Applying Logistic Regression Analysis to Determine the Service Quality Factors Affecting on Consumer Satisfaction Toward Domestic Low Cost Airlines in Thailand

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Abstract

In recent years, Thai low cost airline market has been significantly growing. Because of the rebound of Thai economy and economic policy of government to stimulate people consumption and tourism increasing more holidays, the amount of sales in Thai low cost airline were increased dramatically. Thailand has 3 major low cost airline providers, namely Thai Air Asia, Nok Air and Thai Lion Air. Each airline has been trying to be lower the costs and good service in order to meet consumer's need. This research studies about the factors affecting on consumer satisfaction toward domestic low cost airlines in Thailand. A sample survey is conducted during December 2016 to January 2017 at Don-Mueang International Airport. Convenience sampling with questionnaires are used to collect data from 450 Thai passengers who have ever used those low cost airlines for domestic flight to travel within 6 months ago.Data was analyzed by using Multinomial Logistic Regression Analysis at 0.10 level of significance, and the results of the study shown that four of five dimensions of service quality as assurance (safety flight), responsiveness (Speed in managing the ticket, Convenience in reserving the seats, Carefulness in transmitting the luggage), empathy(Crews are always willing to serve customers), and reliability (Crews completely communicate all information to customers)were the important factors that have the impact on customer satisfaction.

Keywords: Customer Satisfaction, Low Cost Airline, Logistic Regression Analysis.

Introduction

In recent years, the growth rate of Thai low cost airline (LCA) market has been significantly growing.Because of the rebound of Thai economy and economic policy of government with returning of tax refund for people who spend money in tourism that stimulate people consumption and tourism increasing more holidays.The amounts of sales in Thai low cost airline was increased dramatically. Moreover, compared with ground travelling, low cost airline takes lower time for transportation, but similar price influencing people select to use low cost airline travelling more and more.

Though full service airlines currently dominate the market, LCA are growing rapidly in market share. In 2013, low cost airlines held 46% of Thai airline market share (calculated from revenue received from domestic routes), while full service airlines held 54%. Thai Airways, a full service airline, still leads the market with the highest domestic market share at 31.6%, followed by Thai Air Asia and Nok Air, Thai low cost airlines, at 23.2% and 22.7%. From a market share growth perspective, during 2011-2013 low cost airlines' market share growth was 9%, while full service airlines' market share growth dropped by 6% (Srisumran and Sintanabodee, 2014). Moreover, New Airport Insider (2017) reported that the domestic low cost route in Bangkok region has grown from 40% in 2011 to 67% in 2016. According to Table 1, low cost airline market in Thailand consisted on big three brands; Thai Air Asia, Nok Air, and Thai Lion Air ordering by the size respectively. Thai AirAsia is one of the famous brands in Thai low cost airline market which takes the average 40.52% of the whole market shares, following with Nok Air and Thai Lion Air which possess the market 40.16% and 15.44%, respectively. Theirs base are in Don Mueang International Airport.

Table 1: The Number of Domestic Passengers Traffic and Market Shares in Percentage at Don Mueang International Airport by Airlines

Airlines	Fiscal Year				Average of Market Shares Growth (%)
	2013	2014	2015	2016	
1.ThaiAir Asia	5,338,600 (47.71%)	6,293,328 (40.45%)	7,806,056 (36.94%)	8,628,793 (37.00%)	40.52%
2.Nok Air	5,337,815 (47.70%)	7,028,018 (45.18%)	7,865,177 (37.22%)	7,127,102 (30.56%)	40.16%
3.ThaiLion Air	32,288 (0.29%)	1,766,917 (11.36%)	4,545,831 (21.51%)	6,669,321 (28.59%)	15.44%
4. Others	482,080 (4.31%)	468,364 (3.01%)	916,438 (4.34%)	898,241 (3.85%)	3.88%
Total	11,190,783 (100 %)	15,556,627 (100%)	21,133,502 (100%)	23,323,457 (100%)	100%

Source: AOT Statistic Report, 2013-2016

Over the past decades, domestic flight has become one of the most important sectors in terms of bringing revenue to LCA. Therefore, it is important to study how to increase customer satisfaction during the low seasons and with high competition. The

ability to achieve sustainable growth during hard times guarantees steady revenues in the future. The domestic flights' revenues can be increased in two ways. First is to increase new customers and second is to make sure that the old customers repurchase the products and service again and again. Service quality is widely accepted as one of the most important factors for customers to make a decision to repurchase. Service quality is an important factor whenever its uniqueness encourages purchase and repurchase by customers. The more customers repurchase the same products and service, the higher the probability will be that customers have loyalty to that particular brand. Service quality has been increasingly accepted as a key factor in differentiating and building a competitive edge in the modern airline business. Service quality is satisfaction based on customer's experience. Positive experience from customers leads to highly satisfied customers and a willingness to repurchase or recommend the particular products and services to others customers (Techarattanased, N., 2014).

