distributed lag model.
- Chapter 6 – The impact of airline service quality on customer satisfaction and repurchase intention: Laos
  - This chapter gives the results and discusses the examined factors influencing airline service quality and its impact on customer satisfaction in Laos using structural equation modelling.
- Chapter 7 – The impact of airline service quality on customer satisfaction and repurchase intention: Myanmar
  - This chapter gives the results and discusses the examined factors influencing airline service quality and its impact on customer satisfaction in Myanmar using structural equation modelling.
- Chapter 8 – Conclusion
  - This chapter provides the conclusion, the implications of this research and suggestions for future research.

## **1.6 Summary**

Air transport plays an important social and economic role in many countries. Improving air connectivity is one of the major elements to increasing economic growth in a country through creating jobs, promoting trade and stimulating tourism. This chapter is an introduction to the topic for four countries in the Southeast Asia region and presents the background of the study. The research questions, research objective and significance of the study were also addressed. This chapter concludes with a model of the structure of the thesis (Figure 1.15).



**Figure 1.15:** The research structure.

## **Chapter 2**

# **Regulatory changes in international air transport and their impact on tourism development in the Asia Pacific region**

### **Chapter outline**

This chapter gives the background to the changes in air transport deregulation in the Asia-Pacific region over recent decades. In addition, it illustrates the impact of air transport deregulation on the tourism industry.

### **2.1 Introduction**

For decades, governments around the world protected and regulated their national air transport industry because of its importance to a nation's economy, national security and as a result of its volatile performance. Many restrictions and rules were established to limit competition in the air transport industry with one aim being to protect domestic airlines. As a result, passengers often had a narrow choice of service providers and had to pay high prices to fly. Airlines operating in the protected environment were frequently labelled as inefficient and corrupt, and many of them would not have survived without financial aid from government.

Recognising the problems plaguing the sector, many countries have undertaken significant reforms towards liberalisation of their air transport industry over the past four decades. As a result, productive efficiency in the industry has increased and airfares have declined. In many markets airfares are largely determined by market forces and, although most bilateral agreements still restrict frequencies and the number of seats offered, these restrictions have been largely relaxed. Air transport is an intermediate input in the provision of a range of goods and services. There is a strong link between tourism and aviation (Forsyth, 2006), and this link has become stronger through deregulation of the air transport industry.

The next section reviews the history of regulation and deregulation in the air transport industry, followed by an assessment of their impact on the tourism sector.

The development of the Hong Kong–Bangkok route in the past 70 years is then examined. An analysis of the next step of reforms in the air transport industry will be discussed before concluding the chapter.

## **2.2 Regulation and deregulation in the air transport industry**

### **2.2.1 Regulation history**

International aviation regulatory issues were first raised at the International Air Navigation Conference held in Paris in 1910, where representatives from nineteen European countries discussed a range of topics, including the law of countries, administrative and technical matters, customs and the regulation of aerial navigation (ICAO, 2017a).<sup>1</sup> Even though there was no law enacted as a result of the conference, several principles governing international aviation were established. During World War I, aircraft were used to carry cargo and military resources across borders, leading to the post-war Paris Convention to examine the issue of air sovereignty. Air sovereignty means that every country has complete and exclusive sovereignty over the airspace above its territory, including the territorial sea (ICAO, 2017b). The 1919 Paris Convention conference also approved international civil aviation standards on the technical, operational and organisational aspects of civil aviation and created the first international aviation governing body, the International Commission for Air Navigation, the forerunner of the International Civil Aviation Organisation (ICAO) (ICAO, 2017c).

The 1944 Convention on International Civil Aviation, also known as the Chicago Convention, established the ICAO as the governing body for the aviation industry worldwide. The convention also established the technical and legal framework for the operation of international air services. A regulatory framework was formed to deal with economic issues, including the control of market access, inter-airline commercial or pooling agreements and the International Air Transport Association (IATA) for controlling tariffs (Doganis, 2001). While the ICAO is an inter-government agency, the members of IATA are airlines.

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<sup>1</sup> The countries were Austria-Hungary, Belgium, Bulgaria, Denmark, France, England, Germany, Italy, Luxembourg, Monaco, Netherlands, Portugal, Romania, Russia, Serbia, Spain, Sweden, Switzerland and Turkey.

In discussing the exchange of rights for air services between countries, a set of principles emerged, which is referred to as *the nine freedoms of the air*. The first five freedoms are specified in the Chicago Convention documents and the complementary International Air Services Transit Agreement, and the other four have been articulated subsequently.<sup>2</sup> In particular, the eighth and ninth freedoms refer to the right to provide air services between points within a single foreign country ('cabotage') either, respectively, as a continuation of a flight from the home country (sometimes referred to as 'tag-end cabotage') or with a separate airplane.

The Bermuda Agreement, the first bilateral air treaty signed between the USA and the UK, served as a model for the bilateral air services agreements (ASAs) that followed it after 1946. It introduced capacity regulation, designation of carriers and routes, and system requirements for fair and equal opportunity for the countries and carriers involved (Doganis, 2001). That is, ASAs are based on a principle of reciprocity within a single industry in the exchange of air transport rights between countries that may have different market sizes, geographical characteristics and economic interests. Thus, except for the first and second freedoms of the air, the regulatory framework limited freedoms, which must be negotiated bilaterally.

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<sup>2</sup> First freedom: The right to fly over another country without landing; Second freedom: The right to make a landing for technical reasons in another country without picking up/setting down revenue traffic; Third freedom: The right to carry revenue traffic from your own country, A, to the country, B, of your treaty partner; Fourth freedom: The right to carry traffic from country B back to your own country A; Fifth freedom: The right of an airline from country A to carry revenue traffic between country B and other countries such as C or D on services starting or ending in its home country A; Sixth freedom: The use by an airline of country A of two sets of Third and Fourth Freedom rights to carry traffic between two other countries but using its base at A as a transit point; Seventh freedom: The right of an airline to carry revenue traffic between points in two countries on services that lie entirely outside its own home country; Eighth freedom: The right of transporting cabotage traffic between two points in a country on a service which originates or terminates in the home country of the foreign carrier; Ninth freedom: the right of transporting cabotage traffic of a country on service performed entirely within the territory of the approving state. (ICAO, 2004).



The first freedom, also known as the service transit agreement, is automatically granted to all countries upon their conformity with the Chicago Convention (Milde, 2008). When an ASA is negotiated between two countries, the first four freedom rights are usually included. The fifth freedom requires all involved countries to agree upon a multilateral agreement. Freedoms six to nine were not officially accepted until recently when the seventh freedom for cargo operations was included in some ASAs. The eighth and ninth freedoms are used rarely; the few include the 'single aviation market' agreement signed by Australia and New Zealand in 1996 and the European Union's single air transport market, which grant the airlines of each country full cabotage rights in the other countries.

In almost all countries it was government instead of market forces that regulated almost every aspect of air transport services from the 1940s to the 1970s. For example, the USA airline market was controlled and regulated by the Civil Aeronautics Board which exercised authority over entry and exit, pricing, capacity, frequency and so on in an attempt to maintain financial viability and to prevent the weakest carriers from going bankrupt (Forsyth & Oster, 1987).

Up to the 1920s not many private companies were willing to invest in the air transport industry due to low travel demand and the enormous capital required to establish and operate an airline. But many airlines were established with government support or by the government itself as governments realised the potential role that air transportation could play in a country's economic development. The government-operated airline was known as the flag carrier and represented its country in the international market. Profits were not a concern in the early years of commercial aviation. Many governments regarded the operation of air transport as a type of public service. To support the state-owned enterprise, governments set up strict regulations to protect the flag carriers (Abeyratne, 2014). The principal restriction contained barriers of entry to limit competition. Even though some countries allowed the operation of private airlines, government rules favoured the flag carriers. These rules included fixed airfares, restrictions on market entry and exit, and a ban or limit on the amount of foreign equity in a country's domestic airline. A country's flag

carrier was favoured with numerous privileges, including the monopoly use of some airport facilities, ideal slots for flight departure/arrival times, and flying international routes as the designated carrier in the ASAs.

Air travel in the 1950s was still a luxurious mode of transport and not many people could afford to fly. For example, a one-way 13-hour flight from New York to London on Trans World Airlines cost USD290 (Novak, 2013) which is equivalent to today's USD2622.30 (with an annual inflation rate of 3.62%) (DollarTimes, 2017). In the 1960s the emergence of jet-engine planes and post-world war economic growth created a boom in the air travel industry (Nagle, 1999). The increasing demand for air travel resulted in calls for reforms in the air transport industry. In 1975 Senator Edward Kennedy addressed the Subcommittee on Administrative Practice and Procedure of the committee overseeing the Civil Aeronautics Board's practices and procedures. He stated there was a need for industry reform in the USA's aviation market:

Regulation has gone astray ... Either because they have become captives of regulated industries or captives of outmoded administrative agencies, regulators all too often encourage or approve unreasonably high prices, inadequate service, and anticompetitive behaviour. The cost of this regulation is always passed on to the consumer. And that cost is astronomical. (USA Government, 1975, p.1)

### **2.2.2 Deregulation and open skies**

Policy wise, perhaps the greatest event in the airline industry was the passage in the USA of the Airline Deregulation Act in 1978 (Zhang & Round, 2008). This led to a series of liberalisations in fares, services, and entry and exit to and from the industry which was replicated across the world in the following two decades. For example see Borenstein (1992), Morrison and Winston (1995), Oum (1998), Zhang et al. (2011), and Zhang et al. (2017): changes came to Canada in 1984 (fully deregulated from 1988), Japan (East Asia) in 1986, Australia (Oceania) in 1990, the European Union

(EU) in 1993,<sup>3</sup> China (Asia) in 1997 and Malaysia (Southeast Asia) in 2001. Carriers were allowed to adjust fares, to service new markets and to enter or exit as long as they met certain basic requirements. Inviting private capital to the industry and introducing new entrants substantially intensified competition, thereby leading to a decrease in airfares and an improvement in services (e.g., Baker, 2013; Zhang & Zhang, 2016).

Air transport deregulation sparked greater demand for air travel. Many countries enjoyed rapid growth in the air transportation sector after deregulation. The data from the World Bank (Table 2.1) have shown an impressive growth in air passenger traffic in the period five years before and after deregulation. Despite the recession in the USA in 1981 and 1982 (Sablík, 2013), the industry still had a growth rate of 16%, five years after deregulation. For other countries such as Japan, Australia and those in the EU the post-deregulation growth was substantially higher than before deregulation.

**Table 2.1:** Passenger traffic and growth rate five years before and after deregulation. (Source: World Bank)

Country	Passengers carried 5 years before deregulation	Passengers carried in the deregulation year	Passengers carried 5 years after deregulation
USA	202,309,200 (1973)	273,025,504 (1978)	315,600,096 (1983)
	35% increase		16% increase
Japan	48,061,200 (1981)	52,489,800 (1986)	78,719,800 (1991)
	9% increase		50% increase
Australia	14,412,100 (1985)	17,553,400 (1990)	28,831,400 (1995)
	22% increase		64% increase
EU	174,043,800 (1988)	220,146,500 (1993)	307,005,300 (1998)
	26% increase		39% increase
Malaysia	15,117,600 (1996)	16,107,156 (2001)	17,833,364 (2006)
	7% increase		11% increase

<sup>3</sup> The EU deregulated its internal market through a sequence of three packages for liberalisation and integration (Buttón, 2003). The first package began in 1988 with the mandate to open up the existing structure, followed by Package 2 in 1990 with the liberalisation of the intra-EU international market, and Package 3 in 1993 with an open European air transport market. Package 3 introduced cabotage within the EU.

The open skies concept has been pursued by the USA since 1979 (Walulik, 2017). The main elements of the USA's open skies model include free determination of the frequency of services and fares, no restrictions on engaging in codesharing, pro-competitive business provisions and granting the fifth freedom (allowing other country's airlines to transit traffic to a third country). An open skies air service agreement could also include the rights to operate the sixth freedom (InterVISTAS-EU, 2009). However, Zhang and Findlay (2014) note that a typical open skies agreement does not touch the issues of relaxing foreign ownership restrictions or the adoption of the 'principal place of business', nor does it mention cabotage rights. The first international open skies agreement was signed between the USA and The Netherlands in 1992. The policy granted airlines from both countries unrestricted access to and from any cities between the two parties (Los Angeles Times, 1992). To April 2017 the USA had concluded open skies agreements with 121 countries.

The EU took a more gradual approach and liberalised the market in three phases (see footnote 3). The last phase of liberalisation took place in April 1997 and transformed the EU into a single domestic market, implying that airlines in the EU may fly between any two cities in the EU without limitations (European Commission, 1996). The EU Commission represents all EU members in negotiating traffic rights and open skies agreements with other countries. National ownership rules have been replaced by EU ownership criteria, and airlines have been given freedom to set fares (with safeguards against predatory pricing through EU competition policy rules). One of the major open skies agreements was signed between the USA and the EU in 2007. It allowed airlines in the USA and the EU to operate unlimited flights between any points in the EU and the USA.

The liberalisation trend has moved to other regions. In the Middle East, United Arab Emirates has signed open skies agreements with 122 countries and regions. In the Asia-Pacific region,<sup>4</sup> a single aviation market between Australia and New Zealand was created in 1996. In 2003 Cambodia, Laos, Myanmar and Vietnam concluded a

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<sup>4</sup> See Huenemann and Zhang (2005) for a review of airline policy developments in the Asia-Pacific region prior to the mid 2000s.

multilateral agreement on air transport in the sub-region. It consisted of air transport liberalisation and comprehensive cooperation between the four countries. In 2004 Brunei, Singapore and Thailand signed a multilateral agreement on the liberalisation of passenger air services which allowed for unlimited flights between the three countries. In December 2016 an open skies arrangement was concluded between China and Australia, which removed all capacity restrictions for each country's airlines.

ASEAN adopted a similar approach to the EU in forming a regional bloc. In 2010 ASEAN's multilateral agreement on the full liberalisation of passenger air services and its two protocols were concluded, which would allow designated airlines of a member state to provide air services from any city with an international airport in its territory to any city with an international airport in the territory of the other member states and vice versa with full third, fourth and fifth freedoms. However, there have been concerns over the two protocols. Indonesia feared that it would have to open up hundreds of domestic destinations due to its large size while Singapore and Malaysia only have a few points to open, thus creating a disadvantage for Indonesian airlines (Meszaros, 2016). More negotiations are needed before the ASEAN single aviation market policy can be fully implemented across all member states.

### **2.3 The impact of air transport deregulation on the tourism industry**

Following air transport deregulation, aviation markets around the world have seen the constant entry of new airlines, especially in the form of low cost carriers (LCC), airline cooperation in the form of codeshares and airline alliances, the development of the hub-and-spoke system and so on. These trends have had considerable impact on the tourism industry.

#### **2.3.1 Low cost carriers**

Deregulation of the airline industry has attracted new carriers and new business models. The LCC business model was not a new concept. However, in the pre-deregulation era U.S. airlines operating with the low cost model were only allowed to operate within their registered state as intrastate airlines. Inflight services were not

necessarily due to the short flying distance (Henchel, 2005). Deregulation allowed regional airlines to expand beyond their state border to national and international markets. Air Florida, a regional airline, commenced operating in 1971 (Flight International, 1975). The company benefited from deregulation: it was allowed to operate interstate flights and international flights to the Bahamas and the Caribbean. As a result, the airline enjoyed an annual growth rate close to 50% and doubled its fleet size every six months (Dewberry, 2016).

Southwest Airlines is known as the pioneer airline implementing the budget airline business philosophy (Pratley, 2003). The airline is recognised as the most successful LCC today. The airline began operating in 1971 in the state of Texas. In January 1973 Southwest Airlines adopted the ‘half-fare sale’ strategy to boost passenger loads. This brought a price war with Braniff Airlines in Texas (New York Times, 1973). The ‘half-fare sale’ strategy was so successful that it turned the airline into a profitable business two years after its inception (Southwest Media, 2017). This laid down the template for the budget airline business model. Southwest Airlines took advantage of the Airline Deregulation Act and quickly expanded its domestic network through offering low airfares to passengers. Today, the company is the largest budget airline in the world with over 700 aircraft.

The success of Southwest’s business model in the USA has spread worldwide, leading to the birth of airlines such as Ryanair and EasyJet in Europe, flydubai and Flyadeal in the Middle East, and Jetstar, AirAsia and Spring Airlines in the Asia-Pacific. The negative effects of the LCC model on airfares is known as the ‘Southwest effect’ and the ‘Ryanair effect’ (see, e.g., Morrison, 2001; Vowles, 2001; Alderighi et al., 2012; Zhang & Lu, 2013). Bennett and Craun (1993) estimated that if airfares on the routes where Southwest Airlines served were raised to the level of the airfares on the routes without Southwest, the industry revenue would increase by USD2.5–3 billion (holding traffic constant). Morrison (2001) finds that the airfares of a route were lower but varied to different degrees depending on whether Southwest was operating on that route or an adjacent route, or even when it was only present at route endpoint(s) but not serving that route or an adjacent route.

Morrison's findings show that passengers enjoyed an annual saving of USD12.9 billion in airfares in aggregate in the USA airline markets. Shumsky (2006) noticed that in 2005 Southwest Airlines carried more passengers than any other airline in the USA market and had forced traditional airlines to cooperate in the form of airline alliances. In Europe, LCCs have been a serious threat to the traditional airlines, including British Airways, KLM and Air France (Zhang & Lu, 2013).

The presence of LCCs represents an opportunity to develop the local economy by creating employment and benefiting from higher tourism revenues (Donzelli, 2010). Zhang et al. (2008) claim that the 'Southwest effect' may also exist in Asia. However, studies into the application of this business model in the Asian aviation market are rare due in part to the relatively short history of LCCs in this region. Zhang and Lu (2013) reveal the impressive increase in passenger traffic in the Chinese aviation market thanks to the presence of Spring Airlines. Therefore, public policies could be used to provide incentives to develop a LCC network to boost a region's tourism. By studying the passenger traffic flows between the capital cities of 19 Asia-Pacific economies, Zhang and Findlay (2014) report that the presence of a LCC substantially increases the city-pair passenger flows. However, in a study of the determinants of international arrivals to Australia, Zhang (2015) finds that the presence of LCCs does not increase the traffic flow to Australia probably because Australia is too distant from many other countries. As a result, LCCs may not be a good substitute for full service carriers in particular circumstances.

The presence of LCCs has boosted tourism in regional Thailand. Sakon Nakhon, a northeast province of Thailand, is approximately 650 km northeast of Bangkok. The province has many tourist attractions, but it did not draw many visitors due to the long travel time, more than nine hours, using surface transport from Bangkok. Figure 2.1 shows the travelling time between Bangkok and Sakon Nakhon. Thai Airways International operated direct flights between Bangkok and Sakon Nakhon in the 1990s. From 2000 to 2009, the full service carrier BP Air was the monopoly operator on this route. After the demise of BP Air in 2009, Nok Air, a LCC, took over this

route. In September 2014 another LCC, Thai AirAsia, joined this market. Today, the two LCCs service the Bangkok–Sakon Nakhon route.



**Figure 2.1:** Travelling time between Bangkok and Sakon Nakhon. (Source: Tourism Authority of Thailand)

Under PB Air the Bangkok–Sakon Nakhon airfare was THB2035 (one way) and THB4070 (return) in 2002. These amounts were equivalent to THB2505 and THB4970, respectively, in 2016. The airfare on this route gradually decreased after the entry of the LCCs. In 2016 the airfare was around THB1450 (one way) and THB2900 (return). The number of air passengers between the two cities increased from 45,777 in 2000 to 97,422 in 2012 and to 347,384 in 2016 (Civil Aviation Authority of Thailand, 2017). The total tourism revenue bought into the province increased from THB441 million in 2009 to THB1.895 billion in 2016.

### 2.3.2 Codeshare and airline alliances

Codeshare is an agreement between two airlines that allows airline B to sell tickets of the flight operated by airline A and in return the flight of airline A will carry airline B's code. This business strategy was first developed by American Airlines and Qantas Airways in 1990 (Compart, 1999). Under this agreement, the American Airlines designator 'AA' was included in Qantas's flights between Sydney and Los Angeles, Auckland and Melbourne, and Qantas's 'QF' code was included in

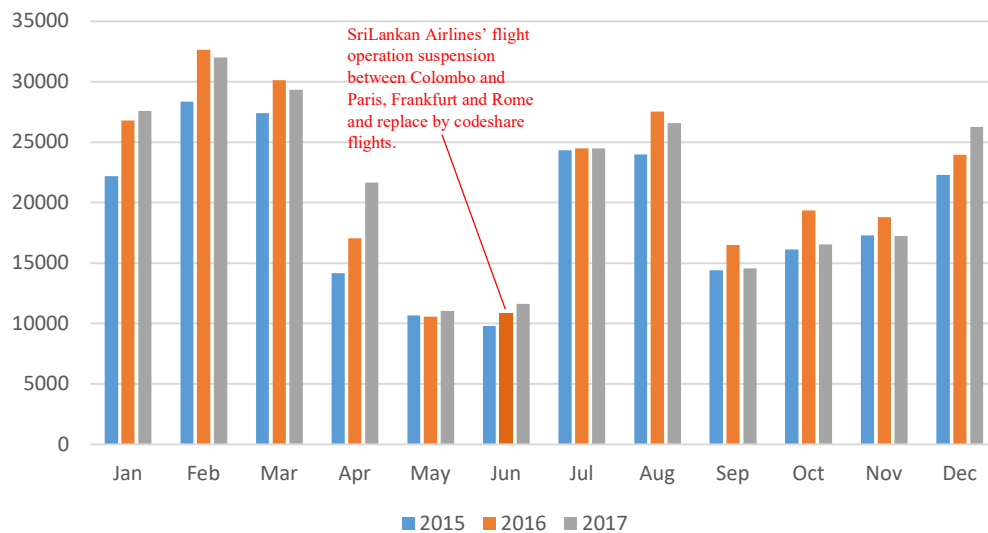


American's flights between Los Angeles and Boston, Chicago, New York and Washington DC (Barron, 1997). The cooperative agreement between American Airlines and Qantas helped the airlines to attract additional passengers by selling tickets to passengers for destinations beyond their own network. This practice allows foreign carriers to participate in a market to which it would otherwise have no access under the current ASA framework. The codeshare operation has become common today and a flight can involve multiple codeshare arrangements. With multiple airlines selling tickets on a single flight, a higher load factor can be achieved. The codeshare strategy has facilitated revenue increases for the airlines and at the same time reduced operating costs due to economies of scope (ECA, 2002). Lower operating costs gives airlines the possibility of adjusting their airfares to motivate more people to travel. Moreover, an airline can codeshare with a partner airline to provide services to a congested airport at an ideal departure/arrival time, which is usually a scarce resource and not always available to new airlines.

However, many countries require airlines to obtain government approval before the codeshare agreement becomes effective. A government agency assesses whether the codeshare agreement will go against the country's anti-trust regulations. Upon government approval, the airline partnership will be granted with an antitrust immunity (Pearlstein, 2002). In August 2015 the Australian Competition and Consumer Commission dropped its opposition to the codeshare arrangement of Qantas–China Eastern Airlines and approved the airlines' cooperation on routes between Australia and China. But the competition regulator remained concerned that the pair could take advantage of their dominant position on the Sydney–Shanghai route to raise airfares as together they commanded a market share of more than 80% on this route. As a result, the regulator imposed conditions on the approval requiring the two airlines to grow their capacity on the routes between Shanghai and Australia by 21% over the five-year term of the authorisation.

Rigorous research into the impact of the codeshare arrangements on tourism is rare. However, empirical evidence has shown that the codeshare agreements between SriLankan Airlines and some European and Middle East airlines have boosted the

tourism sector in Sri Lanka. Thanks to the codeshare agreements, tourist arrivals to Sri Lanka have remained on an upward track despite SriLankan Airlines' flight operation suspension between Colombo and Paris, Frankfurt and Rome in 2016 (Amarasinghe, 2016). Tourists from western and central Europe increased by 16.5% from 2015 to 2016 (Sri Lanka Tourism Development Authority, 2017). The SriLankan Airlines' codeshare partnership has contributed a total of two million tourists for the country. Figure 2.2 shows the international arrivals to Sri Lanka from three European countries, indicating a continual growth despite the suspension of SriLankan's services.



**Figure 2.2:** Sri Lanka's tourist arrivals from France, Germany and Italy, 2015–17. (Source: Sri Lanka Tourism Development Authority, 2017)

Another major strategic action taken by airlines in the deregulated market environment involves the proliferation of airline alliances. The first cross-country airline alliance (joint venture) occurred in 1993 when KLM acquired Northwest Airlines which was in financial trouble (Tully & Eiben, 1996). Currently, there are three major global alliance groups – namely, Star Alliance, oneworld and SkyTeam – which combined have had over 60% of the world market in recent years. In 2016 Star Alliance and SkyTeam had roughly the same market share as measured by passenger count (around 700 million each), while oneworld lagged behind slightly in carrying about 600 million passengers (Zhang & Zhang, 2017).

Researchers into airline consolidations, notably airline alliances, have identified a series of benefits: greater ability to overcome regulatory restrictions; cost reductions and economies of scale, scope and density; coordinated schedules and prices to optimise the demand for each flight with improved service quality; and opportunities to reshape the industry structure strategically and to raise barriers against new entrants (Oum & Park, 1997; Oum et al., 2000; Goh & Uncles, 2003; Zhang & Zhang, 2006; Zhang & Round, 2008). Weber (2005) claims that compared with the benefit of earning frequent flyer points, convenience is regarded as the most important benefit of airline alliances to passengers. The convenience comes from greater travel flexibility in terms of destinations and schedules, and shorter travel time due to the optimised transfer arrangements between alliance members. Therefore, flying with an airline that joins a global airline alliance can add value to a passenger's travel experience, especially for connecting passengers. A survey of Taiwanese passengers' experience by Wang (2014) confirms this. That is, by joining an alliance airlines can enhance their customers' perception of brand equity and brand preference and thereby influence consumer purchase intentions.

Although it is clear that airline alliances have a positive impact on connecting passengers, it is less clear if alliances benefit non-stop passengers travelling on hub-to-hub routes between alliance partners. Wan et al. (2009) show that there are offsetting impacts of alliances on passengers travelling on these routes. On the one hand, joint price-setting may result in higher prices on routes serviced by a single alliance. On the other hand, alliances can lead to efficiency gains and cost savings which may be passed on to consumers via lower prices on these routes. Similar offsetting effects could also happen with complementary alliances. Although complementary airline alliances tend to reduce airfares as a result of the elimination of double marginalisation and efficiency gains, alliance members should be able to charge higher prices for enhanced services such as one-stop check-in, better schedule coordination and so on (Zou et al., 2011). Therefore, the net effects of airline alliances on tourism through the impact on airfares and service quality remain uncertain. This issue needs to be assessed on a case-by-case basis.

### 2.3.3 Hub-and-spoke system

The hub-and-spoke network is a strategy used by many airlines to gain a higher load factor and has been well developed in the USA and elsewhere following airline deregulation. In 1955 Delta Airlines set up a hub-and-spoke system in Atlanta, USA to connect passengers through Hartsfield-Jackson International Airport (Georgia Historical Society, 2015). The strategy of hub-and-spoke became common as it allowed airlines to lower their operating costs, offer more destinations and maintain strategic competitiveness (see, e.g., Hendricks et al., 1995; Oum et al., 1995; Hansson et al., 2003). Higher traffic densities through a hub-and-spoke network can be achieved through the use of larger and more efficient aircraft at higher load factors, and more intensive use of aircraft, fixed ground facilities and personnel, all leading to cost savings (Caves et al., 1984).<sup>5</sup> Kanafani (1981) demonstrates that this type of route system is the most efficient arrangement to overcome the production indivisibilities associated with the use of large aircraft. Liu and Lynk (1999) find that cost savings are achieved from the economies of network size. They also contend that the hub-and-spoke system provides opportunities to exercise predatory practices through predatory scheduling or frequent flyer programs, and also to exercise market power by taking advantage of hub dominance. Instead of passengers travelling directly to their destination, they depart from their origin and connect with another plane at the hub before reaching their final destination, which usually involves a longer journey time, but at a lower price. Increased tourism receipts at the hub airport are one of the benefits of this system. For example, Emirates concentrates on long-haul traffic flows between Europe, Asia, India and Australasia via its hub at Dubai in the United Arab Emirates which serves both primary and regional airports (O'Connell & Williams, 2011). Dubai's tourism clearly benefits from this. Clark (2007) reports that 50% of Emirates' traffic was transiting through Dubai, down from 75% a decade earlier, as more passengers stopped at Dubai for tourism,

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<sup>5</sup> Although many empirical studies only found constant returns to scale in the USA airline market, Oum and Zhang (1997) pointed out that a measurement problem that ignored the role of operating characteristics may have led to such a result. Using a different methodology, they estimated a slightly increasing return.

conference and business purposes. The tourism in the regions and countries linked by Emirates also benefit from the hub-and-spoke system. For example, Emirates invested heavily in promoting Australia in Europe and the Middle East, which attracted a large number of tourists to Australia. This was also the case when China Southern launched its ‘Canton route’ linking Australia and the UK via Guangzhou in China.

#### **2.3.4 The impact of open skies agreements**

Open skies agreements introduce more international routes, greater competition and lower international fares, which contributes substantially to the development of the tourism industry. An open skies agreement gives airlines more flexibility in adjusting their routing network to fulfil passengers’ demands. In 2010 the transport ministers of the ASEAN countries signed the ASEAN–China Air Transport Agreement with China to establish an unlimited air service arrangement (passengers and cargo) between China and ASEAN members (Duval, 2014). Since then, flight activities between ASEAN countries and China have increased rapidly. Traditionally, air transport services between ASEAN countries and China were offered by the flag carriers, and they only operated flights serving gateway cities. The open skies agreement allowed both flag and non-flag carriers to increase flight frequency and offer flights to many second- and third-tier cities. As a result, air connectivity between ASEAN countries and China has increased substantially. The number of flights operating between them was 862 a week in 2010 (Shan, 2012). This number increased to 1000 a week in 2013 (Wang, 2013). In 2017 there were more than 5000 flights operating between ASEAN countries and China each week (ASEAN, 2017).

Further air liberalisation in the form of open skies has created demand for air travel. The reduced airfares and convenience of direct flights have encouraged international travel. Many passengers do not need to fly from a spoke to a hub to be connected to an international flight. The direct flight offers hassle-free and time-saving travel experiences for the passengers. Soon after the open skies agreement between the ASEAN countries and China came into effect, Chinese tourist arrivals to the ASEAN countries increased by about 34%, from 9 million in 2012 to 12 million in 2013. The

vast majority of the tourists took scheduled and chartered flights from their home city and arrived in an ASEAN member's city directly.

#### **2.4 A case study of the Hong Kong–Bangkok market**

The fifth freedom of the air introduced by the Chicago Convention in 1944 is known as the 'beyond right'. This was another breakthrough for the aviation industry. It allows an airline to carry revenue traffic between countries as part of a service connecting to the airline's home country. The fifth freedom benefited many airlines then as the technology at that time prevented aircraft from flying non-stop over long distances. Exploiting the fifth freedom allowed the airlines to sell tickets on multiple segments and thus carry more passengers to increase revenue. For several decades, the Hong Kong–Bangkok route has constituted an important fifth freedom market in East Asia. Both Hong Kong and Bangkok serve as key Asian aviation hubs.

