

A STUDY ON COMMERCIAL PERFORMANCE OF DOMESTIC AIRLINES IN MYANMAR

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ABSTRACT

This paper aims to study the **commercial performance of domestic airlines in Myanmar** through identifying the environmental forces of domestic airlines, examining the marketing mix activity of domestic airlines and analyzing the effect of those environmental forces and marketing mix activities on commercial performance of domestic airlines in Myanmar. The study found that among environmental forces, technology factor is the most influencing factor on the commercial performance whereas all remaining factors also have influence on commercial performance except for political factor. Regarding marketing mix activities, while all variables affect commercial performance of domestic airlines, the place (distribution) is the most influential one. Thus, domestic airlines should focus on direct and indirect sales distribution channels with the support of technology such as computer reservation system, global distribution system, internet web booking facilities, E-ticketing facilities can enhance the commercial performance of domestic airlines in Myanmar.

Keywords: Load factor, Open Skies, Global Distribution System, Computer Reservation System

I. INTRODUCTION

Airline industry in Myanmar exists in an intensely challenging and hyper competitive market due to oversupplied in recent years which are impacting load factors and profitability. There has been an industry-wide shakedown, which will have far-reaching effects on the industry's trend towards expending and surviving domestic air transport services.

Myanmar currently has 11 national airlines in which there are ten airlines offering domestic services and two airlines offering international services. Most of these carriers focus on the domestic market, operating similar routes with similar aircraft type, similar strategies with similar

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business model. The current situation, with several airlines competing on relatively small trunk routes, is unsustainable. During the period of transformation, short-term problems including economic recession and long-term difficulties such as cost, regulatory, competitive and environmental issues have caused substantial uncertainties for airline industry in Myanmar

The environmental forces such as political, economic, social and technological are major consideration for policy maker and organizational marketing mix such as pricing, product, promotion and distribution are also major activities for airlines in marketing strategic decision. Therefore, it can be worthwhile to identify and understand the influencing environmental forces and marketing activities on commercial performance of airline industry in Myanmar.

Objectives of the Study

This study specifies the following objectives:

- (1) To examine the environmental forces and marketing mix activities of domestic airlines in Myanmar.
- (2) To analysis the effect of environmental forces and marketing mix activities on commercial performance of domestic airlines in Myanmar.

Methodology and sources of Data

This study focusses on the environmental forces and organizational marketing mix activities of domestic airlines industry in Myanmar by identifying PESTEL analysis (PEST) of industry and examining marketing mix of each airline that effect on commercial performance. This study covers all domestic airlines in Myanmar in order to get more reliable data. This study uses both descriptive and analytical methods based on primary and secondary data. Primary data are collected by structured questionnaires with 5-point Likert scale from top executive level of each from 10 domestic airlines. Secondary data are obtained by Airlines' annual report and website, annual report of Department of Civil Aviation, international research papers and other related information resources.

II. BACKGROUND OF DOMESTIC AIRLINES IN MYANMAR

Myanmar domestic airline industry was started dated back to 1948, September 15 after we got independent in 1947 by establishing United Burma

Airways (UBA). It initially operated domestic services only and international services were added in 1950. The name was changed to Burma Airways in December 1972, and to Myanma Airways on 1 April 1989 following the renaming of the country from Burma to Myanmar. In December 2014, Myanma Airways re-branded itself as Myanmar National Airlines (MNA).

In 1994, Air Mandalay was established and in 1996, Yangon Airways came into the market. With the development of the air travel industry, Air Bagan emerges in 2004. In the year 2011, the new airlines: Asain Wings Airways and Air KBZ penetrates the market as the newcomers in January and April. After 2011, Golden Myanmar Airlines entered into the market as low cost carrier in 2013, Air Mann Yadanarpon came in 2014 and Apex airline was established as special carrier of Tanintharye division such as Dawei, Myeik and Kawthaung destinations. Recently, ten domestic airlines are operating in Myanmar and the market is extremely fragmented with no single airline accounting for more than a 20 percent share.

In fact, domestic airline market in Myanmar has huge potential for both local and foreign carriers as the country has recorded some of passenger growth rates in Asia since opening up in 2012. However, there are still having huge challenges, including infrastructure constraints, uncertainty environment, over capacity and unprofitability. Even if airlines have gradually removed existing barriers and lower fares, low discretionary income hinders the air travel of local people. Accordingly, foreigners become larger portion of domestic air travelers.