LCA become strategic move of airline business as companies reduce irrelevant expenses such as crew uniform and in-flight catering so tickets can be offered at competitive price. Moreover, tickets can be sold in advance via internet so company can efficiently manage flight schedules and minimize risk of empty seats. Low cost airlines have always changed marketing strategies to survive in the business and fulfill customers' needs (Charoensettasilp and Wu, 2013).

Since low cost airline business in Thailand grows continuously and has a great impact on Thai economy in the future, this business obviously has high competition among carriers because there is a positive trend in this business. However, airline business is mostly concerned with services provided to customer to make them satisfied and repurchase the product again. Each airline has been trying to be lower the costs and good service in order to meet consumer's need. Hence, it is increasingly necessary to find out the influential factors in service quality which have an influence on customer satisfaction among top three low cost airlines in Thailand as Thai Air Asia, Nok Air, and Thai Lion Air. Therefore, this research aims to study the factors affecting on consumer satisfaction toward Thai domestic low cost airlines in Thailand. The obtained results will be helpful for marketer to improve service quality and create marketing strategy for airlines in order to increase customer satisfaction in the future.

Research Objective

1. To study the general behaviors of consumer who use Thai domestic low cost airlines of Thai Air Asia, Nok Air, and Thai Lion Air.

2. To study the important factors in five dimensions of service quality that has the effect on consumer satisfaction toward Thai domestic low cost airlines of Thai Air Asia, Nok Air, and Thai Lion Air.

Literature Review

Theories Related to the Independent Variable

Service

Service can be defined in many ways depending on which area the term is being used. An author defines service as "any intangible act or performance that one party offers to another that does not result in the ownership of anything" (Kotler & Keller, 2009, p. 789). In all, service can also be defined as an intangible offer by one party to another in exchange of money for pleasure. (Jenet Manyi Agbor, 2011). Investor's word defines service as a type of economic activity that is intangible, is not stored and does not result in ownership. A service is consumed at the point of sale. Services are one of the two key components of economics, the other being goods.

Service Quality

According to Parasuraman et al. (1988), service quality can be defined as an overall judgment similar to attitude towards the service and generally accepted as an antecedent of overall customer satisfaction. According to Asubonteng et al., (1996), due to intense competition and the hostility of environmental factors, service quality has become a cornerstone marketing strategy for companies. This highlights how important improving service quality is to organizations for their survival and growth since it could help them tackle these challenges they face in the competitive markets. Quality in a service business has become a measure of the extent to which the service provided meets the customer's expectations. Companies have found that in order to increase profits and market share, they should pay much attention to service quality.

SERVQUAL Model

To facilitate the assessment and measurement of service quality, it is called SERVQUAL (Service Quality) model. SERVQUAL model was also chosen because it is valuable when it is used periodically to track the service quality trends, and when it is used in conjunction with other forms of service quality measurement. Parasuraman et al. (1988) included that the SERVQUAL model was made of five dimensions of service quality as (1) Tangibles- physical facilities, equipments, and staff appearance; (2) Assurance- knowledge and courtesy of employees and their ability to inspire trust and confidence; (3) Responsiveness- willingness to help customers and provide prompt service; (4) Empathy- caring, individual attention the firm provides its customers; and (5) Reliability- ability to perform the promised service dependably and accurately.

1. Tangible (Direct Evidence)

Tangible (Direct Evidence) can be defined as the appearance and quality of the tools used for physical, employee performance and communication equipment. This is direct evidence that the service will be assessed to determine the respondents in selecting items. This is because the quality of the physical tools and the appearance of a good employee will automatically be able to attract respondents to buy the products that they offer (Zeithaml and Bitner, 2003). Tangible can also be defined as

appearance of physical facilities, equipment, personnel, and communication materials. Include all physical products that are involved in service delivery, and even other customers (Parasuraman et al., 1988).