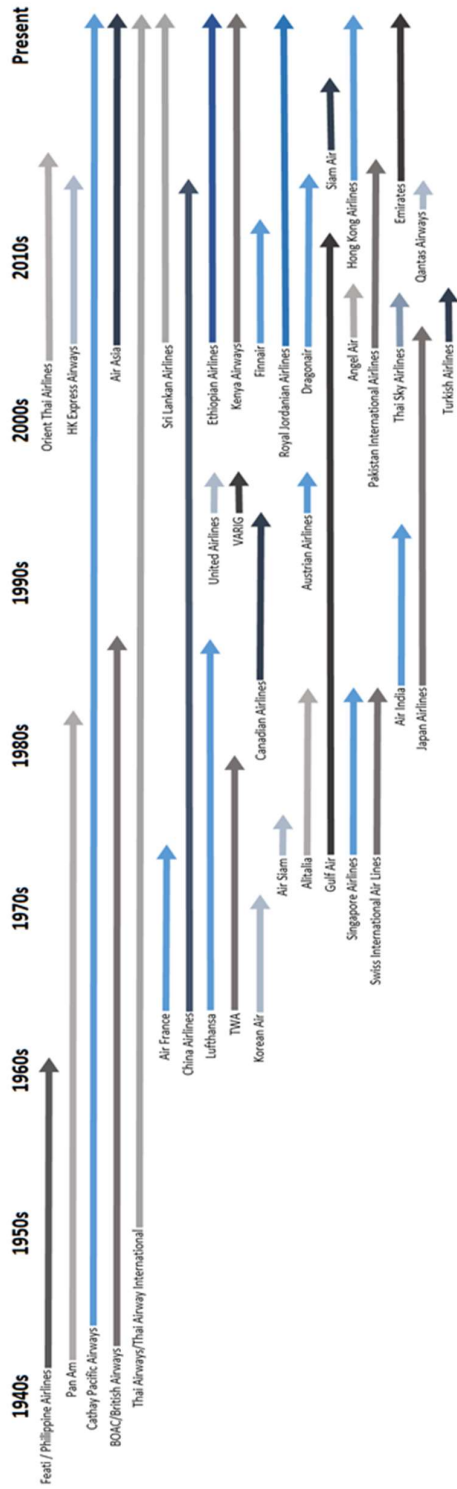
Commercial flights between Bangkok and Hong Kong commenced in December 1946 when a Cathay Pacific DC 4 took off from the then British colony for Singapore via Bangkok. The price of the air ticket at that time was HKD528 (Young, 1988). On 10 November 1950 the governments of the UK and Thailand signed an agreement to establish traffic rights for air services between them and beyond their respective territories. Airlines in Hong Kong were allowed to operate flights to Bangkok and to Singapore, Rangoon, Akyab, Chittagong, Dacca and Calcutta. In return, airlines in Thailand could operate on the Bangkok–Hong Kong route and continue to cities in China, Korea and Japan (UK Secretary of State, 1950). Thus, on 1 May 1960 Thai Airways International operated its maiden international flight to Hong Kong when a DC-6B aircraft departed Bangkok for Tokyo via Hong Kong and Taipei (Grossman, 2009). Figure 2.3 shows the airlines that have provided services between Hong Kong and Bangkok from the 1940s to the present day.

In the following years many countries signed multilateral agreements with the UK and Thai governments and acquired the fifth freedom for services via Bangkok and Hong Kong. Airlines used the fifth freedom for the following reasons: (i) for aircraft overnight parking as night flying was forbidden due to the lack of navigation aids;

(ii) an extra transit point that allowed the airline to carry more passenger loads; and (iii) for refuelling purposes. Many airlines stopped such transit flights after they purchased aircraft which could fly long distances and so they could offer non-stop services. For example, in the 1960s British Airways operated a Manchester–Hong Kong service via Munich, Dubai and Bangkok using Lockheed L1011 planes. The service ceased when the airline started operating direct flights between London Heathrow and Hong Kong in the 1990s with Boeing B747-200 planes.

The provision of adequate air services is essential for the development of tourism to most destinations (Wheatcroft, 1998). The granting of the fifth freedom to airlines from a third country secured the provision of the much-needed air transport capacity for the development of tourism in Hong Kong and Bangkok. The aviation industry supports a large number of jobs and contributes greatly to the local economies in both Hong Kong and Thailand. For example, in 2011 the total economic contribution to Hong Kong’s economy from the aviation industry amounted to HKD308 billion, representing 8.23% of Hong Kong’s GDP (Tsui et al., 2017). A study by Oxford Economics (2011) reports that the aviation industry contributed HKD44.2 billion to Hong Kong’s GDP through tourism in 2009.

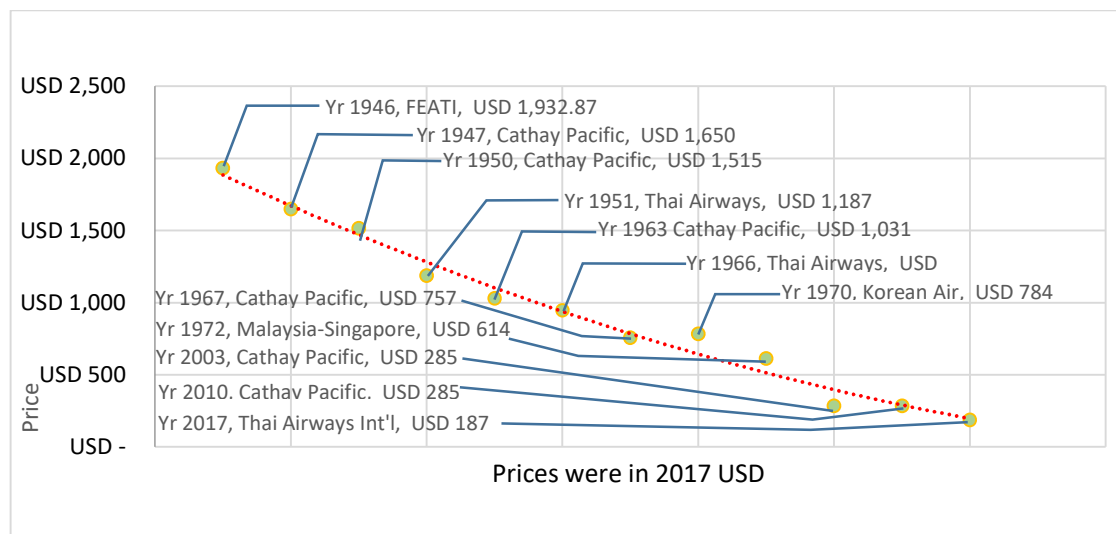
For passengers one of the biggest successes of air transport deregulation has been the substantial reduction in airfares. In the 1950s, when the majority of airlines were controlled or protected by the government, air tickets were relatively expensive. Only the upper class in the society could afford to travel by air. Air transport liberalisation attracted new airlines to the market, resulting in a drop in prices. The adoption of cost-efficient aircraft and the entry of LCCs in the 2000s contributed to the reduction in airfares on the Hong Kong–Bangkok route.



**Figure 2.3:** Airline services between Hong Kong and Bangkok, 1946–2017.



Airfares on this route have decreased greatly over 70 years. A one-way ticket on Far Eastern Air Transport and Commercial Air Lines (later merged with Philippine Airlines) from Hong Kong to Bangkok ticket cost HKD600 in 1946 (equivalent to USD1932 in 2017) (FEATI, 1946). In 1951, when there were five airlines operating on this route, Thai Airways sold tickets for HKD450 (equivalent to USD1031 in 2017) (Thai Airways Company, 1951). The airfare dropped further in 1972 when more airlines joined the route thanks to the granting of the fifth freedom rights. Malaysia-Singapore Airlines (later spilt as Malaysia Airlines and Singapore Airlines) then offered tickets for USD209.4 (equivalent to USD614 in 2017) (Malaysia-Singapore Airlines, 1972). In 2017 Thai Airways International charged HKD1457 (equivalent to USD187 in 2017). In the past 70 years Hong Kong–Bangkok airfares have decreased by about 90%. Figure 2.4 shows the trend of the price of tickets on this route over the last 70 years. It should be noted that the unavailability of historical data means it is not possible to conduct rigorous analysis to disentangle the contribution of each of the factors – the fifth freedom rights, deregulation, the entry of LCCs and the use of new types of aircraft – have had on airfares. However, we are confident that these factors have together led to the observed decrease in airfares on the Hong Kong–Bangkok route.



**Figure 2.4:** The one-way airfare from Hong Kong to Bangkok, 1946–2017.

## **2.5 Next step liberalisation in air transport**

### **2.5.1 Expanding the freedoms of the air**

Most of the existing ASAs only cover the first four freedoms of the air. Some of them provide fifth freedom rights. Many open skies arrangements also include the sixth freedom rights. Further liberalisation in air transport involves the implementation of the seventh, eighth and ninth freedoms.

#### **2.5.1.1 Seventh freedom**

The open skies agreement enabled the unofficially recognised seventh freedom to function. Historically, airlines could only operate international flights to and from their registered state. The seventh freedom rights for cargo, although optional, are frequently granted when a USA version open skies agreement is concluded. In fact, ICAO (2008) note that over 60% of the agreements grant seventh freedom rights for all-cargo services, eleven agreements grant seventh freedom rights for passenger services and ten agreements grant eighth freedom rights or consecutive cabotage rights for all services. The seventh freedom also became available after the EU formed a single aviation market in the 1990s. The removal of the restrictions allows any airline in the EU to exercise the seventh freedom within the region. The seventh freedom has created a free aviation market within the EU. For example, Ireland-based Ryanair operates direct services from Barcelona in Spain to several cities in the EU, including Bologna (Italy), Budapest (Hungary), Warsaw (Poland) and Cologne (Germany), without touching any cities in Ireland. The UK's EasyJet operates flights from Hamburg in Germany to Rome (Italy), Bordeaux (France), Split (Croatia) and Athens (Greece) without going through the UK. It is expected that the seventh freedom will be the next step of reform in pursuing a more liberal air transport regime.

#### **2.5.1.2 Eighth and ninth freedoms**

It is rare to see the exercise of the eighth freedom that allows a foreign airline to operate a domestic sector before and after an international flight. Australia once considered applying an open skies policy to northern Australia and allowing international carriers to fly passengers between domestic airports in this region.

However, this idea was not implemented due to strong opposition from domestic carriers.

The ninth freedom allows an airline registered in a foreign country to operate a solely domestic flight in another country. The ninth freedom is not common: only a few airlines have had been granted this right. The open skies policy between Australia and New Zealand allowed Jetstar from Australia to exercise the ninth freedom in New Zealand. Jetstar has operated on the routes from Auckland to eight domestic cities – Christchurch, Napier, Nelson, Dunedin, Queenstown, Wellington, Palmerston North and New Plymouth (Qantas, 2017).

The opening of the seventh, eighth, and ninth freedoms on a bilateral basis or, ideally, on a multilateral basis reduces the constraints on airline network designs (Zhang & Findlay, 2010). Optimal airline network designs need not correspond to national borders (e.g., the hub-and-spoke systems). A genuinely open regime facilitates the construction of more efficient networks across domestic and international routes, thereby lowering costs and adding to competitiveness. This will in turn have a significant impact on the travel costs and travel patterns as shown in the discussion of the ASEAN-China Air Transport Agreement in section 2.3.4.

#### **2.5.1.3 Relaxing ownership restrictions**

Many countries have partly privatised their national carriers and allowed private investors to hold a 49% stake. However, after examining regulations on airline ownership and control in 121 countries and territories, Waluik (2016) finds that airline investment rules worldwide remain restrictive. Strict restrictions are still in place in terms of the maximum level of foreign equity ownership. For example, until recently, the USA and Canada limited the amount of foreign ownership in their domestic airlines to a maximum of 25%. Foreign investment in Japanese airlines is capped at 33.33%.

Zhang and Findlay (2014) note that the current regulatory system impedes private and foreign investment, which denies opportunities to both incumbents and

newcomers. They contend that ownership is central in all liberalisation policies. That is, if ownership control could be relaxed, the level of government interference would decrease, and it would not be necessary to restrict the fifth and seventh freedom rights as well as the cabotage rights. In addition, a higher level of private and foreign ownership, according to previous research, adds to management incentives to cut costs and to operate more efficiently (Zhang & Findlay, 2010).

## **2.6 Summary**

This chapter has reviewed the regulation and deregulation history in international air transport. The impacts of deregulation on the airline industry and on traffic and tourism flows in the Asia-Pacific region have been significant and positive. The examination of the Hong Kong–Bangkok market shows that the granting of fifth freedom rights has given those two places sufficient air service provisions to build tourism. Finally, an analysis of future reforms in the air transport sector, including relaxing ownership rules and expanding air freedom rights, was offered.

Interestingly, for decades the carriers in the USA fought against government intervention, but recently they asked the government to end open skies agreements with Qatar and United Arab Emirates to stop the Gulf carriers expanding in the USA market. The USA airlines argued that the Gulf carriers received subsidies from their government and competed unfairly on transatlantic routes. In February 2017 Air France-KLM and the Lufthansa Group requested the European Commission to ensure fair competition in the aviation industry with the same claim that the Gulf carriers obtained illegal subsidies from their governments. In Asia the profits of Cathay Pacific and Singapore Airlines dropped sharply in recent years due to the rise of Chinese and Gulf carriers that received financial aid from their governments. The hub-and-spoke system established by Cathay Pacific and Singapore Airlines in connecting the Asia-Pacific market with the rest of the world was under serious threat. This may imply a potential decline in the number of transit passengers and tourism revenues to Singapore and Hong Kong in the next few years. It is likely that this will lead to a dwindling in public support for the open skies policy. We cannot

exclude the possibility that some countries may even pursue protectionism in international air transport.

# **Chapter 3**

## **Literature review**

### **Chapter outline**

This chapter explores previous studies to indicate the research gap in existing knowledge on the research questions. The main aim of this chapter is to provide a comprehensive understanding of air industry deregulation and its impact on tourism and economic growth in the CLMV countries. It also explains the importance of service quality and customer satisfaction in air transport.

### **3.1 Introduction**

Liberalisation and open skies are ongoing trends in the aviation industry's development around the world. Many governments started by deregulating the domestic air transport market and then extended it to liberalise the airline industry internationally (Fu, Oum & Zhang, 2010). Traditionally, aviation was a strongly protected industry in which government set many rules and regulations to protect the government's flag carrier. These regulations included barriers to entry, fixed airfares, fixed routes and limiting the foreign ownership of an airline (Findlay, Chia & Singh, 1997). In the past decades, governments around the world started to deregulate and liberalise the air transport industry to allow competition domestically and internationally. Increasing the number of carriers and flights has driven down airfares and enabled more people to travel, thus creating economic growth for a country. With changes to the air transport market, airlines are challenged by more intense competition and resultant changes in consumer behaviours. The four CLMV countries are considered to have the fastest growing economies in that region of Southeast Asia. The reforms in these countries have opened their economies and have made them attractive destinations for foreign investors and tourists.

### **3.2 Cambodia, Laos, Myanmar and Vietnam**

ASEAN consists of ten countries, of which the CLMV countries are classified as the least developed and are among the poorest in the world (ICAO, 2003). The other six countries – Thailand, Indonesia, Singapore, Malaysia, The Philippines and Brunei –

are much more developed. ASEAN's total population exceeded 628 million in 2016 (ASEAN, 2016b). the ASEAN region has become one of the largest economic zones in the world (Vinayak, Thompson & Tonby, 2014). Historically, domestic travel within the CLMV countries relied on railways and roads, while air travel was mainly used for transporting international passengers to and from the region. However, there is a shift in the travelling pattern of ASEAN travellers in the last ten years in which air travel for international and domestic purposes has become more common (ASEAN-Japan Transport Partnership, 2006). There are differences in terms of the level of aviation development in the various countries. Countries located within the island zone – Indonesia, Malaysia, The Philippines and Brunei – are largely dependent upon air transport to connect cities to the capital city. In contrast, the development of aviation in the CLMV countries is at a slower pace due to their heavy reliance on land transport and their previous closed policy on international travellers.

This significant growth in the economic development of ASEAN allows for better living conditions and the increased affordability of air travel, especially for the CLMV countries. The cumulative GDP growth for the ASEAN region between 2006 and 2015 was 30%, while the CLMV countries had a cumulative GDP growth of 66% in that period (World Bank, 2019a). This, along with the increasing number of LCCs operating in the region has created exponential growth in leisure travel.

Data from the World Bank has shown that the number of air passengers within the ASEAN region has increased from 23 million in the 1970s to more than 47 million in 2018, an increment of around 104% (World Bank, 2019b). In addition, the aircraft manufacturer Boeing (2016) has forecast that the revenue passenger kilometre (RPK) ratio for ASEAN will reach a growth rate of 6.5% over the next 20 years, outpacing the growth of other Asian countries (estimated to be 6.1%) and the world's growth rate of 4.9%. The increasing travel demand in the region is due to population growth, an increasing middle-class and rising household incomes (Boeing, 2016).

The CLMV countries are rapidly developing countries. With rich natural and cultural attractions, these countries have become favourable to international tourists.

According to the Asian Development Bank (2017), the countries had 22.08 million international tourists in 2016 with an annual growth rate twice that of the other countries in ASEAN. Tourist arrivals into the CLMV countries have contributed 19.2% to total tourist arrivals in the ASEAN region, which made tourism a key economic driver (ASEAN, 2018).

### **3.3 Market reforms and air deregulation**

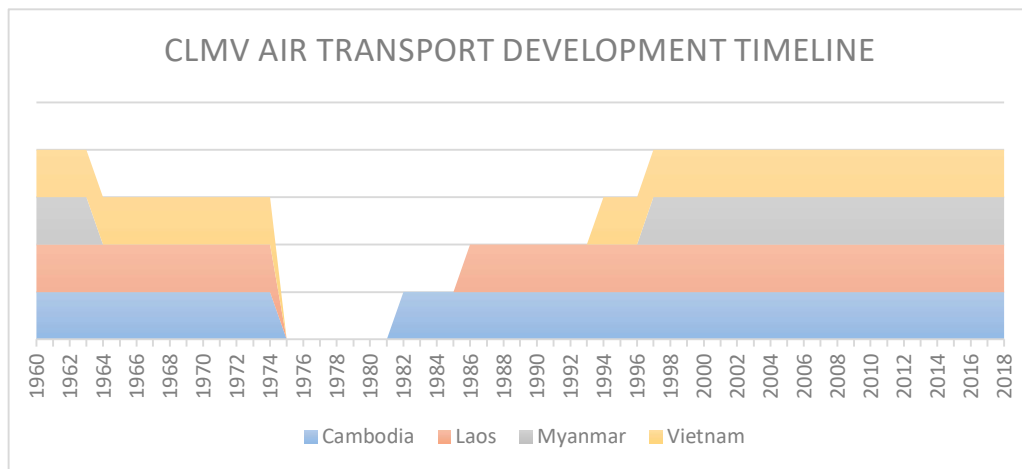
The development of aviation industries in the CLMV countries was delayed due to political changes post-independence in each country. The countries underwent a period of isolation which limited the development of air transport industries for many years.

- In 1975 the aviation industry in Cambodia was put on hold because no public or private transport was allowed after the Communist Party of Kampuchea seized power (Carney, 1977). The blockage ended in 1982 when the Cambodian government, with the assistance of the Vietnamese government, re-established the Cambodian state-owned airline (Davies, 2016).
- Similarly, in Laos the Communist Party (Pathet Lao) took control in 1975 and implemented a closed country policy. Laos was isolated from the rest of the world and limited air transport was allowed into the country. The Laotian government adopted market-oriented economic reforms in 1986 and relaxed the air connectivity restrictions (Insisienmay & Bannalath, 2019).
- After the military seized control of Myanmar in 1963 the government imposed a policy of limiting foreigners entering the country. This led to the termination of international flights, except for a few to China, Russia and Thailand. In 1997 Myanmar joined ASEAN and extended air connectivity to its neighbouring countries (Guyot, 1998).
- The trade embargo imposed by the USA on Vietnam after the Vietnam War limited air transport movements in Vietnam from 1975 onwards. International air connectivity was limited to a few countries, including China, Laos and



Thailand. The trade embargo was lifted in 1994 and this opened an era of expansion for the aviation industry in Vietnam (Harris, 2016).

Due to these political constraints, the air transport industry in the CLMV countries was put on hold. The governments' closed country policy in Myanmar in 1963, and Cambodia and Laos in 1975 and the trade embargo imposed in Vietnam isolated these countries from the rest of the world. The development of the air transport industry was restarted after the governments piloted economic reform in Cambodia (1982), Laos (1986), Vietnam (1994) and Myanmar (1995). The timeline of air transport development in the CLMV countries is illustrated in Figure 3.1.



**Figure 3.1:** Air transport development in the CLMV countries, 1960–2018. (Compiled by the author based on Paxton [1990], Hunter [1995], Davis [1997], Hansen [2018], Laos Airlines [2018], Vietnam Airlines [2019] and Myanmar National Airlines [2020].)

Market reforms in the CLMV countries have included the air transport industry. The relaxation of airline ownership has reshaped the industry by bringing in more competition. The main events in the deregulation in airline ownership in the CLMV countries were:

- In 2006 the government of Vietnam amended the Civil Aviation Law and allowed private entities and foreign investors to own and operate air transport services in Vietnam (ICAO, 2013).

- In 2009 the Lao government introduced a new Investment Promotion Law which allowed private or foreign companies to operate airlines in Laos with up to 100% ownership (Asia Briefing, 2019).
- In 2010 the Cambodian government lifted the foreign ownership restriction and allowed foreign entities to operate airlines in the country (Tan, 2013).
- Myanmar passed the Foreign Investment Law in 2012 after the new civil government was elected. Under this law, domestic and international air transport can be conducted via a joint venture with local private entities or government agencies (British Chamber of Commerce, 2017).

### **3.4 Air transport and economic growth**

Aviation generates economic and social benefits. According to Zhang and Graham (2020), the air transport industry benefits an economy directly and indirectly. The direct economic benefits include employment in the aviation sector which has generated a total of 10.2 million jobs worldwide and added USD704.4 billion to the world GDP in 2019. Moreover, the economic impact of aviation extends indirectly to employment and economic activity in other industries, including manufacturing, tourism, agriculture and retail (Industry High Level Group, 2019). Aviation has facilitated trade and tourism by linking the world and promoting commerce, investment, travel for leisure and education, and tourism (Upham et al., 2003).

Air transport was one of the main drivers of globalisation by providing safe and speedy delivery services. Globalisation enables companies to produce goods in different parts of the world at a lower cost and benefits consumers with lower price products (Bowen & Rodrigue, 2020). Samimi and Jenataadi (2014) identified that there is a positive effect between globalisation and economic growth.

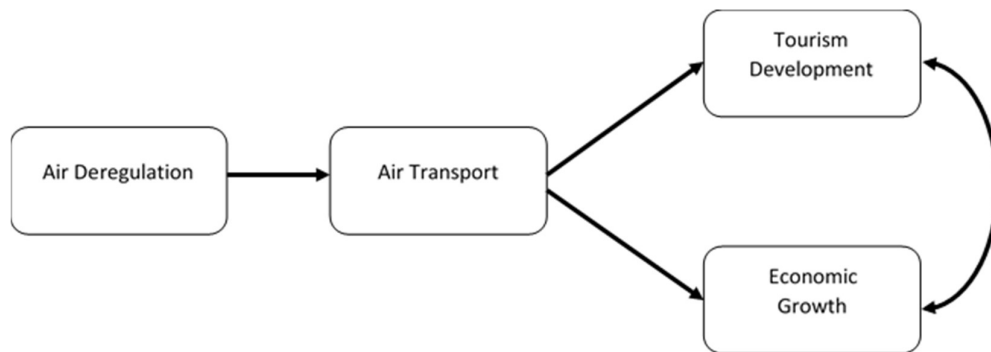
Tourism can be described as the ‘activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes’ (UNWTO, 1995). As of 2017, more than half of the international inbound tourists travelled by air (ATAG, 2017a). There is a clear relationship between aviation and tourism.

Aviation offers a form of connectivity that facilitates the tourism industry of a country. In this instance, an airline company is classified as a business that offers air transport services. On the one hand air transport is influenced by the development of tourism, while on the other hand airlines offering flights to new destinations are driving travel demands to these locations (SEO Amsterdam Economics, 2016). As such, tourism is a driving factor that stimulates change in the aviation industry. Changes in tourist behaviour also impact on the development of airline business models such as low cost and charter airlines (Bieger & Wittmer, 2006).

According to Schuette and Ciariante (1998), consumer behaviour is strongly influenced by culture and because Asian consumption patterns are derived from Western culture, it cannot be addressed using a mainstream business model. It becomes a challenge to persuade Asian customers to switch to air transport. Hence, it is important for a company to understand its customers and to develop strategies to achieve this goal. Tourism also results in social benefits as money generated from this source is then spent in another region to support local businesses and the creation of jobs. These translate into an increase in government's overall revenue and its ability to maintain a country's economy.

Even though inbound international tourism is important to many countries, it is not necessarily a sustainable source of income as any fluctuation in the global economy will affect international travel. An example is that of the political crisis and economic downturn between 2007 and 2010 which resulted in a steep decline in the number of international arrivals in Greece. This created a new economic problem for Greece. Also, the Greek people avoided travelling overseas, with most of them turning to nearby budget destinations as their spending power decreased (Kapiki, 2012). During such downturns, domestic travel can also help to sustain local tourism and hospitality businesses (World Travel and Tourism Council, 2016). Research on the Visit London campaign in 2008 revealed that travellers were more inclined to opt for domestic travel during periods of economic downturn (Olive Insight, 2008). There was also a greater preference for one-day trips and travellers were more likely to sign up for promotional events. Similarly, country lockdowns during the COVID-

19 crisis led many countries to boost domestic travel to restart the economy (Thaichareon, 2020; Kozok, 2020). To support tourism, governments need to stimulate both the international and domestic tourism market growth through their local carrier market to ensure the profitability of the companies so as to maintain the operation of air transport services in a country. Figure 3.2 shows the relationship between tourism development, economic growth and air transport. The air deregulation has leads to increased competition between airlines and stimulates traffic. Air transport helps to generate trade and to create employment opportunities which are enablers for a country to achieve economic growth. In addition, air transport improves the connectivity between destinations and generates tourist flow. These benefit a country economically by improving the quality of life of the population. .



**Figure 3.2:** The relationship between air transport, tourism development and economic growth.

A country's rate of economic growth drives the development of its air transport industry (Fu, Oum & Zhang, 2010). Developments include the launch of new airlines serving the passenger and freight markets and an increase in connectivity between destinations. These changes promote travel and trade which in return contribute to economic growth (COMCEC, 2014; ATAG, 2017b; Zhu et al., 2019). Increased disposal income can motivate people to travel and also increase demand for cargo shipments, which generate revenue, enabling airlines to expand and improve their services. More air travel also brings additional revenue to governments through the taxes and levies collected on tickets, which gives government extra revenue which can be used to improve existing aviation facilities and to establish new ones (IATA,

2011a). With the intertwined relationship between air transport and a country's economic growth, analysing air transport demand allows the aviation industry to make sound investment decisions and governments to design appropriate policies to produce good economic outcomes for the country.

The majority of past empirical studies have estimated that income and size of population are the key determinants of air travel demand (Jacobson, 1978; Calderón, 1997; Ba-Fail, Abed & Jasimuddin, 2000; Abed, Abdullah & Jasimuddin, 2001; Hofer, Windle & Martin, 2008; Zhang & Round, 2009; Marazzo et al., 2010; Kopsch, 2012). Valdes (2015) and Suryani, Chou and Chen (2012) included FDI data in their studies because that variable and exports are closely related. FDI can stimulate exports which in turn creates air freight demand. The consumer price index was included in previous air transportation econometric studies to examine the effects of inflation on the level of economic activity (Abed, Ba-Fail & Jasimuddin, 2001; Guo & Zhong, 2017). Furthermore, Day (1986) found that exchange rates have a direct impact on both air passenger and freight demand. Zhang et al. (2017) explained the rationale of including the exchange rate in their regional airport traffic study. They note that many airports are close to famous tourism resorts and that tourism levels tend to react strongly to changes in the exchange rate. A study by Castelli and Walter (2003) divided the drivers of air travel demand into five major factors: activity (population, GDP per capita), location (distance, tourist market, intra-model competition, inter-model competition), quality of service (aircraft size, frequency of flights), market characteristics (hubbing strategy, year, period of observation) and price (airfare). A recent study by Hakim and Merkert (2019) included GDP per capita, FDI, industrialisation, flight frequency, urban population growth and jet fuel price to analyse air travel demand in some south Asian countries.

### **3.5 Air deregulation and its impact on economic growth**

Air transport deregulation has been a key driver of the increase in air travel (Zhang & Round, 2008; Wang et al., 2018). Warnock-Smith and O'Connell (2011) note that air traffic and, consequently, the incoming tourism expenditure could be at least partially stimulated through changes in aviation policy. Zhang and Findlay (2014)

report that regulatory systems that impede entry and discriminate against the air transport service suppliers reduce the volume of passenger traffic which hampers economic integration. Wu et al. (2020) found that air transport deregulation is one of the key factors influencing the development of China's LCC network.

Air transport is attractive to travellers mainly for its speed and comfort. Travelling to some remote locations by surface-based transport requires longer travel times which can make the journey less pleasant and reduce relaxation time. Increases in the number of tourists allow an airline to increase its capacity on an existing route and to expand its network to more destinations (UNWTO, 2015; Wu et al., 2020). It also attracts airlines to enter the market. The economy benefits when new air services stimulate travel and trade, which can assist in spreading wealth across and within countries, particularly benefiting those living in a geographically isolated area (Zhang, 2015). The additional direct and indirect employment opportunities to support the aviation industry can also increase employment (ATAG, 2017b).

There are a few studies related to the context of air travel demand in Asia. Air transport demand in south Asian countries has been studied by Hakim and Merkert (2019), Karim, Ieda and Alam (2000) and Abed, Abdullah and Jasimuddin (2001). The study of air travel demand in middle income countries by Valdes (2015) included Malaysia and Thailand. Hakim and Merkert (2019) found that income, FDI, flight frequency and jet fuel price are highly correlated to air passenger demand and that income, FDI, industrialisation and jet fuel price are correlated to air freight demand in south Asian countries with low income economies. The study by Karim, Ieda and Alam (2000) indicated that exports and imports, income growth and foreign remittances are correlated to air passenger demand and that air freight demand is influenced by exports, imports and urban population size. Abed, Abdullah and Jasimuddin (2001) identified population size and total expenditure as the main determinants of international air travel in Saudi Arabia. The findings of Bastola (2017) indicated that GDP and the number of tourists arriving were strong indicators when projecting air passenger demand in Nepal.

### **3.6 Consumer behaviour and air transport**

There is a long tradition of government supporting flag carriers as they serve a nation's interest (Button, 2008). In addition, it has been argued that companies invested in foreign joint venture airlines may sometimes pursue profit maximisation at a country's expense. The revenue earned by these airlines irrevocably leads to an economic leakage when profits are sent abroad (Jenkins, 2015). To support the tourism industry, airlines operating within a country need to offer high-quality transport services to fulfil customers' needs. As such, the development of appropriate customer relationship management (CRM) is essential to attract customers to travel more frequently and to ensure profitability. Moreover, changing consumer behaviour towards air transport serves to create long-term benefits for a country's economy.

