YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME

ANALYSIS ON IMPROVEMENT OF AIRPORT SERVICE AFTER LIBERALIZATION IN AVIATION INDUSTRY OF MYANMAR

(Case Study: Customer Perspective at Yangon International Airport)

SAN LINN
EMPA - 52 (16th Batch)

JUNE, 2019

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A thesis submitted in partial fulfillment of the requirements for the
Master of Public Administration (MPA) Degree

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This is to certify that this thesis entitled **"ANALYSIS ON IMPROVEMENT OF AIRPORT SERVICE AFTER LIBERALIZATION IN AVIATION INDUSTRY OF MYANMAR (Case Study: Customer Perspective at Yangon International Airport)"** submitted as a partial fulfillment in the requirements for the degree of Master of Public Administration (MPA) has been accepted by the Board of Examiners.

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ABSTRACT

Transportation has vitally important role for the economic development and regarding important development in the liberalization of air transport services was the emergence and subsequent expansion of bilateral agreements. This study aims to determine the dominant aspects of airport services and examine the customers' perceived satisfaction on the implementation of service liberalization process in air transport. Both quantitative and qualitative case study research design and descriptive method are used for this study. The descriptive method is used gathering data from 200 randomly selected passengers at the Yangon International Airport and key informant interviews are conducted to heads of the Department of Civil Aviation in Myanmar. This study found that the respondents were more satisfied with the Webpage and Booking section, Check-in section, Security and Immigration section, Boarding section and usually liked that customer satisfaction. It also found that the respondents got more variety in the flight options and the respondents who had booked their online tickets had done their reservation by themselves, especially from Yangon International Airport. The respondents satisfied that the airport staff is informed and helpful when it comes to finding out about the timings, locations, counters, gates of arrivals or departures of different airlines taking place at the airport for boarding. Findings of this study provide relevance information for airlines, airport, airport ground staff and other airport staff because of needing to do the more services higher than now for the customer satisfactions.

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LIST OF ABBREVIATIONS

ACMECS	Ayeyawady Chao Phraya Mekong Economic Cooperation Strategy
Air KBZ	Kanbawza Airline
Air MYP	Mann Yadanarpon Airline
AIS	Aeronautical Information Services
ANS	Air Navigation Services
ANSD	Air Navigation Safety Division
ANSP	Air Navigation Service Provider
APDD	Admin, Plan and Domestic Airport Division
ASA	Air Service Agreement
ASD	Aviation Security Division
ASEAN	Associations of South East Asian Nations
ASSD	Aerodrome Standards and Safety Division
ATD	Air Transport Division
ATM	Air Traffic Management
AWD	Airworthiness Division
BCIM	Bangladesh, China, India and Myanmar Cooperation Forum
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation
BOAC	British Overseas Airways Corporation
BSA	Block Space Agreement
CAAS	Civil Aviation Authority of Singapore
CATI	Civil Aviation Training Institute
CLMV	Cambodia, Laos, Myanmar, Vietnam
CNS	Communication, Navigation and Surveillance
CNSD	Communication, Navigation and Surveillance Division
COMESA	Common Market for Eastern and Southern Africa
CPG	Consumer Packaged Goods
CRS	Computer Reservation System
DCA	Department of Civil Aviation
DGCA	Director General Civil Aviation

DLR	Deutsches Zentrum fur Luft- und Raumfahrt e.V (German Aerospace Center)
DOT	Department of Transportation
EU	European Union
FIR	Flight Information Region
FSD	Flight Standards Division
GATS	General Agreement on Trade Services
GDP	Gross Domestic Product
GSE	Ground Support Equipment
IAL	International Aeradio Limited
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IT	Information Technology
JALUX Inc	Japan Airlines Co.,Ltd
KII	Key Informant Interview
KLM	Koninklijke Luchtvaart Maatschappij (Royal Dutch Airlines)
LCC	Low Cost Carrier
MAI	Myanmar Airways International
MALIAT	Multilateral Agreement on the Liberalization of International Air Transportation
MDCA	Department of Civil Aviation in Myanmar
MET	Aeronautical Meteorology Services
MNA	Myanmar National Airline
NCAER	National Council of Applied Economic Research
OECD	Organization for Economic Cooperation and Development
OSA	Open Skies Agreement
SAR	Search and Rescue
SARP	Standard and Recommended Practice
SITA	Society International de Telecommunications Aeronautics (Air Transport Communications and Information Technology)
SPA	Special Prorate Agreement
SSOD	Standards and Safety Oversight Division
TV	Television
UAE	United Arab Emirates

UK	United Kingdom
ULD	Unit Load Devices
UNDP	United Nations Development Programme
U.S	United States of America
USA	United States of America
WiFi	Wireless Fidelity
WTO	World Trade Organization

CHAPTER 1
INTRODUCTION

1.1 Rationale of the Study

Transportation is playing the pivotal role in economic development as well as infrastructure. There are four modes of transportation follow as: road, water, railway and air. In the modes, the aviation sector is improved especially developed late world war II. In this time only the passenger service developed. In the late, cargo service developed but transportation cost was expensive. However, aviation is one of the modes of infrastructure among the international relationship.

An important development in the liberalization of air transport services was the emergence and subsequent expansion of “open skies” bilateral agreements. The purpose of open skies agreements was to eliminate governmental restrictions regarding international route rights, the number of designated airlines, capacity, frequencies, and types of aircraft that could be operated on specific routes. In 1992, the first open skies agreement was signed between the U.S. and the Netherlands. Since then, over 160 open skies agreements have been established. Still, all but a few countries prohibit foreign competition in their domestic markets by banning both the operation of foreign carriers between domestic points and cross border ownership of national airlines.

The Asia-Pacific region service industries generate a predominant share of output and account for an increasing share of employment. Services have also become a major source of product and process innovation, the target of increasing research and development (R&D) expenditure. In the advent of IT revolution-unleashed supply chains and vertical linkages within and across service and manufacturing industries, services were allowing some countries at a lower level of development to leapfrog entire stages of industrial development and insert themselves productively into the new geography of trade and investment patterns. Services rank among dynamic capital exporting sectors, growing volume of outward investment activity even as they remain the predominant target for inward foreign direct investment (FDI) activity in

most countries of the region, a source of significant and increasing returns to labour mobility at all skill levels. The intangible and heterogeneous nature of tertiary activities, the relative novelty of market contestability and pro-competitive reforms in many major service sectors, and the far weaker supply of quality disaggregated.

Road transportation is the main artery of transport network in Myanmar but now most important of the improvement of technology and liberalization in service sector especially the government encourages the private sector participation (PSP) in aviation industry. Centrally plan economy, State Own Enterprise operated solely this sector. After initiating the economic reform in every economy sector, the role of private sector emerged significantly in Myanmar economy. Similarly, private sector has been involving in different aspect in aviation industry. Then the economic relationship improved among the countries and human mobility as well as trade mobility. Thus cargo trade was developed in Myanmar.

In this regard, Myanmar Department of Civil Aviation (MDCA) had a strategic plan to further expand the aviation sector with four objectives: (1) to pursue the liberalization of economic regulations in the aviation sector; (2) to strengthen air linkages; (3) to promote airline businesses; and (4) to improve infrastructure.

Under the Foreign Investment Law (FIL) in 2012, domestic and international air transport services could be conducted via a joint venture operation with a Myanmar private entity or government agency. As part of this strategy, the aviation Sauthorities have announced the privatization of airports and the upgrade of major international airports in the country especially for Yangon International Airport.

Recognizing these trends, Myanmar Civil Aviation authority had decided to make some far reaching changes in the system. The priority was being given to the development of airport services with emphasis on providing efficient and smooth services while promoting of safety concern.

1.2 Objectives of the Study

The objectives of the study are -

(1) To determine the dominant aspects of airport services at Yangon International Airport and

(2) To examine the customers' perceived satisfaction on the implementation of service liberalization process in air transport.

1.3 Method of Study

This study is used the descriptive method. Both quantitative and qualitative approaches are used to collect the primary data from a random sample of passengers from four randomly selected Airlines and Key Informant interviewed to key persons from relevant institutions. Moreover, the secondary data utilized in this study are collected from Ministry of Transport and Communications, Department of Civil Aviation's (DCA) library, literature books, research paper, various Aeronautical Information Publications, transport journals and relevant issues from websites.

1.4 Scope and Limitations of the Study

This study mainly focuses on the perception of passengers on service liberalization in air transport, cooperation of airline and airport services at Yangon International Airport. The study period is during April and May at Terminal 1 and Terminal 3 of Yangon International Airport. This study reviews and analyzes the concept and implementation of air transport liberalization process as well as real practices in cooperation with private sector in line with the changes of rule and regulation in air transport sector. Air cargo services are not discussed in this study.

1.5 Organization of the Study

This study is organized into five chapters. Chapter one is presenting the introduction of the subject matter, which describes the rationale, objectives, scope and limitations, method of study and organization of the study. Chapter two is followed by chapter one, which presents the literature reviews. Chapter three is service liberalization in air transport in Myanmar and, based on the data available. Chapter four describes survey analysis on the customer perceived satisfaction after liberalization process of aviation industry. Finally, findings, and recommendations are presented in Chapter five.

CHAPTER 2
LITERATURE REVIEW

2.1 Concept of Service Liberalization

2.1.1 The Concept of Service

According to the economic point of view a service is an intangible commodity. That is, services are an example of intangible economic goods. A service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to physical product such as education service; insurance service; banking service; film theater; medical service; telecommunication service; legal service; and air transport services (Ahsanath, 2011).

The current world economy is increasingly characterized as a service economy. This is primarily due to the increasing importance and share of the service sector in the economies of most developed and developing countries. In fact, the growth of the service sector has long been considered as an indicator of a country's economic progress. Economic history tells us that all developing nations have invariably experienced a shift from agriculture to industry and then to the service sector as the mainstay of the economy. This shift has also brought about a change in the definition of goods and services themselves. The service sector is going through revolutionary change, which dramatically affects the way in which we live and work. New services are continually being launched to satisfy our existing needs and to meet needs that we did not even know we had. Nearly fifty years ago, when the first electronic file sharing system was created, few people likely anticipated the future demand for online banking, website hosting, or email providers. Today, many of us feel we can't do without them. Similar transformations are occurring in business-to-business market (Ahsanath, 2011).

2.1.2 The Concept of Liberalization in Aviation Industry

The aviation industry is the business sector dedicated to manufacturing and operating all types of aircraft. Air traffic controllers, when they are awake, are concerned with aviation safety. The term Liberalization refers to a relaxation of previous Government restrictions, usually in areas of social or economic policy, it is a term used for economic liberalization especially trade liberalization or capital market liberalization. In the context of air transport liberalization means the opening up of the market access to airlines of other nationalities, and hence the theory behind 'open skies' (Clarke, 1994).

Retrospectively, bilateral air service agreements have provided the framework under which fares and service frequency between two countries are determined. The first development of air service agreements appeared at the end of World War II during the Chicago Convention in 1944. Bilateral agreements define the conditions and privileges of airlines of both countries and cover items such as: traffic rights, authorized points, capacity, pricing, and designation. For a long period, bilateral agreements were the primary instrument for liberalizing international air transport services (Inter VISTAS, 2015).

In the late 1970s, the U.S. began the process of deregulating its domestic commercial aviation industry by diminishing government control over fares, routes, and market entry. Following the success of this experiment, many countries deregulated their domestic airline markets; however, liberalization of international airline markets has been slower to progress (Inter VISTAS, 2015).

An important development in the liberalization of air transport services was the emergence and subsequent expansion of "open skies" bilateral agreements. The purpose of open skies agreements is to eliminate governmental restrictions regarding international route rights, the number of designated airlines, capacity, frequencies, and types of aircraft that could be operated on specific routes. In 1992, the first open skies agreement was signed between the U.S. and the Netherlands. Since then, over 160 open skies agreements have been established. Still, all but a few countries prohibit foreign competition in their domestic markets by banning both the operation of foreign carriers between domestic points and cross border ownership of national airlines (Inter VISTAS, 2015).

A vast body of literature has explored the impacts of international air service liberalization. This literature has yielded important insights on how the progressive

deregulation of airline operations has fostered the industry's development. By removing government regulatory impediments, airlines have been better able to compete with each other, leading to efficiency improvements and price reductions. These improvements have generated positive impacts on the entire economy. An overwhelming majority of the peer-reviewed research shows that liberalization confers a significant range of benefits to users (passengers, shippers, aviation dependent industries), including lower fares, higher traffic, and "wider economic benefits". Liberalization has tended to generate an initial jump in benefits that subsequently moderates after the market is allowed to adjust to a more unconstrained basis. Further, liberalization has generated different levels of benefits depending on whether the bilateral agreements covered developed versus developing economies. Where bilateral agreements liberalized air service, fares tended to drop between 10% and 40%, depending on the methodology used for the estimate and the time period studied. Passenger traffic levels in liberalized country pairs increased between 18% and 78% compared to country pairs that remain under restrictive agreements (Inter VISTAS, 2015).

Only a few papers estimated limited or a complete lack of benefits from liberalization. While there are some theoretical studies that suggest liberalization could have detrimental effects, there are no empirical studies that establish negative impacts. This section summarizes much of the peer-reviewed literature that has been published over the past 20 years (Inter VISTAS, 2015).

The term 'open skies' refers to a bilateral or multilateral Air Transport Agreement, which liberalizes the rules for international aviation markets and minimizes (or eliminates) Government intervention: the provisions apply to passenger, cargo and combination air transportation on scheduled and charter services. Further, an open skies environment promotes a system based on competition, where air transport is run like any other business, and which facilitates the expansion of the air transport industry. It eliminates the abuse of a dominant position, offers the public better services at lower prices, and eventually creates new economic opportunities and helps to achieve economic growth, provided that the highest degree of aviation safety and security remains in place, and that possible abuses and market instabilities, such as capacity dumping and cutthroat competition, are avoided. Competition is generally accepted as being good for economy because it encourages

firms to be cost-efficient; it drives down prices and leads to expanding output (ICAO Secretariat, 2016).

2.2 Liberalization in Aviation Industry

2.2.1 The United States and the World

The United States, like other States, adopted the bilateral model with a strictly balanced trade of rights with its partners. In 1978, the liberalization of the domestic air transport market in the United States removed barriers to market entry (Brueckner, 2000). By eliminating protected domestic markets, liberalization in the United States also prompted airlines to seek new opportunities for growth in international markets (Hansson, 2001).

This involved route rights, as well as charter operating rights and other commercial opportunities concerning pricing freedom. In 1995, the United States conducted a broad review of its aviation goals and strategies, and by the end of 1995, it concluded nine open skies agreements with European countries. According to (Hansson, 2001), the United States continues to seek to conclude open skies agreements and its policy revolves around the following:

(a) Direct and one-to-one contact with each country based on the particulars of each country, allowing code-sharing, including third party code-sharing: to date, the United States has concluded open skies agreement with more than 76 countries around the world, including agreements with seven Arab countries, namely, Bahrain, Jordan, Kuwait, Morocco, Oman, Qatar and United Arab Emirates;

(b) Multilateral agreements to liberalize international air transport: the first such agreement, the Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT), entered into force on 21 December 2001, and includes Brunei Darussalam, Chile, New Zealand, Samoa, Singapore and Tonga, as well as the United States. The Cook Islands joined the Convention, on 23 July 2006. The agreement includes open traffic rights, including the seventh freedom and is aimed at creating new investment opportunities for airlines, and launching new airlines in concerned markets, particularly through the elimination of many restrictions regarding foreign ownership stipulated in the bilateral agreements (Brueckner, 2000).

(c) Euro-American talks to liberalize skies across the Atlantic in March 2008 saw the wrapping up of the biggest open skies accord in the history of the air transport industry between the European Union and the United States. This agreement will

draw on a market of 750 million inhabitants and 56 Multilateral Agreement on the Liberalization of International Air Transportation.

Other issues involve American laws of airline ownership and control that are partly designed to protect American carriers but also to satisfy the United States military, which maintains the Civil Reserve Air Fleet by drawing on commercial fleets for airlift during national emergencies (Cooper and Smith, 2005). The airlines, as a quid pro quo, benefit with priority over the carriage of military and Government personnel. Other issues include the tax free position of European Union-United States aviation and the harmonization of antitrust policies to protect against predatory behavior (Hansson, 2002).

Studies by (Hansson, 2002), further indicate that the parties agreed on the principle of the liberalization of airspace between them, and began negotiations on a draft agreement. It is also worth noting that on 5 December 2006, the United States Department of Transportation withdrew a proposal regarding the International Investment Rule and expressed its commitment to working on an open skies agreement. This proposal would have changed rules governing international investment in United States airlines (Brueckner, 2000). The withdrawal came after the Department reviewed a multitude of public comments, including those from the United States Congress.

The original proposal, first issued by the Department in November 2005, and later amended in May 2006, would have allowed international investors more input into the marketing, routing and fleet structures of United States airlines while at the same time retaining current domestic ownership and labour protection (Hansson, 2002).

Talks between the Europeans and Americans were aimed at accomplishing a final agreement by the end of 2006. However, the Americans decided to postpone the review of restrictions on foreign ownership. Still, both parties were hopeful that they would be able to reach an early final agreement, and roll it out in the summer of 2007. However, an agreement was only reached in March 2008 and final settlement was anticipated by 2010.

2.2.2 Traffic Stimulation

Consistent with the fare reducing effects, the literature tends to uniformly demonstrate that air service liberalization has a positive impact on stimulating passenger traffic. There are differences in the extent to which travel may be

stimulated, depending on a number of factors, such as geographical location, existing traffic, market structure or the use of different methodologies (e.g., different estimation techniques and the use of cross-sectional or time series data). The time series studies tend to focus on increased rate of traffic growth, while cross-sectional studies focus on snapshots of differences between liberalized and non-liberalized routes. In any event, studies found an increase in traffic in each market analyzed.

2.2.3 Case of Liberalization on U.S. and EU Routes

In 1992, Dresner and Windle examined the impact of the U.S bilateral policy on passenger travel. Using data from the U.S. DOT on air passenger travel between the U.S. and foreign countries with at least 100,000 passengers in 1989, as well as data on bilateral agreements, they found that country pairs characterized by more liberal air service agreements (with liberal pricing and capacity clauses) experienced 46% higher passenger levels than did those with non-liberal agreements (Dresner and Windle, 1992).

The authors evaluated markets between the U.S. and five European countries (the UK, France, West Germany, Netherlands, and Italy) for the years 1969 to 1989. Their findings indicated that traffic between the U.S. and the five European countries increased by 56% as a result of liberalization (Maillebiau and Hansen, 1995).