2. Assurance

Assurance can be defined as the level of knowledge and level of courtesy of employees, in addition to their ability to give confidence to the customers (Zeithaml and Bitner, 2003). Assurance can also be defined as knowledge and courtesy of employees and their ability to convey trust and confidence (Parasuraman et al., 1988).

3. Responsiveness

Responsiveness can be defined as the desire of the staff and employees to help customers, provide service with responsive and able to handle customer complaints quickly (Zeithaml and Bitner, 2003). Responsiveness can also be defined as willingness to help customers, provide prompt service and how fast the service is provided customers (Parasuraman et al., 1988). In this research, responsiveness is concerned with only staff; for instance, the willingness of staff to help consumers and the response of staff to provide services required by consumers quickly. Thus, in order to clarify the variable, the researcher renamed it as staff's responsiveness.

4. Empathy

Empathy can be defined as the special attention given to each customer individually by an employee. For corporate service organizations, all characteristics of service quality should be measured and adjusted relative to the quality requirements (Zeithaml and Bitner, 2003). Empathy can also be defined as the firm provides care and individualized attention to its customers (Parasuraman et al., 1988).

5. Reliability

Reliability can be defined as the ability to deliver the promised services with immediate, accurate and satisfying (Zeithaml and Bitner, 2003). Reliability can also be defined as ability to perform the promised service dependably and accurately service is performed with high accuracy and thoroughness every time customers (Parasuraman et al., 1988). In this research, as the researcher reviewed based on the definition of reliability, the researcher found that another promise that airline should provide to customers is the good management in case of emergency; such as delay of flight or luggage problem. This can be considered as reliability of the airline. Therefore, it is separated from reliability, so this is called "well-managed of emergency case".

Service Quality in Airline Business

Airline service quality is different from services in other industries. An airline service comprises are tangible and intangible attributes. Airlines carry passengers to the destination using aircraft, and passengers experience diverse intangible services from airlines such as on time performance, inflight service, service frequency and so on. Many researchers define a number of key service quality attributes in airline industry

that affect customer's perception of a service delivered and thus create the image of a carrier. The attributes are summarized in Table 2 (Ekaterina Tolpa, 2012).

Table 2: Service Quality in Airline Aspects

Service Quality Aspects	Researcher(s)
Behavior – Performance, Price, Tangibility	David J. Snyder, Canisius College, USA Pham Anh Tai
Caring and tangible, reliability, responsiveness, affordability, visual attractiveness	Ahmad Azmi M.Ariffin, Aliah Hanim M.Salleh, Norzalita A.Aziz and Astuti Agustina Asbudin
Service environment	Kalaippiriya Kalaiarasan, Santhi Appannan and Barathy Doraisamy
Tangibles and responsiveness	Kim, Yu Kyoung and Hyung Ryong Lee
Assurance, then reliability, responsiveness, empathy, and tangibles	K. Ravichandran, B. Tamil Mani, S. Arun Kumar, and S. Prabhakaran
Willingness to correct errors, task proficiency, courtesy, friendliness, tolerance	Mersha & Adlakha (1992)
Airline brand, price, sleep comfort	Boetsch et al. (2001)

Table 2: Service Quality in Airline Aspects (continued)

Service Quality Aspects	Researcher(s)
Frequency and timings, punctuality, airport location and access, seat accessibility/ticket flexibility, frequent flyer benefits, airport services, in-flight services	Shaw (2007)
Employee's service, safety & reliability, on board service, schedule, on time performance, frequent flyer program	Liou & Tzeng (2007)
Flight schedule, total fare, flexibility, frequent flyer program, punctuality, catering, ground services	Teichert et al. (2008)
Level of concern and civility, listening and understanding, individual attention, cheerfulness, friendliness, courtesy	Babbar & Koufteros (2008)
On-time performance, overbooking, mishandled baggage, customer complaints	Tiernan et al. (2008/2)

Source: Ekaterina Tolpa, 2012

Theories Related to Dependent Variable

Satisfaction

Kotler & Keller (2009) defined satisfaction can be a person's feelings of pleasure or disappointment that results from comparing a product's perceived performance or outcome with their expectations. Satisfaction could be the pleasure derived from someone from the consumption of goods or services offered by another person or group of people. Satisfaction was defined as an overall evaluation dependent on the total purchase and consumption experience of the target product or service performance compared with repurchase expectations over time. While satisfaction is

sometimes equated with performance, it implies compensation or substitution whereas performance denotes doing what was actually promised. See also accord and satisfaction

Customer Satisfaction

Kotler (2000) defined satisfaction as: "a person's feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations". According to Hansemark and Albinsson (2004) defined that "satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire". Oliver (1981) defined satisfaction "as a summary of psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience".