Environmental Forces on Domestic Airlines

The external environment consists of external influences that affect the firm's strategy formulation and its performance. Political, economic, social and technological environments are the frameworks used for analyzing the macro-environmental factors affecting the performance of domestic airlines industry in Myanmar.

Political Factors

Prior to 20 years ago, there was only government own airline known as Myanmar Airways (UB) since air transport sector was restricted to operate only by government in Myanmar. Since implementation of economic reforms in 1990s, deregulation in several sectors are initiated, privatization and joint venture business pattern was founded in aviation industry. The first joint venture domestic airline in Myanmar was Air Mandalay established in 1994

and then Yangon Airways in 1996. In 2004, Air Bagan was established as the first private domestic airline in Myanmar. Nowadays, ten domestic airlines which are privately owned or public limited company are operating domestic air transport in Myanmar.

Even though Myanmar domestic airline industry was liberalized gradually, new entrance was very rare till 2011. Later on, new domestic airlines like Air KBZ, Asian Wings, Mann Yadanarpon, Golden Myanmar, Apex and FMI were coming into the market. It leads to price competition among airlines so as to seize and maintain the market shares. Since the market demand is not good enough to support the supply side, inevitably, some domestic airlines cannot compete and survive to operate in the market for a long run.

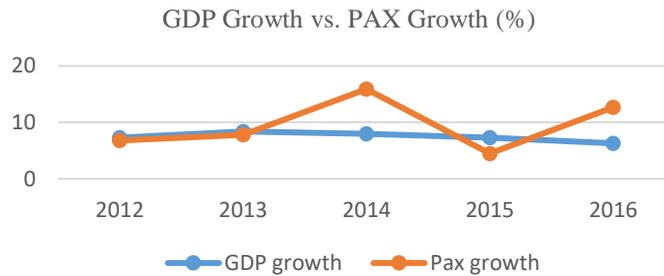
Taxes and duties levied by the Government are also large burden for aviation sector. These costs are significantly high compared to those of other businesses due to the high cost of equipment and materials used in the aircraft and airline operations.

The Open Skies policy, which is also known as the ASEAN Single Aviation Market (ASEAN-SAM), is intended to increase regional and domestic connectivity, integrate production networks and enhance regional trade by allowing airlines from ASEAN member states to fly freely throughout the region. After participating in ASEAN open skies policy, the number of international airlines landing to Myanmar has increased from 13 airlines to 28 airlines in 2017. The number of international passengers has also grown two times during four-year period from 2012 to 2016.

Disasters and political instabilities in some ethnic regions also have an impact on the airlines industry. Rakhaing State situation or other political instability in some domestic region can have large impact on the domestic airlines industry in Myanmar.

Economic Factors

The factors that are most relevant with domestic airline industry in Myanmar. The growth of gross domestic product (GDP) and foreign trade investment (FDI) are highly influence on the growth of air travel. Figure 1 shows the relationship between domestic passenger growth and real annual GDP growth in Myanmar in the period of 2012-16. It highlights the fact that demand for air travel has been grown with the growth of country GDP.

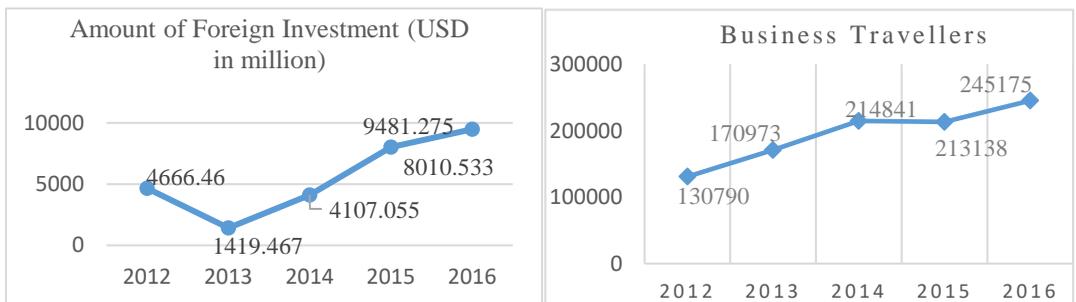


Source: Department of Civil Aviation & Central Bank of Myanmar

Figure-1 GDP Growth vs. Passenger Growth

The new investment law of Myanmar has been finally approved in October 2016 and came into force on April 1 2017, Due to the widespread of multinationals organizations, air travel is often required as a means to engage in face-to-face contacts within the business group. As shown in Figure 2, the number of business travelers has increased in accordance with the investment growth.