#### **3.6.1 Customer relationship management**

To attract and retain customers, many airlines are seeking to develop their CRM system so as to boost customer loyalty. CRM is a term that refers to practices, strategies and technologies that companies use to manage and analyse customer interactions and data throughout a customer's lifecycle. As described in *Marketing: An Introduction*, 'CRM is the overall process of establishing, building and maintaining profitable customer relationships by delivering superior customer value and satisfaction' (Armstrong & Kotler, 2010, p.15). CRM evolved in the 1980s when companies started to record customers' information and details so as to customise their communication channels with them. In 1990 the first CRM software was created to help companies generate a customer database to analyse passengers' travel behaviour (Lyle, 2015). Today, CRM is more than just technology; it is an approach used by different companies to develop long-term relationships with customers. The CRM system ensures customer satisfaction so as to drive repurchases and aims to foster loyal customer behaviour.

#### **3.6.2 Repurchase and loyalty**

According to Abraham Maslow, '[a] human is motivated to act in a certain way to fulfil their needs for a positive feeling' (Maslow, 1954, p. 63). This act includes the

behaviour of making purchases of a product to fulfil one's needs. The act of making a purchase refers to an action in which an individual procures something to satisfy their wants. Tauber (1972) showed that people make purchases in order to fulfil their psychosocial requirements. The term 'repurchase' refers to the behaviour when one is making a repeat purchase of a product from the same supplier due to a previous positive experience. This idea is further reinforced by Fornell (1992) who defined repurchase intention or customer retention as an acknowledgement of the likelihood of using a particular service provider again in the future.

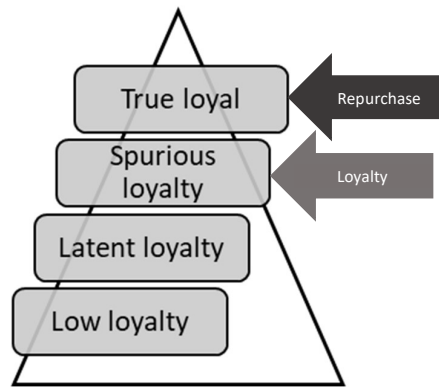
A consumer initially makes a purchase possibly due to the product's functions and performance. However, a repurchase action is likely to occur when the consumer is satisfied with the product and happy with the previous purchasing experience. According to Yau (1994) consumer product or brand choice can be affected by social influences. Social influences, culture and environment work hand-in-hand to influence consumers' decision and, consequently, shape their preferences over time.

A repurchase is a behaviour, while loyalty is an attitude. A successful CRM system not only encourages customer repurchase, but it also changes their attitude towards the company, its brand and product. A study by Backman and Crompton (1991) showed that there are two types of customer loyalty: repeat purchase and attachment. Loyalty is developed when a customer is attached to a brand and it is unlikely that they will switch to another brand on their next purchase of the same product. The study defined four levels of customer loyalty as follows (Figure 3.3):

1. True loyal. Customers have a high level of attachment, as they are satisfied with both the product and the company. These customers will always return to purchase.
2. Spurious loyalty. Customers who return to purchase due to their satisfaction with the company's product. However, they have no emotional attachment to the company.
3. Latent loyalty. Customers who are attached to a company brand. However, their repurchase behaviour is minimal due to reasons such as reduced disposable income or unemployment.



4. Low loyalty. Customers who do not emotionally connect with the brand and have no intention to repurchase.



**Figure 3.3:** Backman and Crompton—customer loyalty.

Customers who are satisfied with an airline exhibit repurchase behaviours, but they may shift to other service providers when offered a better deal because they do not have a brand attachment to the company. Companies today are seeking to motivate their customers into developing ‘spurious loyalty’ (repurchase) and eventually turn them into ‘true loyal’ customers (loyalty). Capturing the segment of ‘true loyal’ customers and retaining them is the key to generating a constant stream of revenue.

### 3.6.3 Factors influencing consumer repurchase

A company needs to be able to recognise the best strategies that motivate customer repurchase behaviour. These customers may not be attached to a particular service provider but keeping them for the long-term is an initial step to achieving success in the CRM system. Encouraging customer repurchase increases the chances of turning these repurchase customers into loyal consumers.

Customer satisfaction is generated when a customer purchases a product which fulfils their needs and exceeds their expectations (Law, 2018). To succeed in a competitive market a company needs to offer a high-quality product and services to persuade customer purchase and repurchase behaviour. The majority of previous studies have used the SERVQUAL model to measure the relationship between service quality and customer satisfaction (Abdullah, Manaf & Noor, 2007; Hussain,

Nasser & Hussain, 2015; Jahmani, 2017). The SERVQUAL model was introduced by Parasuraman, Zeithaml and Berry (1988) to measure the service quality of service in retailing organisations. The SERVQUAL model consists of five dimensions: tangibles, reliability, responsiveness, assurance and empathy. In 1992, Cronin and Taylor modified SERVQUAL to a performance-based measure and introduced the SERVPERF model (Cronin & Taylor, 1992). However, a number of studies have argued that the model is unable to capture all dimensions of service quality in the airline industry (Ali et al., 2015; Ostrowski et al., 1993). To measure airline service quality, the AIRQUAL model was developed in 2001 by Bari et al. (2001). The AIRQUAL model consists of eight dimensions: airline tangibles, terminal tangibles, personnel, empathy, image, customer satisfaction, repurchase intention and word-of-mouth communication. However, one researcher argues that the validity of the model is incomplete. Alotaibi (2015) observed many limitations of AIRQUAL model in its applicability to the airline industry. Ali et al. (2015) and Park et al. (2006) have identified that the theoretical and conceptual basis for measuring service quality in the airline industry is still in the development phase as most models are insufficiently comprehensive to represent the service quality dimension in the air transport service sector.

Piana, an economist, identified eight reasons that influence consumer repurchase: satisfaction, monopolist, optimal but non-fully satisfactory, switching barriers, routine response, durable goods, obsolescence and branding (Piana 2007). These factors are suggested to be effective in influencing customer satisfaction, leading to the act of repeat buying (Piana, 2007). Gelb (2014) defined several motivational factors that help 'persuade' customers to make a purchase: convenience, best value for money, personal attention, ease of buying, honesty and integrity. Moreover, Kitchathorn (2010) suggested that interpersonal relationships, the attractiveness of alternatives, switching costs and service recovery are the main barriers to customers switching. Switching costs have also been found to have a large effect on repurchase intention. Research conducted by Jeng (2016) on airline brand credibility found that brand credibility has an impact on consumer repurchase intention. Ringle, Sarstedt and Zimmermann (2011) found that perceived safety plays a part in affecting airline

passengers' level of satisfaction. Last but not least, Climis's (2016) study on customer retention in the airline industry has given some insight on the attributes and elements of customer loyalty such as the loyalty reward program and service quality.

Proussaloglou and Koppelman (1995) suggested a conceptual framework for passengers' choice of airlines. The framework consists of three attributes that determine the decision to fly with a particular airline. The carrier attributes include carrier market presence, level of carrier service, quality of carrier service and carrier pricing. The travel attributes include frequent flyer membership. The trip attributes include the trip purpose and schedule constraints leading to the passengers' decision and their choice of an airline. Archana and Subha (2012) observed that in-flight services, in-flight digital services, and airline back-office operations significantly influence passenger satisfaction which drives customer loyalty.

There is limited research on the relationship between service quality and customer satisfaction in Laos and Myanmar. The previous studies on this consumer behaviour include the research of Khamphanthong and Buavaraporn (2016) which covered the banking sector in Laos. Their study identified that service quality has a positive and significant relationship on customer satisfaction in Laos's financial service sector. A similar finding was made for hotel businesses (Inthavong & Onphanhdala, 2015). Previous studies in Myanmar focused on the banking sector and the telecommunications industry identified that ease of convenience influences the service quality (Lwin, Liana & Nusari, 2019). The result from the study of Myanmar's telecommunications industry has shown a strong relationship between service quality and customer satisfaction (Swe, 2019). Comparable findings were also observed in the food services sector (Win, 2016).

There are no previous studies involving the air transport industry in the two countries. The present study contributes to the existing knowledge of consumer behaviours by investigating the factors influencing customer satisfaction in an emerging air transport market.

A literature review by Kalemba et al. (2017) evaluated articles between 1993 to 2014 from the Scopus database and four quality indexes related to the airline industry and recommended a 32-attribute list to measure service quality for airlines. Compared with the model from the previous studies, these 32 attributes cover a wider variety of items measuring an airline's service quality. The conceptual framework is used in this study to identify the purchase and repurchase motivations of air passengers. The model shows the hypothesis test link between customer satisfaction (CS) and repurchase intentions (RI), and their relevance to the nine dimensions of air service quality (SQ) and purchase motivational factors. The air service quality and purchase motivational factors are price and perceived value (PV), loyalty program (LP), product uniqueness (PU), durability (DU), ease of convenience (EC), promotion (PR), service interaction (SI), brand credibility (BR), and reliability and dependability (RD). This combination of criteria was chosen based on the literature review of customer satisfaction, service quality and motivation factors for air transport by Kalemba et al. (2017) and other previous studies (Koufteros, Babbar & Kaighobadi, 2009; Saleem, Zahra & Asif, 2017; Law, 2018). These criteria are mentioned in a customer strategy article on how airlines can become customer-centric (TeleTech, 2020).

#### 3.6.3.1 Price and perceived value

Price and perceived value are defined as the amount of money that the consumer is willing to pay for a product or service. It has a direct impact on the level of customer satisfaction. The consumer often uses price to evaluate the quality of the product that they purchase which influences the level of their satisfaction with the company offering the product (Science Daily, 2011). The price of a product or services is an antecedent of a customer's satisfaction as positive price and product quality are closely related (Sproles, 1977; Law 2018). The satisfaction of a consumption experience is created when the customer makes a purchase by paying a price that is lower than the expected value (Lee, 2015), while perceived value refers to the worth that a product or service has in the mind of the consumer. In a previous study examining the relationship between price and customer satisfaction, the result indicated that the level of price-performance consistency in a service exchange

directed the relationship development between performance expectation and consumer satisfaction (Voss, Parasuraman & Grewal, 1988). A study by Matzler, Renzl and Rothenberger (2006) showed that price perception has a direct influence on customers' purchasing behaviour and, hence, their level of satisfaction. A study by Driver (1999) concluded that leisure travellers and business travellers have different pricing perceptions and satisfaction levels. Business travellers' demands are relatively inelastic as their travel expenses are usually paid for by their employer while leisure travellers are paying for themselves. Understanding these two groups of customers and charging them the 'right' price – such as temporarily reducing the price of air tickets for leisure travellers – helps to increase customer satisfaction levels and encourage customer repurchase. According to a study of air passenger complaints, customers have a lower expectation of service quality when they pay lower fares travelling on low-cost airlines. Wittman (2014) and Rothenberger (2004) revealed that customer satisfaction with a company is generated when the product they purchase is reasonably priced. Another study on the impact of price on customer satisfaction and loyalty in the service industry revealed that perceived price fairness influences the level of customer satisfaction and loyalty toward airline services. (Consuegra, Molina & Esteban, 2007).

#### 3.6.3.2 **Product uniqueness**

Delivering a unique product or service to the consumer can increase the level of customer satisfaction. Product differentiation is a marketing strategy that a company uses to distinguish the company's products or services from those offered by competitors (Levitt, 1980). Product/service differentiation allows a company to offer exclusive offers to customers. According to previous studies, offering a differentiated product drives the level of customer satisfaction as a consumer is able to identify the core benefits between different brands (Piana, 2003; Nguyen & Jolley, 2017). The Virgin America airline implemented a differentiation strategy in offering routes to niche markets and customer-oriented services to differentiate it from the major carriers. This was found to be effective in attracting customers (Qin, 2015). A study of charter airline services in the UK revealed that customer satisfaction increased when an airline offered a new booking system which differentiated it from

their competitors (Dennett et al., 2000). A study by Chan (2000) has shown that companies that offer differentiated products or services are more likely to enjoy a higher degree of repeat business as their product(s) is promoted via word-of-mouth by satisfied customers. Furthermore, a study from Fornell and Johnson (1988) indicated that differentiated offerings positively influence service quality and the level of customer satisfaction across different industries. Additionally, product uniqueness is not limited to increased customer satisfaction; it also improves an airline's financial performance (Strategic Direction, 2012).

#### 3.6.3.3 Service interaction

Service interaction is an important element in service industries. Service interactions refer to the contacts between the service providers and their customers. Increased interactions between the service provider and its customers allow the company to understand the needs of the customers; moreover, this develops a positive relationship between both, leading to customer satisfaction (Boshoff & Tait, 1996; Ramani & Kumar, 2008; Law, 2018). Urban (2004) identified that there is a positive relationship between interaction orientation and customer satisfaction. The interaction also strengthens consumer repurchase behaviour. In a study of service interaction and air transport, service interaction is a significant influence on airline customer satisfaction (Baker, 2013). Human interactions are involved in producing positive experiences, so the interactions between the airline employees and the customers are shaping customer satisfaction towards the service provider (Prokesch, 1995). According to a study by Liang and Zhang (2011), interaction orientation has positive influences on customer satisfaction for both first-time and repeat customers. Today's customers expect high-quality services from airline employees (both on-ground and on-board), and before, during and after the flight (Mai & Le, 2014). Satisfied customers form a personal relationship with the company personnel, and this can be a factor in sustaining customer repurchase (Burnham, Frels & Mahajan, 2003).

#### 3.6.3.4 Durability

Durability refers to the ability of a physical product to remain functional. In the context of air transport, it is referred to as safety (Sukhikh et al., 2017). The safety performance of the airline has a direct influence on the level of customer satisfaction. It includes the safety of the employees (Willis, Brown & Prussiac, 2012; Law 2018) and operational safety (Morpace International, 1999). Safety is a key attribute in a consumer's decision on selecting an air transport service provider, and it is also an important factor in customer satisfaction (Lin & Vlachos, 2018). A report for the UK Aviation Factor has indicated that safety and security in air travel were not generally front-of-mind considerations for the participants in their research, whether in decision making, at the point of booking or during the consumer's air travel experience (Civil Aviation Authority, 2015). However, there was a strong latent awareness of safety and security issues in relation to air travel due to the prominence of safety and security processes when people fly. The study of Clemes et al. (2008) has defined that safety and security are perceived to be the most important consideration for air passengers in New Zealand. The result is identical to that of Gilbert and Wong 2002's study of the Hong Kong market and Baisya and Sarkar (2004)'s study of the Indian market. Additionally, Ringle, Sarstedt and Zimmermann (2011) revealed that airlines with a high safety rating generally create higher customer satisfaction. As a result, the consumer perceived safety value of an airline is an important driver towards air passengers' satisfaction which is further generating loyalty. Furthermore, a study by Atalık and Özel (2007) showed that safety is one of the most important criteria when passengers decide on which airline to fly with. The customer often uses airline safety performance to evaluate the airline's service quality.

#### 3.6.3.5 Loyalty programs

Establishing a membership program to attract repeat customers has become the norm for many businesses. The programs allow the consumer to earn privileges when they make a purchase from the service provider (Reinartz, 2006). The membership program in the airline industry is known as the frequent flier program. The program allows the consumer to enjoy discounts and to accrue points for mileage travelled; in

return, the accumulated points can be used to redeem tickets for future travel (Toh & Hu, 1988). The loyalty program is designed to secure a customer by offering additional benefits and increase their switching cost (Dowling & Uncles, 1997). In previous studies the program was found to have a significant positive relationship with customer satisfaction in different industries, including retail and hospitality (Hu, Huang & Chen, 2010; Stathopoulou & Balabanis, 2016; Zakaria, et al., 2013). A similar result was identified in the air transport industry in the South African region and the Korean market; the frequent flyer program has a positive influence on customer satisfaction and loyalty (Sandada & Matibiri, 2016; Park, 2010). A study by Lewis (2009) on loyalty programs and customer retention revealed that airline loyalty programs are effective in increasing the customer repurchase rate. Bolton, Kannan and Bramlett (2000) had previously made the same findings, i.e., loyalty programs have a positive effect on customer repeat purchase behaviour as these customers perceive that they are getting better quality and services because they are members of the loyalty program. Many customers considered that the airline loyalty program is part of the product they purchase and many often compare programs before choosing an airline. Furthermore, Sandada and Matibiri (2016) suggested that it is important for airlines to invest in loyalty programs as they increase customer satisfaction and encourage loyal behaviour. As such, many airlines including LCCs offer such programs to retain customers. However, some researchers argue that value-added programs are no longer a key driver in attracting customers as loyalty programs offered by businesses have become commoditised (Watanabe, 2016).

#### 3.6.3.6 Brand credibility

Brand credibility refers to the consumer's perception of a company rather than of the product or service. The customer compares and distinguishes companies in mass appeal to evaluate the quality of service or product (Saunders, 2011) and they choose a brand that they feel comfortable with and trust. Fulfilling promises and implementing a corporate social responsibility program are some of the tactics for a company to develop a reputable brand (Erdem & Swait, 2004; Hur, Kim & Woo, 2013). Brand credibility is also influenced by the nationality of the brand. The 'country of origin' effect is influencing consumer decisions; the country image



attributes of a brand often manipulate the perceived quality of a product or service (Adina, Gabriela & Denisa, 2015). A study by Swait and Erdem (2007) showed that brand credibility is a decision-making factor as customers have the tendency to believe that purchasing from the same brand reduces the element of risk and the research cost of buying a similar product from another supplier. Brand awareness creates a favourable impression of the product, which in turn motivates a customer's purchases. A study by Choe and Zhao (2013) demonstrated that brand awareness influences the perceived quality of a product, which has a direct effect on the brand's equity. Hence, this is a possible trigger of a customer's purchase intention. Brand image is also a reflection of a consumer's social status. An earlier study by Munson and Spivey (1981) concluded that user stereotype is associated with branding, especially among younger consumers. In the context of Southeast Asian cultures, purchasing a product with a luxury brand name is an indication of a person's social status. Luxury goods symbolise one's achievement, wealth and prestige; all of which are factors that can help to further develop the relationship between customers and suppliers (Shukla, 2015). Other studies have indicated that airline brand credibility influences customer purchase intentions positively (Baek, Kim & Yu, 2010; Jeng, 2016).

#### 3.6.3.7 Reliability and dependability

Reliability and dependability are important factors in the air transport industry. Customers expect an airline to offer a reliable and dependable service with a reputation for on-time performance (CAB, 1968) and a good plan for recovery from irregular or disrupted operations (Sefanov, 2018). According to the Department of Transportation (2020) in the United States, an airline's on-time performance is referred to as the punctuality of flight departure, flight arrival, mishandled baggage and denied boarding. The Traveller Service Quality Report published by Business Travel News has pointed out that corporate travel buyers and travellers in the United States consider punctuality to be the most important factor when choosing their flights (Baker, 2014; Jamkatel, 2018; Puspawigati, 2019). Previous studies have revealed that airlines' on-time performance reduces customer complaints which eliminated customer dissatisfaction (Chow, 2015). The level of customer satisfaction

reduces when the customer encounters a flight delay (Anderson, Baggett & Widener, 2008). However, if the airlines inform passengers of the irregularity ahead of time, the impact to dissatisfaction level is less (Efthymiou et al., 2019; Kim & Park, 2016). A similar finding was identified with the customers' baggage delivery. The level of customer satisfaction reduces when the customers are unable to retrieve their baggage at the destination airport upon their arrival (Fitantri, Madhani & Widiastuti, 2018).

#### 3.6.3.8 Ease of convenience

A hassle-free travel experience is one of the expectations of airline customers (IATA, 2011b). From the time of purchasing tickets, going through the airport process, boarding the aircraft and arriving at their destination, the passenger does not want to encounter a situation causing difficulty. By getting what they want with minimal time, physical and mental effort from purchase to use and being able to get help easily are the elements of service convenience that influence the level of customer satisfaction (Berry, Seiders & Grewal, 2002, Law & Doerflein, 2013) According to previous studies, service convenience has positive effects on a customer's satisfaction with the air transport industry. Ease of use of an airline's online reservation system was identified as the most important contributor to customer satisfaction in Malaysia (Lau, Kwek & Tan, 2011). Offering a self-check-in service has reduced waiting time which has had a positive impact on customer satisfaction levels (Yusra & Agus, 2018). According to Charoensettasilp and Wu (2014), a convenient airline process includes ticket availability, the mode of payment, the ease of locating ticket offices, convenience in terms of contacting service agents, and the convenience and speed in each of checking in, baggage claim and preparing for flight departure. Customers generally prefer being able to make their purchases with convenience. A study by Atchariyachanvanich, Okada and Sonehara (2006) revealed that purchasing via the Internet serves as a useful tool in motivating a customer's repurchase intention as it facilitates the ease of purchase. In short, the ease of convenience of getting things done is a critical factor that influences customer satisfaction and increases the customer retention rate.

### 3.6.3.9 Promotion

Increasing customer contact points and offering multiple methods of purchase give the airlines a better chance of promoting their product and service. Promotion is defined as the activities implemented by a company to support and encourage purchases (Kotler & Keller, 2006). Promotion contributes to airline service quality leading to customer satisfaction (Robledo, 2001). Airlines are using various promotion strategies to motivate customer purchases, including sales promotion and advertising (O’Guinn, Allen & Semenik, 2009). Personal communication also allows a company to interact with customers based on their purchasing behaviour and preferences. One way of doing so is through delivering a relevant and interesting message. This helps to motivate customers and allows suppliers to develop a closer relationship with their customers (Simonson, 2005). A study of banks and supermarkets indicated that the advertising expenditure of a company and the customer orientation communication has a close relationship with customer satisfaction through perceived quality (Ha & Muthaly, 2012). Another study on the effects on promotion and customer loyalty disclosed that relationship-orientated promotion has significant positive effects on the satisfaction of the customer in the Taiwan air transport market (Pi & Huang, 2011). Additionally, the study of Tsao et al. (2009) stated that the greater the effect of a promotion program, the higher the customer retention rate.

Table 3.1 summarises the literature review on the nine dimensions of air service quality and purchase motivational factors.

**Table 3.1:** Summary of literature review on the nine dimensions of air service quality and purchase motivational factors.

Motivating factors	References
Price and perceived value	(Sproles, 1977) (Voss, Parasuraman & Grewal, 1988) (Driver, 1999) (Matzler, Renzl & Rothenberger, 2006) (Consuegra, Molina & Esteban, 2007) (Wittman, 2014) (Lee, 2015) (Law, 2018)
Product uniqueness	(Levitt, 1980) (Fornell & Johnson 1988) (Chan, 2000) (Dennett et al., 2000) (Piana, 2003) (Strategic Direction, 2012) (Qin, 2015) (Nguyen & Jolley, 2017)
Service interaction	(Prokesch, 1995) (Boshoff & Tait, 1996) (Burnham, Frels & Mahajan, 2003) (Ramani & Kumar, 2008) (Urban, 2004) (Liang & Zhang, 2011) (Baker, 2013) (Mai & Le, 2014) (Law, 2018)

Durability	(Morpace International, 1999) (Gibert & Wong, 2002) (Atalık & Özel, 2007) (Clemes et al., 2008) (Lewis, 2009) Baisya & Sarkar, 2004) (Ringle, Sarstedt & Zimmermann, 2011) (Willis, Brown & Prussiacc, 2012) (Sukhikh et al., 2017) (Law, 2018) (Lin & Vlachos, 2018)
Loyalty program	(Toh & Hu, 1988) (Dowling & Uncles, 1997) (Bolton, Kannan & Bramlett, 2000) (Reinartz, 2006) (Hu, Huang & Chen, 2010) (Park, 2010) (Zakaria et al., 2013) (Sandada & Matibiri, 2015) (Stathopoulou & Balabanis, 2016) (Watanabe, 2016)
Brand credibility	(Erdem & Swait, 2004) (Swait & Erdem, 2007) (Baek, Kim & Yu, 2010) (Saunders, 2011) (Choe & Zhao, 2013) (Hur, Kim & Woo, 2013) (Adina, Gabriela & Denisa, 2015) (Munson & Spivey, 1981) (Shukla, 2015) (Jeng, 2016)
Reliability and dependability	(Anderson, Baggett & Widener, 2008) (Baker, 2014) (Chow, 2015) (Kim & Park, 2016) (Fitantri, Madhani & Widiastuti, 2018) (Jamkatel, 2018) (Sefanov, 2018) (Efthymiou et al., 2019) (Puspawigati, 2019)
Ease of convenience	(Berry, Seiders & Grewal, 2002) (Okada & Sonehara, 2006) (Lau, Kwek & Tan, 2011) (Law & Doerflein, 2013) (Charoensettasilp & Wu, 2014) (Yusra & Agus, 2018)
Promotion	(Robledo, 2001) (Simonson, 2005) Kotler & Keller, 2006) (O'Guinn, Allen & Semenik, 2009) (Tsao et al., 2009) (Pi & Huang, 2011) (Ha & Muthaly, 2012)

### 3.6.3.10 Service quality

There is a higher chance of a customer making a purchase when a company offers a product or service which meets their needs. When a person makes a purchase, they are not only buying the product itself, they are buying a range of related items. Customer satisfaction is created when customers realise the service quality of the product that they have purchased meets their expectation. According to a study by Ladhari (2009), customer satisfaction in the hospitality industry is influenced by the service quality. Previous studies in the air transport industry have revealed positive relationships between service quality and customer satisfaction (Huang, 2010; Park, Robertson & Wu, 2006). The study of Baker (2013) indicated that the higher the service quality offered by USA airlines, the greater the level of customer satisfaction. A similar finding was revealed in the study of the New Zealand market (Clemes et al., 2008).

### 3.6.3.11 Customer satisfaction

Customer satisfaction is generated when the company's product and/or service meet the needs of the customer. When a company consistently exceeds the customer's expectations, the customer often returns for repurchase. The customer with a high satisfaction level is also likely to become a loyal customer. These customers are

likely to spend more and are unlikely to change companies for their future purchase (Ranaweera, 2007; Sohaib, Rehman & Akram, 2016).

Previous studies have demonstrated that there is a positive relationship between customer satisfaction and repurchase behaviour; satisfied consumers are likely to continue their relationship with the same supplier (Ibzan, Balarabe & Jakada, 2016). Similar results were found in studies on consumer repurchase motivators (Chen, Li & Liu, 2019; Siraphatthada & Thitivesa, 2019).

#### 3.6.3.12 Repurchase intention

Service quality is a factor that influences customers' repurchase intention. Research has suggested that when the needs of customers are fulfilled by a service provider, the customer will be more likely to form repurchase behaviour (Zeithami, Berry & Parasuraman, 1996). This view was supported by another study that confirmed a positive relationship between service quality and repurchase intention (Su, Swanson & Chen, 2016). Another study revealed that service quality has a direct impact on repurchase intention and does not directly affect customer satisfaction (Hellier et al., 2003). A study of the Pakistan airline industry revealed that service quality and repurchase intention demonstrate a positive and moderate relationship (Saleem, Zahra & Yaseen, 2017).

### 3.6.4 Hypotheses and theoretical model

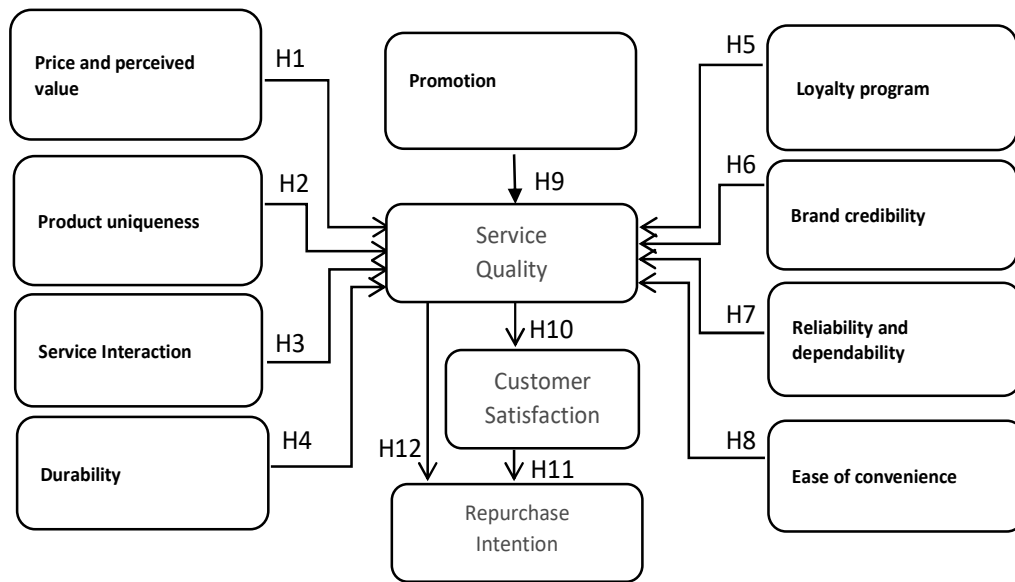
Based on the information in the literature review, eleven hypotheses are created. Figure 3.4 shows the theoretical model.

#### 3.6.4.1 Hypotheses

- H.1. Price and perceived value significantly influence service quality.
- H.2. Loyalty program significantly influences service quality.
- H.3. Product uniqueness significantly influences service quality.
- H.4. Durability significantly influences service quality.
- H.5. Ease of convenience significantly influences service quality.
- H.6. Promotion significantly influences service quality.

- H.7. Service interaction significantly influences service quality.
- H.8. Brand credibility significantly influences service quality.
- H.9. Reliability and dependability significantly influences service quality.
- H.10. Service quality significantly influences customer satisfaction.
- H.11. Customer satisfaction significantly influences repurchase intention.
- H.12 Service quality significantly influences repurchase intention.

### 3.6.4.2 The theoretical model of consumer behaviour and air transport



**Figure 3.4:** The theoretical model of consumer behaviour and air transportation.

### 3.7 Methodological Review

Econometric analysis is the use of quantitative data to test an hypothesis in economics. According to Hoover (2006), the most common econometric analysis methodologies include the Cowles Commission, Vector Autoregressions, the LSE Approach, Calibration and Textbook Econometrics. These methods are able to analyse the stationary time series. If the variables are of mixed order of integration or are non-stationary, the common methodology may not be appropriate for analysing the relationship. However, the autoregressive distributed lag (ARDL) model is valid for both non-stationary time series and for times series with mixed order of integration (Shrestha & Bhatta, 2018).

The ARDL model was developed by Pesaran (1997). It has been verified to be a valuable vehicle for testing the existence of the long-run relationship between time series economic variables. Compared with other cointegration methods, including Engle and Granger (1987) and Johansen and Juselius (1990), the ARDL model has demonstrated several advantages.

The ARDL model generates additional flexibility compared with other techniques because the ARDL model can be applied even when the studied variables are not of the same order of integration. Besides, the ARDL test is more efficient even with small and finite sample sizes, while other techniques require large data samples to demonstrate a meaningful result. A dynamic error correction model (ECM) can be developed from the ARDL model through a simple linear transformation to measure short-run coefficients (Nkoro & Uko, 2016). The application of the ARDL approach was mainly used in studies related to trade and economic growth (Bahmani-Oskooe & Brooks, 1999; Kim & Kim, 1999; Nell, 2000). The approach was also applied to measuring the relationship between economic growth and both tourism demand (Narayan, 2004) and transport demand (Kulshreshtha & Nag, 2000).

Multivariate analysis is used to evaluate constructs and assess their relationships. There are several statistical techniques for conducting multivariate analysis. The four most common techniques are multiple regression analysis, factor analysis, path analysis and multiple analysis of variance (MANOVA) which are known as the first generation of multivariate analysis (Yulianto, Robihaningrum & Elinda, 2019). Structural Equation modelling (SEM) is a second generation multivariate analysis technique that combines factor analysis and multiple regression analysis. It is capable of analysing of all the variables included in the model instead of having them analysed separately (Fornell & Larcker 1987).