Relationship of Service Quality and Customer Satisfaction

In this logic they are separate, where quality is something the company is responsible for and satisfaction is an experience in the customer's domain. However, the concepts are clearly related since we might use customer reaction (satisfaction/dissatisfaction) as means of evaluating whether the right quality has been delivered. When a customer recognizes quality, it is reflected in customer satisfaction. To achieve a high level of customer satisfaction, most researchers suggest that a high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction (Cronin, Brady, & Hult, 2000; Anderson et al., 1994; Cronin & Taylor, 1992). Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations.

In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service (Wilson et al., 2008).

Research Model

According to the Literature Review, the research model consists of two major variables:
   (1) ....
       dependent variable is customers' satisfaction toward the service quality in domestic low cost airlines in Thailand among three brands Thai Air Asia, Nok Air and Thai Lion Air
   (2) ....
       independent variables are five dimensions of service quality
       Tangibility
           - Boarding pass and system are modern

- The airline's seat is comfortable
- Restrooms are clean
- Cabin's air pressure is comfortable
- Modernity of airplane

Assurance
- Safety flight
- Capacity of airplane
- It is convenient to communicate to the airline.
- Experience and Ability of crews
- Serving customers appropriately

Responsiveness
- Speed in managing the ticket
- Speed in checking in at the counter
- Convenience in reserving the seats
- Carefulness in transmitting the luggage
- Taking small time from entrance to the plane
- Speed of crew's response to employee's need

Empathy
- Friendliness airline
- Crews always try to explain customers with easy words
- Crews always try to understand customers' need
- Crews are always willing to serve customers

Reliability
- Airline follows the words in advertisement
- Airline is an expert in aero business
- Reliability of employees
- Crews completely communicate all information to customers.
- Crews have got professional experience in service
- Accuracy of recorded information
- Well solving when problems occurred

Research Hypotheses

According to the literature review and the research model, the twenty seven alternative hypotheses are as follows:

H_{a1i}: Tangibility has the effect on customers' satisfaction toward the service quality in the

   domestic low cost airline, $i = 1, 2, 3, 4, 5$

H_{a2i}: Assurance has the effect on customers' satisfaction toward the service quality in the

   domestic low cost airline, $i = 1, 2, 3, 4, 5$

H_{a3i}: Responsiveness has the effect on customers' satisfaction toward the service quality in

   the domestic low cost airline, $i = 1, 2, 3, 4, 5, 6$

H_{a4i}: Empathy has the effect on customers' satisfaction toward the service quality in the

   domestic low cost airline, $i = 1, 2, 3, 4$

H_{a5i}: Reliability has the effect on customers' satisfaction toward the service quality in the

domestic low cost airline, $i = 1, 2, 3, 4, 5, 6, 7$

Logistic Regression Analysis

Logistic regression really is a specialized form of regression that is formulated to predict when the dependent is a categorical variable and the independents are of any type (David et. al., 2008). Logistic regression analysis can be further divided into two types, which are binomial and multinomial logistic regression. Multinomial Logistic Regression exists to handle the case of dependents with more classes than two do. This type of regression is similar to binary logistic, but it is more general because the dependent variable is not restricted to two categories. (Hair, 1988). Generally, the dependent variable in logistic regression is categorical variable. Logistic regression estimates the odds of a certain event occurring (Garson, 2009). Logistic regression makes no assumption about the distribution of the independent variables. The relationship between the independents and dependent variable is not a linear function. The logistic response function is

$$P(Y = 1) = \frac{e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_p X_p}}{1 + e^{\beta_0 + \beta_1 X_1 + \ldots + \beta_p X_p}}, \text{ where}$$

β_i are logistic coefficients to be estimated; i =1, 2, …, p

For logistic regression, the "parameter estimate" is the B coefficient used to predict the log odds (logit) of the dependent variable. The B coefficients with 0 indicate that the given explanatory variable does not affect the logit (that is, makes no difference in the probability of the dependent value equalling the value of the event, usually 1); positive or negative B coefficients indicate the explanatory variable increases or decreases the logit of the dependent. Exp (B) is the odds ratio for the explanatory variable. The odds ratio for a given independent variable represents the factor by which the odds (event) change for a one-unit change in the independent variable. An Exp (B) > 1 means the independent variable increases odds (event). An Exp (B) < 1, then the independent variable decreases odds (event).