The trend of increasing fuel prices is definitely a cause of concern for airlines industry in Myanmar, which is the second highest cost in the cost structure. A total expenditure for fuel is the highest ever recorded, but it happened twice- in 2012 and 2013. It is a major cost component of the domestic airlines in Myanmar accounted for almost 40 percent of operating cost of domestic carriers. Table-1 presents the fuel price at various countries in the region. As shown in the table, the price of aviation fuel (Jet A1) in Myanmar is highest compare to other countries.



Source: MOHT and DICA (website)

Figure-2 Business Travelers vs. Amount of Foreign Investment

Table -1 Jet –A1 Price in Myanmar, Thailand, Singapore, Malaysia, India, Vietnam

Countries	Myanmar	Thailand	Singapore	Malaysia	India	Vietnam
Jet-A1 (USD/IG)	3.78	1.44	0.97	1.06	1.53	1.63

Source: aeroportos.weebly.com (23rd Feb 2018)

Social Factors

Life style changes compared to previous decade has been seen in travelling school vacation and holidays effect on YFR as well as leisure travelers in domestic market in Myanmar. The social perception of air travel has changed towards to be more safety and convenient in travelling. Moreover, with increasing awareness and usage of technology lead to create air travelers in larger numbers. The availability of online sale method has been beneficial to industry supply chain including travel service provider, opened up opportunity for online travel agencies, passengers and airlines.

Technology Factors

Technological advancement has been the driving factor for improving airlines' operational efficiency. Airlines have been able to reduce costs and improvement by using advanced aircraft engine technology, IT solutions and mobile technology. The technology has created better connectivity and enhanced passengers' travel experience. Today, through the use of airlines' booking engine, customers are now able to better compare prices and find the cheapest tickets on any given domestic route in Myanmar. Nowadays, domestic airlines in Myanmar are also moving away from paper system.

Technological developments continuously make it possible to upgrade aircrafts that operate more fuel-efficient, emit less CO₂, and reduce noise than older versions. A state-of-the-art aircraft fleet can enhance a company's competitive edge in terms of costs and quality of service. In Myanmar domestic airline industry, 65 percent of aircraft type are ATR72 turbo prod and remaining 35 percent are jet engine aircrafts which are more modernized than those of last two decade.

Marketing Activities of Domestic Airlines

To identify the influencing marketing factors on the performance of domestic airlines, the study examines the marketing mix (4Ps) activities of domestic airlines in Myanmar.

Product

The airline industry's "product" includes both intangible services and tangible physical products such as aircraft, seat and lounges respectively. Domestic airlines' products in Myanmar can be examined with the types and number of aircraft, destinations, booking classes, business lounges facilities, inflight catering, free baggage allowances, frequent flyer program for loyal customers and booking control system respectively.

Price

Domestic airlines industry in Myanmar can be classified as oligopoly market because there are less than 10 airlines are playing in the market. Since the market size is not enlarge much to support the supply of 10 domestic airlines, each airline is attracted by offering low price with full service due to high competition in the market. Since airline service is perishable and substitutable, a decrease in the price of a airline leads to decrease the demand for others. Domestic airlines in Myanmar mainly practice market-based pricing strategy in which the prevailing fares are more emphasized than operating costs to attract the customer. By doing so, the airlines try to meet the needs of customer through the competitive offerings. However, it leads to price war and ultimately no one can benefit from this strategy.

Promotion

One crucial marketing strategies of domestic airlines in Myanmar is promotion activities. There are two seasons in the market: high season from October to April and slack season from May to September. Since the market size is not good enough for 10 domestic airlines in Myanmar, all airlines face difficulties especially in slack season. All domestic airlines emphasis seasonal promotional activities in slack season including all in one promotion programs, route by route promotion programs, and conduct public relation activities like sponsorship in events and workshop, participate in travel road show accordingly.