In 2002, Schipper estimated that in country pairs that are fully liberalized, airlines operated 36% more frequencies for the period 1988 to 1992. The results indicate that an increase in passenger numbers did not lead to an increase in departures in the same proportion. These results suggested that the increase in frequency could be accommodated by an increase in load factor (if aircraft size is constant) (Schipper, 2002).

In 2007, Booz Allen Hamilton assessed the potential economic impacts of an open aviation area between the EU and the U.S. Their study showed that removing restrictions on international air services across the North Atlantic would lead to an increase of 26 million passengers over five years, equivalent to 34% more than without liberalization (Hamilton, 2007).

2.2.4 Case of Liberalization on Other International Routes

In 2008, Piermartini and Rousova assessed the impacts of air transport liberalization on passenger flows. Based on a sample of scheduled international

passenger traffic across 184 countries (approximately 80% of global international passenger traffic) in 2005, the authors found a significant positive correlation between the degree of liberalization and the volume of passenger traffic. In particular, agreements that removed pricing and capacity restrictions, granted cabotage rights, and/or included the possibility for foreign carriers to operate air services had the strongest impact on traffic volumes. They estimated that passenger traffic among countries with the most liberal agreement was over 78% higher than among countries with the most restrictive type of regulation (Piermartini and Rousova, 2008).

Warnock-Smith and Morell estimated how traffic growth in tourism-dependent economies in Caribbean member states would be affected by air transport liberalization. Their study assessed the relationship between air traffic growth and air policy reform using data on three U.S-Northern Caribbean country pairs from 2005-2006. The authors' regression analysis revealed a significant positive correlation between air policy reform and traffic growth; thus, a more liberalized air policy reform would lead to an increase in air passenger traffic (Warnock and Morell, 2008).

In 2012, Cristea, Hummels and Roberson found that passenger traffic in countries that had signed open skies agreements rose 18% more than in non-liberalized countries after five years. The authors also found that the introduction of new routes accounts for over one-third of the increased traffic growth in Open Skies Agreement signatory countries. In 2013, Piermartini and Rousova expanded on their earlier work on passenger flows and focused on four aspects of liberalization: (1) multiple designation provisions; (2) free determination of capacity; (3) free pricing and community of interest; and (4) cabotage. They estimated that worldwide adoption of free determination of capacity and free pricing would lead to a 5% and 9% increase in traffic volumes, respectively. Granting cabotage rights to all country pairs was estimated to increase passenger traffic by 10 percent.

2.2.5 Service Liberalizations in Aviation Industry

Recent studies, by (Doganis and Rigas, 2001), indicate that states regard their national carriers and transport rights as strategic and national resources, as part of their sovereignty, and as part of their de facto and de jure control over all land, sea and air space within defined territorial boundaries. Further, a large number of airlines are still state-owned, or state-supported, and consequently Governments have resorted to imposing various degrees of protectionism to defend their airlines. Extensive

research by (Alamdari and Morrell, 1998), attests to the importance of commercial aviation to nations in all states of development. Air service liberalization, which replaces a set of strict and arcane rules with the primacy of the market, has repeatedly proven a decisive influence in expanding the industry, and making its benefits available to more people. The past two decades have seen significant and beneficial changes in airline regulation.

The United States began pursuing open skies agreements in 1979, and by 1982, it had signed 23 bilateral air service agreements worldwide, mainly with smaller nations. That was followed in the 1990s by agreements with some individual European States. The creation of a single European market for air transport services between 1987 and 1997 contributed to a surge in air transport within Europe. It is expected that the Arab market, which ranks among the fastest growing in the world, will benefit enormously from easing restrictions on air transport (Brueckner, 2000).

As early as in the 1944 Chicago Convention, there had been proposals to liberalize the international aviation market. It took the industry half a century before the first Open Skies agreement got approved by the US-Netherlands governments in 1992. Although many Open Skies agreements have been reached in the following years, liberalization remains a formidable challenge. In addition, many of these liberalizations have been partial and incomplete, which needs further deregulations on ownership control and beyond rights etc. Many difficulties in liberalization can be ascribed to stakeholders' different expectations on the effects of alternative policy / agreement scenarios. The resulting uncertainty has prevented many governments from adopting substantial regulatory changes. This study examines the effects of past liberalization policies on economic growth, passenger traffic and low cost carriers. Our main conclusions are as follows: o Liberalization has led to substantial economic and traffic growth. Such positive effects are mainly due to 1) increased competition in the aviation market, which reduces price and stimulates traffic growth; 2) productive efficiency gains as a result of carriers' optimization of their network operations and pricing strategy. In addition, the increased competitive pressure forces airlines to improve productivity, and eliminates inefficient carriers out of the market; 3) positive externalities to the overall economy including employment opportunities, trade promotion, better transport and logistics services etc. These impacts are not uniform across countries. However, there has been an increasing number of countries adopted

(progressive) liberalizations. This suggests that countries involved have benefited from liberalization in general.

Liberalization allowed carriers to optimize their networks to cover intra / inter-continental markets. Hub-and-spoke networks have been extensively used by airlines to achieve cost advantages in production (economies of density) and / or revenue advantage. If ownership / citizenship restrictions are relaxed, market consolidation via merger and acquisition would allow airlines to strengthen their networks and market position. Strategic alliances allowed airlines to achieve "second best" network connection in markets where BSAs are still restrictive. Upon liberalization, the future growth of global airline alliance would be limited. Liberalization and network competition in international markets imply shift in traffic spatial pattern and market power. Therefore, it is important for countries to maintain their leadership in liberalization, thus that to keep their aviation sector competitive in the global markets.

The prosperity of low cost carriers has brought significant impacts to the airline industry. There is a two-way relationship between LCC expansion vs. liberalization (and deregulation). The fast growth of LCCs leads to increased competition and reduced fare, which stimulate traffic substantially. These changes call for the removal of restrictions on capacity, frequency and pricing. In liberalized markets such as the EU single aviation market, LCCs have benefited most from the liberalization of beyond rights by establishing airport bases across borders. In addition, development of LCCs in domestic market can promote liberalization policy by increasing the competitiveness of a nation's aviation industry. On the other hand, existing regulations on route entry, ownership and effective citizen control have constrained the expansion of LCCs, and thereby, prevented the associated benefits to be fully realized. The possibility of creating "destructive" or "excessive" competition had often been used as an excuse for regulation. Our investigation revealed that such negative effects were not material. Protection and regulation did not lead the airline industry to efficiency and profitability as hoped by policy makers. Instead, countries leading deregulation and liberalization scored various benefits for their aviation industry as well as the overall economy. Therefore, it is important for first-mover countries to maintain their leadership in liberalization, and it is urgent for countries still practicing tight regulation to catch up the wave of liberalization.

The research on airfares and traffic flows shows that liberalization of air services generates significant additional opportunities for air transport users.

Subsequent to liberalization, studies shows that airfares fall 10% to 40% while traffic increases as much as 75%. Removing restrictions on pricing and capacity appear to have the most sizeable effects. Allowing for foreign competition on domestic point-to-point routes (cabotage) is expected to confer significant consumer benefits, although it may have a negative impact on producer surplus. The literature does not reconcile the difference in magnitudes across studies. However, examining the methodologies used by these studies, we infer that as time progressed, liberalization had the general effect of lowering of fares and growing traffic in all markets (non-liberalized markets have to compete with liberalized destinations). As a result, while liberalization still has the effect of reducing fares and increasing traffic, the difference between liberalized and non-liberalized markets is now smaller, although still meaningful and significant.

The literature review also shows considerable evidence of wider economic benefits provided by air service liberalization. Those wider economic benefits (sometimes called catalytic impacts) are driven by the increased connectivity enabled by further liberalization. In Asia, India, the EU and the U.S., the liberalization of air service has increased production and benefits in other sectors such as tourism, international trade, and overall economic growth. The literature also shows that the emergence of the Gulf carriers has stimulated traffic and generated consumer benefits in the regional markets they serve. Finally, few papers have identified limited impacts. One example often cited is that the outbound tourism may offset the benefit of increased inbound tourism. However, the impacts advanced in these papers are based on theoretical rather than empirical analysis.

2.3 Airport Services and Passengers' Demand

2.3.1 Airport Check-in

The security of all the passengers at the airport and in flight is very important. Hence, just like the passengers need to go through security checks before boarding flight, the checked-in baggage also undergoes security checks. The procedure for security check for checked-in baggage varies as per region and airport however to explain it easily information provided by Yangon Aerodrome Co Ltd. will be taken. Once the bag is checked-in the luggage travels on the conveyor towards the destination gate to be loaded on the plane. During this period it goes through security checks to negate any kind of threats. Before the bag reached the first

level of check the bag is loaded on tray and the computerized system checks if the bags are overlapping or awkwardly placed on the tray. Once the baggage is placed and spaced well so that the bags can be identified without confusion.

The first level of baggage check is an automated X-ray scanning machine which can detect any questionable object. If the level 1 scanning is not successful the bag is transferred to level 2 where the object is scanned again and the image shows up on the screen along with the image that was scanned at level 1 where an attendant checks it. If the attendant still cannot clear the suspected baggage then the baggage transferred to a level 3 check (Robson Handling Technology, 2016). At the level 3 check the attendant has more freedom to manipulate the image and to take a decision if the baggage n question is a genuine threat. Along with this at level 3 the attendant has access to a printer where he/she can stick the print to the baggage to categorize the baggage like failed level 1, failed level 2, tracking error, etc. The baggage that is not cleared at level 3 is a clear threat as a result needs to undergo manual check (Robson Handling Technology, 2016). After the baggage is cleared it is loaded back in the system after which the baggage reaches the destination terminal with the help of computer guidance which reads through its 10 digit barcode. During the course of literature review there was a question on wuora.com which asks about the security check procedure of the checked-in baggage. The response of Tanvee Sait and Mohanraj Jayaraman concur to the procedures of level 4 check. As per their blog profiles they are working or related to airline industry. As per their responses all checked-in baggage undergo security scanning and in case a suspected baggage is found the baggage is opened and the suspected item is removed from the baggage and a notice is pasted on the bag signifying a detailed open bag search was carried out (SITA, 2015).

2.3.2 Security Services

Security has been an important aspect of airline industry and since 1970's there has been significant importance given towards it. As a result the security incidents have reduced constantly, barring the incident of 9/11. At present, security service is either provided by the government or the airlines which hire a private agency for the same. However, it is the duty of the airlines to finance these security agencies irrespective of them provided by the government or hired privately (IATA, 2011). Over time technological improvements and automation have improved the security. Threat of baggage being stolen has reduced significantly as the baggage

arrival in the baggage reclamation area is aligned with the passengers in the arrival area. Similarly, due to automation security checks in the system have been significantly fast, reducing the check-in baggage transfer times. Security and customs checks have reduced significantly as the checks are done in advance by profiling the passenger and the baggage as per the level of potential of risk (IATA, 2011).

2.3.3 Future of Security

Soon detail updates will be provided to the passengers regarding the locations of their baggage eliminating possibilities of mishandled baggage. Similar systems are used by airlines airports to monitor passengers so that the flights will not be missed.

'Big Brother' system will help in storing data of each and every passenger in the world to make seamless movement for the passengers and their respective baggage from passport checks, immigration checks and customs check (IATA, 2011). Airports Authority of India with the help of SITA has taken up the bag manager system that will help the organization and security personnel to determine which passengers have boarded the flight and which baggage have been loaded. This system will help in finding out mismatches which will improve the security immensely even before the flight takes off (SITA, 2015). This way suspected explosives or terror activities can be avoided.

A new type of baggage pick-up and drop service can become the way for the future in which the baggage is picked from a location out of the airport. In other words it can be said to be offsite baggage drop service. Abu Dhabi Airports is one such company that is providing such service. However it is not offered as a mainstream service for passengers. Also the security checks in this offsite baggage drop service can vary from the security checks done at the airport (Ghee, 2013).

2.3.4 Air Passenger Demand

As a result of the intensification of overall economic, social and political ties between countries on one hand and the advent of technology in the other, the demand for air transport services has grown enormously. In line with this, the desire to understand and the pattern of this demand from the academics, policy makers and the airlines have been given special attention. Accordingly, the following paragraphs highlight studies related to air transport demand.

Jorge-Calderon (1997) summarizes that the demand for air transport can be explained in two broad categories. Firstly, geo-economic variables which arise from activity

(economic) and location factors determine the level of air transport demand between countries. The variables most commonly used to capture the influence of these factors are income and population of route end points (cities, countries) and the distance between them. The first two are 'generative' variables since air transport demand is positively related with them. Other studies (Dargay and Hanly, 2001 Mallilabiau and Hansen, 1995) used exports and imports between route end points instead of income to capture the propensity to travel by air between countries.

In the second category, service related variables which include quality of service and price are used as the main determinants of air transport demand. To this end, Jorge- Calderon (1997) indicates that the number of flight frequency and aircraft size are mostly used to capture the influence of quality related variables.

2.4 Airline, Airport Choice and Customer's Perception

2.4.1 Airline Choice

In this section, I discuss studies on the factors driving a customer's choice of airlines. While airlines compete through price competition for customers, several other factors may also influence a customer's choice (Morrison, 1989; Proussaloglou and Koppelman, 1995). This section is divided into two parts. The first part discusses literature concerned with service schedules, such as schedule frequency and the number of connection on a route, and how these factors influence the choice of an airline. The second part of the section discusses operation performance factors, such as on-time performance and baggage handling, and how these factors determine a customer's choice of airlines. Most importantly, previous studies that examine customer's operations exposure are summarized since this may affect customer's choice of airline.

A primary factor affecting airline service quality is the provision of a service schedule that maximizes a customer's time and convenience utility, and thus positively influences customers. First, a frequent service schedule is a determinant of customer choice of an airline (Proussaloglou and Koppelman, 1995). Customers want to minimize wait time for a flight, the time different between preferred departure time and the actual departure time (Brueckner and Flores-Fillol, 2007). A carrier that offers a high frequency of flights will offer customers a greater chance that they will be able to depart at a time closer to their desired departure time. This results in convenience for customers so that they can minimize wait time for a flight and arrive at their

destination at the desired times. Proussaloglou and Koppelman (1995) test this notion through multinomial logit model of airline choice using the passenger survey data collected in the Dallas area. The authors use subjective measures of schedule convenience for a specific route and find a positive relationship with a customer's choice of airlines. Suzuki (2007) also found that high flight frequencies are positively associated with a customer's choice of an airline. The implication of these results is that being able to depart at a convenient time is a significant determinant of a customer's choice of airline.

The number of connections required to reach a final destination also matters to customers in their choice among air carriers. Nonstop flights may be considered by customers to be of a higher quality (Lijesen, 2004) compared to connecting flights, and thus may prompt customers to choose the airline offering nonstop flights (Adler, 2005; Coldren, 2003). Previous studies argue that connecting flights increase travel duration time, incur the inconvenience of changing planes, and cause passengers to face the possibilities of flight delays and lost baggage (unreliable and inconvenient service). Adler (2005) test the number of connection across different groups of customers by trip purpose in their choice of airlines. The authors show that business travelers are more sensitive to the number of connections on a routing than are non-business travelers. This result is likely due to the higher value that air travelers place on travel time when they travel for business purpose (Windle and Dresner, 1995). Moreover, they find that frequent travelers are more sensitive to on-time performance than are infrequent travelers, likely because they frequently experience poor service.

In the similar notion, Adler (2005) show that business travelers are more sensitive to flight duration time than are non-business (say leisure) travelers. Morrison and Winston (1992) test the sensitivity of air travelers to flight duration time, connecting time, schedule delays and a wait time between desired and schedule departure time through an airline choice model. The results of the study show that transfer time has the highest value to travelers followed by flight duration time. This argument supports that transfer time is the time that customers most want to avoid. As a result, customers want to avoid connecting routings in order to minimize transfers. In summary, this literature supports the argument that nonstop flights are important to customers, especially those with a high value of time (i.e., business travelers).

Secondly, a customer's choice of airlines is also affected by operation performance factors, including factors such as on-time performance and mishandled

baggage. For instance, Proussaloglou and Koppleman (1995) examine the impact of on-time reliability on customer choice and find that customers prefer airlines with higher on-time performance. Dresner and Xu (1995) examine the relationship between operation service factors and financial performance through customer satisfaction. Operation performance in this study is assessed by a carrier's lost bags and on-time performance. Through a two-stage least squares model to link airline operation service factors to customer satisfaction, and ultimately to airline profits, the study reports that improving one measure of customer service (i.e. lost baggage) increases revenues more than costs and leads to a net increase in profits, whereas improving another measure of customer service (i.e., on-time performance) increases revenues less than costs and leads to a net decrease in profits. It is interesting to note that different operation service factors have differential impacts on customer's satisfaction and an airline's financial performance. The study, however, does not explicitly observe how operation service factors influence actual customer choices.

Tsikriktsis (2007) examines the direct relationship between operation performance factor and an airline's financial performance. Operation performance factors in the study include on-time performance and lost baggage for both "focused" carriers and full service airlines. Focused carriers are defined as airlines that mainly connect less congested secondary airports with a single aircraft type within North America. These airlines include Southwest, America West and Alaska, which other authors may refer to as LCCs. The author argues poor on-time performance will cause more damage to the financial performance of focused service carriers than to full service carriers since customers have higher expectation for focused carrier's service. However, no empirical results are presented to back this supposition.

In sum, it is worth noting that operation service factors have been found to influence customer satisfaction (Dresner and Xu, 1995) and financial performance (Drenser and Xu, 1995; Tsikriktsis, 2007).

2.4.2 Airport Choice

In this section, I review the main airport choice determinants that previous literature argues. In many regions of the country, a passenger can travel from two or more airports, and thus has an airport choice decision to make. Three major variables that drive a customer's airport choice have been recognized by previous researchers. These are airport accessibility, service schedules of airlines at the different airports

(Harvey, 1987; Windle and Dresner, 1995) and airfares offered by airlines at the different airports (Pels et al., 2003; Pathomsiri et al, 2005). These three determinants, flight frequency, fare and access time are discussed as choice specific variables in Windle and Dresner (1995). The "choice specific" variables represent the different characteristics of the airports that may be attractive to customers. Then, these choice specific variables predict airport choice of customers. The authors also discuss the "chooser specific" variables that by distinguish different types of customers, such as residents versus non-residents of the metropolitan area, and business travelers versus leisure travelers. These chooser specific variables moderate the impact of the choice specific variables such as flight frequency, airport access time. Below, I review each of these three choice specific variables and additionally discuss the moderating effect of chooser specific variables.