SEM evolved from the path analysis approach developed by Sewall Wright in 1934 (Sampson, 2001). SEM was first applied to econometric studies which identified the

structural relationships between variables (Frish & Waugh, 1933; Haavelmo, 1944; Koopmand, 1945). The model was further expanded to the field of sociology in the 1960s. Duncan (1966) employed the path analysis that was used in econometrics in sociological studies. In 1970 the analytical strategy of SEM was adopted in the field of psychology. The study of Wert and Lin (1970) confirmed that path analysis applied to the psychological study of 4th-grade student's education achievements related to the parents' level of education in the USA. In recent decades SEM has been popular in social science research (Rahman, Shah & Rasli, 2015) and it is widely used in examining the relationship between service quality and customer satisfaction generally (Gera, 2011; Min & Khoon, 2014; Ali et al., 2017) and especially in the air transport industry (Huang, 2010; Simsek & Demirbag, 2017; Farooq et al., 2018). Comparing SEM with other traditional multivariate techniques, SEM estimates measurement error variance parameters for both independent and dependent variables which other multivariate techniques do not do (Byrne, 2016). Novikova et al (2013) defined three major advantages of SEM over traditional multivariate techniques: (1) a clear assessment of measurement error, (2) estimation of latent variables via an observed variable and (3) the model testing allowing the model to be assessed as to fit the data.

### **3.8 Summary**

This chapter has reviewed the relevant literature and research related to the impact of air transport on economic growth and tourism development and the factors influencing an air passenger's choice of airlines. The review led to the development of the conceptual framework of this study. The CLMV countries are the fastest growing economies in the region. The political and market reforms have made these countries an attractive destination for foreign investors and tourists. The air transport industry has supported the economic development of countries through trade and tourism. Maintaining high-quality air transport services is essential to furthering economic growth. It is important for an airline to establish a positive relationship with its customer by fulfilling and exceeding their expectations. There have been few studies on air travel demand and service quality in low income countries in Southeast Asia and so this study will be one of the pioneers.



# **Chapter 4**

## **Research design and methodology**

### **Chapter outline**

This chapter explains the research design development and the methodologies adopted in the study. This chapter is divided into two parts:

- the influence of air transport service on economic growth and tourism development; and
- the factors influencing airline service quality and its impact on customer satisfaction.

### **4.1 Research design**

The research design is the methodology and procedures that the researcher employs to answer the research questions. It creates the structure of the research and shapes the approach that aims for reliable and valid results (Grand Canyon University, 2012). This study will implement both a desk research approach to examine the relationship between air transport, economic growth and tourism in the CLMV countries and a survey approach to examine air passengers' consumer behaviour in Laos and Myanmar. The desk research approach is referred to as secondary data research by using data that has already been published. It is a common approach to a systematic investigation for historical and future trend analysis (Chambers et al., 1971). The survey approach is a non-experimental means of studying a community or a group of people. It is suitable for examining topics related to human behaviour. Survey methods serve to describe the characteristics of a population and to test the hypotheses about the nature of relationships within a population (Research Methodology, 2016).

Creswell (2014) has recommended three research methods that researchers can choose from when conducting a social science study: qualitative, quantitative and mixed methods. This study will be conducted using quantitative research.

#### 4.1.1 Quantitative design

The quantitative research design aims to answer a problem with numerical data. The data collected is analysed statistically in order to identify their changes over time across different groups and to establish an understanding of customer characteristics and behaviour, their actions and opinions. Quantitative research has a firm logical platform that is developed from physical science through the use of numbers and statistics (Barnham, 2015). Creswell (2014) has identified two quantitative research designs –survey and experimental. Survey research offers a numeric description of the trend, attitude and opinion of a population, and experimental research examines whether the outcome of a topic changes with alterations to an action (Creswell, 2014, p. 13). The quantitative design is best used to quantify attitudes, opinions and behaviours, and it produces a general set of results that applies for a large population group. The data collected can then be measured to form facts and to reveal consumer behaviour patterns.

#### 4.1.2 Justification for research design

This study will apply quantitative design for desk research in four Southeast Asian countries and survey research in Laos and Myanmar to examine the air transport industry. The quantitative design was chosen as it allows the researcher to obtain measurable information about the chosen population. Creswell recommended the quantitative approach for ‘(1) [the] identification of factors that influence an outcome, (2) the utility of an intervention, or (3) [to] understand the best predictors of outcomes’ (Creswell, 2014, p. 20). The data collected allows for the relationships between each hypothesis to be described and tested and to explain their cause and effect. A qualitative design and the mixed method are not recommended for this study. The former is associated with understanding individuals’ feelings, values and perceptions of a topic. It does not provide a general conclusion about the population (Austin & Sutton, 2014). The mixed method is not used due to time constraints and the researcher’s inability to carry out the data collection. Moreover, the interpretation of conflicting results between the two methods can create discrepancies and difficulties when drawing conclusions from the findings (Green et al., 2015).

## **4.2 The methodology of the study**

This study analyses both primary data and secondary data to examine the influential factors affecting customer satisfaction with regard to air travel and to investigate how the air transport industry influences economic growth and the tourism market. The majority of the data is primary in nature and was collected at the main airports of Laos and Myanmar. This study will be based on quantitative primary sources using surveys in the form of questionnaires and secondary sources from external desk research. The external desk research methodology is a method of collecting data from reputable sources on the Internet, media sources (newspaper and magazine articles) and government published data. These data have been gathered without any specific marketing purpose (Allen, 2001) and are vital to this study. To examine the impact of air transport on economic growth, and service quality and customer satisfaction on customer repurchase intentions for air transport, this study applied two models; panel ARDL and SEM.

### **4.2.1 Secondary data**

Cnossen (1997) explained that secondary analysis refers to the analysing of data collected by other researchers, institutes or government departments for other purposes. The secondary data used in this study measures the air transport service influences on economic growth and tourism development. The secondary data from different sources will be used to explore answers to RQ1. These data are selected based on the review of the literature, including travel demand or air passenger traffic (PAX), economic growth rate (GROWTH), international inbound tourist expenditure (TOUR) and an air transport deregulation dummy variable (DEG). The secondary data collected will be analysed using the panel ARDL model.

#### **4.2.1.1 Panel autoregressive distributed lag model**

The dynamic framework of the panel ARDL model is used here to examine the relationship between air transport demand, economic growth and international inbound tourist numbers. The ARDL procedure consists of three steps: (1) stationarity, (2) cointegration and (3) causality (Menegaki, 2019). The ARDL analysis started with the unit root test to define the stationarity. The unit root test

measures the degree of integration of each variable in the equation (Libanio, 2005). The cointegration test follows the stationary test. The ordinary least square test is used. However, incorrect results may be produced if the time series is not stationary (Shrestha & Bhatta, 2018). For non-stationary time series, the cointegration test method developed by Engle and Granger (1987) may be applied. The Engle and Granger test constructs residuals based on the static regression. The test uses the residuals to measure if unit roots are present by using the Augmented Dickey-Fuller test (Harris, 1992). The third step of the ARDL procedure is the causality test to identify evidence of bidirectional or uni-directional Granger causality among the time series. The causality test is carried out to determine the flow and to identify whether one time series is influencing another (Rossi, 2013).

The analysis incorporates a consideration of the impact of air transport deregulation in the CLMV countries. The ARDL framework integrates the short- and long-run effects with an error correction model (ECM). There are some advantages to applying the ARDL framework in this study. The ARDL does not need all of the variables to be integrated in the same order and it is suitable for studies with a small sample size. According to Granger and Weiss (1983), an ECM is used to identify the time series properties of the variables through the allowed lag structure and integrating economic equilibrium. Several studies have applied the ECM in time series analysis, including an investigation of the relationship within air transport demand in Brazil (Marazzo et al., 2010), US (Chi & Baek, 2013) and South Asia (Hakim & Merkert, 2016). The coefficient of the ECM reflects the speed of adjustment at which the model converges to the long-run equilibrium. A negative and significant coefficient of the error correction term suggests that there is a long-run stable relationship between the relevant variables. This implies that a pretesting of integration is not required. That is, the long-run relationship between the variables can be tested without the need to know whether they are  $I(0)$  or  $I(1)$  as long as the dependent variable is constrained to be  $I(1)$ . However, none of the variables should be integrated at  $I(2)$ . Therefore, the unit root test is still needed to ensure they only follow an  $I(1)$  or  $I(0)$  process or a mix of the two. The ARDL framework can also accommodate the endogeneity problem as a result of the inclusion of the lagged

values of both endogenous and exogenous variables. The ARDL approach is particularly suitable for small samples like those found in this study (Haug, 2002).

Following Pesaran et al. (1999), the general ARDL (k p q) model, including the long-run relationship between the variables, is specified as follows:

$$\Delta \ln PAX_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2p} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta_1 \ln PAX_{i,t-1} + \theta_2 \ln GROWTH_{i,t-1} + \theta_3 \ln TOUR_{it} + \theta \mu_{it-1} + v_{it} \quad (1)$$

$$\Delta \ln GROWTH_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2p} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta_1 \ln PAX_{i,t-1} + \theta_2 \ln GROWTH_{i,t-1} + \theta_3 \ln TOUR_{it} + \theta \mu_{it-1} + v_{it} \quad (2)$$

$$\Delta \ln TOUR_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2p} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta_1 \ln PAX_{i,t-1} + \theta_2 \ln GROWTH_{i,t-1} + \theta_3 \ln TOUR_{it} + \theta \mu_{it-1} + v_{it} \quad (3)$$

where k, p, and q denote the optimal lag length variable following the commonly used Akaike information criterion (AIC), Schwartz information criterion (SIC) and Hannan-Quinn criterion (HQ);  $\Delta$  is the first difference operator;  $\alpha_i$  is country-specific intercepts, and  $\mu_{it-1}$  indicates the error correction term.  $\theta$  is the speed of adjustment  $i$ . Included in the model are PAX, GROWTH, TOUR and an air transport deregulation dummy (DEG). The data span is a period of 24 years from 1995 to 2018. PAX is the sum of the domestic and international passengers carried in country  $i$  in year  $t$ . The GDP rate is the percentage change in real GDP (2010 constant dollar term) for country  $i$  in year  $t$ . Tourist expenditures include payments to national carriers for international transport and any other prepayment made for goods or services received in country  $i$  in year  $t$ . The data for these three variables is from the World Bank database. The deregulation dummy denotes the time period during which significant reforms in a country's air transport sector occurred.

As the variables of economic growth and tourist expenditures are likely to be endogenous, the ARDL model is written using each of the two as the dependent variable similar to Equation (1) and the other variables as independent variables.

This will allow the determination of the impact of travel demand on economic growth and tourist expenditure, respectively.

If there is long-run relationship between the variables, the ARDL model can be written in the ECM form by grouping the variables by levels in Equation (4), (5) and (6) :

$$\Delta \ln PAX_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2k} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta ECT_{i-1} + v_{1it} \quad (4)$$

$$\Delta \ln GROWTH_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2k} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta ECT_{i-1} + v_{1it} \quad (5)$$

$$\Delta \ln TOUR_{it} = \alpha_i + \sum_k \phi_{1k} \Delta \ln PAX_{it-k} + \sum_p \phi_{2k} \Delta \ln GROWTH_{it-p} + \sum_q \phi_{3q} \Delta \ln TOUR_{it-q} + \delta DEG + \theta ECT_{i-1} + v_{1it} \quad (6)$$

where  $ECT_{i-1}$  is the error correction term. A negative and significant coefficient  $\theta$  (speed of adjustment) denotes how fast a deviation from the long-run equilibrium is eliminated following changes in each variable. In the same fashion, the ECM form equations can be written for GROWTH and TOUR when they are each treated as dependent variables.

Pesaran et al. (1995, 1999) present two approaches to estimate non-stationary dynamic panels with the assumption that the parameters are heterogeneous across groups: the mean-group (MG) and the pooled mean-group (PMG) estimators. PMG assumes that the long-run coefficients are equal across the panels while the short-run effects are allowed to differ across the groups. The MG estimator allows for heterogeneity of all the parameters. A Hausman test can be used to decide whether MG or PMG should be used. If the parameters are homogenous, the PMG estimates are more efficient than the MG's (Pesaran et al., 1999).

#### 4.2.1.2 Diagnostic Testing

To check the fitness of the model, diagnostic tests are conducted to assess for correlation, heteroskedasticity and stability. The Breusch-Godfrey test was developed by Breusch (1978) and Godfrey (1978). The test is used to examine autocorrelation errors in a regression model. The Breusch-Pagan test is used to test for heteroskedasticity in a linear regression model (Godfrey, 1978; Breusch-Pagan, 1979) and the cumulative method (CUMSUM) developed by Page (1954) is used to check the stability of long-run and short-run coefficient estimates.

#### 4.2.2 Primary data

Primary analysis refers to the analysis of data or information based on the principles of the scientific method, a theory of investigation first developed by John Stuart Mill in the nineteenth century in his book *Philosophy of the Scientific Method* (Driscoll, 2011). SEM will be adopted to test the hypothesis of this study, as it is a useful way of identifying the relationships between the various variables (Hox & Bechger, 1999).

##### 4.2.2.1 Survey

The primary data was collected by using face-to-face written questionnaires at various airports to provide answers to RQ2 and RQ3. This survey method allows the interviewer to accurately screen the respondents to match the set criteria. It also allows the interviewer to clarify the questions for more information and to achieve a higher response rate. The primary data collected will be analysed using quantitative data analysis approaches to determine customer behaviour differences between the two countries in the study. These quantitative data analysis techniques allow researchers to draw meaningful results from a large body of quantitative data. This provides the means of separating unnecessary factors that often obscure the main qualitative findings. These techniques also allow researchers to analyse the results in numerical terms to a specified degree of confidence (Abeyasekera, 2005).

##### 4.2.2.2 Demographics and sample size of primary data

The sample size of this study is determined based on Godden's (2004) formula for an infinite population. Godden's infinite population sampling method states that

sampling from an infinite population is handled by regarding the population as represented by a distribution.

$$SS = \frac{Z^2 \times (p) \times (1-p)}{C^2}$$

SS = Sample Size

Z = Z-value (e.g., 1.96 for a 95% confidence level).

P = Population proportion (expressed as decimal)

C = Confidence interval, expressed as a decimal (e.g., .04 = +/- 4 percentage points).

The Z-values for the confidence levels are:

1.645 = 90% confidence level;

1.96 = 95% confidence level; and

2.576 = 99% confidence level.

As such, in cases where the population size is greater than 50,000 with a significant confidence level of 95% and assume  $p=0.5$  (maximum variability), a sample size of 385 air passengers (combining both international and domestic air passengers) should be surveyed in each country.

$$SS = \frac{(1.96)^2 \times (0.5) \times (1-0.5)}{(0.05)^2}$$

SS = 385 respondents

In addition, according to Nunnally (1967) and Schreiber et al. (2006), an adequate sampling size for SEM is ten observations per indicator variable. Based on the above, a sample size of 400 air passengers will be surveyed in each country. The data was collected using questionnaires at the main international airports in Vientiane (Laos) and Yangon (Myanmar). The questions and response options were created based on the literature review of air transport and consumer behaviour and from the researcher's understanding of the topic.

#### 4.2.2.3 Sampling criteria



The questionnaire was written in English and translations were available in the local language. To better understand the consumer behaviour in each country, the questionnaires were distributed to local air passengers only. In other words, Laotian passengers were surveyed at Wattay International Airport while Burmese passengers were surveyed at Yangon International Airport. The respondents were selected at different airports via quota sampling and convenience sampling within this targeted sub-group. The sampling criteria for targeting local air passengers is to ensure that the data collected represent the purchasing behaviours of passengers in each country.

#### **4.2.2.4 Measurement and questionnaire design**

The measurement scales used in this study are selected from the airline service quality attributes of Kalemba et al. (2017). To measure customer satisfaction, the study has adopted the five Likert type scales ranging from 1 (strongly disagree) to 5 (strongly agree). The five point format was chosen because it reduces the respondent's frustration level which improves the precision and the data quality (Babakus & Mangold, 1992).

The questionnaire comprised three parts (Appendix A). The first part consists of general questions about the respondent's air travel experience. The second part comprises measurement items on the respondent's service satisfaction based on the nine variables guided by the service quality attributes from previous studies. The measurement items consist of six items for price and perceived value, five items for the loyalty program, six items for product uniqueness, four items for durability, five items for ease of convenience, five items for promotion, six items for service interaction, four items for brand credibility and four items for reliability and dependability. The third part contained general demographic questions. To increase the response rate, the questionnaire was translated from English into Laotian (Appendix B) and Burmese (Appendix C) by a professional translator. Minor modifications were made to maintain the meaningfulness of some questions in the questionnaire. A pre-test was carried out to assess the clarity of the questions before the data collection process took place.

#### 4.2.2.5 Data collection

To assess the conceptual model and to test the hypotheses, this study adopted the quantitative method using structured self-administered questionnaires. With the assistance of airport officials, 400 questionnaires were distributed using quota sampling and convenience sampling method in the public areas of the departure and arrival levels at Yangon International Airport, Myanmar over five days from 8 to 12 January 2020 and Wattay International Airport, Laos over seven days between 23 and 30 January 2020. To understand purchase behaviour in each country, the respondents were chosen based on their nationality. A total of 385 questionnaires with complete information in Laos were usable for further data analysis, giving a valid response rate of 96.25%, and a total of 376 questionnaires with complete information in Myanmar were used for further analysis, giving a valid response rate of 94%.

#### 4.2.2.6 Primary data analysis

The SEM for analysis was built using version 23 of the Statistical Package of Social Science's Analysis of Moment Structure program. The SEM methodology of Wright (1921) is used in psychology, social science and behavioural science researchers to evaluate the structural relations between variables (Hox & Bechger, 1999; McMullan & Gilmore, 2008; Kaplan, 2001). SEM is a technique to analyse structural relationships between the measured variables and latent constructs through the use of factor analysis and multiple regression analysis (Stein, Morris & Nock, 2017). There are some advantages of using SEM compared with other traditional multivariate methods suggested by Novikova et al. (2013). These advantages include (1) it explicitly specifies measurement error; (2) it permits the estimation of latent variables from the observed variables; and (3) the model testing allows the data fitness to be evaluated. Several studies have applied the SEM in assessing the quality of air transport services in different countries, including Simsek and Demirbag (2017, Turkey), Farooq et al. (2018, Malaysia), and Carvalho and Medeiros (2020, Brazil). The SEM process consists of two steps. The first validates the measurement

model by using confirmatory factor analysis and the second fits the structural model by examining its validity (Blanche, Durrheim & Painter, 1999).

#### 4.2.2.7 Confirmatory factor analysis

Confirmatory factor analysis is a step to verify the measurement quality of the latent constructs applied in the SEM. It is used to accept or decline the measurement theory (Mueller & Hancock, 2001). Cronbach's alpha was developed by Lee Cronbach in 1951 to measure the internal consistency and reliability of the instrument (Cronbach, 1951). Cronbach alpha values of 0.70 or higher indicate an acceptable internal consistency (Taber, 2018). The average variance extracted (AVE) and composite reliability coefficient (CR) are used to assess the convergent validity and the quality of the measure (Hair et al., 2009). The acceptable range for AVE is 0.50 or above and CR is 0.70 or above (Fornell & Larcker, 1981). Discriminant validity was evaluated by comparing the square root of AVE with the squared correlations for each construct. If the square root of AVE value is higher than the coefficient of the correlation between factors then that is evidence of discriminant validity (Fornell & Larcker, 1981).

#### 4.2.2.8 Model fitting

Model fit is examined by three fitness categories – absolute fit measure, increment fit measure and parsimonious goodness of fit (Hair et al., 2009). The absolute fit measure includes the Chi-squared test ( $X^2$ ), the root means square error of approximation (RMSEA), the standardised root mean square residual (SRMR) and the goodness-of-fit statistic (GFI). The increment fit measure comprises the adjusted goodness-of-fit statistic (AGFI), the normed fit index (NFI), the comparative fit index (CFI), the increment fit index (IFI) and the relative fit index (RFI). The parsimonious goodness of fit includes the parsimonious norms fit index (PNFI) and the parsimony goodness of fit index (PGFI). Bollen (1989) and Kline (2011) recommend that the Chi-squared test ( $X^2$ ), the root means square error of approximation (RMSEA), the goodness-of-fit statistics (GFI, CFI and IFI) and the standardised root mean square residual (SRMR) should be reported to achieve a model fit. The acceptable thresholds for the suggested index follow. The preferred

Chi-squared test ( $X^2/df$ ) value is less than 3 (Kline, 2011, Norberg et al., 2007). The ideal value of the GFI should be 0.90 or above (Hooper, Coughlan & Mullen, 2008) but between 0.8 and 0.9 is considered acceptable (Baumgartner & Homburg, 1996; Chen, Wu & Huan, 2011; Doll, Xia & Torkzadeh, 1994; Knight et al., 1992). The RMSEA below 0.05 demonstrates a good fit (Kim et al., 2016), although the value between 0.05 and 0.08 is considered acceptable (Hooper, Coughlan & Mullen, 2008; Hox & Bechger, 1999). The standard threshold value of the AGFI, NFI, CFI, IFI and RFI should be more than 0.90 (Cunha & Manuela, 2012; Hooper, Coughlan & Mullen, 2008), although some researchers consider that within the range of 0.80 to 0.90 is acceptable as a marginal fit (Baumgartner & Homburg, 1996; Chen, Wu & Huan, 2011; Knight et al., 1992). The PNFI and PGFI value of 0.50 or above is a good fit (Hooper, Coughlan & Mullen, 2008). According to Hair et al. (2014), items with insufficient loading are to be removed from the model and Bryne (2016) and Fabrigar et al. (1999) recommended items with a loading value less than 0.50 should be removed.

The recommended model should have at least three items per factor (Hair et al., 2009). Some researchers have argued that fewer than three items per factor will demonstrate equally high validity (Kline, 2011; Worthington & Whittaker, 2006), especially for consumer studies using SEM (Petrescu, 2013). According to Kline (2011), Worthington and Whittaker (2006) and Yong and Pearce (2013), it is possible to retain a factor with two items as long as the items are highly correlated with  $r > 0.70$  and are relatively uncorrelated with other variables. The studies of Bergkvist and Rossiter (2007) and Drolet and Morrison (2001) debated whether the single-item measure demonstrated an equally high predictive validity as did the multiple-items measure.

To summarise, the three research questions will be answered by using different approaches. RQ1 uses the panel ADRL model, and RQs 2 and 3 use the SEM approach. Table 4.1 provides a summary of the methodologies used in this study.

**Table 4.1:** Summary of the methodologies applied to the research questions.

<b>Research Question</b>	<b>Data Type</b>	<b>Analysis Methodology</b>
RQ1	Secondary Data	Panel Autoregressive Distributed Lag Model
RQ2	Primary Data	Structural Equation Modelling
RQ3	Primary Data	Structural Equation Modelling

### 4.3 Summary

This chapter explains the methodology of the study. This study uses different methodologies to examine the views of air transport consumers in Southeast Asian countries. Secondary data collected from the World Bank is used to examine the relationship between air transport demand, economic growth and international inbound tourist numbers by the panel ARDL dynamic framework. The analysis incorporates a consideration of the impact of air transport deregulation in the CLMV countries and integrates the short- and long-run effects with an ECM.

To further understand the purchase behaviour of air passengers, primary data were collected by surveying passengers at Wattay and Yangon International Airports. The questions and response options were created based on a review of the literature of the air transport industry and consumer behaviour, and from the researcher's understanding of the topic. The primary data were analysed by SEM to identify the key elements influencing the customer's purchase behaviour for air transport services.

## Chapter 5

# Air transport development, economic growth and inbound tourism in Cambodia, Laos, Myanmar and Vietnam

### Chapter outline

This chapter gives the results of the panel ARDL analysis on air transport development, economic growth and inbound tourism in Cambodia, Laos, Myanmar and Vietnam, the CLMV countries.

### 5.1 Results

Air transport plays an important role in a country's economic development. Because of post-colonial government attitudes, the civil air transportation industry in the CLMV countries did not develop from the 1960s onwards when compared with other countries in the Asia-Pacific region. The CLMV countries share a similar history in their political systems, development of their aviation industries and their economic development in general. This chapter illustrates the relationship between air transport development, economic growth and inbound tourism in the CLMV countries. There is bi-directional Granger causality between air passenger traffic and economic growth in the long run. Inbound tourism has a significant impact on air transport demand in the long run, but no significant relationship exists between the two in the short run. Air transport deregulation has had a positive and significant impact on traffic volumes. Further reforms are still needed before such an outcome can occur in Myanmar though.

The data for the variables – travel demand or air passenger traffic (PAX), economic growth rate (GROWTH) and inbound tourist expenditure (TOUR) – come from the World Bank database. The deregulation dummy variable (DEG) denotes the time period during which significant reforms in a country's air transport sector occurred. Based on the tourism and economic data for the CLMV countries between 1995 and 2018 (24 years), Table 5.1 provides information about the variables to be used in the estimation procedure.

**Table 5.1:** The descriptive statistics

Variable	Obs.	Mean	SD	Min.	Max.
PAX	96	3,648,615	8,370,663	112,500	47,000,000
GROWTH	96	0.077	0.024	0.001	0.138
TOUR (USD, million)	88	1640	2310	5200	10,100
DEG	88	0.385	0.489	0	1

## 5.2 Panel unit root test result

Panel unit root tests were first used to check the stationary properties of the dataset. There are multiple panel unit root tests available, including but not limited to the Dickey-Fuller test (Dickey & Fuller, 1979), the Phillips-Perron test (Phillips & Perron, 1988), the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test (Kwiatkowski et al., 1992), the Zivot-Andrews test (Zivot & Andrews, 1992), and the Im, Pesaran and Shin (IPS) test (Im, Pesaran & Shin, 2003). The CLMV countries are heterogeneous between each other (Das, 2013), therefore the IPS test was applied in this study.

**Table 5.2:** The panel unit root test (IPS)

Variables	Deterministic	IPS Test	
		Level	First difference
lnPAX	Individual intercept	3.0113	-5.1994***
	Individual intercept and trend	-0.3036	-4.7118***
lnGROWTH	Individual intercept	-2.4212***	-6.2480***
	Individual intercept and trend	-1.2342	-5.5864***
lnTOUR	Individual intercept	0.9538	-2.9877***
	Individual intercept and trend	0.6887	-2.5814***

Note: \*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

The results of the IPS test in Table 5.2 suggest that all of the variables are stationary when the first differences are taken. Next is the estimation of the ARDL model but first there is a need to select the optimal lag length. AIC suggests an ARDL (2 2 2) model while BIC and HQ prefer ARDL (1 1 1). Considering the small sample size, the ARDL (1 1 1) model was adopted.

## 5.3 Mean-group and pooled mean-group estimators

Table 5.3 reports the results of the MG and PMG estimators with the dependent variable being lnPAX. The choice between MG and PMG estimation also depends on the Hausman test which has a Chi-squared statistic value of ( $\chi^2(2) = 2.3$ ). The null hypothesis can thus be rejected at 1%, implying the acceptance of the long-run

homogeneity assumption. Therefore, the PMG estimation is more consistent than the MG estimation and thus is reported in this chapter.

**Table 5.3:** Panel ARDL model results (dependent variable: lnPAX)

Variable	Coefficient	Std Error	t-Statistic	Prob.
<b>Long-Run Equation</b>				
lnGROWTH	0.252648	0.116585	2.167070	0.0338
lnTOUR	0.301358	0.114998	2.620541	0.0109
<b>Short-Run Equation</b>				
ECT	-0.222536	0.060288	-3.691197	0.0005
D(lnGROWTH)	0.193781	0.122127	1.586723	0.1174
D(lnTOUR)	0.056323	0.107283	0.524990	0.6013
DEG	0.272173	0.105132	2.588859	0.0118
C	1.739437	0.316868	5.489472	0.0000
Mean dependent	0.114656	SD dependent variable		0.220952
SE of regression	0.195264	Akaike info criterion		-0.517987
Sum squared residue	2.516446	Schwarz criterion		0.101347
Log likelihood	44.791430	Hannan-Quinn criterion		-0.268473

#### 5.4 Panel ARDL model results

The results in Table 5.3 show that in the long run both economic growth and tourist expenditures have a significant and positive effect on travel demand at a significance level of 5%. A 1% increase in the GDP growth rate would lead to a 0.25% increase in air passenger traffic. A 1% increase in tourist expenditure results in an increase in air passenger traffic by 0.3%. The negative of the error correction terms suggests that there are significant long-run relationships between economic growth, tourist expenditure and travel demand. The convergence speed value is between 0 and -1, which implies that a deviation from the long-run equilibrium can be restored with an adjustment period of about 4.5 years (1/0.22). Interestingly, the short-run effects of economic growth and tourist expenditure on passenger traffic are not statistically significant. As expected, air transport deregulation has a significant and positive impact on travel demand. On average, deregulation contributes to an increase of 27% in air passenger traffic, which is considered substantial in magnitude.

To better understand the impact of economic growth and tourist expenditure on travel demand at a country level, Table 5.4 reports the short-run effects of these



variables using the PMG procedure. Except for Myanmar, air transport deregulation has had a significant impact on the level of traffic flow. This is not surprising as Myanmar was the last of the four countries to open its air transport sector to private and foreign investors. The effect of deregulation is more pronounced in Cambodia as the liberalisation move led to an increase in travel demand of almost 53%. Compared with the other three countries, Cambodia has a reputation as one of the easiest places to obtain air operator certificates for new airlines. To attract external capital to support the development of the air transport industry, the Cambodian government has eased the foreign airline ownership restrictions and allowed foreign carriers to establish and operate businesses in the country (ADB, 2014; CAPA, 2014; Dennis, 2018). Therefore, it is not surprising to see that the deregulation impact is larger in Cambodia than in other countries.

**Table 5.4:** Short-run country specific results (PMG)

Country	ECT(-1)	D(lnGROWTH)	D(lnTOUR)	DEG
Cambodia	-.384***	-0.049	-0.231	0.528***
Laos	-.245***	0.486***	0.258*	0.326***
Myanmar	-.141	0.395	0.173	0.026
Vietnam	-.120***	0.298	0.025	0.210***

Tables 5.5 and 5.6 report the panel ARDL model results when economic growth and tourist expenditure are used as dependent variables, respectively. Table 5.5 shows that in the long and short term, passenger traffic has a significant and positive impact on economic growth. However, inbound tourist expenditure and deregulation have no significant impact on economic growth. The results in Table 5.6 suggest that air travel demand and economic growth have no significant impact on inbound tourist expenditure. From Tables 5.4, 5.5 and 5.6 the Granger causality flows between these variables can be inferred. There is a bi-directional Granger causality between air travel demand and economic growth in both the short and long run, and uni-directional Granger causality running from inbound tourism to passenger traffic in the long run, but not the other way around.

**Table 5.5:** Panel ARDL model results (dependent variable: lnGROWTH)

Variable	Coefficient	Std Error	t-Statistic	Prob.
<b>Long-Run Equation</b>				
lnPAX	0.196038	0.077155	2.540829	0.0134
lnTOUR	-0.130382	0.104628	-1.246147	0.2171
<b>Short-Run Equation</b>				
ECT(-1)	-0.601605	0.113845	-5.284398	0.0000
D(lnPAX)	0.525563	0.251847	2.086837	0.0408
D(lnTOUR)	0.244955	0.345841	0.708287	0.4813
DEG	-0.055128	0.062490	-0.882191	0.3809
C	-1.720024	0.381153	-4.512688	0.0000

**Table 5.6:** Panel ARDL model results (dependent variable: lnTOUR)

Variable	Coefficient	Std Error	t-Statistic	Prob.
<b>Long-Run Equation</b>				
lnGROWTH	-0.772843	0.483717	-1.597719	0.1149
lnPAX	-0.360505	0.231908	-1.554520	0.1248
<b>Short-Run Equation</b>				
ECT(-1)	-0.151471	0.128604	-1.177814	0.2431
D(lnGROWTH)	0.291633	0.147385	1.978713	0.0520
D(lnPAX)	-0.209474	0.201868	-1.037680	0.3032
DEG	0.318587	0.378195	0.842387	0.4026
C	3.464085	2.741822	1.263424	0.2109

### 5.5 Diagnostic Test

The ADRL model was tested for correlation, heteroskedasticity and stability. Table 5.7 shows the results of the Breusch-Godfrey serial correlation LM test. The results confirmed that there is no presence of serial correlation since the probability of chi-square 0.9587 (dependent variables: lnPAX), 0.1904 (dependent variables: lnGROWTH) and 0.9325 (dependent variables: lnTOUR) are greater than 0.05 thus failing to reject the null hypothesis and conclude that there is no presence of serial correlation.