Frequent Flyer Programs is enabling airlines to produce effective databases. Today, domestic carriers in Myanmar are seeking to emphasis better contact with their loyal customers as a component of their strategy to make database marketing as a way of giving updated information or promotion programs to target customer group.

Table-3 Domestic Airlines with Facilities

Airline	Class of service	Lounge	FFP	Inflight catering	Baggage allowance	Booking system
Myanmar National Airlines (UB)	Business, Premium, Economy	RGN, airport	MNA club	Hot meal, Cool	30,25,20 kgs + 7 kg	CRS, GDS, Web booking
Air Mandalay (6T)	Economy	Nil		Snack & drinks	20 +5 kg	CRS
Yangon Airways (YH)	Economy	Nil	yes	Snack & drinks	20+5 kg	CRS
Air Bagan (W9)	Economy	-	-	-	-	-
Asian Wings Airways (YJ)	Economy	Nil	yes	Snack & drinks	20+5 kg	CRS, GDS, Web booking
Air KBZ (K7)	Economy		yes	Snack & drinks	20+5 kg	CRS, Web booking
Golden Myanmar (Y5)	Economy	Nil	yes	Snack & drinks	20+5 kg	CRS, Web booking
Mann Yadanarpon Airlines (7Y)	Economy	Nil	yes	Snack & drinks	20+5 kg	CRS, Web booking
FMI Air(ND)	Economy	Nil	yes	Snack & drinks	20+5 kg	CRS, Web booking
Apex Airline (SO)	Economy	Nil	Nil	Snack & drinks	20+5 kg	CRS

Source: Airlines' website

Note: FFP: Frequent Flyer Program

CRS: Computer Reservation System

GDS: Global Distribution System

Place (Distribution)

Domestic Airlines use both direct and indirect platforms. Direct channel where domestic carriers make direct contact with passengers for buying air tickets, without any intermediaries being involved at all. Direct channels bring the advantage that no mark-ups or commissions have to be paid to channel intermediaries and be able in touch with the true sources of

demand for their airline's ticket. Domestic airlines in Myanmar also use indirect channel relationship: ticketing agencies or travels and tours companies that is also one of B2B channel distributions.

III. EMPIRICAL ANALYSIS

To identify the influencing environmental forces and marketing mix activities, commercial performance of domestic airlines is regressed with environmental and marketing mix variables. Environmental factors are measured with political, economic, social and technological dimensions while marketing mix activities are identified with product, price, promotion, and place variables. For commercial performance, the study uses important efficiency scores based on available seat miles and revenue passenger mile which are computed as passenger load factor. All data are collected by structured questionnaires with 5-point Likert scale from 32 officials of top executive level from 10 domestic airlines. Regression results for influencing environmental forces on commercial performance of domestic airlines presented in Table-4.

Table – 4 Effect of Environmental Forces on Commercial Performance

Variable	Unstandardized Coefficients		β	t	Sig
	B	Std Error			
(Constant)	-.036	.092		-.389	.700
Political	.064	.083	.062	.769	.448
Economic	.281**	.107	.280	2.626	.014
Social	.250***	.074	.263	3.384	.002
Technology	.405***	.088	.409	4.581	.000
R Square	.983				
Adjusted R Square	.981				
F Value	416.554***				

Source: Survey Data (2017)

*** Significant at 1% level, ** Significant at 5% level, * Significant at 10% level

The specified model could explain well about the variation of the commercial performance of the domestic airlines in Myanmar since the value of R^2 is about 98 percent. Since the value of F test, the overall significance of the model, is highly significant at 1 percent level, the specified model can be said valid. The overall evaluation reveals that models explain the variation in commercial performance of the domestic airlines well because the estimation produced expected signs and significant coefficients for most variables.

The coefficients of social and technology variables show expected positive sign and highly significant at 10 percent level while that of economic variable is significant at 5 percent level. It highlights that economic, social, and technology factors have significant effects on commercial performance of the airlines. It can be said that improvement in economic variables leads to enhance the commercial performance of domestic airlines in Myanmar. Moreover, the results suggested that transformation of social and cultural factors and development in technology will impact on whole travelling industry and thereby, improve the commercial performance on Domestic airlines.