2.4.3 Airport Accessibility

Accessibility is recognized as perhaps the most important variable in choosing an airport (Pels, 2003). In the Pels (2003) study, a customer's airport choice is found to be positively associated with airport accessibility in terms of both lower access time and lower access cost. Access time is calculated by the travel distance between the trip origin location (home, business, or hotel) and an airport by the various modes of airport access. The authors also calculate the access cost for each ground transportation mode based on travel distance. They find higher elasticity for access time than for the access cost, especially for the business passengers. In a similar study by Hess and Polak (2006), in- vehicle access time is posited as a factor that will influence a customer's choice of airport. The authors find that in-vehicle access time is negatively associated with a customer's airport choice and interpret this finding as evidence of a customer's risk aversion; that is, his/her desire not to miss a flight by arriving late to the airport. Ground access time to an airport has been found by other studies to be the primary determinant of airport choice and consistently demonstrates a negative impact on a customer's choice among airports (Windle and Dresner, 1995).

The importance of access time to the airport may vary among categories of passengers. Windle and Dresner (1995) estimate the impact of access time on customer choice among the three airports in the Washington Metropolitan Area. The study shows that high airport access time most negatively affects business customers regardless of whether they are resident or non-resident of the metropolitan area. This

result may imply that business travelers have higher time values than do leisure travelers, and thus tend to minimize airport access time and the risk of missing a flight. Also test access time across different customers grouped by the number of traveling companions in a group using data from the San Francisco Bay area airports. The authors argue that customers traveling in a group may use the access time for socialization purposes and thus may be less sensitive to access time than solo travelers. Recently, Loo (2008) examines the impact of flight length on access time and access cost to the five airports in the Hong Kong area. The author finds that access time is important for all passengers; including those traveling on short hauls, medium hauls and long haul flights. All the studies support the notion that access time consistently influences customer choice of airports, but its importance may vary across customer segments.

Pels (2003) examine a passenger's choice of airport in the San Francisco Bay area in order to determine the influence of airport access modes, such as private car, hired service, and public transportation. The authors note that actual ground travel time or distance can vary depending on the transportation mode used, and that customers consider a combination of airports and access modes in order to maximize their utility. In the study, two nested models are tested. The first model has access mode choice first and airport choice later. The second model has airport choice first and access mode choice second. The authors conclude that the nested model with airport choice first and access mode choice later is statistically preferable based on their empirical results. In addition, it is conceptually more intuitive. This conclusion implies that access mode choice may not drive airport choice, rather airport choice may help determine access mode.

Recently, Loo (2008) has tested the relationship between a customer's airport choice and the number of public access modes available to the five airports near Hong Kong. Accessibility is tested in terms of access time, access cost and access mode in the study. However, the study finds that only access time is significant in a customer's choice of airports. While showing that the number of available access modes may not significantly predict a customer's airport choice, these previous studies still leave open whether a unique access mode, such as a metro connection, may influence customer choice.

In sum, this section has reviewed literature discussing airport accessibility (access time, access cost, and access mode) to explain a customer's airport choice.

Although airport accessibility is acknowledged as an airport attribute (Suzuki, 2007) airports have little control over this attribute, at least in the short run.

2.4.4 Customer Perception of the Service Quality

The perception of service itself is a multidimensional concept that can include different sub-categories depending on the service type. The 'Business Dictionary' (2016) gives the following definition of customer perception: "Customer perception" is a marketing concept that encompasses a customer's impression, awareness and/or consciousness about a company or its offerings". The same source also mentions that customer perception can be affected by various factors, such as advertising, reviews, public relations, social media, personal experience etc. The perception of service is grounded in the three perceptional processes: selective attention, distortion, and retention, which are explained as follows ("Selective attention, distortion, and retention", 2006):

• **Selective attention** is a perceptional process that implies the tendency for people to filter and eliminate most of the information to which they are exposed.
• **Selective distortion** is a perceptional process that implies the tendency for people to support existing beliefs of them while interpreting absorbed information
• **Selective retention** is a perceptional process that implies the tendency for people to remember and concentrate more on the positive findings of the favored brand and eliminate the good points about their competing brands.

The concept of service perception is closely related to the customer perception of service quality, while the quality of service reflects on the customer satisfaction (Sureshchanda, Rajendran, & Anantharaman, 2002).

2.4.5 Customer Loyalty

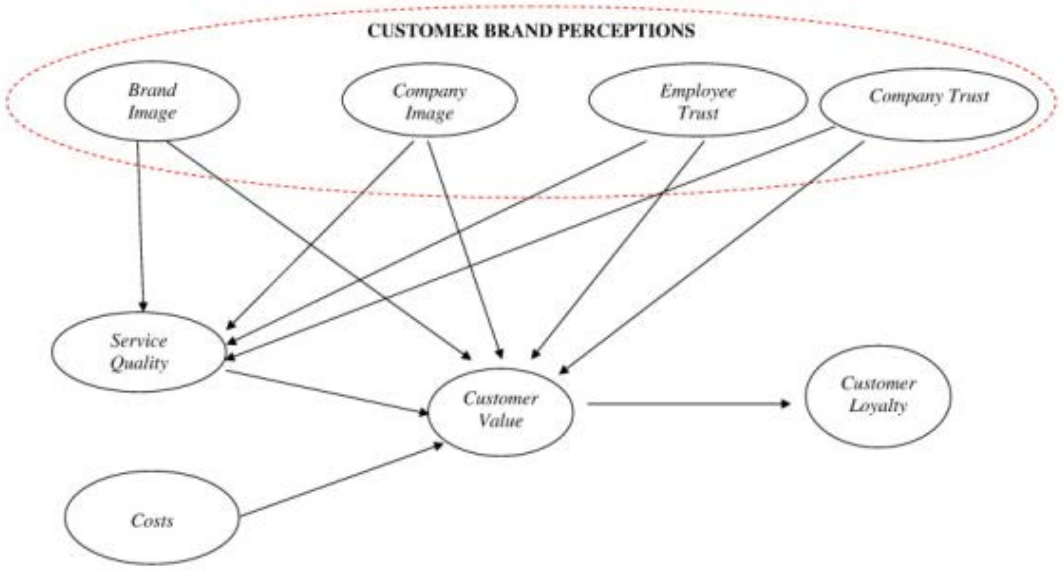
The concept of customer loyalty is usually associated with other concepts as service quality, perceived value, and customer satisfaction, which were mentioned above. There are various definitions of customer loyalty, given by different authors and dictionaries. According to the Cambridge Dictionary (2016) "Customer loyalty is the fact of a consumer buying products or services from the same company over a long period of time".

It has to be said that the customer loyalty is closely related to the customer perception of service in general. This fact was supported by the study of Shafeiha and

Saeednia (2011), the results of which has shown that perceived value of service has a direct positive impact on customer loyalty.

Previously, Brodie and Whittome (2009) have created a conceptual model, representing components of the customer brand perception and the factors influencing the concept (see Figure 2).

Figure (2.1) Customer Brand Perception



Source: Brodie and Whittome, 2009.

The model suggests four components of the customer brand perception: brand image, company image, employee trust and company trust. Each of them has its own influence on other factors, such as service quality, costs, and customer value and customer loyalty. Thereby, the model explained above supports the fact of the relationship of customer loyalty to other concepts, constituting the overall customer perception of service.

Study of Woon (2015) investigates factors influencing customer loyalty in the airline industry in Malaysia and, eventually, implies that there is a positive relationship between customer loyalty, taken as the dependent variable, and commitment, trust and perceived quality of service as explanatory variables.

2.5 Air Passengers' Traffic Flows and Liberalization of the Aviation Market

This section is divided in two subsections. The first subsection describes the distribution of international air passenger traffic across countries worldwide and on the routes covered by international air services agreements. The target is to provide an

understanding of the extent of the coverage of the database we use for the empirical analysis. The second subsection looks at the degree of liberalization of the aviation market. It, first, describes the key features of an air service agreement and provides some statistics on the relative prevalence of different features across agreements. Then, it illustrates and compares two measures of the degree of liberalization. One is the informed index of liberalization built by the WTO Secretariat (WTO, 2006) on the basis of consultations with experts. The second one is the statistical index of liberalization we built using principal component analysis on the basis of the raw data of the agreements.

Key features of Air Service Agreements **(**ASAs) incorporate many features covering a wide range of topics such as aviation security, incident investigation, immigration, control of travel documents and many others. In a recent study, the WTO Secretariat (WTO, 2006) has identified seven features of ASAs as relevant indicators of openness for scheduled air passenger services. These include seven –

(a) Grant of rights that defines the rights to provide air services between the two countries. In particular, the WTO study focuses on the fifth freedom, seventh freedom and cabotage. Fifth freedom is the freedom to carry freight/passengers between two countries by an airline of a third country on a route with origin or destination in its home country. Seventh freedom allows carrying freight/passengers between two countries by an airline of a third country on a route with no connection with its home country. Cabotage is the freedom to carry freight/passengers within a country by an airline of another country on a route with origin/destination in its home country;

(b) Capacity clause that identifies the regime to determine the capacity of an agreed service. The capacity regime refers to the volume of traffic, frequency of service and/or aircraft type(s). Sorted from the most restrictive to the most liberal regime, three commonly used capacity clauses are predetermination, Bermuda I and free determination. Predetermination requires that capacity is agreed prior to the service commencement; Bermuda I regime gives limited right to the airlines to set their capacities without a prior governmental approval and free determination finally leaves the capacity determination out of regulatory control;

(c) Tariff approval that refers to the regime to price air services. The most restrictive regime is that of dual approval, whereby both parties have to approve the tariff before this can be applied. The most liberal regime is free pricing, when prices

are not subject to the approval by any party. The semi-liberal regimes are country of origin disapproval (tariffs may be disapproved only by the country of origin), dual disapproval (both countries has to disapprove the tariffs in order to make them ineffective) and zone pricing (the type of control depends on given reference points);

(d) Withholding that defines the conditions required for the designated airline to operate on a specific route. Restrictive conditions require substantial ownership and effective control, meaning that the designated airline is the "flag carrier" of the country. More liberal regimes are community of interests and principal place of business regimes, when a foreign airline can be also designated. Community of interests' regime still requires a vested substantial ownership and effective control of the airline in one or more countries that are defined in the agreement, but principal place of business regime removes the substantial ownership requirement and is thus more liberal

(e) Designation that governs the right to designate one (single designation) or more than one (multiple designations) airline to operate on a route;

(f) Statistics that provides rules on exchange of statistics between countries or their airlines. If exchange of statistics is (can be) requested, it is an indicator that the parties intend to monitor the performance of each other's airline and is thus viewed as a restrictive feature of an agreement.

(g) Cooperative arrangements that define the right for the designated airlines to enter into cooperative marketing agreements. This right provides a number of commercial advantages and is thus considered as a liberal feature of an agreement.

Table (2.1) shows the number of agreements where a specific provision appears. It is interesting to notice that the most restrictive regime is usually the most frequent. For instance, dual approval of air tariffs is required in more than 70 per cent of ASAs. Similarly predetermination, substantial ownership and effective control and the request for exchange of statistics are included in most of the agreements. Cooperative arrangements are mostly not allowed as well. 5th freedom right is included quite often, while 7th freedom and cabotage are very rare. Different pattern arises only for the designation of airlines, since multiple designations are allowed in more than 60 per cent of agreements.

Table 2.1 Frequencies of Regimes/Provisions of ASAs

Regime	Frequency	Regime	Frequency
Grant of rights		**Withholding/Ownership**	
5th freedom	1650	Substantial ownership and effective control	1735
7th freedom	417	Community of interest	396
Cabotage	353	Principal place of business	
138 Missing values	0	Missing values	59
Pricing regimes		**Capacity regimes**	
Dual approval	1625	Predetermination	1324
Country of origin disapproval	37	Other liberal	125
Dual disapproval	153	Bermuda I	327
Zone pricing	8	Other restrictive	10
Free pricing	381	Free determination	464
Missing values	94	Missing values	49
Total	**2299**		**2299**
Designation		**Statistical exchange**	
Single	879	Exchange of statistics required	1492
Multiple	1411	Exchange of statistics not required	807
Missing values	9	Missing values	0
Total	**2299**		**2299**
Cooperative arrangements			
Not allowed	2173		
Allowed	126		
Missing values	0		
Total	**2999**		

Source: Own calculations based on WASA database (ICAO, 2005) and QUASAR database (WTO, 2006 and 2007).

Note: The frequencies of freedom5, freedom7 and cabotage do not sum up to 2299 observations, because they are independent provisions, not excluding each other. Similarly, some ASAs report combination of ownership regimes.

2.6 Reviews on Previous Studies

Recent studies of Myanmar Candidate by Ei Mon Kha EMPA 10th Batch (2011) submitted a thesis, "A Study on Service Quality of Myanma Airways (A Case

of Yangon-Kawthaung Route. This study emphasized on exploring how customers evaluate the quality of services provided by Myanma Airways based on servqual model. In this, the customers' perception for the services of Myanma Airways had been evaluated.

Aung Soe Moe, EMPA 10th Batch (2011) analyzed in Air Transportation services in the aviation industry on the thesis title of "A Study on Myanmar Civil Aviation". This thesis examined the aviation industry has some difficulties in availability of qualified employees. Privatization process are slow development of international air transport is not good. On effective state aviation system has not been fully applied yet. Government should encourage more private participation in aviation sector via privatization process. Partial practice of clear separation between service provider and regulator/ inspector is required.

Thet Thet Latt, EMPA 11th Batch (2015) conducted a research "A Study on Public Private Partnership of Air Transportation in Myanmar". The study analyzed the public private partnership arrangement in air transportation sector of Myanmar by implementing the Management Contract in case of Yangon International Airport and Build Operate Transfer Contract in case of Nay Pyi Taw International Airport. In this study, it was found that PPP is the allocating of risk to transfer the private sector and YIA faces land risk and Nay Pyi Taw International Airport also faces with demand risk of international flights and passengers.

Another survey conducted by Sandar Aung, EMPA 4th Batch (2008) who studied in "A Study on Airport Operations at Yangon International Airport" is made on ground operations and had tried to indicate the sufficiency of services provided by this airport and also to produce the need for quality services. The paper had emphasized only on aircraft entries and departures, passenger arrival services, passenger departure services, cargo and baggage handling, concessionaries such as duty free shops, restaurant etc. and ground transport such as taxi, air bus services etc.

CHAPTER 3

SERVICE LIBERALIZATION IN AIR TRANSPORT IN MYANMAR

3.1 Overview on Service Liberalization in Myanmar

The air transport industry plays a major role in world economic activities and one of the main factors which have been playing a vital role in the aviation sector of Myanmar. Currently, most international air transport services in Myanmar are conducted under the web of bilateral agreements that put restrictions on entry (market access), capacity (frequency and aircraft type), and foreign ownership of airlines. Besides, traffic rights, airline designation and fares are also subject to restrictive regulatory control. Provisions of these agreements are based on a reciprocal exchange of rights, which are supposed to be exploited by the designated airlines of the two bilateral partners. This move had its beginning when the United States of America (USA) deregulated its domestic market in the late 1970s. Subsequently, the USA started to follow a liberal 'Open Skies' policy in its air transport services negotiations with the rest of the world.

Transport plays an extensive role in present modern world. It helps in removing the farness barrier. An efficient transport system is necessary for sustainable economic growth of the country and plays an important role in promoting national and global integration. Air transport is of present origin in the advancement of transport system of a country. Air transport offers the fastest practical means of transportation.

Before 2010, Myanmar was led by Military Government. So that Government operated in almost economy by State Own Enterprise. After 2010, President U Thein Sein's Democracy Government who was usually operated Private Sector Participation for many economies which included in aviation industry and in this time Myanmar was opened sanction by usually world nations. In 2012, after the FIL was noticed Aviation Industry services were more improved by the countries signed the bilateral and multilateral agreements with Myanmar that is established of services liberalization.

3.2 Modes of Transport in Myanmar

A mode of transport is a solution that makes use of a particular type of vehicle, infrastructure and operation. The transport of a person or of cargo may involve one mode or several modes with the latter case being called intermodal or multimodal transport.

(a) Rail Transport

Rail transport is a commonly used mode of long-distance transportation. Rail transport is where a train runs along a set of two parallel steel rails, known as a railway or railroad. The rails are anchored perpendicular to ties of timber, concrete or steel, to maintain a consistent distance apart, or gauge. The rails and perpendicular beams are placed on a foundation made of concrete or compressed earth and gravel in a bed of ballast.

(b) Road Transport

A road is an identifiable route, way or path between two or more places. Roads are typically smoothed, paved, or otherwise prepared to allow easy travel. The most common road vehicle is the automobile. Other users of roads include buses, trucks, motorcycles, bicycles and pedestrians. Automobiles offer high flexibility and with low capacity but they are the main source of noise and air pollution in cities. Buses allow for more efficient travel at the cost of reduced flexibility. Road transport by truck is often the initial and final stage of freight transport.

(c) Water Transport

Water transport is the process of transport a watercraft, such as a barge, boat, ship or sailboat, makes over a body of water, such as a sea, ocean, lake, canal or river. The need for buoyancy unites watercraft, and makes the hull a dominant aspect of its construction, maintenance and appearance. Although slow, modern sea transport is a highly effective method of transporting large quantities of non-perishable goods. There are many commercial vessels today carrying billion tons of cargo around the globe. Transport by water is significantly less costly than air transport for transcontinental shipping. Short sea shipping and ferries remain viable in coastal areas.

(d) Air Transport

Air transportation plays an integral role in our way of life. Commercial airlines allow millions of passengers every year to attend business matters, go home for the holidays, take vacations around the globe, or travel to other important events.

Air transportation also represents the fastest way to ship most types of cargo over long distances. Social Benefits of air transport are as follow; air transport broadens people's leisure and cultural experiences via wide choice and affordable access to destinations across the globe. It improves living standards and alleviates poverty through tourism. It facilitates the delivery of emergency and humanitarian aid relief and swift delivery of medical supplies. Economic benefits of air transport are as follow; air transport provides the only worldwide transportation system which makes it essential for global business and tourism. There are around 5 billion air passengers annually. Air transport carries over 43 million tons of freight annually and 35% of interregional exports of goods by value and 40% of international tourists travel by fair.

3.2.1 Advantages and Disadvantages of Air Transport

(a) Advantages

It is the fastest mode of transport. It is very useful in transporting goods and passengers to the area, which are not accessible by any other means. Air transport provides comfortable, efficient and quick transport services. It is regarded as best mode of transport for transporting perishable goods. It is the most convenient mode of transport during natural calamities. It provides vital support to the national security and defense.

(b) Disadvantages

It is relatively more expensive mode of transport. It is not suitable for transporting heavy and bulky goods. It is affected by adverse weather conditions. It is not suitable for short distance travel. In case of accidents, it results in heavy losses of goods, property and life but this is lower possible case.