**Table 5.7:** Breusch-Godfrey serial correlation LM test results.

Dependent variable: lnPAX

F-statistic	0.039203	Prob. F(2,79)	0.9616
Obs*R-squared	0.084277	Prob. chi-square(2)	0.9587
Log likelihood	35.31821	Hannan-Quinn criteria	-0.620487
F-statistic	0.015681	Durbin-Watson statistic	2.013249
Prob(F-statistic)	0.999907		

Dependent variable: lnGROWTH

F-statistic	1.603244	Prob. F(2,78)	0.2078
Obs*R-squared	3.316791	Prob. chi-square(2)	0.1904
Log likelihood	2.199438	Hannan-Quinn criteria	0.160287
F-statistic	0.641298	Durbin-Watson statistic	2.027519
Prob(F-statistic)	0.668858		

Dependent variable: lnTOUR

F-statistic	0.065038	Prob. F(2,78)	0.9371
Obs*R-squared	0.139849	Prob. chi-square(2)	0.9325
Log likelihood	-36.28296	Hannan-Quinn criteria	1.076535
F-statistic	0.026015	Durbin-Watson statistic	2.019258
Prob(F-statistic)	0.999676		

Null hypothesis: No serial correlation at up to 2 lags

Table 5.8 shows the results of the Breusch-Pagan-Godfrey heteroskedasticity test. The results have demonstrated that the residuals are homoscedastic as the p-value 0.6480 (dependent variables: lnPAX), 0.7101 (dependent variables: lnGROWTH) and 0.2618 (dependent variables: lnTOUR) are more than  $\alpha=0.05$ , thus failing to reject the null hypothesis and the model does not consist of a heteroscedasticity problem at 5% significance level.

**Table 5.8:** Breusch-Pagan-Godfrey heteroskedasticity test results.

Dependent variable: lnPAX

F-statistic	0.534665	Prob. F(3,80)	0.6598
Obs*R-squared	1.650521	Prob. chi-square(3)	0.6480
Scaled explained SS	17.66913	Prob. chi-square(3)	0.0005
Log likelihood	57.68339	Hannan-Quinn criteria	-1.216903

F-statistic	0.534665	Durbin-Watson statistic	2.061614
Prob(F-statistic)	0.659830		

Dependent variable: lnGROWTH

F-statistic	0.445527	Prob. F(3,80)	0.7211
Obs*R-squared	1.380349	Prob. chi-square(3)	0.7101
Scaled explained SS	29.87762	Prob. chi-square(3)	0.0000
Log likelihood	-65.79656	Hannan-Quinn criteria	1.708355
F-statistic	1.332241	Durbin-Watson statistic	2.061724
Prob(F-statistic)	0.269762		

Dependent variable: lnTOUR

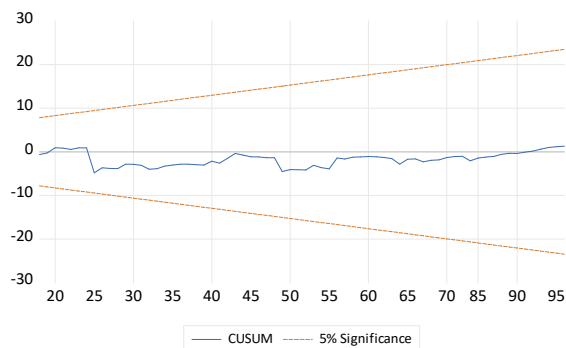
F-statistic	1.332241	Prob. F(3,80)	0.2698
Obs*R-squared	3.996878	Prob. chi-square(3)	0.2618
Scaled explained SS	27.57491	Prob. chi-square(3)	0.0000
Log likelihood	-41.44948	Hannan-Quinn criteria	1.128662
F-statistic	0.445527	Durbin-Watson statistic	2.038141
Prob(F-statistic)	0.721130		

Null hypothesis: Homoskedasticity

Figure 5.1, 5.2 and 5.3 presents the CUSUM test result for the residuals. All of the recursive residuals are lying within the critical bounds at the 5% level of significance. This is implying that all coefficients in the ARDL models are stable.

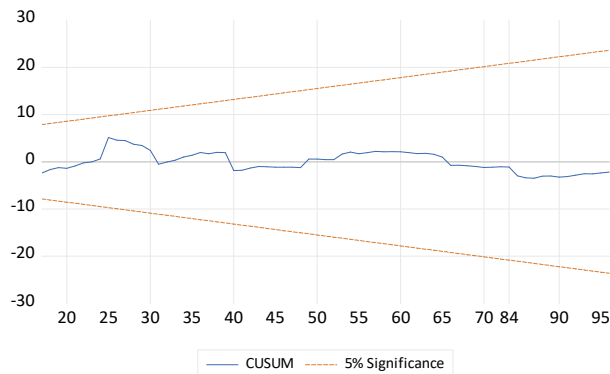
**Figure 5.1:** Plot of the cumulative sum of the recursive residuals.

(Dependent variable: lnPAX)



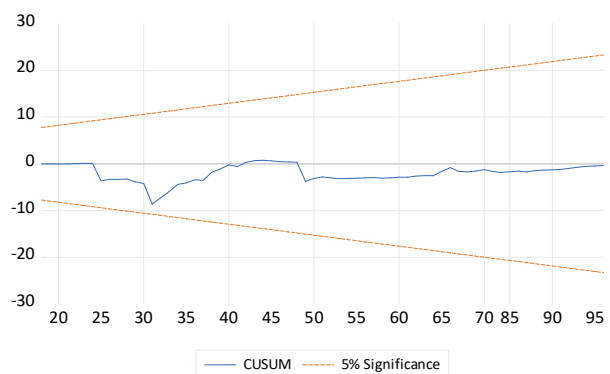
**Figure 5.2:** Plot of the cumulative sum of the recursive residuals.

(Dependent variable: lnGROWTH)



**Figure 5.3:** Plot of the cumulative sum of the recursive residuals.

(Dependent variable: lnTOUR)



## 5.6 Discussion

This study examined the short- and long-run relationships between economic growth, air transport demand and inbound tourism in the CLMV countries who share similar economic development characteristics, including their civil air transport industries. The findings of this study confirm the existence of bi-directional Granger causality between air transport development and economic growth. Inbound tourism has a significant impact on air travel demand in the long run but there is not a significant relationship in the short run. Air transport deregulation has had a positive and significant impact on traffic volumes, particularly in Cambodia. However, significant effects of deregulation in Myanmar have not been observed.

It is apparent that air transport is a very important contributor to the economic growth of a country. Investment in air transport infrastructure must keep pace with a country's economic development for sustainable growth to be achieved. This includes investment in both air traffic management and airport facilities to increase capacity and improve aviation safety, as well as investment in innovative technologies to enhance passenger experiences. These investments will allow major airports in the region to enhance connectivity and build connecting hubs, which consumers value and which further benefits the economy.

It is clear that further liberalisation of air transport can boost travel demand, which in turn can stimulate economic growth. Air transport policies in the CLMV countries are still relatively restrictive as their national carriers are under full or majority ownership of the national government, which has created an unlevel playing field for private airlines. Further relaxation of airline ownership restrictions can increase competition and thereby improve airline efficiency. Removing foreign ownership restrictions also reduces subsidies of national airlines, which will free up government finances for more socially productive uses.

## **Chapter 6**

### **The impact of airline service quality on customer satisfaction and repurchase intention: Laos**

#### **Chapter outline**

This chapter outlines and discusses the results of the factors influencing airline service quality and its impact on customer satisfaction in Laos using SEM. The chapter includes the respondents' background details, the data validity testing procedure and the model fitting outcomes.

#### **6.1 Introduction**

The Laos air transport industry has experienced rapid growth over the last decade and it has become an important contributor to the country's economic growth. This chapter examines the factors influencing airline service quality and its impact on customer satisfaction. To understand the purchase behaviour of the Laotian, the respondents were chosen based on their nationality. Four hundred questionnaires were distributed to Laotian air passengers at Wattay International Airport, Vientiane over seven days from 23 to 30 January 2020. Quota sampling and convenience sampling method were used in the public area of the departure and arrival levels. A total of 385 questionnaires with complete information were usable for further data analysis, giving a valid response rate of 96.25%. This chapter reports the findings of the impact of service quality and customer satisfaction on customer repurchase intention in Laos's air transport market analysed using SEM. The modelling evaluated nine common measures of air service quality and purchase motivational factors: price and perceived value (PV), loyalty program (LP), product uniqueness (PU), durability (DU), ease of convenience (EC), promotions (PR), service interaction (SI), brand credibility (BR) and reliability and dependability (RD).

#### **6.2 Sample profile**

The descriptive analysis of the demographic profile shows that the respondents consist of 51.7% males and 48.3% females. The majority of the respondents are in

the 20–29 year age group (56.2%). More than 84.9% of the respondents graduated from college or university. Most respondents are employees of companies and earn less than USD500 per month. Table 6.1 provides detailed information on the respondents’ profiles.

**Table 6.1:** The demographic profile of the survey respondents in Laos. (Source: author’s survey)

<b>Variables</b>	<b>Criteria</b>	<b>Frequency</b>	<b>%</b>
<b>Gender</b>	Male	199	51.7
	Female	186	48.3
<b>Age (years)</b>	18–19	30	7.8
	20–29	216	56.2
	30–39	114	29.6
	40–49	18	4.6
	50–59	5	1.2
	60+	2	0.6
<b>Education</b>	Primary	3	0.8
	High school	27	7
	College/university	327	84.9
	Graduate school	28	7.3
<b>Occupation</b>	Employee of a for-profit company or business or of an individual, for wages, salary or commissions	118	30.6
	Employee of a not-for-profit, tax-exempt or charitable organisation	44	11.4
	Government employee (city, country etc.)	82	21.3
	Self-employed in own, not incorporated business, professional practice or farm	38	9.9
	Self-employed in own incorporated business, professional practice or farm	30	7.8
	Working without pay in a family business or farm	11	2.9
	A student	57	14.8
	Retired	2	0.5
	Unable to work	3	0.8
<b>Monthly income (USD)</b>	Less than 500	149	38.7
	501–1000	112	29.1
	1001–1500	64	16.6
	1501–2000	31	8.1
	More than \$2000	29	7.5

### 6.3 Travel experience

More than half of the respondents are travelling for personal reasons (51.7%). The majority of the respondents chose to fly to save time (87.3%). Economy class passengers were 62.9% of the respondents. A large group of respondents purchased



their ticket online through online travel agencies and airline websites (46%) and directly from the airline’s office (41.3%). Many of them purchased their ticket 1–2 days before the departure date (43.6%). Over half of the respondents purchased their ticket using their own funds (58.5%). Table 6.2 provides information on the respondents’ travel experience.

**Table 6.2:** The travel experience of the respondents in Laos. (Source: author’s survey)

<b>Variables</b>		<b>Frequency</b>	<b>%</b>
<b>Purpose of travel</b>	Business	113	29.4
	Leisure	70	18.2
	Personal – visiting family and friends	199	51.7
	Other	3	8
<b>Reason choose to fly</b>	Flying saves time	336	87.3
	No other mode of transport	39	10.1
	The fare is comparable to other modes of transportation	10	2.6
<b>Class of service</b>	First	68	17.7
	Business	75	19.5
	Economy	242	62.9
<b>Travel frequency over the last 12 months</b>	0 time	56	14.5
	1–2 times	164	42.6
	3–4 times	94	24.4
	5–6 times	28	7.3
	6 times or more	43	11.2
<b>Ticket purchasing location</b>	Airline sales office	159	41.3
	Travel agencies	48	12.5
	Online travel agencies	100	26
	Airline’s website (including apps)	77	20
	Other	1	0.3
<b>Time purchasing ticket</b>	On the departure date	18	4.7
	1–2 days before the departure date	168	43.6
	3–6 days before the departure date	86	23.3
	7–15 days before the departure date	90	23.4
	Over 15 days before the departure date	23	6
<b>Finance resource for ticket</b>	Paid by employer	98	25.5
	Paid by yourself	225	58.5
	Family member support	61	15.8
	Frequent flier plan award	1	0.3

#### 6.4 Measurement model

Based on the reliability and validity analysis, several items were removed from the model due to low loading. After removing the low loading constructs, the items at each construct included three for price and perceived value, loyalty program, ease of convenience, promotion, service interaction and brand credibility, and two for

product uniqueness, durability, and reliability and dependability. Figure 6.1 shows the measurement model.

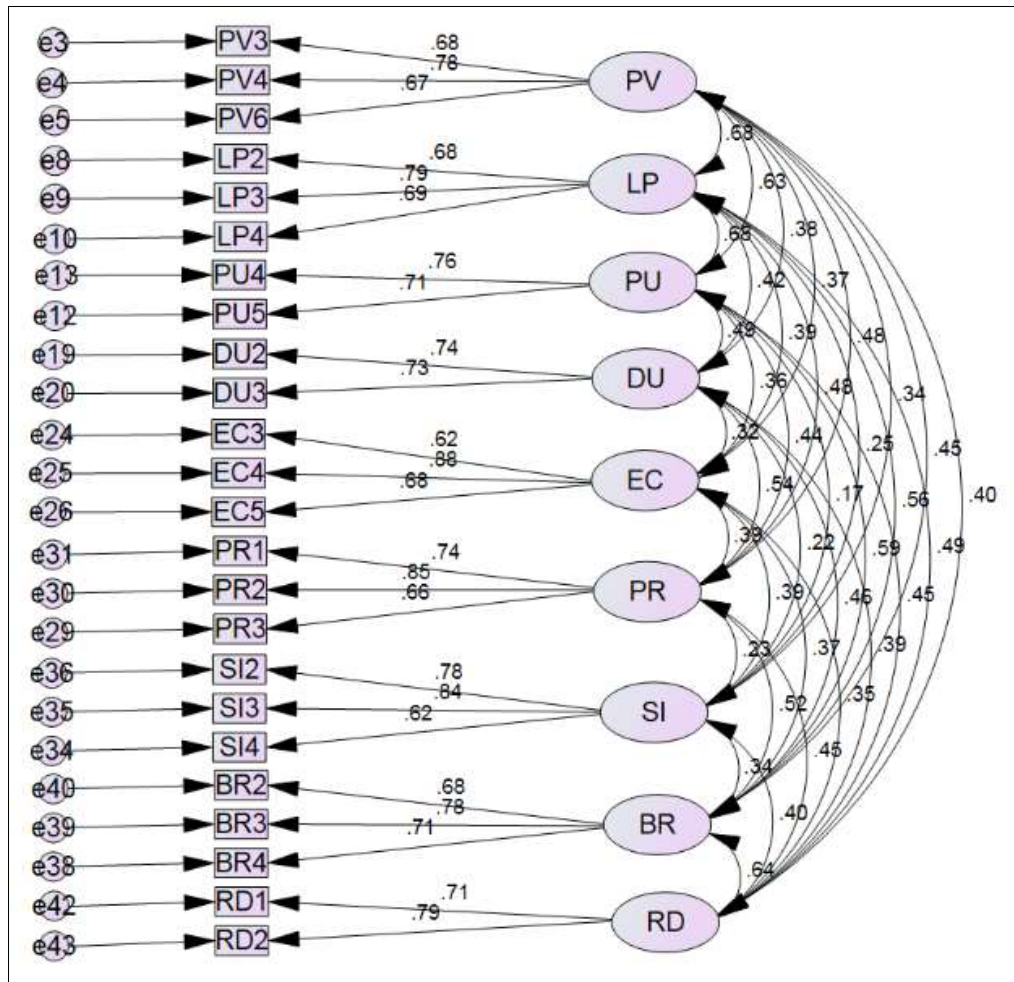


Figure 6.1: The measurement model, Laos. (Source: author's survey)

### 6.5 Reliability and validity test

The CR test was used to examine the reliability and validity of the model. CR was used to assess the internal consistency of the constructs (Netemeyer, Bearden & Sharma, 2003). The minimum CR value is 0.7 or above which indicates that the variances in the construct are reliable (Lewis, Templeton & Byrd, 2004). The convergent validity is applied to assess the correlation between the variables in the construct. The Cronbach's alpha of all the instruments are above the recommended value of 0.7, all AVE estimates are above the recommended value of 0.5 and the CR values are all above 0.7. These have indicated adequate convergences and the

validity of the nine constructs in the model. The result of the measurement model shows that all items demonstrate good measurement properties. The correlation matrix shows that all items correlated positively with each other and the correlation coefficient is significant at  $P < 0.01$ . The criterion was met by all of the variables in the study as no correlation exceeds the square root of the average variance extracted. Table 6.3 provides details result of the CR test and Table 6.4 gives the result of the correlation matrix.

**Table 6.3:** Reliability and validity analysis. (Source: author’s survey)

Variable	Mean	SD	Load	$\alpha$
<b>Price and perceived value</b>				0.740
PV3 – The price I’ve paid for my ticket is worth the value	3.200	0.973	0.68	
PV4 – I was planning to drive or take the bus/train to this destination but decided to fly because of the fare	3.210	0.996	0.78	
PV6 – I was not planning to take this trip at all, but decided to go because of the fare	3.110	1.003	0.67	
<b>Loyalty program</b>				0.735
LP2 – Frequent flyer program attracts me for return purchase from the same airline	3.280	0.912	0.68	
LP3 – I am fully aware of the benefits that I will get from the frequent flyer membership	3.190	1.011	0.79	
LP4 – I have chosen this airline due to the additional benefits I receive as a member of the airline’s frequent flyer program	3.150	1.370	0.69	
<b>Product uniqueness</b>				0.704
PU4 – I have chosen this airline due to the aircraft preference	3.239	1.005	0.76	
PU5 – I have chosen this airline because of the entertainment onboard	3.106	1.044	0.71	
<b>Durability</b>				0.732
DU2 – Choosing an airline operating a young fleet makes me feel safe	3.340	0.899	0.74	
DU3 – I avoid airlines with a record of fatal incidents	3.481	0.955	0.73	
<b>Ease of convenience</b>				0.755
EC3 – Multiple channels for ticket purchase is important for me	3.590	0.983	0.62	
EC4 – I can contact the staff easily when I need assistance	3.400	1.046	0.88	
EC5 – The airline website/mobile application is making the process easier	3.500	1.066	0.68	
<b>Promotion</b>				0.781
PR1 – I am concerned about the discounts offered by the airline	3.280	0.892	0.74	
PR2 – I was attracted by the airline advertisements	3.320	.896	0.85	
PR3 – The airline offered more benefits compared with other airlines	3.320	0.946	0.66	
<b>Service interaction</b>				0.784
SI1 – The cabin crew are friendly and having good language skills is important	3.420	0.890	0.78	

SI2 – The pilots keeping me informed is important	3.520	0.857	0.84	
SI3 – I receive prompt attention from this airline’s employees	3.430	0.854	0.62	
<b>Brand credibility</b>				0.762
BR 2 – Flying with a leading airline demonstrates my status	3.320	0.965	0.68	
BR3 – The airline supporting society encourages my choice of airline	3.270	1.018	0.78	
BR4 – I have chosen the airline based on its nationality	3.210	1.017	0.71	
<b>Reliability and dependability</b>				0.72
RD1 – I have chosen the airline based on its flight on-time departure/arrival performance	3.430	0.882	0.71	
RD2 – I know the airline has a disruption plan giving me protection during irregular operations	3.360	0.911	0.79	
<b>Customer satisfaction</b>				0.848
CS1 – I am satisfied with the airline	3.564	0.885	0.90	
CS2 – I have made the right decision with my airline choice for today’s flight	3.577	0.938	0.82	
<b>Repurchase intention</b>				0.841
RI1 – I would continuously fly with this airline	3.208	0.926	0.87	
RI2 – I consider this airline my first choice for air transport	3.392	0.878	0.83	

**Table 6.4:** Inter-construct correlations

		CR	AVE	1	2	3	4	5	6	7	8	9
1	PV	0.754	0.507	<b>0.712</b>								
2	LP	0.764	0.521	0.542**	<b>0.721</b>							
3	PU	0.702	0.541	0.473**	0.505**	<b>0.735</b>						
4	DU	0.701	0.540	0.275**	0.317**	0.338**	<b>0.734</b>					
5	EC	0.775	0.540	0.314**	0.314**	0.273**	0.259**	<b>0.734</b>				
6	PR	0.796	0.569	0.397**	0.416**	0.351**	0.418**	0.366**	<b>0.754</b>			
7	SI	0.794	0.566	0.291**	0.227**	0.125**	0.169**	0.356**	0.209**	<b>0.752</b>		
8	BR	0.768	0.525	0.349**	0.440**	0.442**	0.342**	0.305**	0.437**	0.277**	<b>0.721</b>	
9	RD	0.721	0.564	0.305**	0.358**	0.323**	0.278**	0.270**	0.342**	0.331**	0.482**	<b>0.750</b>

Note: \*\* Correlation is significant at the 0.01 level (2-tailed).

The diagonal elements (bolded) represent the square root of AVE values. The diagonal should be larger than any other corresponding row or column entry in order to support discriminant validity.

The load of the remaining variables ranges between 0.62 and 0.88 which indicates acceptable convergent validity. To assess for good fit of the model, the standard model fit indices were applied (Hair et al., 2009). Table 6.5 and Figure 6.2 show details of the outcomes. The test result demonstrates that the model is an acceptable fit based on the following measures:  $X^2$  (467.175, N = 385), CIM/df = 2.163, GFI = 0.910, RMSEA = 0.055, AGFI = 0.875, NFI = 0.871, CFI = 0.925, IFI = 0.927, RFI = 0.836, PNFI = 0.682 and PGFI = 0.724.

## 6.6 The structural model

A structural model analyses the relationship between service quality, customer satisfaction and repurchase intention. The model consists of nine exogenous variables (price and perceived value, loyalty program, product uniqueness, durability, ease of convenience, promotions, service interaction, brand credibility and reliability and dependability) which form a second-order latent variable (service quality) and two endogenous variables (customer satisfaction and repurchase intention). This model indicated an acceptable fit with  $X^2$  (737.518, N= 385), CIM/df = 2.182, GFI = 0.881, RMSEA = 0.055, AGFI = 0.857, NFI = 0.840, CFI = 0.905, IFI = 0.906, RFI = 0.821, PNFI = 0.751 and PGFI = 0.733. Table 6.5 provides the details of the model fitting of the SEM.

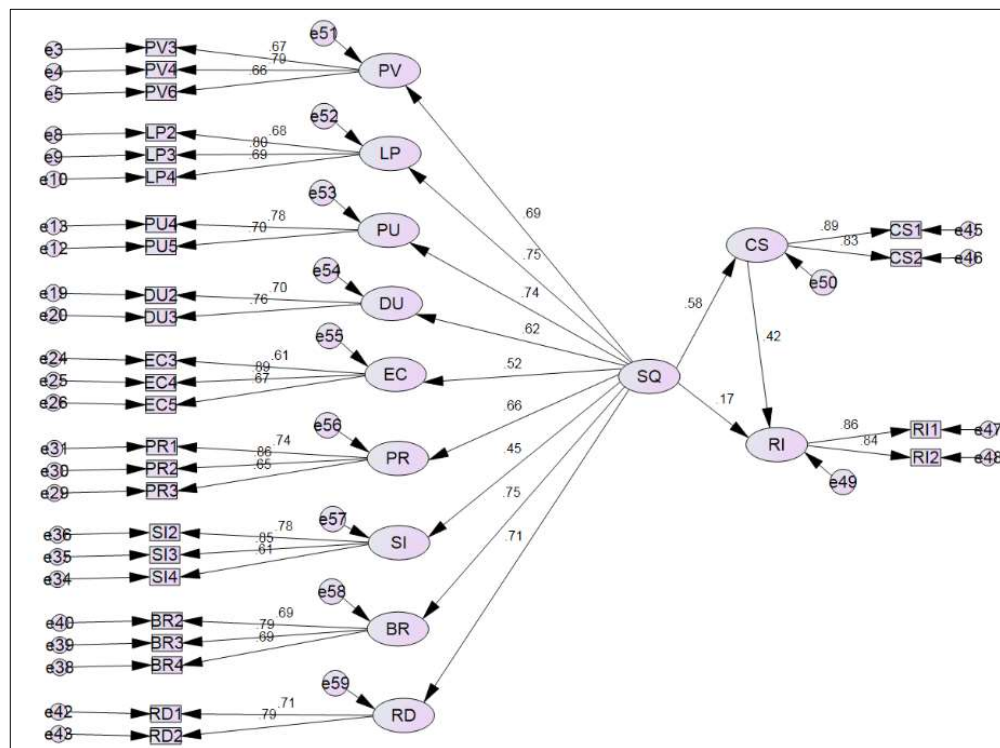
The structural model integrated the knowledge of past research and reconfirmed the relationship between service quality, customer satisfaction and repurchase intention. The constructs are assessed by the linear sequence from service quality to satisfaction. All ratios (except SQ→RI) are significant with a  $P < 0.001$ . Each of the latent variables contributes to the level of service quality which influences the level of customer satisfaction and repurchase intention.

**Table 6.5:** Goodness of fit indices for the measurement model and the SEM

Fit	Recommended Values	Measurement Model Value	SEM Value
<b>Absolute fit measure</b>			
Chi-Squared test ( $X^2/df$ )	< 3 (Kline, 2011; Norberg et al., 2007)	2.163 (good fit)	2.182 (good fit)
Root mean square error of approximation (RMSEA)	< <b>0.05 – Ideal</b> (Kim et al., 2016) <b>0.05–0.08 – Acceptable</b> (Hooper, Coughlan & Mullen, 2008; Hox & Bechger, 1999)	0.055 (good fit)	0.055 (good fit)
Goodness-of-fit statistic (GFI)	> <b>0.9 – Ideal</b> (Hooper, Coughlan & Mullen, 2008) <b>0.8–0.9 – Acceptable</b> (Baumgartner & Homburg, 1996; Chen, Wu & Huan, 2011; Doll, Xia & Torkzadeh, 1994; Knight et al., 1992)	0.91 (good fit)	0.88 (acceptable fit)
<b>Increment fit measure</b>			
Adjusted goodness-of-fit statistic (AGFI)	> <b>0.9 – Ideal</b> (Cunha & Manuela, 2012; Hooper, Coughlan & Mullen, 2008)	0.875 (acceptable fit)	0.857 (acceptable fit)
Normed-fit index (NFI)		0.871 (acceptable fit)	0.840 (acceptable fit)
Comparative fit index (CFI)	<b>0.8–0.9 – Acceptable</b>	0.925 (good fit)	0.905 (good fit)
Increment fit index (IFI)	(Baumgartner & Homburg,	0.927 (good fit)	0.906 (good fit)

Relative fit index (RFI)	1996; Chen, Wu & Huan, 2011; Knight et al., 1992)	0.836 (acceptable fit)	0.821 (marginal fit)
<b>Parsimonious goodness of fit</b>			
Parsimonious norms fit index (PNFI)	> 0.5 (Hooper, Coughlan & Mullen, 2008)	0.682 (good fit)	0.751 (good fit)
Parsimonious goodness of fit index (PGFI)		0.724 (good fit)	0.733 (good fit)

The SEM results show that loyalty program and brand credibility make the greatest contribution to service quality (standardised beta = 0.75), followed by product uniqueness (standardised beta = 0.74), reliability and dependability (standardised beta = 0.71), price and perceived value (standardised beta = 0.69), promotion (standardised beta = 0.66), durability (standardised beta = 0.62), ease of convenience (standardised beta = 0.52) and service interaction (standardised beta = 0.45) with the least contribution. The lambda coefficient relationship between service quality and customer satisfaction is positive and significant (standardised beta = 0.58). Figure 6.2 provides the details of the results.



**Figure 6.2:** The structural model, Laos. (Source: author’s survey)

A comparable result of positive and significant was also defined for the relationship between customer satisfaction and repurchase intention (standardised beta = 0.42).

However, the relationship between service quality and repurchase intention is shown to be positive, but not significant. Therefore, the main proposed hypotheses in the study were supported (except H.12). Table 6.6 provides the details of the results.

**Table 6.6:** The structural model result (path coefficients/standardised regression weights)

Structural Path	Variable	Standardised Coefficient	t-Value	Squared Multiple Correlation
Service quality	Price and perceived value	0.69	8.964***	0.478
Service quality	Loyalty program	0.75	8.271***	0.560
Service quality	Product uniqueness	0.74	9.051***	0.543
Service quality	Durability	0.62	7.794***	0.387
Service quality	Ease of convenience	0.53	7.810***	0.275
Service quality	Promotion	0.66	8.088***	0.441
Service quality	Service interaction	0.45	6.502***	0.201
Service quality	Brand credibility	0.75	9.490***	0.567
Service quality	Reliability and dependability	0.71	8.248***	0.510
Service quality	Customer satisfaction	0.58	8.363***	0.363
Service quality	Repurchase intention	0.17	2.367	0.289
Customer satisfaction	Repurchase intention	0.42	5.566***	-

Note: \*\*\*statistically significant level at  $P < 0.001$

## 6.7 Discussion

The Laotian air transport industry has become increasingly important to the country's economic growth. The increasing number of Laotian domestic and outbound tourists has created growth opportunities for the Laotian air transport industry. To achieve success in the competitive and challenging airline industry, improved service quality and an increased level of customer satisfaction are crucial (Cento et al., 2013). This study aimed to examine the service quality determinants influencing customer satisfaction in the Laotian air transport industry.

A different view was generated on the measurement of service quality dimensions. Rather than applying the common SERVQUAL and SEREPERF model, based on the development of the industry, alternative industry-specific measurement scales should be deployed (Ladhari, 2008; Yarimoglu, 2014). Even though the AIRQUAL model was specifically developed to measure the service quality of the airline industry (Bari et al., 2001), it was criticised due to a lack of validity with incomplete developments (Alotaibi, 2015). As a result, this study attempted to propose a comprehensive model by examining the determinants selected from the attributes

generated by Kalembe et al. (2017) which cover wider dimensions of service quality in the airline industry.

The findings of the study indicated that all proposed hypotheses (except one) are strongly supported and the service quality of air transport industry in Laos is influenced by the selected variables studied.

The findings of the study identified that brand credibility, product uniqueness and loyalty program are the three top dimensions in shaping the level of service quality in the Laotian air transport industry, followed by reliability and dependability, price and perceived value, promotion, durability, ease of convenience and, lastly, service interaction.