Among four explanatory variables, when the variance explained by other variables is controlled for, technology has the greatest contribution to increase the commercial performance of the domestic airlines.

Regression results for influencing marketing mix variables on commercial performance of domestic airlines presented in Table-5. As shown in table, the specified model could explain well about the variation of the commercial performance of the domestic airlines in Myanmar since the value of R^2 is about 99 percent. Since the value of F test, the overall significance of the model, is highly significant at 1 percent level, the specified model can be said valid. The overall evaluation reveals that models explain the variation in commercial performance of the domestic airlines well because the estimation produced expected signs and significant coefficients for most variables.

The coefficients of all marketing mix variables show expected positive sign and highly significant at 1 percent level in all variables except product variable which is significant at 5 percent level.

In Myanmar, domestic airlines use the same type of airplanes and there is limited chance for passengers to choose time, routes, aircraft, facilities and etc. All the schedules, departure time and other facilities (in flight & ground) are very similar to each other. Nevertheless, the significant

positive effect of product factor indicates that improve in product factors leads to more commercial performance of the domestic airlines. Highly significant effect of price variable suggests that variation in price based on different target markets with different booking class can enhance the commercial performance of the airlines.

Table-5 Effect of Marketing Mix on Commercial Performance

Variable	Unstandardized Coefficients		β	t	Sig
	B	Std Error			
(Constant)	-.168	.054		-3.097	.004
Product	.195**	.087	.180	2.254	.032
Price	.261***	.086	.255	3.015	.005
Promotion	.272***	.073	.264	3.722	.001
Place (Distribution)	.302***	.086	.305	3.505	.002
R Square	.996				
Adjusted R Square	.995				
F Value	1620.676***				

Source: Survey Data (2017)

*** Significant at 1% level, ** Significant at 5% level, * Significant at 10% level

The results suggested that offering seasonal promotion and advertising will also attract people, stimulate demand, and thereby, improve the commercial performance. Moreover, if the airlines can provide privileges to loyal customer, the passengers will be more interested to take the airlines rather than using other transport methods.

The results also highlight the importance of distribution channel for improving commercial performance of the airlines. By expanding distribution channels, domestic airlines can reach more market segments and accordingly, recruit more passengers and thereby, promote the commercial performance of domestic airlines in Myanmar.

Among four explanatory variables, when the variance explained by other variables is controlled for, place (distribution) has the greatest contribution to improve the commercial performance of the domestic airlines in Myanmar.

IV. CONCLUSION REMARKS

This paper has traced the environmental forces and marketing mix activities that affect commercial performance of domestic airlines in Myanmar. According to survey data, among the four environmental forces, economic, social and technology influence on commercial performance of domestic airlines with highly significant level. In practice, worsen political situation impact on travelling industry and thereby, affect domestic airlines in Myanmar. It can be expected that the more favorable political situation, the better the commercial performance of the domestic airlines will be result. In economic factor, the price of fuel highly affects the performance of domestic airlines because fuel expense is the largest proportion of airlines operating cost. Social factor, such as changes in life style also influence airlines' performance. The awareness and interest of people in vacation trip will have the big impact on airline industry. Moreover, under the context of today virtual world, applications of online system like reservation control system, E-ticketing and online banking facilities are imperative for improving business performance of domestic airlines.

All marketing mix activities have direct impact on commercial performance of the airlines. For product factors, schedule, frequency, timing, and flexibility of flights, and providing facilities are the most influence on commercial performance. The more the flexible way, the more passengers have the chance to choose the airline and as the consequences, the high load factor can get by the airline. Regarding price, air fare can be set upon different booking classes in order to improve the commercial performance of the domestic airlines. Seasonal sales promotion and advertising are the most attractive activities for passengers in order to enhance the commercial performance. Place (distribution) factors also strongly influence on commercial performance of domestic airlines. Computer reservation system(CRS), global distribution system(GDS) for worldwide distribution, and Web booking and E-ticketing facilities together with direct and indirect distribution with the support of information technology can enhance the commercial performance of domestic airlines.

As overall empirical research finding, it can be concluded that environmental forces of technology has the greatest contribution to increase the commercial performance while place (distribution) has the highest influence on commercial performance of domestic airlines in Myanmar.

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