When Myanmar gained independence, the Ministry of Waterways and Civil Aviation and Ministry of Transport, Posts and Telecommunications were formed. In 1961, the above-mentioned ministries were merged and reconstituted as the Ministry of Transport and Communications with (11) organizations. In 1972, it was again reconstituted as the Ministry of Transport and Communications. It consists of (17) organizations. In 1992, it was reconstituted into three ministries, namely Ministry of Transport, Ministry of Rail Transportation and Ministry of Communications, Posts and Telegraphs. When the Ministry of Transport was first formed it has (4) departments, (5) enterprises and (1) training institute, totaling (10) organizations. The

Meteorology and Hydrology Department was added to the Ministry of Transport on August 20, 1999. Myanmar Maritime University was inaugurated on 1st August, 2002. Currently there are (5) departments, (5) enterprises (1) university and (1) training institute totaling (12) organizations under the Ministry of Transport.

3.3 Brief History of Department of Civil Aviation (DCA)

During the pre-independence period, the British Overseas Airways Corporation (BOAC) took responsibility for carrying out all of Myanmar's civil aviation functions and after independence in 1948, it was considered not appropriate for the aeronautical communications functions under the management of BOAC and through the efforts of efficient young communication engineers, the International Aeradio Limited (IAL) was contacted and Myanmar's aeronautical communication functions were contracted to IAL and so the foundation for the future of Myanmar's civil aviation communication sector was laid. The Department of Civil Aviation is headed by the Director General and is a subordinate organization under the Ministry of Transport. The Department of Civil Aviation is one of the ten departments and two institutes under the Ministry of Transport established by Executive Section of the Republic of the Union of Myanmar Constitution of 2008.

With a view for the systematic development of international civil aviation, the Chicago Convention was signed at Chicago on April 4, 1947 and the International Civil Aviation Organization (ICAO) was formed. Myanmar became a member state of the ICAO on August 8, 1948.

3.3.1 Policies and Objectives

In compliance with the Republic of Union of Myanmar Aircraft Act, Rules and procedures as well as the Standards and Recommended Practices of the ICAO, the Department of Civil Aviation is carrying out its functions for the safe, smooth and secure operation of both domestic and international air transport in line with the following policies: safe operation, Regular flights, economical operation, efficient operation, secure operation.

The objectives of DCA is to commit a safe, efficient, reliable and secure civil aviation system in Myanmar in accordance with the Myanmar Aircraft Act, the Myanmar Aircraft Rules and the obligations of the Convention on International Civil

Aviation (Chicago, 1944) and the Standards and Recommended Practices of the Annexes to the Convention.

3.3.2 Services and Responsibilities

The services DCA currently providing are as follow:

1. Air Traffic Services
2. Communication and Radio Navigation Facilities
3. Licensing of pilots and aircraft maintenance engineers and flight checks
4. Construction, maintenance and management of airports
5. Airworthiness Control
6. Issue of permits and licenses to domestic and international airlines
7. Conclusion of bilateral air agreements
8. Relations with ICAO and other international organizations
9. Training of civil aviation personnel

In order to carry out effectively of Myanmar Civil Aviation industry, both regulator and service provider side of Myanmar DCA do its utmost for the safe, secure, reliable and efficient air operation. Here are the responsibilities.

(a) Maintaining the effective legal system to the extent possible for the implementation of the applicable civil aviation related international convention.

(b) Facilitating the growth of aviation through the application of modern technology in air navigation systems.

(c) Ensuring the high level of safety in providing air traffic management services.

(d) Maintaining the safe, secure, orderly and expeditious flow of air traffic and providing aeronautical information and alerting service within Myanmar Flight Information Region.

(e) Coordinating search and rescue operations in the event of aircraft emergencies and accidents within Myanmar Flight Information Region.

(f) Setting and enforcing aerodromes safety and aviation security standards.

(g) Ensuring compliance with established airworthiness and flight operation standards by Myanmar registered aircraft and locally based airlines.

(h) Ensuring compliance with international standards by Myanmar approved aircraft maintenance organizations.

(i) Ensuring compliance with international standards by Myanmar licensed flight crew and aircraft maintenance engineers.

(j) Developing strategies and implementation proactive measures to minimize safety risks to aviation by ensuring that all operations are conducted in conformity with the respective acceptable levels of safety.

(k) Monitoring the compliance by airlines with the relevant provisions of bi-lateral Air Service Agreements with Myanmar.

3.4 Organization and Function of Divisions

DCA Myanmar can be divided into two main groups. The concept of separation between two groups is to make sure "check and balance" and ensure mechanism run smooth by appropriate separation.

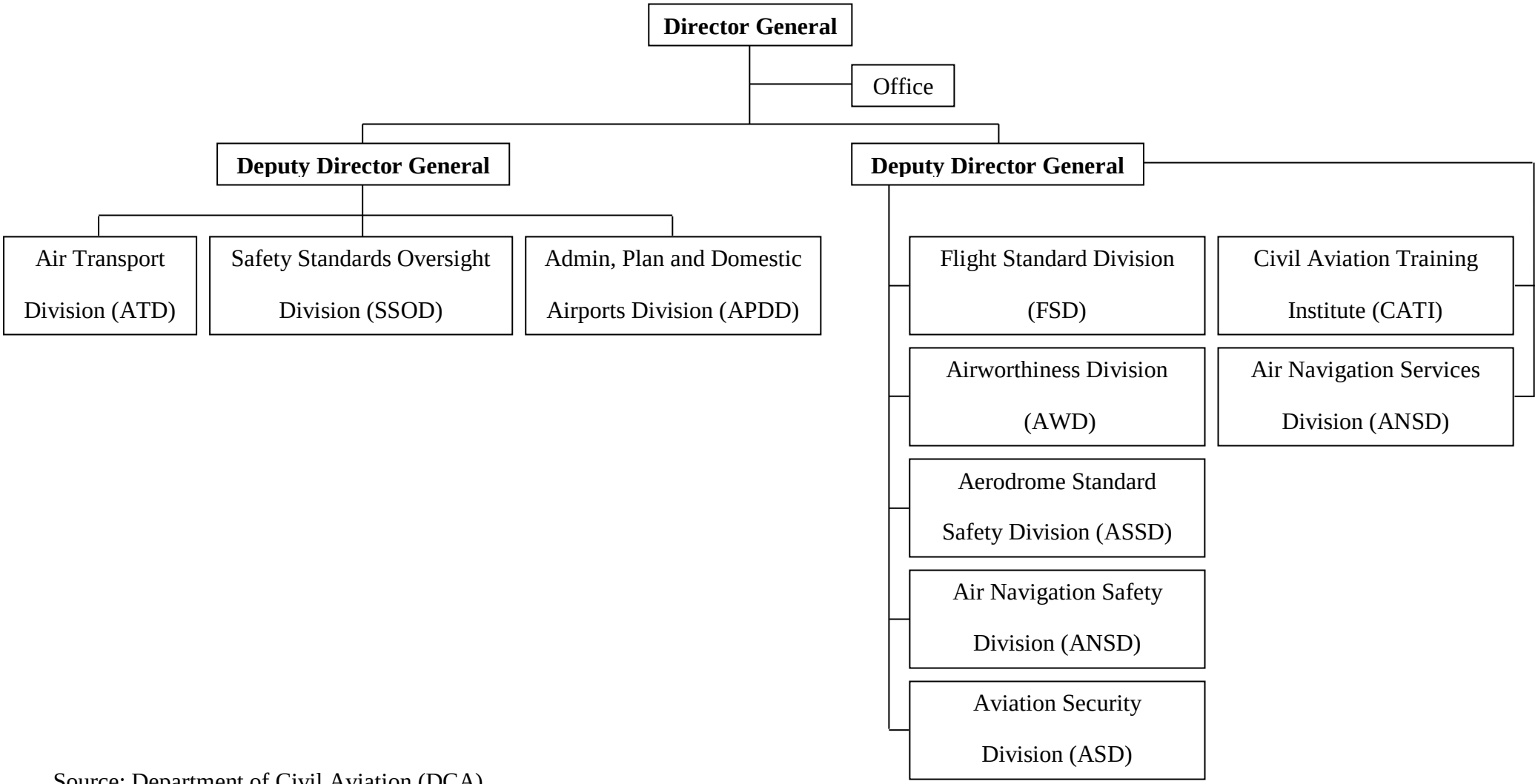
The first one is regulator/inspector group and the latter one service provider group. Regulator focus is to set the normative framework and empower aviation management in line with safety, cost effectiveness, efficiency and environment concern. Likewise, inspectors focus to ensure that service provision complies with regulation. Air Transport Division, Air Navigation Safety Division, Air Worthiness Division, Aerodrome Standards and Safety Division, Flight Standard Division, Aviation Security Division, Standards and Safety Oversight Division and Admin, Plan and Domestic Airport Division fall into the first group.

Service providers focus to responding flexibly to customer needs. Aviation Security Division, Air Navigation Services Division, Civil Aviation Training Institute and Mandalay International Airport, Yangon International Airport and Nay Pyi Taw International Airport, 36 Domestic Airports and Civil Aviation Training Institute fall into the latter group as shown in figure (3.1).

(a) Air Navigation Safety Division (ANSD)

The ANSD is headed by a Director and is responsible for making recommendations to the DGCA on safety policies and regulatory requirements and overseeing the ANSP in their implementation of safety related SARPs, ICAO Annexes, the safety of ANS operations and training of air navigation services including Air Traffic Management (ATM), Communication, Navigation and Surveillance (CNS), Aeronautical Information Services (AIS), Search and Rescue (SAR), Aeronautical Meteorology Services (MET), Flight Procedure Design (PANS-

Figure (3.1) Organization Structure of Department of Civil Aviation in Myanmar



Source: Department of Civil Aviation (DCA)

OPS) and Aeronautical Charts (MAP) within Yangon FIR and airspace allocated to Myanmar under national and international agreements with authorization from ICAO.

(a) Communication, Navigation and Surveillance Division (CNSD)

The CNSD division is headed by a Director and is responsible for installation, commissioning, operation and maintaining of the communication, navigation and surveillance systems and information technology systems of the DCA. The division is also responsible for overseeing and monitoring of system integrity and reliability, and taking necessary actions to introduce enhancements to the above-mentioned systems.

(c) Flight Standards Division (FSD)

The FSD is headed by a Director and is responsible for the issue of Air Operator's Certificates and the subsequent monitoring of compliance with ICAO SARPs by Certificate holders. The FSD is also responsible for air crew personnel licensing, safety data analysis, and supervision of aircraft operation in Myanmar.

(d) Airworthiness Division (AWD)

This directorate is headed by a Director and is responsible for the airworthiness control of aircraft registered in Myanmar, issuance of certificates of registration, maintaining the national registry of civil aircraft, issuance of certificates of airworthiness, licensing of aircraft maintenance engineers, conducting of operator certification inspections related to airworthiness in cooperation with the FSD division, and inspection and certification of maintenance organization.

(e) Aerodrome Standards and Safety Division (ASSD)

The ASSD is headed by a Director and is responsible for the regulation of airports in respect of safety, developing and reviewing of the national standards and practices for aerodrome design, operation, maintenance and engineering specifications periodic inspections of aerodrome physical characteristics, facilities, equipment, operating procedures and aerodrome operator's safety management system.

(f) Standards and Safety Oversight Division (SSOD)

The SSOD is headed by a Director and responsible for taking part in drafting of civil aviation legislation, notifications, orders, directives, notices, circulars and certifying standards and guidelines for the industry. It follows and assesses to adequately meet the requirements set out in the standards and recommended practices of the international civil aviation organizations (ICAO) in view of incorporating them into national regulations.

The Division oversees the requirements for conducting examinations and their performance which is also responsible for issuance of certificates, licenses, ratings and authorizations to aviation personnel. With the aim of creating a safe aviation environment in accordance with the international obligations, the Division is responsible for the oversight of the aviation industry. This continual oversight is maintained by performing inspections and audits in order to oversee the compliance with regulations and standards, as well as oversight of achieved safety performance.

(g) Admin, Plan and Domestic Airport Division (APDD)

The APDD is headed by a Director and is responsible for the general administration, planning and human resources management of the DCA and ensuring high efficiency of human resources, financial management, development of the Department and general management of domestic airports.

(h) Aviation Security Division (ASD)

This ASD is headed by a Director and is responsible for the development, implementation and maintenance of the Myanmar National Civil Aviation Security Programme.

(i) Civil Aviation Training Institute (CATI)

The CATI is headed by a Principal and is responsible for the conduct of initial training for personnel of air traffic services, aeronautical information services, search and rescue, aeronautical communications, navigation and surveillance, aviation security, aerodrome operations, and other related divisional recurrent courses. Civil Aviation Training Center was formed under Department of Civil Aviation of the Ministry of Transport. The Government of Myanmar decided to establish the Civil Aviation Training Centre which provides aviators with an aviation learning experience and excellent pathway to their aviation careers. In 1981, the Government of Myanmar coordinated with UNDP and ICAO's project BUR/81/004 to establish the Civil Aviation Training Centre initially. Then MYA/86/003 continued the development of Civil Aviation Centre. This Civil Aviation Training Centre provides license courses of Airline Transport Pilot License and Commercial Pilot License, basic training in the fields of Air Traffic Service, Communication Engineering including navigational aids and radar data processing, Electro-mechanical Engineering, Crash Fire Rescue, and Aeronautical English since 1989. Later Civil Aviation Training Centre was changed its name to CATI and it is committing itself to

meet international standards for strengthening of air transport sub sector, to provide more reliable and safer air transport services.

As the transport sector plays a vital role in the successful implementation of the economic objectives, the following transport guidelines are laid down to fully support the economic and social development of the nation -

(1) To develop and fully utilize transport capacities to contribute towards the realization of an economically strong, modern and developed nation.

(2) To fulfill transport requirements, and to extend and maintain the transport infrastructure to be able to fully support increased production from other economic sectors and meet growing public and social demands.

(3) To ensure smooth and secure domestic and international transport systems as well as contribute towards the development of border areas and national races and the development of tourism.

(4) To develop air and maritime transport infrastructures in line with international standards for environmental protection.

(5) To enhance the transport sector through human resources development and upgrade expertise in management and advancing modern technology.

(6) To abide by international conventions, acts, laws, rules and regulations with respect to the transport sector.

(7) To develop domestic and international transportation and actively take a key role in the implementation of a national multi-modal transport system.

(8) To plan for implementation of implement national, sub-regional and international transport networks.

(j) Air Transport Division (ATD)

The Air Transport Division is headed by a Director under which are four branches namely Air Transport, Regional, International, Legal and Research. The functions of the Air Transport Division are as follow;

1. Preparing draft bilateral / multilateral air services agreements and conclusion of those agreements with other countries;
2. Issuing "Permit to Operate" on economic concerns to its national airlines and international airlines of other countries having concluded bilateral/ multilateral Air Services Agreement with Myanmar;
3. Controlling national airlines operations to be in line with Myanmar Investment Commission permit;

4. Monitoring international airlines operations to Myanmar in accordance with the provisions of bilateral / multilateral Air Services Agreements of those Myanmar has concluded with other countries the airlines designated;
5. Preparing air transport statistic form and forecasting the trend of air transport development;
6. Studying for the compliance of International Civil Aviation's Standards, Recommended Practices and guide lines on air transport economic concerns;
7. Liaising with the ICAO;
8. Cooperation and coordination with International Air Transport Association, if necessary;
9. Participation and cooperation with regional organizations such as ASEAN, CLMV GMS, BIMSTEC, ACMECS and BCIM on air transport concerns;
10. Reviewing current bilateral /multilateral Air Services Agreements and coordination with other countries, those are bilateral or multilateral partners with Myanmar;
11. Studying air transport infrastructures;
12. Formulating the air transport strategy to be in line with international air transport development and to gain benefit for the country.

3.4.1 Yangon International Airport

Yangon International Airport is the primary international airport of Myanmar and is located in Mingaladon Township, at 15 km north of downtown Yangon. The airport was originally built in 1947 by the Calcutta Metropolitan Airports Authority. When it was built, the airport was regarded as the best in South East Asia.

A modernization program was launched in April 2003 and resulted in a new terminal and an extended 3414 m runway. The new Yangon International Airport was successfully opened in 25th May, 2007. Overall design and detailing was carried out to meet IATA service standards and to comply with ICAO safety and security standards. The runway extension was part of an upgrade which began in April 2003. Designed by the Airport Development Division of CPG Corporation of Singapore, a new terminal was constructed at a cost of US$13.3 million by Asia World. It can handle 900 arriving and 900 departing passengers simultaneously. The design meets IATA service standards and complies with ICAO safety and security standards at a cost of SG$30 million. Other notable features include:

- Separate floors for arriving and departing passengers to lessen congestion
- Automated baggage handling system with an integrated check-in system
- Four air bridges, capable of handling four Boeing 747s
- Special lounges for use by government officials and business people
- A two-story parking garage with spaces for 340 vehicles

In June 2011, the government announced plans to expand the airport by 40% and increase its capacity from 2.7 million passengers to 3.8 million passengers annually. The airport was already over its annual capacity of 2.7 million passengers, having accepted 3.1 million in 2012 and 4 million in 2014. To fulfill this increased demand, new international and domestic terminals are being constructed and are expected to be finished end of 2016. After upgrading, Yangon International Airport will be able to service 6 million passengers annually.

In 2013, a contract worth $150 million was awarded to a consortium led by an affiliate of Asia World to construct a new domestic terminal and expansion of airport apron.

The new international terminal (T1) opened in March 2016, with the previously existing international terminal being designated as T2. The new domestic terminal (T3) opened on December 5, 2016.

Terminal 1: In August 2014, the old domestic terminal was demolished and construction began for the new six-story Terminal 1 which will handle international flights. The opening ceremony was held on March 12, 2016. After the opening of Terminal 1, the airport can handle 6 million passengers annually, as opposed to 2.7 million before.

Terminal 2: After the opening of Terminal 1, the former International Terminal was renamed "Terminal 2." The building was designed by the CPG Corporation of Singapore and constructed by the Asia World Company costing USD $13.3 million. The terminal can handle 900 arriving passengers and 900 departing passengers at the same time. Terminal 2 was closed in July, 2018 to undergo extensive renovation. All international flights are now operating from Terminal 1.

Terminal 3: Terminal 3, which is used for domestic flights, opened on December 5, 2016, replacing the old domestic terminal which was demolished in August 2014.

Guard of Honor Building (VIP Terminal): The former VIP terminal was temporarily being used as the domestic terminal, until Terminal 3 was completed. The

Guard of Honor Building has been demolished, to make way for a connector between Terminal 1 and Terminal 2.