A positive significant relationship between service quality and customer satisfaction was identified. The findings indicated that if an airline pays attention to service quality, a Laotian traveller will be more willing to fly. The airlines should focus on building a positive brand reputation for their company to develop trust among Laotian customers. The airlines need to develop brand equity by focusing on brand loyalty to create a differential effect in customers' minds in motivating customer purchase and repurchase. Visual brand elements such as the company logo and uniform design of the frontline employees attract a customer's attention. An article by Baumann (2016) indicated that uniforms can be viewed as a competitive tool to promote visual brand consistency for airline companies, which then influences the level of trust between the customer and the airline. Selling uniqueness by offering differentiated products is an important strategy to attract Laotian customers. Promoting the local culture and investing in onboard technology with in-flight wi-fi, in-seat power and in-flight entertainment were considered an expedient strategy to make an airline stand out in the Asian market (Ku, 2016). Reliability and dependability also play a key role in contributing to the level of service quality. The study findings on this is in line with a previous study on the relationship between customer satisfaction and airline on-time performance (Suzuki, 2000). The study observed that passengers are more likely to switch airlines once they had



experienced flight delays. Price and perceived value had a positive and significant effect on the service quality, thus confirming the study of Khraim, Al-Jabaly and Aymen (2014) who found that there is a significant effect of perceived value and perceived price fairness on the customer satisfaction level of airline passengers. Promotion also had a positive and significant relationship with service quality, which validates the studies of Firdausy and Idawati (2017) and Pi and Huang (2011). A similar result was identified with durability with a positive and significant contribution to service quality. That result is comparable to a previous study indicating that perceived safety has a significantly greater impact on service quality for pleasure travellers than those who travel for business purposes (Ringle, Sarstedt & Zimmermann, 2011). The result indicated that airline safety played an important role in building customer satisfaction for leisure travellers. Ease of convenience positively and significantly influences service quality, which is consistent with the result of a study on customer satisfaction with the automating of the system of LCCs in Malaysia by Yusra and Agus (2018). Service interaction also demonstrated a positive and significant impact on the service quality. This has validated the studies of Ali, Dey and Filieri (2015), Babbar and Koufteros (2008) and Saha and Theingi (2009), indicating that individual attention, helpfulness and courtesy from the airline representative has a positive impact on customer satisfaction levels. However, service interaction contributed least to service quality, which confirmed the result of the Société Internationale de Télécommunications Aéronautique's 2016 Passenger IT Trends Survey. That study concluded that contemporary air passengers favour technology over human interaction (Société Internationale de Télécommunications Aéronautique, 2016). The results for Laos has shown evidence that service quality has a positive and statistically significant effect on customer satisfaction and on repurchase intentions in Laos' air transportation markets. However, the result demonstrated that service quality had no significant direct effect on a customer's repurchase intention.

## **Chapter 7**

### **The impact of airline service quality on customer satisfaction and repurchase intention: Myanmar**

#### **Chapter outline**

This chapter outlines and discusses the results of the factors influencing airline service quality and its impact on customer satisfaction in Myanmar using SEM. The chapter includes the respondents' background details, the data validity testing method and the model fitting results.

#### **7.1 Introduction**

The Myanmar air transport industry has experienced rapid growth over the last decade and it has become an important contributor to the country's economic growth. This chapter examined the factors influencing airline service quality and its impact on customer satisfaction. To understand the purchase behaviour of the Burmese, the respondents were chosen based on their nationality. Four hundred questionnaires were distributed to Burmese air passengers at Yangon International Airport, Myanmar over five days between 8 and 12 January 2020. The quota sampling and convenience sampling method were used in the public area of the departure and arrival levels. A total of 376 questionnaires with complete information are usable for further data analysis giving a valid response rate of 94%. This chapter reveals the findings of the impact of service quality and customer satisfaction on customer repurchase intention in Myanmar's air transport industry by SEM. The modelling evaluated nine common measures of air service quality and purchase motivational factors: price and perceived value (PV), loyalty program (LP), product uniqueness (PU), durability (DU), ease of convenience (EC), promotions (PR), service interaction (SI), brand credibility (BR) and reliability and dependability (RD).

## 7.2 Sample profile

The demographic profile of the respondents shows 41.2% were male and 58.8% were female. Many of the respondents were from the 30–39 year age group (38.5%). The majority of the respondents have graduated from college or university (48.9%). Most respondents are an employee of companies with a monthly income between USD501 and USD1000. Table 7.1 provides information about the respondents' profile.

**Table 7.1:** The demographic profile of respondents to the survey in Myanmar.  
(Source: author's survey)

Variables	Criteria	Frequency	%
<b>Gender</b>	Male	155	41.2
	Female	221	58.8
<b>Age (years)</b>	18–19	19	5.05
	20–29	91	24.2
	30–39	145	38.5
	40–49	89	23.5
	50–59	25	6.6
	60+	7	1.9
<b>Education</b>	Primary	7	1.9
	High school	56	14.9
	College/university	184	48.9
	Graduate school	129	34.3
<b>Occupation</b>	Employee of a for-profit company or business or of an individual, for wages, salary or commissions	138	36.7
	Employee of a not-for-profit, tax-exempt or charitable organisation	30	8
	Government employee (city, country etc.)	49	13
	Self-employed in own, not incorporated business, professional practice or farm	38	10.1
	Self-employed in own incorporated business, professional practice or farm	41	10.9
	Working without pay in a family business or farm	36	9.6
	A student	33	8.8
	Retired	8	2.1
	Unable to work	3	0.8
	<b>Monthly income (USD)</b>	Less than 500	86
501–1000		151	40.2
1001–1500		96	25.5
1501–2000		29	7.7
More than \$2000		14	3.7

### 7.3 Travel experience

The majority of the respondents were travelling for business purposes (38%). Most of them chose to take air transport for time-saving reasons (74.5%). More than 88% of the respondents were flying economy class. A large group of respondents purchased their ticket online (35.1%), directly from an airline's office (33%) and through travel agencies (31.9%). Most respondents purchased their ticket 1 - 2 days (31.4%) and 3 - 6 days (21.6%) before the departure date and used their own funds to buy their ticket. Table 7.2 gives details on the respondents' travel experience.

**Table 7.2:** The travel experiences of the respondents in Myanmar. (Source: author's survey)

Variables		Frequency	%
<b>Purpose of travel</b>	Business	143	38
	Leisure	131	34.8
	Personal – visiting family and friends	90	23.9
	Other	12	3.2
<b>Reason choose to fly</b>	Flying saves time	280	74.5
	No other mode of transport	72	19.1
	The fare is comparable to other modes of transportation	24	6.4
<b>Class of service</b>	First	5	1.3
	Business	38	10.1
	Economy	333	88.6
<b>Travel frequency over the last 12 months</b>	0 time	49	13
	1–2 times	139	37
	3–4 times	140	37.2
	5–6 times	39	10.1
	6 times or more	10	2.7
<b>Ticket purchasing location</b>	Airline sales office	124	33
	Travel agencies	120	31.9
	Online travel agencies	84	22.3
	Airline's website (including apps)	48	12.8
	Other	0	0
<b>Time purchasing ticket</b>	On the departure date	38	10.1
	1–2 days before the departure date	118	31.4
	3–6 days before the departure date	119	31.6
	7–15 days before the departure date	77	20.5
	Over 15 days before the departure date	24	6.4
<b>Finance resource for ticket</b>	Paid by employer	117	31.7
	Paid by yourself	158	42
	Family member support	96	25.5
	Frequent flier plan award	3	0.8

### 7.4 The measurement model

Based on the reliability and validity analysis, several items were removed from the model due to low loading. After removing the low loading constructs, the items at each construct included three for price and perceived value, loyalty program, product uniqueness, ease of convenience, promotion, service interaction, brand credibility, and reliability and dependability, and two for durability. Figure 7.1 shows the measurement model.

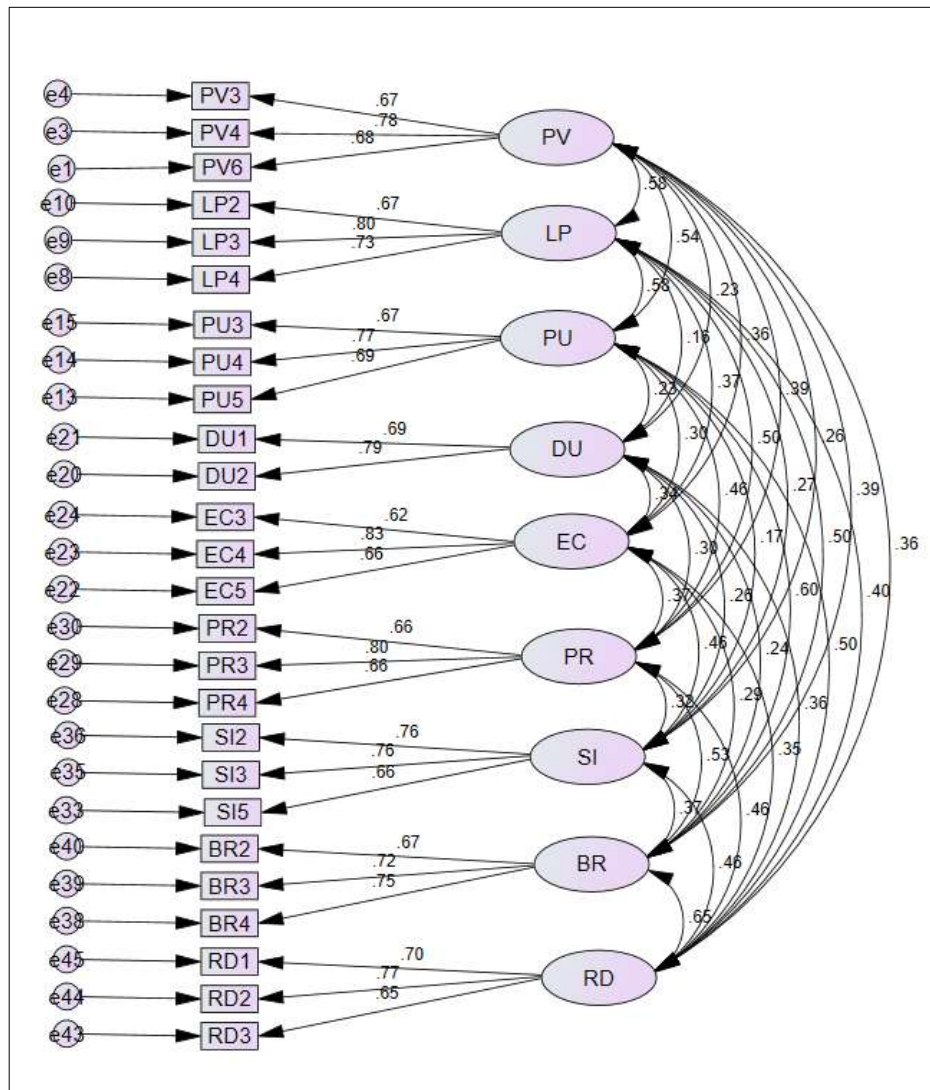


Figure 7.1: The measurement model, Myanmar. (Source: author's survey)

## 7.5 Reliability and validity test

The Cronbach's alpha of all the instruments are above the recommended value of 0.70, and the AVE of all the measurements are above the acceptable value of 0.50. Furthermore, the value of the CR is also above 0.70. The test has indicated adequate convergences and validity of the nine constructs have been achieved. The results of the measurement model show that all items demonstrated good measurement properties. Out of 36 possible inter-factor correlations, 34 were significant with a correlation coefficient significant at  $P < 0.01$ , which demonstrates a significant relationship between the latent variables. The criterion was met by all of the variables in the study as no correlation exceeds the square root of the average variance extracted. Table 7.3 provides the detailed results of the CR test and Table 7.4 gives the result of the correlation matrix.

**Table 7.3:** Reliability and validity analysis. (Source: author's survey)

Variable	Mean	SD	Load	$\alpha$
<b>Price and perceived value</b>				0.749
PV3 – The price I've paid for my ticket is worth the value	3.32	0.962	0.67	
PV4 – I was planning to drive or take the bus/train to this destination, but decided to fly because of the fare	3.22	0.978	0.78	
PV6 – I was not planning to take this trip at all, but decided to go because of the fare	3.13	1.00	0.68	
<b>Loyalty program</b>				0.773
PV2 – Frequent flyer program attracts me for return purchase from the same airline	3.32	0.839	0.67	
PV3 – I am fully aware of the benefits that I will get from the frequent flyer membership	3.19	0.975	0.80	
PV4 – I have chosen this airline due to the additional benefits I receive as a member of the airline's frequent flyer program	3.16	0.979	0.73	
<b>Product uniqueness</b>				0.736
PU3 – I have chosen this airline because it offered better inflight meal and beverage services	3.34	0.915	0.67	
PU4 – I have chosen this airline due to the aircraft preference	3.32	0.933	0.77	
PU5 – I have chosen this airline because of the entertainment onboard	3.16	0.952	0.69	
<b>Durability</b>				0.701
DU1 – I have chosen this airline based on the airline's safety record	3.45	0.926	0.69	
DU2 – Choosing an airline operating a young fleet makes me feel safe	3.40	0.824	0.79	
<b>Ease of convenience</b>				0.733
EC3 – Multiple channels for ticket purchase is important for me	3.64	0.883	0.62	
EC4 – I can contact the staff easily when I need assistance	3.56	0.950	0.83	
EC5 – The airline website/mobile application is making the process easier	3.54	0.876	0.66	
<b>Promotion</b>				0.742

PR2 – I was attracted by the airline advertisements	3.36	0.843	0.76	
PR3 – The airline offered more benefits compared with other airlines	3.37	0.883	0.80	
PR4 – I was attracted by online content from the airlines (YouTube, Google, etc.)	3.26	0.860	0.66	
<b>Service quality</b>				<b>0.765</b>
SI2 – The cabin crew are friendly and having good language skills is important	3.46	0.828	0.76	
SI3 – The pilots keeping me informed is important	3.5	0.820	0.76	
SI5 – The airline employees are always willing to help me	3.43	0.867	0.66	
<b>Brand credibility</b>				<b>0.759</b>
BR2 – Flying with a leading airline demonstrates my status	3.23	0.928	0.67	
BR3 – The airline supporting the society encourages my choice of airline	3.27	0.984	0.72	
BR4 – I have chosen the airline based on its nationality	3.18	0.955	0.75	
<b>Reliability and dependability</b>				<b>0.742</b>
RD1 – I have chosen the airline based on its flight on-time departure/arrival performance	3.45	0.821	0.70	
RD2 – I know the airline has a disruption plan giving me protection during irregular operations	3.38	0.827	0.77	
RD3 – I have chosen the airline for its good baggage handling record	3.46	0.902	0.65	
<b>Customer satisfaction</b>				<b>0.826</b>
CS1 – I am satisfied with the airline	3.57	0.892	0.81	
CS2 – I have made the right decision with my choice for today’s flight	3.58	0.946	0.90	
CS3 – I am familiar with this airline	3.61	0.987	0.66	
<b>Repurchase intention</b>				<b>0.838</b>
RI1 – I would continuously fly with this airline	3.22	0.926	0.68	
RI2 – I consider this airline my first choice for air transport	3.4	0.877	0.88	

**Table 7.4: Inter-construct correlations**

		CR	AVE	1	2	3	4	5	6	7	8	9
<b>1</b>	PV	0.754	0.507	<b>0.712</b>								
<b>2</b>	LP	0.778	0.541	0.459**	<b>0.735</b>							
<b>3</b>	PU	0.754	0.506	0.426**	0.445**	<b>0.711</b>						
<b>4</b>	DU	0.709	0.550	0.142**	0.100	0.137**	<b>0.741</b>					
<b>5</b>	EC	0.749	0.503	0.291**	0.295**	0.233**	0.273**	<b>0.709</b>				
<b>6</b>	PR	0.751	0.504	0.309**	0.390**	0.369**	0.183**	0.293**	<b>0.710</b>			
<b>7</b>	SI	0.771	0.530	0.207**	0.228**	0.136**	0.210**	0.394**	0.255**	<b>0.728</b>		
<b>8</b>	BR	0.757	0.510	0.295**	0.387**	0.447**	0.144**	0.241**	0.414**	0.310**	<b>0.714</b>	
<b>9</b>	RD	0.750	0.502	0.276**	0.134**	0.078	0.312**	0.239**	0.205**	0.366**	0.254**	<b>0.708</b>

Note: \*\* Correlation is significant at the 0.01 level (2-tailed).

The diagonal elements (bolded) represent the square root of AVE values. The diagonal should be larger than any other corresponding row or column entry in order to support discriminant validity.

The lowest loadings were removed and the loading of the remaining variables ranged between 0.62 and 0.83 which indicated an acceptable convergent validity. Table 7.3 and Figure 7.1 show details of the outcome. To assess for model good fit, the standard model fit indices were applied (Hair et al., 2009). The test results for the model showed an acceptable fit with the following measures:  $X^2$  (461.335, N = 376),

CIM/df = 1.748, GFI = 0.914, RMSEA = 0.045, AGFI = 0.886, NFI = 0.870, CFI = 0.939, IFI = 0.940, RFI = 0.839, PNFI = 0.706 and PGFI = 0.762.

## 7.6 The structural model

To identify the relationship between service quality, customer satisfaction and repurchase intention, a structural model was developed. The nine exogenous variables (price and perceived value, loyalty program, product uniqueness, durability, ease of convenience, promotions, service interaction, brand credibility and reliability and dependability) form second-order latent variable (service quality) which are linked to two endogenous variables (customer satisfaction and repurchase intention). The model fit analysis indicated that  $X^2$  (821.037,  $N = 376$ ), CIM/df = 1.936, GFI = 0.876, RMSEA = 0.050, AGFI = 0.855, NFI = 0.823, CFI = 0.905, IFI = 0.906, RFI = 0.806, PNFI = 0.751 and PGFI = 0.749. The result has demonstrated an acceptable model. Table 7.5 provides the details of the model fitting of the SEM.

The constructs are assessed by the linear sequence from service quality to satisfaction. All ratios are significant with a  $P < 0.001$  (except  $SQ \rightarrow RI$  which is significant with  $P$  value  $< 0.002$ ) (Table 7.6). This demonstrates that all of the latent variables contribute to the level of service quality which stimulates the level of customer satisfaction and repurchase intention.

**Table 7.5:** Goodness of fit indices for the measurement model and the SEM

Fit	Recommended Values	Measurement Model	SEM
<b>Absolute fit measure</b>			
Chi-squared test ( $X^2/df$ )	< 3 (Kline, 2011; Norberg et al., 2007)	1.748 (good fit)	1.936 (good fit)
Root mean square error of approximation (RMSEA)	< <b>0.05 – Ideal</b> (Kim et al., 2016) <b>0.05–0.08 – Acceptable</b> (Hooper, Coughlan & Mullen, 2008; Hox & Bechger, 1999)	0.045 (good fit)	0.05 (good fit)
Goodness-of-fit statistic (GFI)	> <b>0.9 – Ideal</b> (Hooper, Coughlan & Mullen, 2008) <b>0.8–0.9 – Acceptable</b> (Baumgartner & Homburg, 1996; Chen, Wu & Huan, 2011; Doll, Xia & Torkzadeh, 1994; Knight et al., 1992)	0.914 (good fit)	0.876 (acceptable fit)
<b>Increment fit measure</b>			
Adjusted goodness-of-fit statistic (AGFI)	> <b>0.9 – Ideal</b>	0.886 (Acceptable fit)	0.855 (Acceptable fit)
Normed fit index (NFI)		0.870 (Acceptable fit)	0.823 (Acceptable fit)



Comparative fit index (CFI)	(Cunha & Manuela, 2012; Hooper, Coughlan & Mullen, 2008) <b>0.8–0.9 – Acceptable</b> (Baumgartner & Homburg, 1996; Chen, Wu & Huan, 2011; Knight et al., 1992)	0.939 (good fit)	0.905 (good fit)
Increment fit index (IFI)		0.940 (good fit)	0.906 (good fit)
Relative fit index (RFI)		0.839 (Acceptable fit)	0.806 (Acceptable fit)
<b>Parsimonious goodness of fit</b>			
Parsimonious norms fit index (PNFI)	> <b>0.5</b> (Hooper, Coughlan & Mullen, 2008)	0.706 (good fit)	0.751 (good fit)
Parsimonious goodness of fit (PGFI)		0.762 (good fit)	0.749 (good fit)

The result from the SEM analysis has identified that brand credibility has the highest contribution to the service quality of airlines in Myanmar (standardised beta = 0.75) followed by reliability and dependability (standardised beta = 0.74), product uniqueness (standardised beta = 0.69), loyalty program (standardised beta = 0.68), promotion (standardised beta = 0.67), price and perceived value (standardised beta = 0.60), ease of convenience and service interaction shared an equal rating (standardised beta = 0.52) and, lastly, durability (standardised beta = 0.41). The results indicate that service quality is influencing the level of customer satisfaction (standardised beta = 0.46) leading to repurchase intention (standardised beta = 0.24) and service quality influences the level of repurchase intention (standardised beta = 0.22). The main proposed hypotheses in the study were supported. The detail results are displayed in Figure 7.2 and Table 7.6.

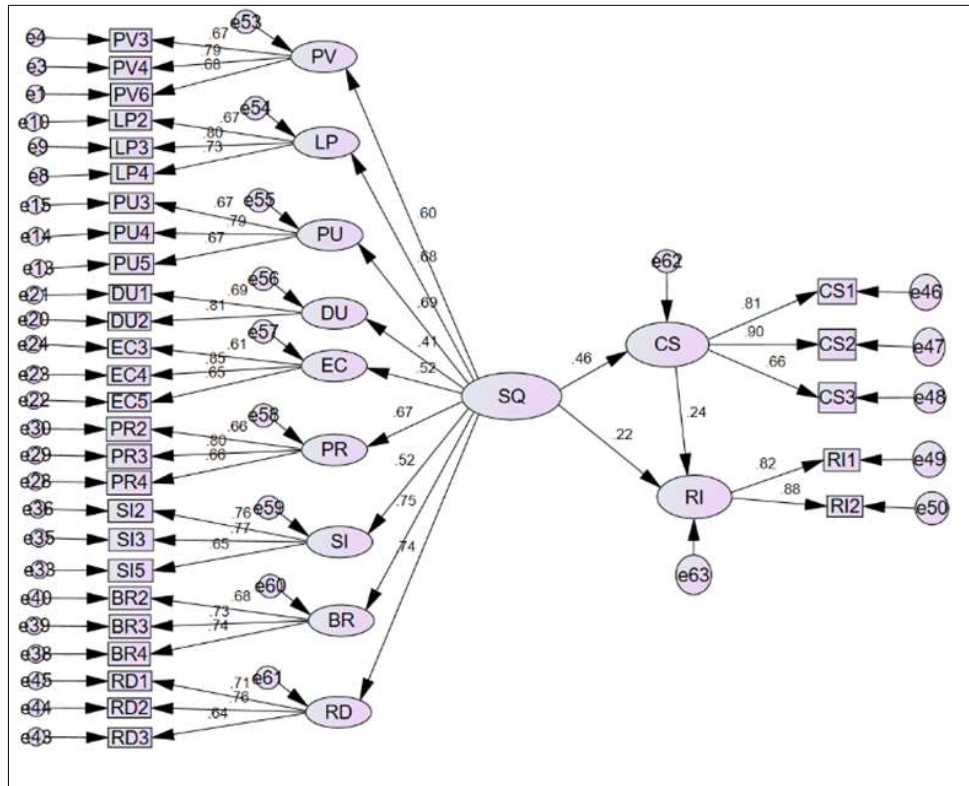


Figure 7.2: The structural model, Myanmar. (Source: author's survey)

Table 7.6: The SEM results (path coefficients/standardised regression weights)

Structural Path	Variable	Standardised Coefficient	t-Value	Squared Multiple Correlation
Service quality	Price and perceived value	0.60	6.623***	0.358
Service quality	Loyalty program	0.68	6.804***	0.465
Service quality	Product uniqueness	0.70	6.623***	0.482
Service quality	Durability	0.41	5.263***	0.170
Service quality	Ease of convenience	0.52	6.210***	0.272
Service quality	Promotion	0.67	6.503***	0.454
Service quality	Service interaction	0.52	5.986***	0.267
Service quality	Brand credibility	0.75	6.898***	0.566
Service quality	Reliability and dependability	0.74	6.696***	0.545
Service quality	Customer satisfaction	0.46	5.818***	0.363
Service quality	Repurchase intention	0.22	3.049**	0.157
Customer satisfaction	Repurchase intention	0.24	3.622***	-

Note: \*\*\*statistically significant level at  $P < 0.001$ , \*\* statistically significant level at  $P < 0.002$

### 7.7 Discussion

After the civilian government was elected in Myanmar in 2012, policies were introduced to promote foreign investment. The introduction of the Foreign Investment Law allowed foreign investors to establish an air transport company in a joint venture with a local private entity (British Chamber of Commerce, 2017). This

has created a competitive market environment in the air transport industry in Myanmar. The industry is relatively fragmented compared with neighbouring countries because of past political issues (Hein, 2020). With an increase in the number of people travelling, both domestically and outbound, understanding their needs will help airlines in Myanmar achieve profitability.

This study took a different approach compared with previous research. Rather than applying the standard SERVQUAL, SEREPERF and AIRQUAL models, this study focuses on specific items of service quality to examine its relationship with customer satisfaction and repurchase intention. The proposed model has selected service quality elements from the list of Kalemba et al. (2017). The findings of this study have identified that the nine exogenous variables (price and perceived value, product uniqueness, service interaction, durability, loyalty program, brand credibility, reliability and dependability, ease of convenience and promotion) possess positive and significant relationships with the two endogenous variables (customer satisfaction and repurchase intention).

The findings in the study indicate that all of the proposed hypotheses are persuasively supported and service quality in the air transport industry in Myanmar is influenced by the selected variables. The study has identified that brand credibility has the highest contribution to service quality in airlines in Myanmar followed by reliability and dependability, product uniqueness, loyalty program, promotion, price and perceived value, ease of convenience, service interaction and, lastly, durability. The results also indicate that service quality is influencing the level of customer satisfaction leading to repurchase intention. Furthermore, service quality is also directly influencing the repurchase intentions of Burmese air passengers.

Developing an admired brand is an important marketing strategy for airlines in Myanmar. This helps to differentiate an airline against its competitors, making the company stand out and helps passengers to make their choice. The results of the study support the findings of Jeng (2016) that consumer purchase intention is influenced by an increase of airline brand credibility when it offers consumers decision convenience. The finding is also aligned with other research on service

industries in Myanmar, including the telecommunications industry (Swe, 2019) and the food services sector (Win, 2016). Reliability and dependability were important elements contributing to service quality and the result is identical to the result of the study by Taylor (1994). Operating on-time services with minimum delays and cancellations contributes positively and significantly to service quality which promotes customer satisfaction (Taylor, 1994). In order to stand out from competitors, offering a differentiated product can create competitive advantages. The result of this study has indicated that reliability and dependability are significant for customer satisfaction and repurchase intention. Many airlines in the ASEAN region are using different strategies to enhance the customer experience level. The strategy of offering identical product has proven to be successful (Henderson, 2019). Several airlines in Myanmar are operating membership reward programs. The results of the study indicate that a loyalty program was a positive and significant influence on the service quality level. Similar findings were revealed in Myanmar's telecommunications and hospitality sectors: more than 80% of telecommunications service providers rely on loyalty program strategies for business growth (Swe, 2019). Promotion was observed to have a positive impact on the level of service quality. Developing multiple communication channels was an important strategy to enhance customer relationships. Previous research in this context in the nearby countries of Thailand and Indonesia demonstrated comparable findings with promotion being an important factor in customer satisfaction in the LCC sector (Qin & Foosiri, 2012; Saputri & Sari, 2018). Price and perceived value also impact on service quality leading to customer satisfaction and repurchase intention. The results of the study demonstrate that price and perceived value have a moderate positive relationship influencing the service quality of airlines in Myanmar. A similar result was found in Myanmar's food retail and telecommunications sectors (Awi & Chaipoopirutana, 2014; Naing & Chaipoopirutana, 2014). Ease of convenience and service interaction is indicating a positive moderate relationship toward service quality. Using technology and online purchasing is relatively new to the Myanmar consumer market. The results of this study corresponds to the findings of previous research on e-commerce influencing consumer purchase in Myanmar (Hla, 2018). The service interaction between an airline employee and a customer is contributing to service

quality and leading to customer satisfaction and repurchase intention. This finding matches the result of a study on Taiwanese consumer behaviour, where courteous frontline employees contribute to service quality (Chen & Chang, 2005). A similar outcome was identified in Myanmar's commercial banking sector where employee engagements are positively contributing to the banks' outstanding services (Lwin, Liana & Nusari, 2019). Durability demonstrates a significant and sufficient relationship to service quality. However, it is the least important variable compared with the other factors. Aviation safety in Myanmar has been a problem over the last decade with a series of accidents (Carroll, 2019). Airlines in Myanmar have been investing a lot of money and time to promote aviation safety to customers (Staehelin, 2020). The degree of importance of flight safety in this study is not similar to the study of Yeh (2003) which suggested that safety has a higher priority than other factors. However, the findings in this study are aligned to the study of Wang et al. (2011) in that the customer recognises service quality for airlines is in-flight safety, but it is not a top ranking priority.

The results have demonstrated that service quality has a positive impact on customer satisfaction and satisfied customers are generating repurchase behaviour. Moreover, the results demonstrate that high service quality for airlines in Myanmar impacts directly on a customer's repurchase intention.

# Chapter 8

## Conclusion

### Chapter outline

This chapter summarises the thesis and the conclusion includes the implications of the study and suggestions for future research.

### 8.1 Conclusion

Air transport plays a vital role in a country's economic growth by motivating trade and tourism. Traditionally, air transport has been a protectionist industry in which government has set many rules and regulation to protect the government-owned flag carrier. These regulations include barriers of entry, fixed airfares, fixed routes and limiting foreign ownership of airlines. Deregulation has changed the air transport industry significantly. Governments around the world have been deregulating and liberalising the air transport industry to allow domestic and international competition. Increasing the number of flights has driven down airfares and enabled more people to travel by air which has helped to create economic growth for countries.

Cambodia, Laos, Myanmar and Vietnam are classified as the least developed economically of the ten ASEAN countries and they are among the poorest countries in the world. Due to political circumstances, the governments of these four countries implemented decades-long closed-door policies after achieving their independence from colonial rulers. That policy isolated the countries from the rest of the world and minimal air transport development occurred. Market reform policies in the 1990s has made a remarkable change to the economies of these four countries. Those reforms welcomed foreign investment in each country and an increase in the number of tourists arriving improved the economy considerably by generating jobs and increasing government revenue. The governments of the CLMV countries deregulated their air transport industries by relaxing some control over entry and fares, and giving the airlines greater flexibility in making routing decisions which

has facilitated trade and tourism. This has created a competitive market in their airline industries.

The desk research of secondary sources revealed that air transport is a very important contributor to economic growth in the CLMV countries. Air transport deregulation has had a positive and significant impact on traffic volumes in all CLMV countries except Myanmar. Air transport policies in the CLMV countries are still relatively restrictive and their national carriers are under full or majority government ownership, which has created an unbalanced market for airlines. Moreover, the delayed development of the air transport industries affected the local airlines' competitiveness. Airlines in the CLMV countries are relatively smaller operations with ageing aircraft compared with airlines in neighbouring or nearby countries. A lack of long-haul flights has limited the operations of the local airlines in competing with other airlines in the nearby countries.

For air passengers in Laos and Myanmar the study reveals, surprisingly, that price and perceived value were not ranked as the most important factors in air transport in these low income countries. The most important factor leading to airline choice in both countries was brand credibility. Product uniqueness also demonstrated great importance in the responses of passengers. The study also has revealed that high service quality does not necessarily generate repurchase behaviour. Airlines need to ensure that their service quality matches customers' expectations in order to create customer satisfaction. Happy and satisfied customers are much more likely to repurchase.