3.5 Thirteen Services Control Handle by Air Transport Division

A service is being exported if it is traded between residents and non-residents certain transactions falling under the GATS, in particular in the case of mode 3, typically involve only residents of the country concerned.

Commercial linkages may exist among all four modes of supply. For example, a foreign company established under mode 3 in country A may employ nationals from country B (mode 4) to export services cross-border into countries B, C etc. Similarly, business visits into A (mode 4) may prove necessary to complement cross-border supplies into that country (mode 1) or to upgrade the capacity of a locally established office (mode 3).

Mode 1: Cross-border - A user in country A receives services from abroad through its telecommunications or postal infrastructure. Such supplies may include consultancy or market research reports, tele-medical advice, distance training, or architectural drawings.

Mode 2: Consumption abroad - Nationals of A have moved abroad as tourists, students, or patients to consume the respective services.

Mode 3: Commercial presence - The service is provided within A by a locally-established affiliate, subsidiary, or representative office of a foreign-owned and — controlled company (bank, hotel group, construction company, etc.).

Mode 4: Movement of natural persons - A foreign national provides a service within A as an independent supplier (e.g., consultant, health worker) or employee of a service supplier (e.g. consultancy firm, hospital, and construction company).

3.5.1 Air Transport Ancillary Services in Myanmar

The air transport ancillary services were controlled by the Air Transport Division of Myanmar DCA. The thirteen services of air transport are as follow;

1. Aircraft Repair and Maintenance Services means such activities when undertaken on an aircraft or a part there of while it is withdrawn from service and do not include so-called line maintenance.

2. Selling and Marketing of Air Transport Services means opportunities for the air concerned to sell and market freely its air transport services including all aspects

of marketing such as market research, advertising and distribution. These activities do not include the pricing of air transport services or the applicable conditions.

3. Computer Reservation System (CRS) Services means services provided by computerized systems that contain information about air carriers' schedules, availability, fares and fare rules, through which reservations can be made tickets may be issued.

4. Aircraft Leasing without Crew means the lease of an aircraft without crew is normally referred to as a "dry lease", under most lease agreements the lessee who provides the crew is the responsible party who must exercise operational control over the aircraft with all the attendant responsibilities.

5. Aircraft Leasing with Crew means the lease of an aircraft with crew provided is normally referred to as a "wet lease". In wet lease the lessor normally exercises operational control of the aircraft should be operated under an Air Operator Certificate issued by the competent authority of the State of Registry of the aircraft.

6. Airfreight Forwarding Services means the activity and arrangement of air transport and related services provided to or performed on behalf of the shipper/consignee for the transportation of goods by air from port of origin to final destination.

Scope of services includes the following services:

(i) Securing cargo space with airline;

(ii) Preparing necessary export/import document;

(iii) Processing customs formalities;

(iv) Pick-up and delivery;

(v) Packing/warehousing;

(vi) Freight consolidation & break-bulk;

(vii) Door to door and logistics services; and

(viii) Inland freight services.

7. Cargo Handling means services provided or arranged for warehouse, facilities, and services for storage and handling of any type of shipment that are transported by air. Cargo handling services cover physical handling of outbound/inbound, transit shipments, document handling of outbound inbound, transit shipments, irregularities handling, and control of Unit Load. Device and services relate to customs control.

8. Aircraft Catering Services means the preparation/production of food and beverages for airlines, including loading/unloading of catering equipment and supplies, arrangement of bar chart, magazines, flowers, souvenirs and miscellaneous items to/from aircraft, washing, cleaning, storing of catering equipment and laundering of cabin linen ware.

9. Refueling Services means the management and operation of fuel tankers for aircraft and airport motor vehicles and distribution of fuelling products.

10. Aircraft Line Maintenance means routine and non-routine inspection and malfunction ratification performed en route and at base station with turnaround time up to 24 hours.

11. Ramp Handling means services provided by ground support equipment to an aircraft upon arrival, during parking until departure.

The services include the following facilities:

(i) Ground Support Equipment (GSE) i.e. aircraft towing tractor, air condition unit, air start unit, ground power unit, loading equipment, Unit Load Devices (ULDs);

(ii) Ramp bus services to transfer passengers and crews to and from the aircraft to the passenger terminal;

(iii) Security services to the aircraft as well as passengers in the ramp area; Toilet and aircraft interior cleaning servicing;

(iv) Portable water servicing;

(v) Post and mail servicing; and

(vi) GSE and ULDs maintenance.

12. Baggage Handling means a process on departure and arrival system at terminals. On departure, baggage handling consists of three activities: (1) in-town check-in passenger checks outside the airport boundary; (2) check-in at the airport terminal; and (3) check-in passenger carries baggage at the aircraft gate and check-in at that point. On arrival, baggage handling consists of three activities; (1) off-loading of baggage from the aircraft; (2) transport of baggage between aircraft and reclaim area; and (3) loading of baggage onto the reclaim unit.

13. Passenger Handling means responsibility in providing services to passengers from check-in point to aircraft side as per the carrier's procedures and instructions.

3.6 Airlines and Airports in Myanmar for Air Transport Services

3.6.1 Airlines in Myanmar

There are six private domestic airlines, a state-owned one and one air operator. Private airlines are Myanmar Airways International, Yangon Airways Ltd., Air Kanbawza Ltd., Asian Wings Airways, Golden Myanmar Airline, Mann Yadanarpon Airline. One state-owned domestic airline is Myanmar National Airline. One domestic air operator is Air Myanmar Aviation Services which operates with Helicopters. And Myanmar National Airline (MNA) which is the nation's flag carrier and Myanmar Airways International (MAI) are the international airlines. So the airlines and air operator are given the air transport services controlled by the Air Transport Division at MDCA.

3.6.2 Airports in Myanmar

There are 69 airports in Myanmar. Out of these 28 airports have been currently operating in the Myanmar.

Table 3.1 Airports in Myanmar

No	Description	Quantity	Airport Lists
1	Airports which are Operational	36	Putato, Myitkyina, Banmaw, Monywar, Kalay, Kanti, Hommalin, Heho, Kengtung, Tachilek, Lashio, Mong-Hsat, Mandalay International, Chanmyathazi, Bagan, Naypyitaw International, Sittwe, Thandwe, Kyaukphu, Ann, Manaung, Yangon International, Loikaw, Mawlamyine, Pathein, Dawei, Myeik, Kawthoung, Bokpyinn, Hpa-An, Anisakan, Magway, Pakhokku, Kyauktu, Coco Island, Pyay
2	Airports which are being operated	28	Putato, Myitkyina, Banmaw, Monywar, Kalay, Kanti, Hommalin, Heho, Kengtung, Tachilek, Lashio, Mong-Hsat, Mandalay International, Chanmyathazi, Bagan, Naypyitaw International, Sittwe, Thandwe, Kyaukphu, Ann, Manaung, Yangon International, Loikaw, Mawlamyine, Pathein, Dawei, Myeik, Kawthoung

Source: Air Transportation Division (DCA)

In other words, 36 are available for aircraft landing, of which only eight can accommodate such larger aircraft as Boeing 747-400. However, Chanmyathazi, Hpa-an, Anisakan, Magway, Pakhokku, Kyauktu, and Koko Island and Pyay airports were used only for special purpose. The Yangon International Airport is the major gateway to Myanmar. The Mandalay International Airport is the second gateway to Myanmar and Naypyitaw Airport is the third gateway to Myanmar. Bagan Nyaung-U Airport, Thandwe Airport and Heho Airport are major domestic airports serving private tours. Operated Airports in Myanmar; International Routes of Myanmar to Foreign; and International Routes of Foreign to Myanmar are shown in Figure (3.2), Figure (3.3) and Figure (3.4), respectively as shown in Appendix (A). Table (3.1) shows the name and number of airport in Myanmar. There are 78 airports in which 69 airports have been listed. 36 airports are operational and 28 airports are being operated.

3.6.3 Airports Services by Yangon Aerodrome Company Limited in Myanmar

Yangon Aerodrome Company Limited is a private Company, and operates international and domestic passenger terminal buildings of Yangon International Airport since June 2010 under a 30 year lease contract and almost entire Airport excepting air traffic control and air navigation systems.

Yangon Aerodrome Company Limited is established as the first private airport operator in the Republic of the Union of Myanmar. Yangon Aerodrome Company Limited operated for Yangon International Airport of Myanmar employing over 1000 staffs at the Yangon International Airport to perform key functions focusing on airport operations and management, engineering and facilities management, air hub development, commercial activities and airport emergency services. Yangon Aerodrome Company Limited is geared to provide quality experiences and services for passengers and airlines.

CHAPTER 4
SURVEY ANALYSIS

4.1 Survey Profile

In Myanmar, there were three international airports which are Yangon International Airport, Mandalay International Airport and Nay Pyi Taw International Airport.

Yangon International Airport was the primary and busiest international airport of Myanmar. The airport was located in Mingaladon, 15 kilometers north of central Yangon. All eight Myanmar carriers and about 31 international airlines operated at Yangon International Airport. The Yangon International Airport was operated by Yangon Aerodrome Co., Ltd.

Mandalay International Airport located 35 kilometers south of Mandalay in Tada-U, is one of only three international airports in Myanmar. Completed in 1999, the airport was the largest and most modern airport in the country until the modernization of Yangon International Airport in 2008, the airport connects 11 domestic and seven international destinations, complete with a 4267-meter runway which was the longest runway in use in Southeast Asia and capacity to handle up to 3 million passengers a year. The Mandalay International Airport was operated by Mitsubishi Corporation, JALUX Inc., SPA Project Management Ltd.

Nay Pyi Taw International Airport located 16 kilometers southeast of Nay Pyi Taw, the capital of Myanmar. Before the foundation of Nay Pyi Taw, this was referred to as the airport of the nearby town of Lewe. The airport officially opened on 19 December 2011. The Nay Pyi Taw International Airport was operated by Pioneer Aerodrome Services Company.

In the three International Airports, the Yangon International was most useful in Myanmar because Yangon was the most population in Myanmar and many passengers were gone to more destinations. Moreover Foreigners were come for business, leisure and about of other that reason Yangon is business capital of the Myanmar. Therefore, I decided to choice for survey analysis to get the survey answers from the Air Passengers at the Yangon International Airport which including Domestic Terminal.

4.2 Survey Design

In this chapter all the collected primary data of the questionnaire survey and Key Informant Interview (KII) were analyzed. The empirical data was collected during April and May at Terminal 1 and Terminal 3 of Yangon International Airport, and there were altogether 200 respondents that all returned the filled in questionnaire. The number of respondents who were asked to answer survey questions was 200 respondents. They were from four airlines which were Myanmar National Airline (MNA), Myanmar Airways International (MAI), Kanbawza Airline (Air KBZ), Mann Yadanarpon Airline (Air MYP) and the 50 respondents from each airline. Respondents were concerned with this study were from Airlines Passengers and Officers of Air Transport Division and Department of Civil Aviation of Myanmar. A cluster sampling method was used to select the specific groups of airlines which were owner of Myanmar citizens. And then a simple random sampling method was used to select four airlines which were Myanmar National Airline (MNA), Myanmar Airways International (MAI), Kanbawza Airline (Air KBZ), Mann Yadanarpon Airline (Air MYP). After that the collected data from passengers by survey with simple random sampling method and descriptive analysis has been used to analyze data.

4.3 Survey Results

4.3.1 Part (A) Background Information

(I) Demographic Characteristics of the Respondents

In this study, total of 200 passengers respondents were included to give some findings regarding the effects of service liberalization of aviation industry of Myanmar after the liberalize for airport services. The demographic characteristics of these respondents were presented in Table (4.1). 72% of respondents were male and 28% was female. There were 3 respondents (16 – 20 years old); 14 3 respondents (21-25 years old); 49 respondents (26-30 years old); 56 respondents (31-35 years old); 23 respondents (36-40 years old) ;19 respondents (41-45 years old); 11 respondents (46-50 years old); and 25 respondents (51 years and above). Thus the passengers who the ages between 26 to35 were more participate and enjoy to airplane trip than other age levels in this study. According to survey data, 80% of the respondents were Myanmar nationality and 20% was foreigner. 81.5% of the respondents were graduates, 14% had finished high school and 4.5% was the basic primary school level of education.

Table (4.1) Data Summary for Demographic Characteristics

	Number	**%**
Gender		
Male	144	72 %
Female	56	28 %
	200	**100 %**
Age		
16-20	3	1.5 %
21-25	14	7 %
26-30	49	24.5 %
31-35	56	28 %
36-40	23	11.5 %
41-45	19	9.5 %
46-50	11	5.5 %
51 and above	25	12.5 %
	200	**100 %**
Education level		
Basic education	28	14 %
Not graduate (higher education)	9	4.5 %
Graduate	163	81.5%
	200	**100 %**
National		
Myanmar nationality	160	80 %
Foreigner	40	20 %
	200	**100 %**

Source: Survey Data, 2019.

The majority of the respondents who finding out about Airline and Flight was shown in Table (4.2), 51.5% people had heard about Airlines through a friend or a family member, the second biggest group 43% had heard about Airlines on the Internet, the third group 4.5% had known through other and the smallest group 1% on TV. The highest finding out about airline and flight are usually used friend and family and internet because they were rapidly got the information than other.

In Table (4.2), 113 male of national passengers and 47 female of national passengers out of 200 respondents were finding about of airlines and flight, 31 male of foreign passengers and 9 female of foreigner passengers were finding about of airlines and flight. The travelling rates of national passengers are more than foreigner passengers.

Table (4.2) Finding out about Airline and Flight

	Male (National)	**Male (Foreigner)**	**Female (National)**	**Female (Foreigner)**	**%**
From newspaper	…	…	…	…	
From magazine	…	…	…	…	
From TV	2	…	…	…	1%
From internet	39	30	8	9	43%
From friends/family members	64	1	38	…	51.5%
Other	8	…	1	…	4.5%
Total	**113**	**31**	**47**	**9**	
%	56.5 %	15.5 %	23.5 %	4.5 %	

Source: Survey Data, 2019.

(II) General Information of the Respondents

Altogether 200 passengers answered this questionnaire, and from them 72% were men and 28% were women. 26 to 30 and 31 to 35 were the biggest age groups and the smallest age group was 16 to 20 year old adults (Table 4.1). 81.5% of respondents were Graduates level, 4.5% of respondents were Undergraduates level and 14% respondents were Basic Education level. But the education was not effect for survey questionnaires because of lowering level of educated passenger were Basic Education level and the questionnaires were prepared by mother language.

The majority of the respondents were citizens of Myanmar, 160 out of 200. There were seven from Singapore, five from Austria and Philippine, four from the United State and Malaysia, three from Germany, two from Cambodia, Egypt and the

United Kingdom, one from France, Greek, Iraq, Korea, Netherland and Switzerland. It was always dependent on a season how many Myanmar citizens were travelling from Yangon International Airport, but during the days this survey was made the majority were Myanmar citizens' passengers.

4.3.2 Part (B) Analysis on Webpages and Booking

The webpage was a document that was suitable to act as a web resource on the World Wide Web. In order to graphically display a webpage, a web browser was needed. This was a type of software that can be retrieved webpages from the Internet. When accessed by a web browser it may be displayed as a webpage on a monitor or mobile device. Web pages usually included information such as the colors of text and backgrounds and very often contain links to images and other types of media to be included in the final view.

The booking was an act of reserving accommodation, a ticket, etc. in advance. Other mean, booking was the arrangement that you make when you book something such as a hotel room, a table at a restaurant, a theatre seat, or a place on public transport (eg, Road, Water, Railway and Air Transport).

Table (4.3) Self Online Air Ticket Booking by Reserve

	Male (National)	**Male (Foreigner)**	**Female (National)**	**Female (Foreigner)**	**Total**
Yes	49	28	13	9	99
No	64	3	34	…	101
Total	113	31	47	9	**200**
%	56.5 %	15.5 %	23.5 %	4.5 %	100%

Source: Survey Data, 2019.

In the Table (4.3), 49.5% passengers of the respondents had booked their tickets online, and this was the goal of airlines to become the airlines that works completely online. 49.5% passengers of the respondents who had booked their tickets online had done their reservation by themselves, and for 50.5% passengers of the respondents the reservation had been booked by someone else. The result showed that the majority had equal IT knowledge and language skills to make the booking themselves. The reason why almost 50.5% did not make their reservations could be a

result of two different things. Either they were not able to do it themselves, or the booking was made by a company or a friend or family member who organized and planned the trip. Therefore, 174 respondents just checked online webpages for finding airlines but they bought air tickets directly from airlines not from online. Therefore, only 26 respondents bought the air tickets directly from the airlines without using online booking. It was important to know how many people actually had experience of the webpages and booking, in order to have the most reliable result.

Table (4.4) Choices of Airlines by Using Online Webpages

	National		**Foreigner**			**Total**
	D to F	**D to D**	**F to D**	**D to F**	**D to D**	
Sufficient	33	97	37	1	1	169
Insufficient	2	2	1	…	…	5
Total	35	99	38	1	1	174

Source: Survey Data, 2019.

(Note: D= Domestic; F= Foreign)

In the Table (4.4), total numbers of 174 out of 200 respondents were seeing online webpages to choose airlines but 169 passengers were sufficient and 5 passengers were insufficient for choice of airlines from online webpages.

All almost airlines including English language and their national language, but survey airlines have translated its web site into English language only yet many were still missing from the list. 99 out of 200 people thought there were enough choices of languages on Survey Airlines website. Especially for Myanmar the fact that Traditional language was lacking from the list was a problem among elderly people and people with poor English language skills. Only booking the ticket, and not to mention completing the online check-in was challenging for people who did not speak many languages, and therefore might even skip booking the ticket completely because of this problem.

All the 3 respondents who felt there could be more choice of airlines suggested airlines that could be used for them. One people who foreigner said there was only Korean Airlines from Seoul to Yangon that was not enough choice of airlines. Other two people said if there were many airlines in Myanmar who can be flying with any airlines on desire time.

Table (4.5) Clear and Easy Design of the Airline Webpage

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	27	75	17	2	…
Female	7	40	6	…	…
Total	**34**	**115**	**23**	**2**	**…**
%	20 %	66 %	13 %	1 %	…

Source: Survey Data, 2019. (Note: Based on 174 respondents)

Question in Table (4.5) was "The design of the web page was clear and easy to read." What was meant with "clear" was that there was nothing messy or distracting, and it was easy to navigate and find the information wanted. Altogether 174 people answered from which 20% agreed strongly, 66% agreed partially, 13% neither agreed nor disagreed (neutral) and 1% disagreed partially. Exactly, 13% did not have an opinion, and other 1% disagreed partially. Totally 86% of the respondents agreed strongly or partially. According to this survey the webpages were seen clear and easy to read which can be explained with the big number of ads on the webpages.

Table (4.6) Satisfied with the Variety of Flight Options

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	69	32	16	2	2
Female	40	10	1	…	2
Total	**109**	**42**	**17**	**2**	**4**
%	54.5 %	21 %	8.5 %	1 %	2 %

Source: Survey Data, 2019. (Note: Based on 174 respondents)

Question in Table (4.6) was "I was satisfied with the variety of flight options." 174 answered in this and 54.5% agreed strongly, 21% agreed partially, 8.5% neither agreed nor disagreed (neutral), 1% disagreed partially and 2% disagreed strongly. For this question 8.5% did not have an opinion, but all almost respondents agreed strongly or partially. According to the respondents there could be more variety in the flight options, and especially from Yangon International Airport.

Table (4.7) Reasonable Air Ticket Prices

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	31	39	27	14	10
Female	20	16	10	6	1
Total	**51**	**55**	**37**	**20**	**11**
%	29.3 %	31.6 %	21.3 %	11.5 %	6.3 %

Source: Survey Data, 2019. (Note: Based on 174 respondents)

In this Table (4.7), question was "The ticket prices were as cheap as I expected." 29.3% passengers agreed strongly, 31.6% passengers agreed partially, 21.3% passengers neither agreed nor disagreed, 11.5% passengers disagreed partially and 6.3% passengers disagreed strongly. Over the half of the respondents said they agree partially or strongly that the ticket prices were as cheap as the expected. The 17.8% passengers expected cheaper fares and 21.3% passengers agreed reasonable price for air tickets.

Table (4.8) Understand the Rules, Terms and Conditions in the Airport

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	63	49	5	4	…
Female	28	24	…	1	…
Total	**91**	**73**	**5**	**5**	**…**
%	52.3 %	41.9 %	2.9 %	2.9	…

Source: Survey Data, 2019. (Note: Based on 174 respondents)

In this Table (4.8), the question was "I did not have any problems understanding the terms and conditions." answered 174 respondents from which 52.3% respondents agreed strongly, 41.9% respondents agreed partially, 2.9% respondents neither agreed nor disagreed and 2.9% respondents disagreed partially. In order to even look for flights on Airlines' website.com, one needs to tick the option "I have read and accept the terms of use of the Airlines website", and it was possible that only a few people actually read them. Even the ones that answered they did not have any problems in understanding them do not mean that they actually read the terms.

4.3.3 Part (C) Customer Satisfactions at the Airport Services

Customer satisfaction was a term used to describe a scenario when an exchange meets the needs and expectations of its user. It captures the provision of goods or services that fulfill the customer's expectations in terms of quality and service in relation to the price paid. Other mean, Customer satisfaction was a term frequently used in marketing. It was a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction was defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."

(I) Analysis on Check-in

Airport check-in is the process whereby passengers were accepted by an airline at the airport prior to travel. The airlines typically used service counters found at airports. The check-in was normally handled by an airline itself or a handling agent working on behalf of an airline. Passengers usually handed over any baggage that they did not wish or were not allowed to carry in to the aircraft's cabin and received a boarding pass before they could proceed to board their aircraft.

Check-in was usually the first procedure for a passenger when arriving at an airport, as airline regulations require passengers to check in by certain times prior to the departure of a flight. This duration spans from 15 minutes to 4 hours depending on the destination and airline. During this process, the passenger had the ability to ask for special accommodations such as seating preferences, inquire about flight or destination information, accumulate frequent flyer program miles, or pay for upgrades. The required time was sometimes written in the reservation, sometimes written somewhere in websites, and sometimes only referred as passengers should allow sufficient time for check-in. The airline check-in's main function, however, was to accept luggage that was to go in the aircraft's cargo hold and issue boarding passes.

According to the Table (4.9) regarding the check-in, question was “There were enough instructions when completing the check-in at the Airport.” to which answered 200 people from 45% agreed strongly, 36% agreed partially, 8.5% neither agreed nor disagreed, 6% disagreed partially and 4.5% disagreed strongly. This claim with according to it the majority that agreed strongly and partially were 113 Males and 49 Female, and the majority who did not have an opinion were 15 Males and 2 Females

respondents. Other According to the results, for the majority there were enough instructions for completing the online check-in.

Table (4.9) Enough Instructions when Completing the Check-in at the Airport

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	65	48	15	10	6
Female	25	24	2	2	3
Total	**90**	**72**	**17**	**12**	**9**
%	45 %	36 %	8.5 %	6 %	4.5 %

Source: Survey Data, 2019.

According to the Table (4.10) regarding the check-in of the customer satisfactions, question was “How would you rate the cooperativeness of the ground staffs at the airport, with the requirements, needs, queries, issues faced by passengers through the airport?” to which answered 200 passengers from 22% agreed strongly, 62% agreed partially, 9.5% neither agreed nor disagreed, 5.5% disagreed partially and 1% disagreed strongly. According to it the majority that agreed strongly and partially were 115 Males and 53 Female, and the majority who did not have an opinion were only 19 Males respondents. According to the results, the general passengers were very satisfied with the cooperativeness of the ground staffs at the Airport.

Table (4.10) Cooperativeness of the Ground Staffs at the Airport, with the Requirements, Needs, Queries, and Issues Faced by Passengers through the Airport

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	32	83	19	9	1
Female	12	41	…	2	1
Total	**44**	**124**	**19**	**11**	**2**
%	22 %	62 %	9.5 %	5.5 %	1 %

Source: Survey Data, 2019.

Table (4.11) Access to Free WiFi

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	28	69	33	12	2
Female	9	30	13	3	1
Total	**37**	**99**	**46**	**15**	**3**
%	18.5 %	49.5 %	23 %	7.5 %	1.5 %

Source: Survey Data, 2019.

According to the Table (4.11) regarding the check-in of the customer satisfactions, question was "How would you rate how do you feel for using of free WiFi at the airport?" to which result the majority was 18.5% passengers agreed strongly and 49.5% passengers agreed partially who said they satisfied the action of immigration section. But some passengers who did not have an opinion were 23% respondents and 7.5% disagreed partially and 1.5% disagreed strongly. So the majority 68% passengers must have been satisfied rate of Wi-Fi service of Yangon International Airport and the service was useful for passengers and was integrated with the airport environment that was increased digital, helping improve quality of service and passenger satisfaction. Despite, 6 passengers who wanted to install the Free WiFi that should transmit 24 hours and they felt 30 minutes Free WiFi service was not necessary for them and the Free WiFi network signal and operating speed were not good at the Airport.

Table (4.12) Facilities Supported for Carrying and Equipped with Clear Signage and Signs Regarding the Various Facilities and Services, Terminals, Gates, Restrooms, Restaurants, and Prayer Rooms

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	69	44	24	4	3
Female	37	11	3	3	2
Total	**106**	**55**	**27**	**7**	**5**
%	53 %	27.5 %	13.5 %	3.5 %	2.5 %

Source: Survey Data, 2019.

According to the Table (4.12), the question was “How would you rate how proper are the facilities supported for carrying heavy baggage and luggage until the check-in point and the airport is equipped with clear signage and signs regarding the various facilities and services?” .The result shows that 200 passengers from which 53% passengers agreed strongly, 27.5% respondents agreed partially, 13.5% respondents neither agreed nor disagreed and 3.5% respondents disagreed partially and 2.5% respondents disagreed strongly. In order to 80.5% passengers were liked for helpfulness to the passengers’ baggage services because the Yangon International Airport had good bag wrappers for extra safety and security of passenger bags. Baggage in the airport was seen to be handled with care according to the result answers of passengers but the precise weighting machines were needed at the airport.

(II) Analysis on Security and Immigration

After check-in, passengers needed to pass through the security control checkpoints. Before passengers enter security control, a Yangon Aerodrome agent checked their identification. The security control area served as the boundary between landside and airside operations and involved a comprehensive screening of all passengers and their belongings.

Screening was conducted by the use of a millimeter wave body scanner and baggage screening devices and also included a manual search using a handheld metal detector. Airport security attempted to prevent any threats or potentially dangerous situations from arising or entering the country.

Immigration was the international movement of people into a destination country of which they were not natives or where they did not possess citizenship in order to settle or reside there, especially as permanent residents or naturalized citizens, or to take up employment as a migrant worker or temporarily as a foreign worker.

Passing immigration was usually needed to make it easier once you do get to the front of the line. Before you go, the passengers made sure who have checked if the passengers needed a visa or what paperwork in order to clear immigration. Sometimes countries would require proof of the passengers’ return airfare or accommodation in order to clear immigration.

Table (4.13) Destination by Gender

	Domestic to Foreign	Foreign to Domestic	Domestic to Domestic	Total	%
Male	38	29	77	144	72%
Female	10	9	37	56	28%
				200	**100%**

Source: Survey Data, 2019.

Out of 200 respondents Table (4.13) 38 male passengers and 10 female passengers were gone to Domestic to Foreign, 29 male passengers and 9 female passengers were gone to Foreign to Domestic, 77 male passengers and 37 female passengers were gone to Domestic to Domestic. 114 passengers were gone to Domestic to Domestic more than Domestic to Foreign and Foreign to Domestic that reason was more respondents were Myanmar citizens and random selected airlines which four airlines were Domestic airlines but MNA and MAI are flied to International.

Table (4.14) Purpose of Journey by Flight

	Male (National)	Male (Foreigner)	Female (National)	Female (Foreigner)
Business	9	23	1	5
Visit	90	8	46	3
Medical Check-up	…	…	…	…
Other	14	…	…	1
Total	**113**	**31**	**47**	**9**
%	56.5 %	15.5 %	23.5 %	4.5 %

Source: Survey Data, 2019.

In this Table (4.14), 56.5% of national Male passengers who were gone 9 people for business, 90 people for visiting and 14 people for other which were duty, delegation, etc. 15.5% of foreigner Male passengers who were gone 23 people for business and 8 people for visiting. 15.5% of national Female passengers were gone 1 people for business and 46 people for visiting. 4.5% of foreigner Female passengers who were gone 5 people for business, 3 people for visiting and 1 people for other

which are duty, delegation, etc. Totally 147 passengers were gone for visiting because of airplanes was to allow travel across vast distances. Whether passengers were moving from one end of the country to another, or the other side of the world; flying was the best option. It was faster than changing modes of transport and allowed you to sit back and relax that were suitable for visiting.

Table (4.15) Delay due to Long Queues, or Visa Issuance Issues, or Staff with Limited Respective Knowledge or Any Other Issues in Immigration Section

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	20	84	29	8	3
Female	13	38	3	1	1
Total	**33**	**122**	**32**	**9**	**4**
%	16.5 %	61 %	16 %	4.5 %	2 %

Source: Survey Data, 2019.

In this Table (4.15) regarding the security and immigration of the customer satisfactions, question was “How would you rate your experience with immigration section, with regards to any related concern, whether it was delay because of long queues, or visa issuance issues, or staff with limited respective knowledge, or any other issues?” to which result the majority was 16.5% passengers agreed strongly and 61% passengers agreed partially who said they satisfied the action of immigration section. But some passengers who did not have an opinion were 16% respondents and 4.5% disagreed partially and 2% disagreed strongly. So the majority must have been satisfied rate of their experience for immigration section of Yangon International Airport.

In this Table (4.16), question was “From your experience within the airport, what would you rate the extent to which the airport is equipped with facilities to support and counteract and security threats which may arise? e.g. enough security personnel, fire exits that are clearly marked, enough fire extinguishers within sight, instructions in case of threat… etc.”10.5% passengers agreed strongly, 51% passengers agreed partially, 30.5% passengers neither agreed nor disagreed, 5% passengers disagreed partially and 3% passengers disagreed strongly. 61.5% of the respondents said they agree partially or strongly, 8.5% of the respondents said they

disagreed partially or strongly and 30.5% did not give their opinion that the result were over the half of the passengers were satisfied for this question which is better after the service liberalization.

Table (4.16) Airport is Equipped with Facilities - Enough Security Personnel, Fire Exits that are Clearly Marked, Enough Fire Extinguishers within Sight, Instructions in Case of Threat

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	15	72	46	8	3
Female	6	30	15	2	3
Total	**21**	**102**	**61**	**10**	**6**
%	10.5 %	51 %	30.5 %	5 %	3 %

Source: Survey Data, 2019.

(III) Analysis on Boarding

Boarding was the entry of passengers onto a vehicle, usually in public transportation. Boarding started with entering the vehicle and ended with the seating of each passenger and closure of the doors. The term was used in road, water and air transport. At commercial airports, a boarding call on the public announcement system asked travelers to proceed to the departure gate and board the aircraft. This could begin any time from an hour to thirty minutes before departure that depending on the size of the plane and number of passengers. For boarding an aircraft, airstairs or jetways are used. Small aircraft was carried their own stairs.

According to the Table (4.17) regarding the boarding, question was “I am likely to travel with Air Transport in the future.” which result the majority was 56% passengers agreed strongly and 37% passengers agreed partially who said they would fly with air transport in the future. But the 7% passengers who did not know if they would fly again was scattered in all passengers. All in all, the majority must have been satisfied as they would fly again with air transport in the future because of easy for travelling and it was faster and safety than other transportations.

Table (4.17) Likely to Travel with Air Transport in the Future

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	81	52	6	2	3
Female	31	22	1	…	2
Total	**112**	**74**	**7**	**2**	**5**
%	56 %	37 %	3.5 %	1 %	2.5 %

Source: Survey Data, 2019.

According to the Table (4.18), question was "How would you rate how receptive airports were to passengers feedback, were there clear adequate means of feedback, is feedback and complaints put forth by the customers recorded and looked into properly?" 23% passengers agreed strongly, 58.5% passengers agreed partially, 13.5% passengers neither agreed nor disagreed, 1.5% passengers disagreed partially and 3.5% passengers disagreed strongly. Over the half of the respondents said they agree partially or strongly that the result was 81.5% passengers were satisfied for this question which was better after the service liberalization.

Table (4.18) Clearly Adequate Means of Feedback on Complaints Put Forth by the Customers Recorded and Looked into Properly

	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree.
Male	32	81	25	3	3
Female	14	36	2	…	4
Total	**46**	**117**	**27**	**3**	**7**
%	23 %	58.5 %	13.5 %	1.5 %	3.5 %

Source: Survey Data, 2019.

According to the Table (4.19), the question was "How would rate the extent to which the airport staff is informed and helpful when it comes to finding out about the timings, locations, counters, gates of arrivals or departures of different Air Lines taking place at the airport?" answered 200 respondents from which 20.5% respondents agreed strongly, 53.5% respondents agreed partially, 16% respondents neither agreed nor disagreed and 9.5% respondents disagreed partially and 0.5% respondents disagreed

strongly. In order to 74% passengers were liked for helpfulness to the passengers' services. Even though all usually passengers liked the helpfulness services of airport staffs but some passengers were dissatisfied which result were explained by the table.

Table (4.19) Airport Staff is Informed and Helpful when It Comes to Finding Out about the Timings, Locations, Counters, Gates of Arrivals or Departures of Different Airlines Taking Place at the Airport

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	29	73	28	14	…
Female	12	34	4	5	1
Total	**41**	**107**	**32**	**19**	**1**
%	20.5 %	53.5 %	16 %	9.5 %	0.5 %

Source: Survey Data, 2019.

Table (4.20) Airport Supports Provisions for Allowing the Passengers to Make Use of the Services of the Airport while Waiting for Their Flights if Flights Being Late or Delayed by Large Times

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	63	48	17	10	6
Female	34	17	1	1	3
Total	**97**	**65**	**18**	**11**	**9**
%	48.5 %	32.5 %	9 %	5.5 %	4.5 %

Source: Survey Data, 2019.

According to the Table (4.20), the question was "In the event of flights being late or delayed by large times, rate the extent to which the airport supports provisions for allowing the passengers to make use of the services of the airport while waiting for their flights?" this result responded 200 passengers from which 48.5% passengers agreed strongly, 32.5% respondents agreed partially, 9% respondents neither agreed nor disagreed and 5.5% respondents disagreed partially and 4.5% respondents disagreed strongly. Accordingly, 81% passengers were satisfied the helpfulness of airport staff in the care of passengers in the event of flight delays. In general people

were very satisfied with the attitudes of staff in the Yangon International Airport. Passengers reviewing Yangon International Airport were positive about the staff attitudes and help.

Table (4.21) Seating Arrangements Made for the Passengers to Sit and Rest while Waiting for Their Flights to Arrive and Board

	Strongly Agree	**Partially Agree**	**Neutral**	**Partially Disagree**	**Strongly Disagree.**
Male	33	38	27	24	22
Female	21	18	11	3	3
Total	**54**	**56**	**38**	**27**	**25**
%	27 %	28 %	19 %	13.5 %	12.5 %

Source: Survey Data, 2019.

According to the Table (4.21), regarding the boarding of the customer satisfactions, question was “How adequate was the seating arrangements made for the passengers to sit and rest while waiting for their flights to arrive and board?” to which answered 200 passengers from 27% agreed strongly, 28% agreed partially, 19% neither agreed nor disagreed, 13.5% disagreed partially and 12.5% disagreed strongly. According to it the majority that agreed strongly and partially were 71 Males and 39 Female, the majority who did not have an opinion were 27 Males and 11 Female respondents and the majority that disagreed partially and strongly were 46 Males and 6 Females.

According to the results, 55% passengers were satisfied the seats which were adequate arrangements for waiting passengers to sit and rest for their flights to arrive and board. But 26% passengers were thought inadequate arrangements to sit and rest for arrival and boarding of flights for waiting passengers and 19% passengers were not give their opinions. But the 9 respondents who suggested one respondent wanted to enough seats for passengers near the check in counters. And other 8 respondents’ suggestions were who wanted to necessary seats at the Yangon International Airport.

Table (4.22) Data Summary of Airlines and Nationality by Gender

	Male				Female			
	National	**%**	**Foreigner**	**%**	**National**	**%**	**Foreigner**	**%**
Myanmar National Airline (MNA)	25	12.5	17	8.5	5	2.5	3	1.5
Myanmar Airway International (MAI)	22	11	14	7	8	4	6	3
Air KBZ	36	18	…	…	14	7	…	…
Mann Yadanapon Airline	30	15	…	…	20	10	…	…
Total	113	56.5	31	15.5	47	23.5	9	4.5

Source: Survey Data, 2019.