## **8.2 Implications and suggestions for future research**

This study has demonstrated some empirical and practical implications for the air transport industry. The study provides an overview of the importance of air transport in economic development in Southeast Asian countries. Air deregulation was found to make a positive and significant impact to a country's economy. However, with the rapid growth in the numbers of travellers, the CLMV countries need to increase their investments in aviation infrastructure. The countries which lack funding should

further deregulate the air transport industry and allow joint venture partnerships or privatisation. Partial or full privatisation will bring external funding from the private sector to assist developments such as airport expansions. In addition, relaxing ownership restrictions will bring in external investment to support the local airlines.

This study analysed the elements contributing to service quality, customer satisfaction and repurchase intention, and provides evidence to the airlines to improve their services for their customers. The study indicated that developing a reputable brand is the most important feature for the airlines. In addition, the airlines need to focus on their reliability and operate on-time departures and arrivals with minimum cancellations. Offering unique services are also important in creating a high service quality culture to attract return business. The airlines could use the assorted factors in this study to develop a strategic marketing plan to target customers. This would enable the airlines to deliver reliable, enjoyable and convenient flying experiences to capture the hearts of customers and to provide for sustainable profitability. The sustainable and effective development of the civil air transport industry will generate economic and social benefits for each CLMV country.

Future studies may include the additional motivational factors of service quality suggested by Kalemba et al. (2017). These allow a thorough understanding of the contribution of other airlines operational activities such as the check-in process, food quality, seat comfort and the baggage handling process to the service quality.



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## APPENDIX A – Questionnaire (English)



Dear Participant:

My name is Colin Law, I am a post graduate student at University Southern Queensland, and I am conducting this research under the supervision of Dr Shane Zhang, from the Department of Commerce. You are being invited to participate in this research study of the quality of air transport service and demand for domestic tourism in Cambodia, Laos, Myanmar and Vietnam. I am interested in finding out about the motivational factors influencing customers' purchase intentions for domestic air transport with HREC approval ID (H19REA028).

Your participation in this study will require the completion of the attached questionnaire. This should take approximately 10 to 15 minutes of your time. Your participation will be anonymous and you will not be contacted again in the future. You will not be paid for being in this study. This survey involves minimal risk to you. The benefits, however, may impact society by helping increase knowledge about consumer behaviour to air transportation product.

You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study.

If you have any questions related to this project you can contact me at [u1095575@uqmail.usq.edu.au](mailto:u1095575@uqmail.usq.edu.au) and if you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Manager of Research Integrity and Ethics on +61 7 4631 1839 or email [researchintegrity@usq.edu.au](mailto:researchintegrity@usq.edu.au). The Manager of Research Integrity and Ethics is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

The completion of this survey implies your consent to participate. If you choose to participate, please complete the attached survey and return it to the interviewer. Thank you!

## Part A - General Information

1. What is the purpose of your trip today?  
 Business       Leisure       Personal - Visiting family and friends  
 Others; please specify \_\_\_\_\_
  
2. Why have you chosen to fly today? (more than one choice can be chosen)  
 Flying save me more time  
 There is no other mode of transport other than flying  
 The price of air ticket is comparable to other modes of transportation
  
3. Is this your first time flying with this airline?  
 Yes       No
  
4. How many times have you travelled within the last twelve months?  
 0 time       1 to 2 times       3 to 4 times       5 to 6 times  
 6 times or more
  
5. What class are you flying today?  
 First     Business     Economy
  
6. Where did you buy your tickets for today's flight?  
 Airline sales office     Travel agencies     Online travel agencies  
 Airline's website (including Apps)     Others; please specify \_\_\_\_\_
  
7. When did you buy the ticket?  
 On the departure date       1-2 days before the departure date  
 3-6 days before the departure date     7-15 days before the departure date  
 Over 15 days before the departure date
  
8. How did you pay for your ticket today?  
 Online with credit card       Through travel agencies     Company purchase  
 Directly from the airline office     Others; please specify \_\_\_\_\_
  
9. The financial resources for your ticket  
 Paid by employers     Paid by yourself     Family member support  
 Frequent flier plan award     Others; please specify \_\_\_\_\_
  
10. Are you taking a domestic flight or International flight?  
 Domestic       International
  
11. What is the airline name that you are taking today?  
\_\_\_\_\_

12. Are you a member of any frequent flier program?  
 Yes , Which airline? \_\_\_\_\_  No

13. Who made the choice of airline for your travel today?  
 I personally have chosen this airline  
 Travel Agent/Co. Travel department chooses the airline  
 Friends or companion chooses the airline  
 The airline choice was included in my tour package

14. What is the main reason that affects your decision to fly with this airline today?  
 Ticket price  
 Service offered by the airline  
 Convenience of ticket purchase  
 Recommendation from friends  
 Reputation of the airline  
 I get benefited from the frequent flyer program  
 No other choices (only flight available)  
 Others; please specify \_\_\_\_\_

**Part B**

1) Based on your experience, what are your view for the below statement.

Pricing	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. This airline’s services are reasonably priced					
2. I was planning this trip with no particular airline in mind and selected ‘airlines’ because of the fare					
3. The price I’ve paid for my ticket is worth the value					
4. I was planning to drive or take the bus/train to this destination but decided to fly because of the fare					
5. I am willing to take multiple connections as long as the price of tickets remains low.					
6. I was not planning to take this trip at all but decided to go because of the fare					
Loyalty Program	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. The airline has a sound frequent flyer program to recognize my status					
2. Frequent flier program attracts me for return purchase from the same airline					
3. I am fully aware of the benefits that I will get from the frequent flier membership.					
4. I have chosen this airline due to the additional benefits I receive as a member of the airline’s frequent flyer program					
5. As a frequent flyer member, I get an additional discount from the airline					

Product Uniqueness	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I choose the airline with the departing time that best meets my schedule					
2. I evaluated and compared the airline's product before my purchase					
3. I have chosen this airline because it offered better inflight meal and beverage services					
4. I have chosen this airline due to the aircraft preference					
5. I have chosen this airline because of the entertainment onboard					
6. I have chosen this airline because of the comfort of the seat					
Durability	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I have chosen this airline based on the airline's safety record					
2. Choosing an airline operating young fleet makes me feel safe					
3. I avoided airlines with past record of fatal incidents.					
4. The professionalism of airline staffs makes me feel safe.					
Ease of convenience	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I choose this airline because the airline offered prompt reservation services					
2. This airline offered prompt services during the check-in process					
3. Multiple channels for ticket purchase is important for me					
4. I can contact the staff easily when I need assistance					

5. The airline website/mobile application making the process easier					
<b>Promotion</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
1. I am concerned about the discounts offered by the airline					
2. I was attracted by the airline advertisements					
3. The airline offered more benefits compare with other airlines					
4. I was attracted by online content from the airlines. (YouTube, Google, etc)					
5. The seasonal promotions of this airline are available.					
<b>Service Quality</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
1. The friendliness and helpfulness of airport staff are important					
2. The cabin crew are friendly and has good language skills are important					
3. The pilots keeping me informed is important					
4. I receive prompt attention from this airline's employees					
5. The airline employees are always willing to help me					
6. The airline employees made me feel comfortable in dealing with them					
<b>Brand</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
1. I have chosen the airline based on its reputation					
2. Flying with a leading airline demonstrates my status					

3. The airline supporting society encourage my choice of the airline					
4. I have chosen the airline based on its nationality					
Reliability and dependability	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I have chosen the airline based on its flight on-time departure/arrival performance					
2. I know the airline has a disruption plan giving me protection during irregular operations					
3. I have chosen the airline with good baggage handling record					
4. I avoid airlines with high cancellation rate					
Customer Satisfaction	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I am satisfied with the airline					
2. I have made the right decision for my airline choice for today's flight					
3. I am familiar with this airline					
Loyalty	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1. I would continuously be flying with this airline					
2. I consider this airline company my first choice for air transportation.					
3. I would recommend this airline to my friends or others					
4. I would say positive things about this airline to others					



### Part C Demographic Profile

1. Age: \_\_\_\_\_
2. Gender:
  - Male
  - Female
3. Education level? (Check only one)
  - Primary
  - High School
  - College/University
  - Graduate School
4. Occupation
  - Employee of a for-profit company or business or of an individual, for wages, salary, or commissions'
  - Employee of a not-for-profit, tax-exempt, or charitable organization
  - Government employee (city, county, etc.)
  - Self-employed in own not-incorporated business, professional practice, or farm
  - Self-employed in own incorporated business, professional practice, or farm
  - Working without pay in family business or farm
  - A student
  - Retired
  - Unable to work
5. Household Income (USD)
  - Less than \$500
  - \$501 to \$1,000
  - \$1,001 to \$1,500
  - \$1,501 to \$2,000
  - More than \$2,000

**Thank you very much for participating, please return the questionnaire to the interviewer.**

## APPENDIX B – Questionnaire (Laotian)



ເຖິງ ຜູ້ເຂົ້າຮ່ວມທີ່ຮັກແພງ:

ຂ້າພະເຈົ້າຊື່ວ່າ ທ້າວ ຄໍລິນ ລໍ (Mr. Colin Law),  
ຂ້າພະເຈົ້າເປັນນັກສຶກສາລົບປະລິນຍາໂທຢູ່ມະຫາວິທະຍາໄລ Southern Queensland  
ແລະ ຂ້ອຍກຳລັງເຮັດການຄົ້ນຄວ້ານີ້ພາຍໃຕ້ການຊີ້ນຳ ຂອງ ດຣ ຊານ ຊາງ,  
ຈາກພະແນກການຄ້າ,  
ທ່ານກຳລັງຖືກເຊີນເຂົ້າຮ່ວມໃນການສຶກສາຄົ້ນຄວ້ານີ້ກ່ຽວກັບຄຸນນະພາບຂອງການ  
ບໍລິການຂົນສົ່ງທາງອາກາດ ແລະ  
ຄວາມຕ້ອງການຂອງການທ່ອງທ່ຽວພາຍໃນປະເທດກຳປູເຈຍ, ສປປ ລາວ, ພະມ້າ  
ແລະ ຫວຽດນາມ.  
ຂ້າພະເຈົ້າສົນໃຈຊອກຮູ້ກ່ຽວກັບບັດໃຈກະຕຸ້ນທີ່ມີອິດທິພົນຕໍ່ຄວາມຕັ້ງໃຈໃນການຊື້  
ຂອງລູກຄ້າ ໃນການຂົນສົ່ງທາງອາກາດພາຍໃນປະເທດດ້ວຍບັດປະຈຳ ຕົວ HREC  
ລະຫັດ ID (H19REA028).

ການມີສ່ວນຮ່ວມຂອງທ່ານໃນການສຶກສານີ້  
ແມ່ນຈະຕ້ອງຂຽນແບບສອບຖາມທີ່ຄັດຕິດມາພ້ອມ. ນີ້ຄວນໃຊ້ເວລາປະມານ 10  
ຫາ 15 ນາທີຂອງເວລາຂອງທ່ານ. ການມີສ່ວນຮ່ວມຂອງທ່ານຈະບໍ່ລະບຸຊື່ ແລະ  
ທ່ານຈະບໍ່ໄດ້ຮັບການຕິດຕໍ່ອີກໃນອະນາຄົດ.  
ທ່ານຈະບໍ່ໄດ້ຮັບຄ່າຈ້າງສຳລັບການສຶກສານີ້.  
ການສຳຫຼວດນີ້ມີຄວາມສ່ຽງໜ້ອຍທີ່ສຸດສຳລັບທ່ານ.  
ເຖິງຢ່າງໃດກໍ່ຕາມຜົນປະໂຫຍດອາດຈະສົ່ງຜົນກະທົບຕໍ່ສັງຄົມໂດຍການຊ່ວຍເພີ່ມຄວາມ  
ຮູ້ກ່ຽວກັບພຶດຕິກຳຂອງຜູ້ບໍລິໂພກຕໍ່ຜະລິດຕະພັນການຂົນສົ່ງທາງອາກາດ.

ທ່ານບໍ່ຈຳເປັນຕ້ອງເຂົ້າຮ່ວມການຄົ້ນຄວ້ານີ້ຖ້າທ່ານບໍ່ຕ້ອງການ.  
ທ່ານບໍ່ຈຳເປັນຕ້ອງຕອບຄຳຖາມໃດໆທີ່ທ່ານບໍ່ຕ້ອງການຕອບດ້ວຍເຫດຜົນໃດໆ.  
ພວກເຮົາຍິນດີຕອບທຸກຄຳຖາມທີ່ທ່ານມີກ່ຽວກັບການສຶກສານີ້.

ຖ້າທ່ານມີຄຳຖາມທີ່ກ່ຽວຂ້ອງກັບໂຄງການນີ້ທ່ານສາມາດຕິດຕໍ່ຫາຂ້າພະເຈົ້າໄດ້ທີ່  
u1095575@uqmail.usq.edu.au ແລະ ຖ້າທ່ານມີຄວາມກັງວົນໃຈ ຫຼື  
ຄຳຮ້ອງທຸກກ່ຽວກັບການປະພຶດທີ່ມີລັບຢາບັນຂອງໂຄງການນີ້  
ທ່ານສາມາດຕິດຕໍ່ຜູ້ຈັດການຜ່າຍຄົ້ນຄວ້າວິທະຍາໄລ University of Southern  
Queensland. ແລະ ຈັບຢາບັນໄດ້ໃນໝາຍເລກ +61 7 4631 1839 ຫຼື ສົ່ງອີເມວ

researchintegrity@usq.edu.au. ຜູ້ຈັດການດ້ານການຄົ້ນຄວ້າຄວາມຊື່ສັດ ແລະ  
ຈົນຍາບັນແມ່ນບໍ່ກ່ຽວຂ້ອງກັບໂຄງການຄົ້ນຄວ້ານີ້ ແລະ  
ສາມາດອໍານວຍຄວາມສະດວກໃຫ້ແກ່ການແກ້ໄຂບັນຫາຄວາມກັງວົນຂອງທ່ານໂດຍ  
ບໍ່ລ່າອາງ.  
ການສໍາເລັດການສໍາຫຼວດຄັ້ງນີ້ໝາຍຄວາມວ່າທ່ານຍິນຍອມເຂົ້າຮ່ວມ.  
ຖ້າທ່ານເລືອກທີ່ຈະເຂົ້າຮ່ວມ, ກະລຸນາເຮັດໃຫ້ສໍາເລັດການສໍາຫຼວດທີ່ຕິດຄັດມານີ້  
ແລະ ສົ່ງໃຫ້ຜູ້ສໍາພາດ. ຂອບໃຈ!

ພາກ ກ - ຂໍ້ມູນທົ່ວໄປ

1. ຈຸດປະສົງຂອງການເດີນທາງມື້ນີ້ແມ່ນຫຍັງ?  
 ທຸລະກິດ     ພັກຜ່ອນ     ສ່ວນຕົວ - ພົບປະຄອບຄົວ ແລະ ໝູ່ເພື່ອນ  
 ອື່ນໆ; ກະລຸນາລະບຸ \_\_\_\_\_
2. ເປັນຫຍັງທ່ານຊຶ່ງເລືອກທີ່ຈະບິນມື້ນີ້? (ສາມາດເລືອກໄດ້ຫຼາຍກວ່າໜຶ່ງຂໍ້)  
 ການບິນຊ່ວຍປະຫຍັດເວລາໄດ້ຫຼາຍ  
 ບໍ່ມີການເດີນທາງອື່ນນອກຈາກການບິນ  
 ລາຄາຂອງປີ້ຍົນບໍ່ຕ່າງກັນຫຼາຍທຽບກັບການໂດຍສານເດີນທາງແບບອື່ນໆ
3. ມື້ແມ່ນເທື່ອທຳອິດທີ່ທ່ານໄດ້ບິນກັບສາຍການບິນນີ້ບໍ່?  
 ແມ່ນ     ບໍ່ແມ່ນ
4. ພາຍໃນ 12 ເດືອນທີ່ຜ່ານມາ, ທ່ານໄດ້ເດີນທາງທ່ອງທ່ຽວຈັກເທື່ອ?  
 0 ເທື່ອ     1 ຫາ 2 ເທື່ອ     3 ຫາ 4 ເທື່ອ     5 ຫາ 6 ເທື່ອ  
 6 ເທື່ອ ຫຼື ຫຼາຍກວ່າ
5. ລະດັບທີ່ນັ່ງຊັ້ນໃດທີ່ທ່ານບິນໃນມື້ນີ້?  
 ຊັ້ນໜຶ່ງ     ຊັ້ນທຸລະກິດ     ຊັ້ນປະຫຍັດ
6. ທ່ານຊື້ປີ້ຍົນຂອງທ່ານສຳລັບຖ້ຽວບິນມື້ນີ້ຢູ່ໃສ?  
 ຫ້ອງການຂາຍຂອງສາຍການບິນ  
 ຕົວແທນທ່ອງທ່ຽວ  
 ຕົວແທນອອນລາຍ  
 ເວັບໄຊລ໌ຂອງສາຍການບິນ (ລວມທັງແອັບ)  
 ອື່ນໆ; ກະລຸນາລະບຸ \_\_\_\_\_
7. ທ່ານຊື້ປີ້ຍົນໃນມື້ໃດ?  
 ໃນວັນທີອອກເດີນທາງ     1-2 ວັນກ່ອນວັນທີອອກເດີນທາງ  
 3-6 ວັນກ່ອນວັນທີອອກເດີນທາງ     7-15 ວັນກ່ອນວັນທີອອກເດີນທາງ  
 ຫຼາຍກວ່າ 15 ວັນກ່ອນວັນທີອອກເດີນທາງ
8. ທ່ານຈ່າຍປີ້ຍົນໃນມື້ນີ້ໄດ້ແນວໃດ?  
 ອອນລາຍດ້ວຍບັດເດບິດ     ຜ່ານຕົວແທນທ່ອງທ່ຽວ     ບໍລິສັດຊື້  
 ໂດຍກົງຈາກຫ້ອງການສາຍການບິນ  
 ອື່ນໆ; ກະລຸນາລະບຸ \_\_\_\_\_

9. ແຫຼ່ງການເງິນສໍາລັບປີຢົນຂອງທ່ານ

- ຈ່າຍໂດຍບໍລິສັດ       ຈ່າຍດ້ວຍຕົວທ່ານເອງ       ຄອບຄົວຊື້ໃຫ້
- ລາງວັນສະສົມຈາກການບິນເລື້ອຍໆ
- ອື່ນໆ; ກະລຸນາລະບຸ \_\_\_\_\_

10. ທ່ານກໍາລັງຈະຂຶ້ນຖ້ຽວບິນພາຍໃນ ຫຼື ສາກົນ?

- ພາຍໃນ       ສາກົນ

11. ຊື່ຂອງສາຍການບິນທີ່ທ່ານຈະຂຶ້ນມື້ນີ້ແມ່ນຫຍັງ?

\_\_\_\_\_

12. ທ່ານເປັນສະມາຊິກໃດໜຶ່ງຂອງໂຄງການຜູ້ເດີນທາງເລື້ອຍໆບໍ່?

- ແມ່ນ, ສາຍການບິນໃດ? \_\_\_\_\_
- ບໍ່

13. ໃຜເປັນຄົນເລືອກສາຍການບິນໃຫ້ທ່ານເດີນທາງທ່ອງທ່ຽວໃນມື້ນີ້?

- ຂ້ອຍເລືອກສາຍການບິນນີ້ດ້ວຍຕົວຂ້ອຍເອງ
- ຕົວແທນ/ບໍລິສັດທ່ອງທ່ຽວ ພະແນກການທ່ອງທ່ຽວເລືອກສາຍການບິນໃຫ້
- ໜູ່ເພື່ອນ ຫຼື ຄົນສະນິດເລືອກສາຍການບິນໃຫ້
- ສາຍການບິນໄດ້ລວມໃນຊຸດການທ່ອງທ່ຽວຂອງຂ້ອຍ

14. ເຫດຜົນໃດທີ່ມີຜົນກະທົບຕໍ່ການຕັດສິນໃຈຂອງທ່ານທີ່ຈະບິນສາຍການບິນນີ້  
ໃນມື້ນີ້?

- ລາຄາປີຢົນ
- ການບໍລິການທີ່ສະເໜີໂດຍສາຍການບິນ
- ສະດວກໃນການຊື້ປີຢົນ
- ແຜນະນໍາໂດຍໜູ່ເພື່ອນ
- ຊື່ສຽງຂອງສາຍການບິນ
- ຂ້ອຍໄດ້ຜົນປະໂຫຍດຈາກໂຄງການຜູ້ເດີນທາງເລື້ອຍໆ
- ບໍ່ມີທາງເລືອກອື່ນ (ມີຖ້ຽວບິນນີ້ເທົ່ານັ້ນມີໃຫ້)
- ອື່ນໆ; ກະລຸນາລະບຸ \_\_\_\_\_

**ພາກ ຂ**

**ອີງຕາມປະສົບການຂອງທ່ານ, ທ່ານມີມຸມມອງແນວໃດກັບຂໍ້ຄວາມດັ່ງຕໍ່ໄປນີ້.**

ລາຄາ	ບໍ່ເຫັນດີທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ສຸດ
1. ການບໍລິການຂອງສາຍການບິນນິສົມເຫດສີໃຜນກັບລາຄາ					
2. ຂ້ອຍໄດ້ວາງແຜນການເດີນທາງນີ້ໂດຍບໍ່ໄດ້ເຈາະໂຈງສາຍການບິນໃນໃຈ ແລະໄດ້ເລືອກ 'ສາຍການບິນ' ຍ້ອນລາຄາ					
3. ລາຄາທີ່ຂ້ອຍໄດ້ຈ່າຍສໍາລັບປີຍົນຂອງຂ້ອຍຄຸ້ມກັບລາຄາ					
4. ຂ້ອຍໄດ້ວາງແຜນທີ່ຈະຂັບລົດ ຫຼືຂຶ້ນລົດເມ/ລົດໄຟໄປທີ່ບາຍທາງ, ແຕ່ຕັດສິນໃຈຂຶ້ນບິນຍ້ອນວ່າລາຄາ					
5. ຂ້ອຍຍິນດີທີ່ຈະໄປຕູ້ຍົນຫຼາຍບ່ອນຕາບໃດທີ່ລາຄາຂອງປີຍົນຍັງຄົງລາຄາຖືກ					
6. ຂ້ອຍບໍ່ໄດ້ວາງແຜນທີ່ຈະເດີນທາງນີ້, ແຕ່ກໍຕັດສິນໃຈທີ່ຈະໄປຍ້ອນວ່າລາຄາ					
ໂຄງການຄວາມພັກດີ	ບໍ່ເຫັນດີທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ສຸດ
1. ສາຍການບິນມີໂຄງການທີ່ດີສໍາລັບຜູ້ເດີນທາງເລື້ອຍໆແລະກໍຮັບຮູ້ສະຖານະຂອງຂ້ອຍ					
2. ໂຄງການຜູ້ເດີນທາງເລື້ອຍໆດຶງດູດຂ້ອຍໃຫ້ກັບຄືນມາຊື້ນໍາສາຍການບິນເດີມ					
3. ຂ້ອຍໄດ້ຄໍານຶງຢ່າງເຕັມສ່ວນໃນຜົນປະໂຫຍດທີ່ຂ້ອຍຈະໄດ້ຈາກການເປັນສະມາຊິກຂອງຜູ້ເດີນທາງເລື້ອຍໆ.					
4. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ເນື່ອງຈາກຜົນປະໂຫຍດເພີ່ມຕື່ມທີ່ຂ້ອຍໄດ້ຮັບໃນຖານະເປັນສະມາຊິກຂອງໂຄງການຜູ້ເດີນທາງເລື້ອຍໆຂອງສາຍການບິນ					
5. ໃນຖານະເປັນສະມາຊິກຂອງຜູ້ເດີນທາງເລື້ອຍໆ, ຂ້ອຍໄດ້ສ່ວນຫຼຸດເພີ່ມຕື່ມຈາກສາຍການບິນ					

ເອກະລັກຂອງຜະລິດຕະພັນ	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍເລືອກສາຍການບິນທີ່ມີເວລາບິນ ເໝາະທີ່ສຸດກັບຕາຕະລາງເວລາຂ້ອຍ					
2. ຂ້ອຍໄດ້ປະເມີນ ແລະ ສົມທຽບສິນຄ້າຂອງສາຍການບິນກ່ອນ ຕັດສິນໃຈຊື້					
3. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ຍ້ອນວ່າ ມັນມີຊື່ສະເໜີການບໍລິການອາຫານ ແລະ ເຄື່ອງດື່ມເທິງຍົນທີ່ດີກວ່າ					
4. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ຍ້ອນຄວາມ ກ້າຂອງຕົວເຄື່ອງບິນ					
5. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ຍ້ອນວ່າ ມີສິ່ງບັນເທີງເທິງຍົນ					
6. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ຍ້ອນວ່າ ຄວາມສະດວກສະບາຍຂອງຕັ້ງນັ່ງ					
ຄວາມທົນທານ	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ອີງຕາມ ບັນທຶກຄວາມປອດໄພຂອງສາຍການ ບິນ					
2. ການເລືອກສາຍການບິນທີ່ມີອາຍຸນ້ອຍ ເຮັດໃຫ້ຮູ້ສຶກປອດໄພ					
3. ຂ້ອຍຫຼີກລ້ຽງສາຍການບິນທີ່ມີປະຫວັດ ການເກີດອຸບັດຕິເຫດຮ້າຍແຮງ.					
4. ຄວາມເປັນມື້ອາຊີບຂອງພະນັກງານສາຍ ການບິນເຮັດໃຫ້ຂ້ອຍຮູ້ສຶກປອດໄພ					
ຄວາມສະດວກສະບາຍ	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍໄດ້ເລືອກສາຍການບິນນີ້ຍ້ອນວ່າ ສາຍການບິນໄດ້ສະເໜີການບໍລິການກາ ນສັ່ງຈອງທີ່ວ່ອງໄວ					
2. ສາຍການບິນນີ້ສະເໜີບໍລິການຢ່າງວ່ອງ ໄວໃນເວລາຂັ້ນຕອນການ check-in					

3. ມີຫຼາຍຊ່ອງທາງໃນການຊື້ປີຍົນແມ່ນສໍາຄັນສໍາລັບຂ້ອຍ					
4. ຂ້ອຍສາມາດຕິດຕໍ່ຫາພະນັກງານໄດ້ຢ່າງງ່າຍດາຍເມື່ອຂ້ອຍຕ້ອງການການຊ່ວຍເຫຼືອ					
5. ເວັບໄຊລ໌/ແອັບມືຖືເຮັດໃຫ້ຂັ້ນຕອນງ່າຍຂຶ້ນ					
<b>ໂປຼໂມຊັນ</b>	<b>ບໍ່ເຫັນດີທີ່ສຸດ</b>	<b>ບໍ່ເຫັນດີ</b>	<b>ບານກາງ</b>	<b>ເຫັນດີ</b>	<b>ເຫັນດີທີ່ສຸດ</b>
1. ຂ້ອຍກັງວົນກ່ຽວກັບສ່ວນຫຼຸດທຶສະເໜີໂດຍສາຍການບິນ					
2. ຂ້ອນຖືກດຶງດູດໂດຍການໂຄສະນາຂອງສາຍການບິນ					
3. ສາຍການບິນໄດ້ສະໜອງຜົນປະໂຫຍດຫຼາຍກວ່າເມື່ອທຽບໃສ່ກັບສາຍການບິນອື່ນໆ					
4. ຂ້ອຍຖືກດຶງດູດໂດຍເນື້ອຫາອອນລາຍຈາກສາຍການບິນ (YouTube, google, etc)					
5. ມີໂປຼໂມຊັນປະຈໍາລະດູໃນສາຍການບິນນີ້.					
<b>ຄຸນນະພາບຂອງການບໍລິການ</b>	<b>ບໍ່ເຫັນດີທີ່ສຸດ</b>	<b>ບໍ່ເຫັນດີ</b>	<b>ບານກາງ</b>	<b>ເຫັນດີ</b>	<b>ເຫັນດີທີ່ສຸດ</b>
1. ຄວາມເປັນມິດ ແລະ ຄວາມເປັນປະໂຫຍດຂອງພະນັກງານສະໜາມບິນແມ່ນມີຄວາມສໍາຄັນ					
2. ລູກເຮືອໃນທ້ອງໂດຍສານແມ່ນເປັນມິດ ແລະມີຄວາມສາມາດດ້ານພາສາທີ່ດີແມ່ນສໍາຄັນ					
3. ນັກບິນທີ່ມັກແຈ້ງໃຫ້ຂ້ອຍຮູ້ແມ່ນມີຄວາມສໍາຄັນ					
4. ຂ້ອຍໄດ້ຮັບຄວາມສົນໃຈຈາກພະນັກງານຂອງສາຍການບິນນີ້					
5. ພະນັກງານສາຍການບິນມີຄວາມເຕັມໃຈທີ່ຈະຊ່ວຍຂ້ອຍສະເໜີ					



6. ພະນັກງານສາຍການບິນເຮັດໃຫ້ຂ້ອຍ ຮູ້ສຶກສະບາຍໃຈໃນການພົວພັນກັບພ ວກເຂົາ					
<b>ຫຍໍ້ຫໍ້</b>	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍໄດ້ເລືອກສາຍການບິນໂດຍອີງໃສ່ ຊື່ສຽງຂອງມັນ					
2. ການບິນດ້ວຍສາຍການບິນຊັ້ນນຳສະແ ດງສະຖານະພາບຂອງຂ້ອຍ					
3. ສາຍການບິນທີ່ສະໜັບສະໜູນສັງຄົມ ຊຸກຍູ້ໃຫ້ຂ້ອຍເລືອກສາຍການບິນ					
4. ຂ້ອຍໄດ້ເລືອກສາຍການບິນໂດຍອີງໃສ່ ລັກສະນະຂອງມັນ					
<b>ຄວາມໜ້າເຊື່ອຖື ແລະ ຄວາມໄວ້ວາງໃຈ</b>	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍໄດ້ເລືອກສາຍການບິນໂດຍອີງໃສ່ ການປະຕິບັດການເດີນທາງຕັ້ງຕໍ່ເວລາ ອອກເດີນທາງ/ການມາເຖິງ					
2. ຂ້ອຍຮູ້ວ່າສາຍການບິນມີແຜນແຊກແ ຊຽງໃຫ້ກັບຂ້ອຍເພື່ອການປົກປ້ອງຂ້ອ ຍໃນລະຫວ່າງການປະຕິບັດງານທີ່ບໍ່ປິ ກກະຕິ					
3. ຂ້ອຍໄດ້ເລືອກສາຍການບິນທີ່ມີບັນທຶ ກການຈັດການກັບກະເປົາທີ່ດີ					
4. ຂ້ອຍຫລີກລ້ຽງສາຍການບິນທີ່ມີອັດຕາ ການຍົກເລີກສູງ					
<b>ຄວາມພິ່ງພໍໃຈຂອງລູກຄ້າ</b>	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ
1. ຂ້ອຍພໍໃຈກັບສາຍການບິນ					
2. ຂ້ອຍໄດ້ຕັດສິນໃຈທີ່ຖືກຕ້ອງສຳລັບກາ ນເລືອກສາຍການບິນຂອງຂ້ອຍສຳລັບ ການບິນຂອງມື້ນີ້					
3. ຂ້ອຍຄຸ້ນເຄີຍກັບສາຍການບິນນີ້					
<b>ຄວາມພັກດີ</b>	ບໍ່ເຫັນດີ ທີ່ສຸດ	ບໍ່ເຫັນດີ	ບານກາງ	ເຫັນດີ	ເຫັນດີທີ່ ສຸດ