In the summary of Table (4.22), the usually air passengers were traveled by national passenger and 15.5% Male passengers and 4.5% of Female passengers from Foreign who were trusted the domestic airline but this result was not perfect for all passengers. So Myanmar Department of Civil Aviation (MDCA) and private company which venture partner with MDCA were needed to do for all passengers' satisfy conditions and filled the requirement facilities. The next chapter submits and explains the overall conclusion and put forward in accordance with the objectives of the study.

4.3.4 Interpretation of Key Informants Interview at Department of Civil Aviation in Myanmar

The key informant interview is conducted to obtain the extremely important information about current situation and difficulties of implementation condition of air services liberalization. This data is collected by understanding of the lived experiences, opinions, and perspectives of the key respondents who are 5 persons of DCA officers and one frequently air passenger who is a business man. The compilations of the findings of 6 key informant interviews are shown in the following.

Question: What is an air services agreement?

Answered by

Officer 1, Department of Civil Aviation of Myanmar

Under international law, government-to-government arrangements enable scheduled international services. Air services agreements set out the routes that can be served by airlines and the number of flights that may be operated. The agreements also cover matters such as which airlines are entitled to use the rights negotiated and how tariffs (prices) are regulated.

Myanmar has air services agreements with 50 countries.

Question: What does 'bilateral agreements' mean and this advantages and disadvantages?

Answered by

Officer 2, Department of Civil Aviation of Myanmar

A bilateral agreement, also called a clearing trade or side deal, refers to an agreement between parties or states that aims to keep trade deficits. It varies depending on the type of agreement, scope, and the countries that are involved in the agreement.

The advantages and disadvantages of bilateral agreements are as follow;

Advantages

(a) Bilateral agreements increase trade between the two countries. They open markets to successful industries. As companies benefit, they add jobs.

(b) The country's consumers also benefit from lower costs. They can get exotic fruits and vegetables that can get too expensive without the agreement.

(c) They are easier to negotiate than multilateral trade agreements, since they only involve two countries. This means they can go into effect faster, reaping trade benefits more quickly. If negotiations for a multilateral trade agreement fail, many of the nations will negotiate a series of bilateral agreements instead.

Disadvantages

(a) Any trade agreement will cause less successful companies to go out of business. They can't compete with a more powerful industry in the foreign country. When protective tariffs are removed, they lose their price advantage. As they go out of business, workers lose jobs.

(b) Bilateral agreements can often trigger competing bilateral agreements between other countries. This can whittle away the advantages that the free trade agreement confers between the original two nations.

Question: How many bilateral agreements does Myanmar have?

Answered by

Officer 2, Department of Civil Aviation of Myanmar

There are 50 bilateral agreements nations with Myanmar which more detail about as show in Appendix (B).

Question: What does 'multilateral agreements' mean this advantages and disadvantages?

Answered by

Officer 3, Department of Civil Aviation of Myanmar

The international agreements involved three or more parties. For example, the GATT (General Agreement 0 Tariffs and Trade) has been, since its establishments in 1947, seeking to promote trade liberalization through multilateral negotiations that also bilateral trade agreement.

The advantages and disadvantages of multilateral agreements are as follow;

Advantages

(a) Multilateral agreements make all signatories treat each other the same. No country can give better trade deals to one country than it does to another. That levels the playing field. It's especially critical for emerging market countries. Many of them are smaller in size, making them less competitive. The Most Favored Nation Status

confers the best trading terms a nation can get from a trading partner. Developing countries benefit the most from this trading status.

(b) The second benefit is that it increases trade for every participant. Their companies enjoy low tariffs. That makes their exports cheaper.

(c) The third benefit is it standardizes commerce regulations for all the trade partners. Companies save legal costs since they follow the same rules for each country.

(d) The fourth benefit is that countries can negotiate trade deals with more than one country at a time. Trade agreements undergo a detailed approval process. Most countries would prefer to get one agreement ratified covering many countries at once.

(e) The fifth benefit applies to emerging markets. Bilateral trade agreements tend to favor the country with the best economy. That puts the weaker nation at a disadvantage. But making emerging markets stronger helps the developed economy over time.

Disadvantages

(a) The biggest disadvantage of multilateral agreements is that they are complex. That makes them difficult and time-consuming to negotiate. Sometimes the length of negotiation means it won't take place at all.

(b) Second, the details of the negotiations are particular to trade and business practices. The public often misunderstands them. As a result, they receive lots of press, controversy, and protests.

(c) The third disadvantage is common to any trade agreement. Some companies and regions of the country suffer when trade borders disappear.

(d) The fourth disadvantage falls on a country's small businesses. A multilateral agreement gives a competitive advantage to giant multi-nationals. They are already familiar with operating in a global environment. As a result, the small firms can't compete. They lay off workers to cut costs. Others move their factories to countries with a lower standard of living. If a region depended on that industry, it would experience high unemployment rates. That makes multilateral agreements unpopular.

Question: How many multilateral agreements does Myanmar have?

Answered by

Officer 3, Department of Civil Aviation of Myanmar

There are 20 multilateral agreements nations with Myanmar which more detail about as show in Appendix (C).

Question: How is current situation of aviation sector in Myanmar?

Answered by

Officer 4, Department of Civil Aviation of Myanmar

Myanmar's three international airports are: Yangon International Airport (YIA) (airport code: RGN) managed by the Yangon Aerodrome Company; Nay Pyi Taw International Airport managed by the Pioneer Aerodrome Services Company; and Mandalay International Airport managed by the Mitsubishi Group and JALUX- an affiliate of Japan Airlines since 2014.

Among the three international airports, YIA is the largest and busiest for both passengers and cargo with steady growth in visitor traffic over the last few years. YIA is strategically located between India and China, two countries that hold two-thirds of the world's population. YIA is also within six hours flying range of other international hubs such as Tokyo, Dubai, Singapore, Bangkok and Kuala Lumpur. In 2018, a total of 5.9 million passengers and 31 international airlines used YIA.

The aviation market in Myanmar is competitive, especially among local airlines. Currently, 7 private airlines own a small number of aircrafts which hinders them from achieving economies of scale. Recently, the Government sought to expand and rebrand MNA to become more competitive internationally. The domestic airline industry is facing heavy competition from foreign carriers in the market. Although the number of people using air travel increases yearly, the growth of service providers has not kept pace.

The travelled passengers list from 2013 to 2018 as shown in Appendix (D).

Question: What is future plan for services of aviation sector of Myanmar if you have plan?

Answered by

Officer 5, Department of Civil Aviation of Myanmar

The future plans for services of aviation sector of Myanmar are as follow;

(a) Have to reduce fuel price

(b) Liberalize to the Refueling Services and

(c) Change to State Owned Enterprise to privatization to the domestic airports

Question: What are difficulties for implementation of air services liberalization?

Answered by

Officer 5, Department of Civil Aviation of Myanmar

Difficulties for implementation of air services liberalization of aviation sector are;

(a) Higher fuel price

(b) Myanmar implemented for liberalization of services according by positive lists which means that are listed by the contract. So contract partner took the data of contract. The positive lists were constrained for foreign owner who did not like this list. But this list was covered for the domestic owner. If Myanmar wants to improvement for aviation sector, Myanmar needs to liberalize by the positive lists method to negative lists method with protectionism rules and regulations for domestic airlines. Negative lists mean that the contract partner can do everything except in the lists of contract.

Common Answered

Question: How do you suggest more cheaply for the airfare?

Common answers by the 5 key informants:

Now airfare is not cheaply. So if the fuel price, tax and fee price for airlines such as gate, runway and fee of airport, etc. Furthermore, the airlines need to compete. Such there are implementation of these airlines competition which need to liberalize for the some services by the government with rules and regulations which are strengthening.

Question: What is your opinion before and after of service liberalization in Aviation Sector of Myanmar?

Common answers by the 5 key informants:

Airport services are more improvement after the service liberalization. Before the service liberalization of airport that air transport services are not improvements than after service liberalization. The 28 airlines used in YIA before 2017 and 31 airlines used in YIA after 2017. In 2018, The 9 Air China airline which was low cost airline connected in YIA at October 28 and Neos S.P.A Italy airline used in YIA at

October 31. Moreover, Sichuan Airlines which was China airline joined in YIA at November 13, 2018. In 2019, the Hainan airlines which was owner of Hainan used in YIA at January 28, 2019. Especially the Donghai Airlines which was China airline joined in YIA via MIA at July 9, 2018. These airlines were joined to the YIA after the service liberalization. Nowadays the Yangon International Airport was used by effect of service liberalization which was totally 31 Airlines.

Question (1): What do you choose the mode of transport for travel?

Question (2): Can you discuss about of your experience of international airport services and Yangon International Airport services after the service liberalization?

Answered by

Frequently Air Passenger, Business Man

For experience of International airports, I was gone to the Paris CDG International airport at France, Domodedovo International airport at Russia, Dubai International airport, Vienna International airport at Austria, Changi International airport at Singapore, Suvarnabhumi International airport at Thailand and Domestic airport in my country.

For question (1), earlier I used road transportation which was cheap for travel. But I used air transportation because this mode was suitable and reduced the waste time and fast arrived for the long trip.

For question (2), At the International airports,

*Check-in

As for me, check-in process took 45 minutes to an hour. If the airport was big then I looked for a big screen. If I could locate where I had to go then I followed directions. If its domestic, I tried to be there an hour before my flight time. But, for international flights, it increased to one and a half hour or two. That is because I check-in online and I just had to drop my luggage and security which did not take much time.

I could always get the boarding pass about 24 hours in advance by doing online check-in. With that, at least here in Europe, they would just weigh your baggage and its almost done. They won't even check your passport. But, if you don't had a boarding pass, then they checked your passport and other documents and then gave you a boarding pass.

I would only say that airports or airplanes are one of the safest places to lose your belongings. In case it happens, please do not panic and contact the airlines. They

keep all the lost items with them till a certain period after which, they report it to the Police. So, you would get your lost item back sooner or later. But yes, after this incidence, I keep a good check on my belongings and make sure I have them all the time.

*Security

There was more annoying for security pass to some countries. Like, in the France, when you entered the country and were going to some other city, though it was a domestic flight, you sometimes had to go through the security again. Of course, it did have a good objective, but, it was annoying.

There had been instances when I had short transfer times, but, I made it up in time. It is okay, because there were people from the airlines to help me and guide me to go to the right gate. Also it was pretty clear where you had to go as they put it up clearly enough on the airport

*Immigration

If you were finished the check-in and security pass, they checked your I.D., they checked your passport to make sure it was a real one. Some airports, they also checked your finger prints like, when I had to pass through the Singapore airport, they checked my finger prints. Also when I was in the France, at the Marseilles airport, I even had to go through the X-Ray machine where they scanned my body. It was a little bit troublesome, but, no choice.

For experience of Yangon International airports, there are 3 terminals at Yangon International Airport (YIA). International flights depart from Terminal 1 and 2. Domestic flights within Myanmar will depart from the Domestic Terminal. If I arrived the airport, I searched Flight Status board which was not enough at the YIA.

Before 2010, I arrived 2 hours 15m for an airline check in and there was no queue but I suspected 30 minutes later it would have got busy as the recommendation for them was 2 hours. After the opened ceremony of new airport terminal, check in was always very quick at Yangon International airports but then I always got there at least 2 hours before flight time if with an airline they were pretty efficient, then I went outside airport over the road.

The airport is efficient and quick. Security process was almost same other ASEAN countries. But Immigration was a bit slow, with the visa checking etc. Luggage was there fast, and money changing service, SIM card and taxi were easily found. Staff is friendly and helpful.

Finally, I went to the boarding gate after passed the immigration section. If I had some problem the airport staff could help me. Passenger should be at the gate 40 minutes prior to the departure for boarding. Boarding gate closed 10 minutes prior to the departure. Therefore, boarding process was easily.

Assumption for me, Yangon International airport needed the facilities of Airport services such as seat arrangement, WiFi connection and Flight Status board because all almost International airports were perfected facilities and supported by their airport staff that could help to air passengers every times.

CHAPTER 5
CONCLUSION

5.1 Findings

In this study, more and more passengers are getting process of the airport services, and the majority of this sample of research was satisfied with the customer satisfactions of airport services. This study found that the respondents were more satisfied with the Webpage and Booking section, Check-in section, Security and Immigration section, Boarding section and usually liked that customer satisfaction. There are 99 passengers of the respondents who had booked their tickets online had done their reservation by themselves and 169 passengers answered that the choice of airlines from online webpages were sufficient.

There are 54.5% respondents strongly agreed in satisfied with the variety of flight options and thus there could be more variety in the flight options, and especially from Yangon International Airport. It is found out that the number of respondents 29.3% strongly agreed on reasonable air ticket prices. About 52.3% respondents strongly agree in understand the rules, terms and conditions in the airport because they actually read them and 45% respondents strongly agree that there were enough instructions when completing the check-in at the Airport. A majority of respondents 56% strongly agree that they are likely to travel with air transport in the future.

Regarding of the customer satisfactions, 62% respondents partially agree the cooperativeness of the ground staffs at the airport, with the requirements, needs, queries, issues faced by passengers through the airport and 16.5% respondents strongly agree the experience with immigration section that there was delay because of long queues, or visa issuance issues, or staff with limited respective knowledge, or any other issues. There are 3.5% respondents partially agree that the airport staff is informed and helpful when it comes to finding out about the timings, locations, counters, gates of arrivals or departures of different Air Lines taking place at the airport. And some 18.5% respondents strongly agree and 49.5% respondents partially

agree that they satisfied the action of immigration section regarding the Free WiFi network at the airport.

There are 51 % respondents partially agree that airport is equipped with facilities, enough security personnel, fire exits that are clearly marked, enough fire extinguishers within sight, and instructions in case of threat. Some 53 % respondents strongly agree that there are the facilities supported for carrying heavy baggage and luggage until the check-in point, weighting systems, baggage rappers, and means of payment for excess luggage and the airport is equipped with clear signage and signs regarding the various facilities and services, like terminals, gates, restrooms, restaurants, and prayer rooms.

However, this research brought up some problems that are related to the seats which situated at the Yangon International Airport and the conditions which may seem unfair of Free WiFi for consumers who are not dissatisfied for this service. In this research the majority was Myanmar citizens who participated in the survey, and the result could be different because the participants were different types of educations, genders, different purpose to go to the trips and current conditions of the airport services. The airports have to meet or exceed expectations of travelers who come from very diverse backgrounds and with a wide variety of expectations. The study also surveyed that Yangon International Airport which is in regard to criteria for exceeding international expectations about airport facilities, reaching and sustaining customer expectations and customer loyalty. This research had some limitations and, given the small sample size, it can only be regarded as an exploratory study.

5.2 Recommendations

With the help of the respondents there are some important things that could be suggested to domestic airlines in order to improve the customer's booking experience. In the booking process it would be helpful if all the prices of flights for each month could be viewed, in order to find fast good deals. The check-in procedure would be easier for a customer if the passport information was added during the booking and immigration section were good services if the customer had necessary data. Then the person would be reminded right away that there are no boarding passes given at the airport, everything needs to be ready before arriving to the airport. The check-in could be activated only when the boarding passes are printed. It would be a great help for passengers if there was service at the check in gates.

For some customers, the number of advertisements on the home page of Airlines might give a confused feeling for the consumers, and not being sure of what they are actually purchasing when the ads are popping up. Some respondents would like to have the information regarding the departure terminal on their boarding cards. For example, in Yangon International Airport, there are three different terminals, and for some people this information is essential when travelling.

Some passengers suggested who have desire to fill the enough seats near the check in counters and land side of the Yangon International Airport. Moreover, some respondents want to low cost restaurant at the airport and 30 min free WiFi service of airport was not enough for passengers so who want to use need more than 30 min that need to transmit it should be at least two hours.

The most interesting facts for the researcher were discussed in this thesis, but were not included in the empirical research. Those facts are related to the customer's perceptions of service quality and price which could have been included in the questionnaire survey. The issues that could have been done differently in the researcher's opinion are discussed deeper in the learning outcomes section. However, if the same research was conducted again in the future, there could be more samples collected in order to get an even more reliable result. The Airlines often should upgrade its designed and some contents for airlines.com because of getting to interest of the airline passengers.

The recommendations are suggested as a continuation to this study and apart from this there are other areas where this framework can be useful. In extension to the findings of the customer preferences in airline services it would be useful to align airlines services as per the customer's preferences so that the level of dissatisfaction is lower. For this a detailed study of an airline service needs to be carried out so that the organizational service delivery is known. With an in-depth understanding of both the sides, a suitable improvement plan can be made.

A study of internal performance analysis would be possible to measure the planned service delivery to that of the actual service delivered. However, for the study to be more accurate it will be necessary for the study to be with a specific commercial airline service. Liberalization has led to substantial economic and traffic growth. Such positive effects are mainly due to increased competition in the aviation market, which reduces price and stimulates traffic growth, producing efficiency gains as a result of carriers' ability to optimize their network and pricing strategies. In addition,

the increased competitive pressure forces airlines to improve productivity and induces inefficient carriers to leave the Myanmar Aviation market. Moreover, there arise positive externalities to the overall economy from liberalization, including stimulation of growth and employment opportunities, trade promotion, and better transport and logistics services.

To sum up, the best condition which airlines to achieve the network connections in markets, especially where bilateral agreements are restrictive. If ownership/ citizenship restrictions are relaxed, market consolidation via mergers and acquisitions in a liberalized environment would allow airlines to further strengthen their networks and market positions and optimize their networks. This will best take place in a marketplace with a unified, liberalized regulatory structure that can ultimately replace the current bilateral framework. Liberalization will enhance connectivity and promote the economic important goal for air transport in Myanmar. Liberalization will enhance connectivity and promote the economic benefits that connectivity affords. Furthermore, a liberal environment becomes best lead to the sustainable development of international air transport especially for Myanmar which is developing country. Liberalization of the aviation system has achieved significant progress, as exemplified by the emergence of strong and competitive carriers, airports that are more user-friendly, optimized airspace, the sustained growth of air traffic, and enhanced connectivity between States and regions. Most importantly, liberalization has allowed for greater choice and more competitive prices for the travelling public.

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APPENDIX (A)

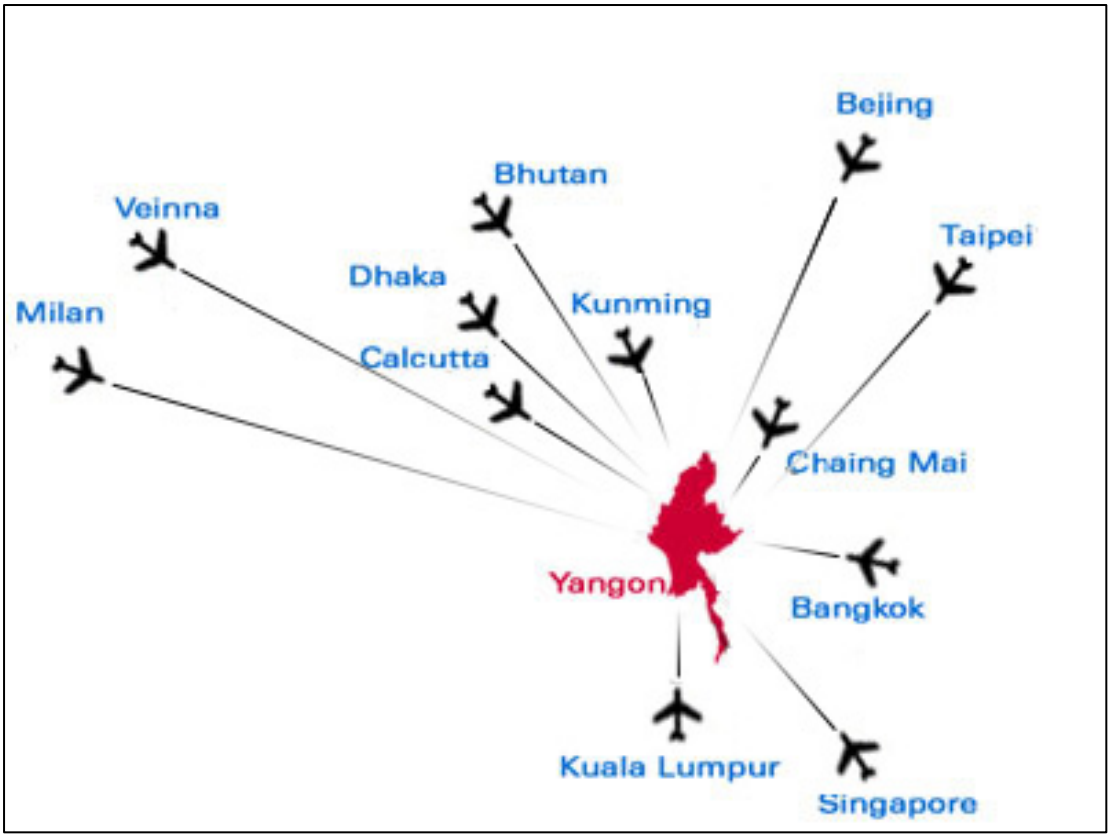
Figure (3.2) Operated Airports in Myanmar (2018)

Source: Air Transportation Division (DCA)

Figure 3.3 International Routes of Myanmar to Foreign

Source: Air Transportation Division (DCA)

Figure 3.4 International Routes of Foreign to Myanmar



Source: Air Transportation Division (DCA)

APPENDIX (B)

CONTRACT OF BILATERAL AGREEMENT COUNTRIES WITH MYANMAR

NO	MEMBER OF COUNTRIES	TYPE OF CONTRACT	ESTABLISHMENT OF SIGNING DATE	RENEW OF SIGNING DATE	REMARK
1	Austria	Air Transport	3.12.1976		EU Country
2	Australia	Air Transport	23.9.1976		
3	Bangladesh	Air Services	3.8.1977	29.8.2013	
4	Belgium	Air Transport	17.8.1960		EU Country
5	Bhutan	Air Services	7.8.2002	24.5.2016	
6	Brunei	Air Services	3.8.1985		
7	Bulgaria	Air Transport	7.10.1971		EU Country
8	China, P.R	Air Services	8.11.1955	14.2.2006	
9	Czechoslovakia	Air Transport	15.12.1965		
10	Cambodia	Air Services	17.10.1996		
11	Denmark	Air Transport	30.7.1951		EU Country
12	Egypt	Air Transport	29.9.1978		
13	Finland	Air Transport	8.3.1980		EU Country
14	France	Air Services	11.1.1972		EU Country
15	F.R.G	Air Transport	27.12.1977		EU Country
16	Hong Kong	Air Services	4.3.1997		
17	India	Air Services	23.1.1979	28.5.2012	
18	Indonesia	Air Services	28.7.1977		
19	Iraq	Air Transport	17.9.1979		
20	Italy	Air Transport	10.10.1977		EU Country
21	Israel	Air Transport	21.1.2003		
22	Japan	Air Services	1.2.1972		
23	Korea R.O	Air Transport	28.1.1978		
24	Kuwait	Air Services	12.4.1983		
25	Lao PDR	Air Transport	12.3.1991		
26	Macau	Air Transport	12.3.1999		

Source: Department of Civil Aviation (DCA)

NO	MEMBER OF COUNTRIES	TYPE OF CONTRACT	ESTABLISHMENT OF SIGNING DATE	RENEW OF SIGNING DATE	REMARK
27	Malaysia	Air Services	12.8.1976		
28	Maldive	Air Services	7.6.2001		
29	Mongolia	Air Services	27.9.2017		
30	Nepal	Air Services	26.8.1996		
31	Netherlands	Air Services	25.3.1977	27.6.2016	EU Country
32	Norway	Air Transport	22.6.1953		
33	Pakistan	Air Services	3.8.1971		
34	Philippines	Air Services	3.7.1979		
35	Poland	Air Transport	15.6.1977		EU Country
36	Quatar	Air Services	24.11.2004		
37	Romania	Air Transport	30.5.1979		EU Country
38	Singapore	Air Transport	26.4.1976	23.1.1996	
39	Sri Lanka	Air Transport	29.6.1950		
40	Sweden	Air Transport	14.9.1950		EU Country
41	Switzerland	Air Transport	31.10.1960		
42	Thailand	Air Services	15.8.1969	14.8.2018	
43	Turkey	Air Services	22.6.2017		
44	United Kingdom	Air Transport	25.10.1952		EU Country
45	U.S.S.R	Air Transport	7.12.1970		
46	U.S.A	Air Transport	28.9.1949		Discussion for Renewable of Contract
47	UAE	Air Services	10.3.2014		
48	Viet Nam	Air Services	13.10.1995		
49	New Zeland	Air Services	25.7.2018		
50	Oman	Air Services	9.4.2019		

Source: Department of Civil Aviation (DCA)

APPENDIX (C)

CONTRACT OF MULTILATERAL AGREEMENT COUNTRIES WITH MYANMAR

NO	STATE	TALE OF AGREEMENT	DATE OF SIGNATURE
1	Cambodia, Lao PDR, Myanmar and Vietnam	CLMV Multilateral Agreement on Air Services	4.12.2003/ 29.4.2005
2	ASEAN Member States	Multilateral Agreement on Commercial Rights on Non Scheduled Services Among the Association of South East Asian Nations	13.3.1971
3	ASEAN Member States	Agreement for the Facilitation of Search for Aircraft in Distress and Rescue of Survivors of Aircraft Accidents	14.4.1972
4	ASEAN Member States	ASEAN MOU on Air Freight Services	19.9.2002
5	ASEAN Member States	Protocol to Amend the ASEAN MOU on Air Freight Services	8.2.2007
6	ASEAN Member States	ASEAN MOU on Cooperation Relating to Aircraft Accident and Incident Investigation	29.5.2008
7	ASEAN Member States	Protocol to Implement the 2nd Package of Commitments under the ASEAN Framework Agreement on Services	16.2.2008
8	ASEAN Member States	Protocol to Implement the 3rd Package of Commitments under the ASEAN Framework Agreement on Services	31.12.2001
9	ASEAN Member States	Protocol to Implement the 4th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	23.11.2004
10	ASEAN Member States	Protocol to Implement the 5th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	8.2.2007
11	ASEAN Member States	Protocol to Implement the 6th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	10.12.2009
12	ASEAN Member States	Protocol to Implement the 7th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	16.12.2011

Source: Department of Civil Aviation (DCA)

NO	STATE	TALE OF AGREEMENT	DATE OF SIGNATURE
13	ASEAN Member States	Protocol to Implement the 8th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	19.11.2014
14	ASEAN Member States	Protocol to Implement the 9th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	6.11.2015
15	ASEAN Member States	Protocol to Implement the 10th Package of Commitments on Air Transport Services under the ASEAN Framework Agreement on Services	13.10.2017
16	ASEAN Member States	ASEAN Multilateral Agreement on the Full Liberalization of Air Freight Services and its Protocol1 and 2	20.5.2009
17	ASEAN Member States	ASEAN Multilateral Agreement on Air Services and its Protocol 1,2,3,4,5 and 6	20.5.2009
18	ASEAN Member States	ASEAN Multilateral Agreement on the Full Liberalization of Passenger Air Services and its Protocol 1 and 2	12.11.2010
19	ASEAN Member States	MOU on ASEAN's Air Services Engagement with Dialogue Partners	13.1.2011
20	ASEAN Member States and PRC	ASEAN-China Air Transport Agreement and its Protocol 1 and 2	13.1.2011

Source: Department of Civil Aviation (DCA)

APPENDIX (D)

Passenger Traffics by Yangon International Airport (2013)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	1898	107589	111798	2716	62982	61261
Feb	1739	105681	107429	2616	65507	62757
Mar	1941	111722	117208	2935	68448	66447
Apr	1871	93513	98598	2444	52887	50055
May	1892	84353	92245	2196	42808	41134
Jun	1710	81555	85431	1948	36069	34480
Jul	1708	87937	83889	1981	37824	37997
Aug	1750	84176	87532	2061	41867	40448
Sep	1705	87448	84164	1943	38731	39221
Oct	2064	111169	105887	2558	52860	54993
Nov	2215	130541	122306	2856	68936	67013
Dec	2424	130266	129210	3055	68196	70159
Total	**22917**	**1215950**	**1225697**	**29309**	**637115**	**625965**

Total Passengers (In and Out) of International and Domestic = 3.7 Millions
Source: Department of Civil Aviation (DCA)

Passenger Traffics by Yangon International Airport (2014)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	2487	130177	128552	3011	72526	69222
Feb	2256	120679	127348	2794	71237	66246
Mar	2479	128436	132529	3061	73916	69399
Apr	2256	125017	124277	2680	62413	60342
May	2090	103607	113525	2557	55156	52784
Jun	1956	93634	97678	2348	47729	45558
Jul	2053	103846	102911	2248	45378	46305
Aug	2026	100710	107255	2247	49883	47389
Sep	1898	102920	102492	2145	46573	47316
Oct	2229	135162	128007	2904	65367	68432
Nov	2431	148748	143893	3185	81583	79245
Dec	2429	154892	147393	3136	76992	79553
Total	**26590**	**1447828**	**1455860**	**32316**	**748753**	**731791**

Total Passengers (In and Out) of International and Domestic = 4.4 Millions
Source: Department of Civil Aviation (DCA)

Passenger Traffics by Yangon International Airport (2015)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	2447	144228	148460	3226	84742	77319
Feb	2251	135652	140594	2856	77285	74838
Mar	2459	143899	148088	3070	75615	70964
Apr	2329	129348	130621	2779	64769	62212
May	2169	113372	118146	2487	54167	52599
Jun	2075	101426	104054	2130	40744	40305
Jul	2084	107929	108049	2503	49842	48058
Aug	2126	107339	108850	2627	54640	51793
Sep	2059	111727	112421	2509	51708	52714
Oct	2446	140911	131798	3038	65748	66529
Nov	2462	154120	146462	3521	82878	79395
Dec	2649	166755	162623	3616	84446	85677
Total	**27556**	**1556706**	**1560166**	**34362**	**786584**	**762403**

Total Passengers (In and Out) of International and Domestic = 4.7 Millions
Source: Department of Civil Aviation (DCA)

Passenger Traffics by Yangon International Airport (2016)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	2696	160049	167309	3567	88999	80532
Feb	2553	157906	161504	3649	92934	86857
Mar	2742	163526	164907	3584	87416	84902
Apr	2686	151345	152895	2915	74996	72612
May	2609	134011	139511	2588	64689	60979
Jun	2451	120857	125059	2379	53391	51997
Jul	2545	134160	133994	2403	56179	55434
Aug	2679	128049	133816	2559	60980	58644
Sep	2639	129256	129284	2502	60010	58145
Oct	2985	168309	154785	3759	82767	82589
Nov	3061	177467	170675	3920	99337	96303
Dec	3233	192413	189444	4118	99661	101533
Total	**32879**	**1817348**	**1823183**	**37943**	**921359**	**890527**

Total Passengers (In and Out) of International and Domestic = 5.5 Millions
Source: Department of Civil Aviation (DCA)

Passenger Traffics by Yangon International Airport (2017)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	3167	184965	182234	4300	101808	96438
Feb	2868	169924	179058	3918	96989	90582
Mar	3144	178779	184296	4159	99006	95517
Apr	3021	172976	174360	3767	88463	86184
May	2926	143767	146488	3508	77518	73925
Jun	2796	129179	132211	3008	59710	58248
Jul	2868	140161	137992	2885	60613	59856
Aug	2814	134375	138571	2826	65364	63135
Sep	2912	136831	136189	2671	64973	64576
Oct	3138	175079	160562	3457	87079	89751
Nov	3224	190635	183356	3664	103531	97581
Dec	3329	199774	198598	3766	102636	104249
Total	**36207**	**1956445**	**1953915**	**41929**	**1007690**	**980042**

Total Passengers (In and Out) of International and Domestic = 5.9 Millions
Source: Department of Civil Aviation (DCA)

Passenger Traffics by Yangon International Airport (2018)

Month	International			Domestic		
	A/C Mov	Pax		A/C Mov	Pax	
		In	Out		In	Out
Jan	3280	179431	183009	3915	99172	90983
Feb	2915	165484	177532	3465	92871	90846
Mar	3148	188078	184385	3662	96690	93654
Apr	3044	172507	177025	3281	83292	81947
May	2840	150902	155849	2827	73902	70131
Jun	2684	133875	141802	2750	58499	56637
Jul	2753	143099	140442	2679	59216	58445
Aug	2765	134600	144213	2686	63744	60498
Sep	2724	137243	133872	2520	59609	59902
Oct	2894	171386	164209	3091	77337	79196
Nov	3084	194006	189414	3198	92699	89160
Dec	3232	206296	208048	3443	97282	99104
Total	**35363**	**1976907**	**1999800**	**37517**	**954313**	**930503**

Total Passengers (In and Out) of International and Domestic = 5.9 Millions
Source: Department of Civil Aviation (DCA)

APPENDIX (E)

Survey Questionnaire

Hello, my name is San Linn and I am MPA student from Applied Economics Department of Yangon University of Economics. I am writing my thesis about **Analysis on Improvement of Airport Service after Liberalization in Aviation Industry of Myanmar**. I would be very grateful if you could answer my questions on this questionnaire. A Lottery ticket will be raffled among all who return the filled in questionnaire.

This is a survey questionnaire for my thesis. These answers will need to complete it probably takes 10-15 minutes. The information collected is "private and confidential" and will not be used for assessment. No part will be revealed without consent.

Part (A) BACKGROUND INFORMATION

Choose the most suitable alternative by drawing a circle.

1. Gender: Male Female

2. Age (years):

16-20 21-25 26-30 31-35

36-40 41-45 46-50 51- 51 above

3. Education _____

4. Nationality _____

5. How did you find out about any Airlines?

(a) Newspaper (b) Magazine (c) TV (d) Internet

(e) Friend/ Family member (f) Other, what?_____

Part (B) WEBPAGES & BOOKING

6. (a) If the tickets were booked online, did you make the reservation yourself?

Yes ☐ No ☐

*If you answered **yes**, you can go to the question number 9.*

(b) If you answered no, have you ever booked tickets from any air ticketing services?

Yes ☐ No ☐

*If you answered **no**, you can skip questions 7-11.*

7. (a) Do you feel there were enough choices of Airlines?

Yes ☐ No ☐

(b) If you answered No, please mention your opinion?

_____

_____

8. The design of the webpage was clear and easy to read.

5 = strongly agree ☐

4 = partially agree ☐

3 = neither agree nor disagree ☐

2 = partially disagree ☐

1 = strongly disagree. ☐

9. I was satisfied with the variety of flight options.

5 = strongly agree ☐

4 = partially agree ☐

3 = neither agree nor disagree ☐

2 = partially disagree ☐

1 = strongly disagree. ☐

10. The ticket prices were as cheap as I expected.

5 = strongly agree ☐

4 = partially agree ☐

3 = neither agree nor disagree ☐

2 = partially disagree ☐

1 = strongly disagree. ☐

11. I did not have any problems understanding the terms and conditions.

5 = strongly agree ☐

4 = partially agree ☐

3 = neither agree nor disagree ☐

2 = partially disagree ☐

1 = strongly disagree. ☐

Part (C) CUSTOMER SATISFACTIONS AT THE AIRPORT SERVICES

Choose the most suitable alternative from the rating scale below by drawing a circle. **5**=strongly agree, **4**=partially agree, **3**=neither agree nor disagree, **2**=partially disagree, **1**=strongly disagree.

(I) CHECK-IN

12. There were enough instructions when completing the check-in at the Airport.

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

13. How would you rate the cooperativeness of the ground staffs at the airport, with the requirements, needs, queries, issues faced by passengers through the airport?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

14. How would you rate how do you feel for using of free WiFi at the airport?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

15. How would you rate how proper are the facilities supported for carrying heavy baggage and luggage until the check-in point and the airport is equipped with clear signage and signs regarding the various facilities and services?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

(II) SECURITY AND IMMIGRATION

16. Destination Domestic From_____ To_____

International From_____ To_____

17. Why do you go to this trip?

(a) Business (b) Leisure (c) Medical Care (d) Others _____

18. How would you rate your experience with immigration section, with regards to any related concern, whether it was delay because of long queues, or visa issuance issues, or staff with limited respective knowledge, or any other issues?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

19. From your experience within the airport, what would you rate the extent to which the airport is equipped with facilities to support and counteract and security threats which may arise? e.g. enough security personnel, fire exits that are clearly marked, enough fire extinguishers within sight, instructions in case of threat… etc.

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

(III) BOARDING

20. Are you likely to travel with Air Transport in the future?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

21. How would you rate how receptive airports were to passengers feedback, were there clear adequate means of feedback, is feedback and complaints put forth by the customers recorded and looked into properly?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

22. How would rate the extent to which the airport staff is informed and helpful when it comes to finding out about the timings, locations, counters, gates of arrivals or departures of different Air Lines taking place at the airport?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

23. In the event of flights being late or delayed by large times, rate the extent to which the airport supports provisions for allowing the passengers to make use of the services of the airport while waiting for their flights?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

24. How adequate was the seating arrangements made for the passengers to sit and rest while waiting for their flights to arrive and board?

5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

* Please give yours opinions and suggestions for air services of Yangon International Airport.

_____

_____

Thank you for participating in this questionnaire survey and have a nice flight!

…….

Contact Information

Name _____

E-mail address _____