1. ຂ້ອຍຈະບິນກັບສາຍການບິນນີ້ຢ່າງຕໍ່ເນື່ອງ					
2. ຂ້ອຍພິຈາລະນາບໍລິສັດການບິນນີ້ເປັນທາງເລືອກທໍາອິດຂອງຂ້ອຍສໍາລັບການຂົນສົ່ງທາງອາກາດ.					
3. ຂ້ອຍຢາກແນະນຳສາຍການບິນນີ້ໃຫ້ໝູ່ເພື່ອນ ຫຼື ຄົນອື່ນໆຂອງຂ້ອຍ					
4. ຂ້ອຍຢາກເວົ້າໃນແງ່ດີກ່ຽວກັບສາຍການບິນນີ້ກັບຄົນອື່ນ					

**ພາກ ຄ ຂໍ້ມູນປະຊາກອນ**

1. ອາຍຸ: \_\_\_\_\_

2. ເພດ:

- ຊາຍ
- ຍິງ

3. ລະດັບການສຶກສາ? (ເລືອກອັນດຽວເທົ່ານັ້ນ)

- ປະຖົມ
- ມັດທະຍົມ
- ວິທະຍາໄລ/ມະຫາວິທະຍາໄລ
- ຮຽນຈົບ

4. ອາຊີບ

- ພະນັກງານຂອງບໍລິສັດທີ່ຫວັງຜົນກຳໄລ ຫລື ທຸລະກິດ ຫລື ຂອງບຸກຄົນ, ສຳລັບຄ່າຈ້າງ, ເງິນເດືອນ, ຫລື ຄ່າຄອມມິດຊິນຕ່າງໆ
- ພະນັກງານຂອງອົງການທີ່ບໍ່ຫວັງຜົນກຳໄລ, ການຍົກເວັ້ນພາສີ, ຫຼື ອົງການການກຸສົນ
- ພະນັກງານລັດ (ເມືອງ, ເຂດປົກຄອງ, ແລະອື່ນໆ)
- ເຮັດທຸລະກິດສ່ວນຕົວໃນທຸລະກິດທີ່ບໍ່ແມ່ນບໍລິສັດ, ການປະຕິບັດວິຊາຊີບ, ຫລື ກະສິກຳ
- ເຮັດທຸລະກິດເປັນເຈົ້າຂອງກິດຈະການ, ການປະຕິບັດດ້ານວິຊາຊີບ, ຫລື ກະສິກຳ
- ເຮັດວຽກໂດຍບໍ່ໄດ້ເສຍຄ່າເຮັດທຸລະກິດຄອບຄົວ ຫລື ກະສິກຳ
- ນັກຮຽນ
- ກິນບໍານານ
- ບໍ່ສາມາດເຮັດວຽກໄດ້

5. ລາຍໄດ້ຂອງຄົວເຮືອນ (USD)

- ຫນ້ອຍກວ່າ \$500
- \$501 ຫາ \$1,000
- \$1,001 ຫາ \$1,500
- \$1,501 ຫາ \$2,000
- ຫຼາຍກວ່າ \$2,000

**ຂອບໃຈຫຼາຍໆສຳລັບການເຂົ້າຮ່ວມ, ກະລຸນາສົ່ງແບບສອບຖາມຄືນໃຫ້ຜູ້ສຳພາດ.**

## APPENDIX C – Questionnaire (Burmese)



စစ်တမ်းဖြေဆိုသူများခင်ဗျာ

ကျွန်တော်ကတော့ University of Southern Queensland မှ ဘွဲ့လွန်စာသင်သား Colin Law ဖြစ်ပြီး ဒီလေ့လာမှုကို Department of Commerce မှ Dr. Shane Zhang ၏ ကြီးကြပ်မှုအောက်မှာ ဆောင်ရွက်နေခြင်း ဖြစ်ပါတယ်။ ဤလေ့လာမှုအကြောင်းအရာကတော့ 'မြန်မာ၊ လာအို၊ ကမ္ဘောဒီးယားနဲ့ ဗီယက်နမ်နိုင်ငံများ၏ လေကြောင်းပို့ဆောင်ရေးဝန်ဆောင်မှုအရည်အသွေးနှင့် ပြည်တွင်းခရီးသွားလုပ်ငန်းအလားအလာ' ဖြစ်ပြီး ပါဝင်ဖြေဆိုပေးဖို့ သင့်အား ဖိတ်ခေါ်ပါရစေ။ ဒီလေ့လာမှုကနေ ပြည်တွင်းလေကြောင်း ပို့ဆောင်ရေးကဏ္ဍ တွင် ခရီးသွားများ၏ ရွေးချယ်ဝယ်ယူမှုအပေါ် သက်ရောက်နေသည့် လှုံ့ဆော်တိုက်တွန်းသည့် အချက်များနှင့် ပတ်သတ်ပြီး သိရှိလိုခြင်းဖြစ်ပြီး HREC အတည်ပြုအမှတ် (H19REA028) ဖြင့် ဆောင်ရွက်မည်ဖြစ်ပါသည်။

ဤလေ့လာမှုတွင် သင်ပါဝင်မည်ဆိုပါက တွဲဖက်ပါရှိသည့် မေးခွန်းလွှာကို ဖြေကြားပေးရပါမည်။ မေးခွန်းလွှာ ကို ဖြေကြားရန် အချိန် ၁၀ မိနစ်မှ ၁၅ မိနစ်ခန့် ကြာနိုင်ပါသည်။ ဤလေ့လာမှုတွင် သင်ပါဝင်ဖြေဆိုခြင်းကို လျှို့ဝှက်ထားမည်ဖြစ်ပြီး ဖြေဆိုပြီးနောက်တွင်လည်း သင့်ထံ နောက်တစ်ကြိမ် ဆက်သွယ်ခြင်း ပြုလုပ်မည် မဟုတ်ပါ။ ဤလေ့လာမှုတွင် စေတနာဖြင့် ကူညီဖြေဆိုပေးပါရန် သင့်အား ပန်ကြားလိုပြီး ဖြေဆိုသည့် အတွက် သင့်အား အဖိုးအခတစ်စုံတစ်ရာ ပေးမည်မဟုတ်ပါ။ ဤလေ့လာမှုတွင် ပါဝင်ခြင်းဖြင့် သင့်အား ထိခိုက်နစ်နာမှု တစ်စုံတစ်ရာလည်း ဖြစ်စေမည်မဟုတ်ပါ။ သို့ရာတွင် သင်ပါဝင်ဖြေဆိုပေးခြင်းကြောင့် လေကြောင်းပို့ဆောင်ရေးဝန်ဆောင်မှုကဏ္ဍတွင် စားသုံးသူအမှုအကျင့်နှင့်ပတ်သတ်၍ အသိပညာများ တိုးပွားလာစေခြင်းဖြင့် သင့်လူမှုပတ်ဝန်းကျင်အား အကျိုးရှိစေမည်ဖြစ်ပါသည်။

အကယ်၍ ဤလေ့လာမှုတွင် သင်မပါဝင်ရန်ဆန္ဒမရှိပါကလည်း မပါဝင်ပဲနေနိုင်ပါသည်။ ပါဝင်ဖြေဆိုသည့် တိုင်အောင် မေးခွန်းလွှာအတွင်းရှိ မဖြေကြားလိုသည့် မေးခွန်းများကို ဖြေဆိုခြင်းမပြုပဲ ချန်လှပ်ခဲ့နိုင်ပါသည်။ ဤလေ့လာမှုနှင့် ပတ်သတ်၍ သင့်တွင် မေးမြန်းလိုသည်များရှိပါက ကျွန်တော်တို့အနေဖြင့် ဝမ်းမြောက်ဝမ်းသာဖြင့် ဖြေကြားပေးလိုပါသည်။

အကယ်၍ ဤလေ့လာမှုနှင့် ပတ်သတ်၍ မေးမြန်းလိုသည့် မေးခွန်းများရှိပါက ကျွန်ုပ်၏ အီးမေးလ်လိပ်စာ ဖြစ်သည့် u1095575@uemail.usq.edu.au သို့ ပေးပို့မေးမြန်းနိုင်ပြီး ဤလေ့လာမှုပြုလုပ်ရာတွင် လိုက်နာရန် ကျင့်ဝတ်များအား ဖောက်ဖျက်မှုများရှိသည်ဟု သင့်အနေဖြင့် သံသယရှိ တိုင်ကြားလိုပါက University of Southern Queensland မှ Manager of Research Integrity and Ethics ၏ ဖုန်းနံပါတ် +61 7 4631 1839 နှင့် အီးမေးလ်လိပ်စာ researchintegrity@usq.edu.au သို့ ဆက်သွယ်ပေးပို့နိုင်ပါသည်။ Manager of Research Integrity and Ethics သည် ဤလေ့လာမှုနှင့် ပတ်သတ်ဆက်နွယ်မှုမရှိသည့်အတွက် သင့်တိုင်ကြားမှုနှင့် ပတ်သတ်ပြီး ဘက်လိုက်ခြင်းကင်းစွာဖြင့် ဖြေရှင်းဆောင်ရွက်ပေးမည်ဖြစ်ပါသည်။

ဤစစ်တမ်းအား ပြီးဆုံးအောင်မြင်ခြင်းဖြင့် လေ့လာမှုတွင်ပါဝင်ရန် သင်သဘောတူလက်ခံသည်ဟု ယူဆမည်ဖြစ်ပါသည်။ ပါဝင်ဖြေဆိုလိုပါက ကျေးဇူးပြု၍ တွဲဖက်ပါရှိသည့် မေးခွန်းလွှာအား ဖြေဆိုပြီး စစ်တမ်းကောက်ယူသူထံသို့ ပြန်လည်ပေးပို့ပေးပါ။ ကျေးဇူးအထူးတင်ရှိလျက်။

**Part A - ယေဘုယျသတင်းအချက်အလက်**

1. ဒီနေ့ ခရီးစဉ်ရဲ့ ရည်ရွယ်ချက်ကို ဖြေပါ။

- လုပ်ငန်းကိစ္စ
- အပန်းဖြေခရီး
- ကိုယ်ရေးကိုယ်တာကိစ္စ - မိသားစု၊ မိတ်ဆွေတို့ဆီအလည်အပတ်
- အခြား၊ အသေးစိတ်ဖြေပါ\_\_\_\_\_

2. ဒီနေ့ လေကြောင်းခရီးနဲ့သွားဖို့ ဘာကြောင့်ရွေးချယ်လိုက်တာလဲ။

- လေကြောင်းခရီးနဲ့သွားတာ ကိုယ့်အတွက်အချိန်ကုန်သက်သာလို့
- ဒီနေရာက လေကြောင်းခရီးနဲ့သွားမှ ရောက်တဲ့နေရာမို့လို့
- တခြားနည်းလမ်းနဲ့သွားတာနဲ့ လေကြောင်းခရီးနဲ့ သွားတာနဲ့ လက်မှတ်ခမကွာလို့

3. ဒီလေကြောင်းလိုင်းနဲ့ ခရီးသွားတာ ပထမဆုံးအကြိမ်လား။

- ဟုတ်ပါတယ်
- မဟုတ်ပါ

4. ပြီးခဲ့တဲ့ ၁၂ လအတွင်းမှာ ခရီးဘယ်နှစ်ကြိမ်သွားခဲ့ပါသလဲ။

- တစ်ကြိမ်မှသွားခဲ့ပါ
- ၁ ကြိမ် ၂ ကြိမ်
- ၃ ကြိမ် ၄ ကြိမ်
- ၅ ကြိမ် ၆ ကြိမ်
- ၆ ကြိမ်ရဲ့အထက်

5. ဒီနေ့ ဘယ် Class ကို စီးမှာလဲ။

- First
- Business
- Economy

6. လေယာဉ်လက်မှတ်ကို ဘယ်ကနေ ဝယ်ခဲ့တာလဲ။

- လေကြောင်းလိုင်းရဲ့အရောင်းဌာန
- ခရီးသွားအေဂျင်စီများ
- အွန်လိုင်းက ခရီးသွားအေဂျင်စီများ
- လေကြောင်းလိုင်းရဲ့ website (App အပါအဝင်)
- အခြား၊ အသေးစိတ်ဖြေပါ\_\_\_\_\_

7. လေယာဉ်လက်မှတ်ကို ဘယ်အချိန် ဝယ်ခဲ့တာလဲ။

- ခရီးစဉ်ထွက်ခွာမည့်နေ့မှာ
- ထွက်ခွာမည့်နေ့မတိုင်ခင် ၁ ရက် ၂ ရက်
- ထွက်ခွာမည့်နေ့မတိုင်ခင် ၃ ရက်ကနေ ၆ ရက်
- ထွက်ခွာမည့်နေ့မတိုင်ခင် ၇ ရက်ကနေ ၁၅ ရက်date
- ထွက်ခွာမည့်နေ့မတိုင်ခင် ၁၅ ရက်ထက်မက ကြိုပြီးတော့

8. လေယာဉ်လက်မှတ်ခကို ဘယ်နည်းလမ်းနဲ့ ပေးချေခဲ့တာလဲ။

- Credit ကဒ်နဲ့ အွန်လိုင်းကနေ
- ခရီးသွားအေဂျင်စီတွေကနေတစ်ဆင့်
- ကုမ္ပဏီကနေ ဝယ်ပေးတာ
- လေကြောင်းလိုင်းရုံးကနေ တိုက်ရိုက်
- အခြား၊ အသေးစိတ်ဖြေပါ \_\_\_\_\_

9. လေယာဉ်လက်မှတ်အတွက် မည်သည်ငွေနဲ့ ပေးချေခဲ့တာလဲ။

- ကုမ္ပဏီ/အလုပ်ရှင်က ဝယ်ပေးတာ
- ကိုယ့်ဖာသာကိုယ်ဝယ်တာ
- မိသားစုက ဝယ်ပေးတာ
- Frequent Flier အစီအစဉ်ကနေ ချီးမြှင့်တာ
- အခြား၊ အသေးစိတ်ဖော်ပြပါ \_\_\_\_\_

10. ပြည်တွင်းခရီးစဉ်လား ပြည်ပခရီးစဉ်လား။

- ပြည်တွင်း
- ပြည်ပ

11. ဒီနေ့စီးမည့် လေကြောင်းလိုင်းအမည်။

\_\_\_\_\_

12. သင်သည် Frequent Flier အစီအစဉ်တစ်ခုခုရဲ့ အဖွဲ့ဝင်ဖြစ်ပါသလား။

- ဟုတ်တယ်ဆိုရင် ဘယ်လေကြောင်းလိုင်းလဲ \_\_\_\_\_
- မဟုတ်ပါ

13. သင့်ခရီးစဉ်အတွက် လေကြောင်းလိုင်းကို မည်သူရွေးချယ်ခဲ့တာလဲ။

- ကိုယ်တိုင်ရွေးချယ်ခဲ့တာ
- ခရီးသွားအေးဂျင့် ဒါမှမဟုတ် ကုမ္ပဏီက ရွေးချယ်ပေးတာ
- မိတ်ဆွေ အပေါင်းအသင်းက ရွေးချယ်ပေးတာ
- ကိုယ့်ဝယ်ထားတဲ့ ခရီးသွားအစီအစဉ်ထဲမှာ ဒီလေကြောင်းလိုင်းက ရွေးပြီးသားပဲ

14. ဒီလေကြောင်းလိုင်းနဲ့ ခရီးသွားဖို့ ဆုံးဖြတ်ရတဲ့ အဓိကအကြောင်းအရင်းက ဘာလဲ။

- လက်မှတ်ဈေးနှုန်းကြောင့်
- လေကြောင်းလိုင်းကပေးတဲ့ ဝန်ဆောင်မှုကြောင့်
- လက်မှတ်ဝယ်ရတာ လွယ်ကူအဆင်ပြေလို့
- မိတ်ဆွေတွေက အကြံပေးလို့
- ဒီလေကြောင်းလိုင်းက နာမည်ကောင်းရထားလို့
- Frequent Flier အစီအစဉ်ကနေ အကျိုးကျေးဇူးရလို့
- တခြားရွေးစရာမရှိလို့ (ဒီခရီးစဉ်တစ်ခုပဲရှိတာ)
- အခြား၊ အသေးစိတ်ဖြေပါ \_\_\_\_\_



**Part B**

<b>ဈေးနှုန်း</b>	လုံးဝသဘောမတူ	သဘောမတူ	ပုံမှန်	သဘောတူ	လုံးဝသဘောတူ
1. ဒီလေကြောင်းလိုင်းရဲ့ ဝန်ဆောင်မှုတွေက ဈေးနှုန်းသင့်တင့်တယ်။					
2. ဒီခရီးကို ဘယ်လေကြောင်းလိုင်းနဲ့သွားမယ်လို့ စိတ်ကူးမရှိပဲ လက်မှတ်ဈေးနှုန်းတစ်ခုတည်းကိုကြည့်ပြီး ဒီလေကြောင်းလိုင်းကို ရွေးလိုက်တာ။					
3. လက်မှတ်ခပေးလိုက်ရတဲ့ငွေနဲ့ ပြန်ရတဲ့ဝန်ဆောင်မှုက တန်ပါတယ်။					
4. အစက ဒီခရီးကို ကားနဲ့ ဒါမှမဟုတ် ရထားနဲ့သွားမလို့ပဲ။ ဒါပေမဲ့ လေယာဉ်လက်မှတ်ခကလည်း ဈေးသင့်လို့ ဝယ်လိုက်တာ။					
5. လေယာဉ်လက်မှတ်ခဈေးနှုန်းတွေက သင့်တော်နေဦးမယ်ဆိုရင် နောက်ထပ်လည်း ဒီလိုပဲသွားဖြစ်ဦးမယ်။					
6. အစက ဒီခရီးသွားဖို့အစီအစဉ်မရှိဘူး။ ဒါပေမဲ့ လေယာဉ်လက်မှတ်ခကတန်နေတော့ သွားဖို့ဆုံးဖြတ်လိုက်တာ။					
<b>သစ္စာရှိမှုအစီအစဉ်</b>	လုံးဝသဘောမတူ	သဘောမတူ	ပုံမှန်	သဘောတူ	လုံးဝသဘောတူ
1. ဒီလေကြောင်းလိုင်းမှာ ကိုယ့်အနေအထားကို အသိအမှတ်ပြုတဲ့ Flyer Program ကောင်းတစ်ခုရှိတယ်။					
2. Frequent Flier Program ကြောင့် အပြန်လက်မှတ်ကိုလည်း ဒီလေကြောင်းလိုင်းကပဲ ဝယ်လိုက်တာ။					
3. Frequent Flier အဖွဲ့ဝင်ဖြစ်ရင်ရမည့် အကျိုးခံစားခွင့်တွေကို ကောင်းကောင်းသိထားတယ်။					
4. Frequent Flier အဖွဲ့ဝင်တစ်ယောက်ဖြစ်ရင် ရနိုင်မည့် အကျိုးခံစားခွင့်တွေကြောင့် ဒီလေကြောင်းလိုင်းကို ရွေးချယ်လိုက်တာ။					

5. Frequent Flier အဖွဲ့ဝင်ဖြစ်ရင် ဒီလေကြောင်းလိုင်းကနေ Discount တွေထပ်ပြီးရနိုင်သေးတယ်။					
<b>ကုန်ပစ္စည်းထူးခြားမှု</b>	<b>လုံးဝသဘောမတူ!</b>	<b>သဘောမတူ!</b>	<b>ပုံမှန်!</b>	<b>သဘောတူ!</b>	<b>လုံးဝသဘောတူ!</b>
1. ဒီလေကြောင်းလိုင်းကို ရွေးရတာက ခရီးစဉ်စတင်ထွက်ခွာမည့်အချိန်နဲ့ ကိုယ့် Schedule နဲ့ အကိုက်ညီဆုံးမို့ပါ။					
2. လက်မှတ်မဝယ်ခင် ဒီလေကြောင်းလိုင်းရဲ့ ဝန်ဆောင်မှုကို လေ့လာပြီး နှိုင်းယှဉ်မှုတွေလုပ်ခဲ့သေးတယ်။					
3. ဒီလေကြောင်းလိုင်းကို ရွေးချယ်ရတာက ခရီးစဉ်အတွင်းမှာ အစားအသောက်ကောင်းကောင်းတွေနဲ့ ဧည့်ခံပေးလိုပါ။					
4. ဒီလေကြောင်းလိုင်းကို ရွေးချယ်ရတာက ပြေးဆွဲမည့်လေယာဉ်ကို နှစ်သက်လိုပါ။					
5. ဒီလေကြောင်းလိုင်းကို ရွေးချယ်ရတာက ခရီးစဉ်အတွင်း ဖျော်ဖြေရေးအစီအစဉ်တွေကြောင့်ပါ။					
6. ဒီလေကြောင်းလိုင်းကို ရွေးချယ်ရတာက သက်တောင့်သက်သာရှိတဲ့ ထိုင်ခုံတွေကြောင့်ပါ။					
<b>ကြာရှည်ခံမှု</b>	<b>လုံးဝသဘောမတူ!</b>	<b>သဘောမတူ!</b>	<b>ပုံမှန်!</b>	<b>သဘောတူ!</b>	<b>လုံးဝသဘောတူ!</b>
1. ဒီလေကြောင်းလိုင်းကို ရွေးချယ်ရတာက ဒီလေကြောင်းလိုင်းရဲ့ ဘေးကင်းလုံခြုံမှုမှတ်တမ်းတွေကြောင့်ပါ။					
2. လေယာဉ်အသစ်တွေနဲ့ ပြေးဆွဲတဲ့ လေကြောင်းလိုင်းကို ရွေးချယ်ရတာက ကိုယ့်အတွက် လုံခြုံမှုရှိစေတယ်။					
3. အရင်က ဆိုးရွားတဲ့ မတော်တဆမှုတွေဖြစ်ခဲ့တဲ့ မှတ်တမ်းရှိတဲ့ လေကြောင်းလိုင်းတွေဆိုရင် မရွေးချယ်ဘူး။					
4. လေကြောင်းလိုင်းဝန်ထမ်းတွေရဲ့ ပရောဖက်ရှင်နယ်ဆန်ပြီး တာဝန်ကျေပွန်မှုက ကိုယ့်အတွက် လုံခြုံမှုရှိစေတယ်။					

<b>အဆင်ပြေလွယ်ကူခြင်း</b>	<b>လုံးဝသဘောမတူ</b>	<b>သဘောမတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. ဒီလေကြောင်းလိုင်းကိုရွေးချယ်ရတာက လက်မှတ်ကြိုတင်မှာတဲ့အခါ မြန်မြန်ဆန်ဆန်ရလို့ပါ။					
2. ဒီလေကြောင်းလိုင်းက Check-in ဝင်တဲ့အခါ မြန်မြန်ဆန်ဆန်ဆောင်ရွက်ပေးတယ်။					
3. လေယာဉ်လက်မှတ်ကို နည်းလမ်းမျိုးစုံနဲ့ ဝယ်ယူလို့ရတာက ကိုယ့်အတွက်အရေးကြီးတယ်။					
4. အကူအညီလိုအပ်တဲ့အခါ သက်ဆိုင်တဲ့ဝန်ထမ်းတွေကို အလွယ်တကူဆက်သွယ်လို့ရလို့ပါ။					
5. ဒီလေကြောင်းလိုင်းရဲ့ Website/မိုဘိုင်းဖုန်းအက်(ပ်)ကနေ လုပ်ဆောင်တာ လွယ်ကူလို့ပါ။					
<b>အရောင်းမြှင့်တင်ရေး</b>	<b>လုံးဝသဘောမတူ</b>	<b>သဘောမတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. ဒီလေကြောင်းလိုင်းကနေပေးတဲ့ Discount တွေကို စိတ်ဝင်စားပါတယ်။					
2. ဒီလေကြောင်းလိုင်းရဲ့ ကြော်ငြာတွေကြောင့် သတိထားမိတာပါ။					
3. ဒီလေကြောင်းလိုင်းက တခြားလေကြောင်းလိုင်းတွေနဲ့ယှဉ်ရင် အကျိုးခံစားခွင့်တွေပိုလို့ပါ။					
4. ဒီလေကြောင်းလိုင်းရဲ့ Youtube ၊ Google တွေက တင်ထားတာတွေကြောင့် စိတ်ဝင်စားမိတာပါ။					
5. ဒီလေကြောင်းလိုင်းက ရာသီအလိုက် ပရိုမိုးရှင်းအစီအစဉ်တွေလည်း ပေးပါတယ်။					
<b>ဝန်ဆောင်မှုအရည်အသွေ</b>	<b>လုံးဝသဘောမတူ</b>	<b>သဘောမတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. လေဆိပ်ကဝန်ထမ်းတွေရဲ့ ဖော်ရွေမှု၊ အကူအညီပေးမှုတွေက အရေးကြီးတယ်။					
2. လေယာဉ်ဝန်ထမ်းတွေက ဖော်ရွေပြီး အပြောအဆို၊ ဆက်ဆံရေးကောင်းမွန်တာက အရေးကြီးတယ်။					

3. လေယာဉ်မှူးက အချက်အလက်တွေ ကြေညာပေးတာက အရေးကြီးတယ်။					
4. လေကြောင်းလိုင်းဝန်ထမ်းတွေရဲ့ ကိုယ့်ကို ဂရုတစိုက်ဆောက်ရွက်ပေးမှုကို ရတယ်။					
5. လေကြောင်းလိုင်းဝန်ထမ်းတွေက အမြဲကူညီဖို့ အသင့်ရှိနေတယ်။					
6. လေကြောင်းလိုင်းဝန်ထမ်းတွေနဲ့ ဆက်ဆံရတာ ကိုယ့်အတွက် သက်တောင့်သက်သာရှိတယ်။					
<b>ကုန်အမှတ်တံဆိပ်</b>	<b>လုံးဝသဘောတူ</b>	<b>သဘောတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. ဒီလေကြောင်းလိုင်းရဲ့ ဂုဏ်သတင်းကို ကြည့်ပြီး ရွေးချယ်လိုက်တာ။					
2. ထိပ်တန်းလေကြောင်းလိုင်းတစ်ခုနဲ့ ခရီးသွားရတာ ကိုယ့်အခြေအနေကို ဖော်ပြခြင်းပဲ။					
3. ဒီလေကြောင်းလိုင်းရဲ့ အများအကျိုးဆောင်ရွက်ချက်တွေကို ကြိုက်လို့ ရွေးချယ်လိုက်တာ။					
4. ဒီလေကြောင်းလိုင်းရဲ့ နိုင်ငံအပေါ်မှာ အခြေခံပြီး ရွေးချယ်လိုက်တာ။					
<b>ယုံကြည်စိတ်ချရမှုနှင့်အားကိုးနိုင်မှု</b>	<b>လုံးဝသဘောတူ</b>	<b>သဘောတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. ဒီလေကြောင်းလိုင်းက ထွက်ခွာချိန်/ဆိုက်ရောက်ချိန်တွေ မှန်လို့ ရွေးချယ်လိုက်တာ။					
2. ဒီလေကြောင်းလိုင်းက အချိန်ပုံမှန်မဖြစ်တဲ့အခါတွေ ကသိကအောက်မဖြစ်စေအောက် စီစဉ်ပေးတတ်တာတွေကြောင့် ရွေးချယ်လိုက်တာ။					
3. ဒီလေကြောင်းလိုင်းက အထုတ်အပိုးအိတ်တွေကို ဂရုတစိုက်စီစဉ်ကိုင်တွယ်ပေးတယ်။					
4. ကိုယ်က ခရီးစဉ်ဖျက်သိမ်းတဲ့အကြိမ်ရေများတဲ့ လေကြောင်းလိုင်းတွေကို ရှောင်တယ်။					
<b>ဖောက်သည်ကျေနပ်မှု</b>	<b>လုံးဝသဘောတူ</b>	<b>သဘောတူ</b>	<b>ပုံမှန်</b>	<b>သဘောတူ</b>	<b>လုံးဝသဘောတူ</b>
1. ဒီလေကြောင်းလိုင်းနဲ့ ပတ်သတ်ပြီး ကျေနပ်မှုရှိတယ်။					

2. ဒီနေ့ လေယာဉ်စီးဖို့အတွက် လေကြောင်းလိုင်းရွေးချယ်လိုက်တာ မှန်ကန်တဲ့ဆုံးဖြတ်ချက်ပဲ။					
3. ဒီလေကြောင်းလိုင်းအကြောင်းကို ကောင်းကောင်းသိတယ်။					
<b>သစ္စာရှိမှု</b>	<b>လုံးဝသဘောမတူ!</b>	<b>သဘောမတူ!</b>	<b>ပုံမှန်!</b>	<b>သဘောတူ!</b>	<b>လုံးဝသဘောတူ!</b>
1. ဒီလေကြောင်းလိုင်းနဲ့ နောက်လည်း အမြဲစီးဖြစ်ဦးမယ်။					
2. လေကြောင်းခရီးသွားဖို့ဆိုရင် ဒီလေကြောင်းလိုင်းကတော့ ကိုယ့်ရဲ့နံပတ်တစ် ရွေးချယ်စရာပဲ။					
3. ဒီလေကြောင်းလိုင်းနဲ့ သွားဖို့ ကိုယ့်အသိတွေကို တိုက်တွန်းမယ်။					
4. ဒီလေကြောင်းလိုင်းရဲ့ ကောင်းကြောင်းတွေကို တခြားသူတွေကို ပြောပြမယ်။					

**Part C လူ ဦး ရေဆိုင်ရာကိုယ်ရေးအချက်အလက်**

1. အသက်အရွယ်: \_\_\_\_\_

2. ကျား/မ:

ကျား

မ

3. ပညာအရည်အချင်း?

မူလတန်း  အထက်တန်း  ကောလိပ်/တက္ကသိုလ်ဘွဲ့ရ

ဘွဲ့လွန်

4. အလုပ်အကိုင်

လုပ်အားခ၊ လစာ၊ ကော်မရှင်ခ စသည်ဖြင့် ရရှိသော ဝန်ထမ်း၊ လုပ်သား

အကျိုးအမြတ်မယူသော သို့မဟုတ် ကုသိုလ်ဖြစ်အဖွဲ့အစည်းများမှ ဝန်ထမ်း

အစိုးရဝန်ထမ်း

ကုမ္ပဏီအဖြစ်မှတ်ပုံတင်ထားသော စီးပွားရေးလုပ်ငန်း၊

အသက်မွေးဝမ်းကျောင်းလုပ်ငန်းလုပ်သူ ကိုယ်ပိုင်လုပ်ငန်းရှင်

ကုမ္ပဏီအဖြစ်မှတ်ပုံတင်ထားသော စီးပွားရေးလုပ်ငန်း၊

အသက်မွေးဝမ်းကျောင်းလုပ်ငန်းလုပ်သူ ကိုယ်ပိုင်လုပ်ငန်းရှင်

မိသားစုလုပ်ငန်းတွင် လုပ်ခလစာမယူပဲ လုပ်ကိုင်သူ

ကျောင်းသူကျောင်းသား

အငြိမ်းစား

အလုပ်မလုပ်နိုင်

5. မိသားစုလစဉ်ဝင်ငွေ (USD)

ကျပ် ၇၅၀၀၀၀ အောက်

၇၅၀၀၀၀ မှ ၁၅ သိန်းကြား

၁၅ သိန်းမှ ၂၂ သိန်းကြား

၂၂ သိန်းမှ သိန်း ၃၀ ကြား

သိန်း ၃၀ နှင့်အထက်

**ပါဝင်ဖြေဆိုသည့်အတွက် ကျေးဇူးအထူးတင်ရှိပါသည်။ ကျေးဇူးပြုပြီး မေးခွန်းလွှာအား  
စစ်တမ်းကောက်ယူသူထံသို့ ပြန်ပို့ပေးပါ**