Thus, the suggestion for considering the influential factor that has the effect on the dependent variable is the influential factor(s)   which has the statistically significance at the level of significance (α) with the value of Exp (B) > 1(Garson, 2009) should be considered in the first priority and so on.

Research Methodology

This research is a survey research; convenience sampling was used in collecting the sample data. A sample survey was conducted during December 2016 to January 2017 at the Don Mueang International Airport. The respondents were Thai passengers who had ever used those three low cost airlines for domestic flight to travel within 6 months ago. A total of 450 respondents were participated in this research. Pre-test was conducted and measures the reliability with the overall Cronbach's Alpha coefficient of this survey instrument is 0.98. The questionnaires are distributed to Thai

passengers who have ever used the low cost airlines for domestic flight to travel within 6 months ago among top three LCA--- Thai Air Asia, Nok Air and Thai Lion Air. A statistical package for the social science and multinomial logistic regression analysis were employed to obtain the important factors in five dimensions of service quality that has the effect on consumer satisfaction toward Thai LCA.

The Findings

Demographic Factors of Respondents

For Thai Air Asia

The majority of the respondents (66.0%) are female, 62.6% of respondents were from 18-35 years age group, and 70.0% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 34.7% and 30.0% with income per month is not more than 30,000 baht is about 75.4%. For the behavior of Thai Air Asia respondents, the main objective of using low cost airline is "Tourism" at 42.5% and the main reason of using is "Low price of ticket" around 23.0% and 66.0% of respondents make the decision by themselves. Moreover, their preferred channel of purchasing tickets is "Airline's website" at 76.7% and 45.7% will pay for tickets by "Credit card". Additionally, 27.7% of respondents prefer time for travelling during "12:01-15:00" and 65.7% of them travel by LCA once a month.

For Nok Air

The majority of the respondents (70.0%) are female, 60.0% of respondents were from 18-35 years age group, and 64.0% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 29.3% and 30.7% with income per month is not more than 30,000 baht is about 67.4%. For the behavior of Nok Air respondents, the main objective of using low cost airline is "Back to home town" at 40.2% and the main reason of using is "Low price of ticket" around 19.0% and 76.1% of respondents make the decision by "Themselves". Moreover, their preferred channel of purchasing tickets is "Airline's website" at 76.7% and 53.8% will pay for tickets by "Counter service". Additionally, 29.7% of respondents prefer time for travelling during "15:01-18:00" and 55.3% of them travel by LCA once a month.

For Thai Lion Air

The majority of the respondents (68.0%) are female, 67.4% of respondents were from 18-35 years age group, and 63.3% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 35.3% and 36.7% with income per month is not more than 30,000 baht is about 72.6%. For the behavior of Thai Lion Air respondents, the main objective of using low cost airline is "Back to home town" at 40.2% and the main reason of using is "Low price of ticket" around 22.0% and 73.5% of respondents make the decision by "Themselves". Moreover, their preferred channel of purchasing tickets is "Airline's website" at 75.0% and 46.5% will pay for tickets by "Counter service". Additionally, 25.8% of respondents prefer time for travelling during "15:01-18:00" and 55.3% of them travel by LCA once a month.

Results of Multinomial Logistic Regression Analysis

Regarding to multinomial logistic regression, it can be obtained the important factors in five dimensions of service quality that has the effect on consumers' satisfaction toward Thai domestic low cost airlines presented as follows:

Table 3: Summaries of parameter estimates of Multinomial Logistic Regression for comparing the factors between Thai Air Asia and Nok Air

Dimension of service quality	Thai Air Asia			Nok Air		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Assurance						
Safety flight	0.386*	0.089	1.472*	- 0.386*	0.089	0.680*
Responsiveness						
Convenience in reserving the seats	- 0.439**	0.015	0.645**	0.439**	0.015	1.551**

Remarks: 1. * it has the significant at 0.10 level of significance
        2. ** it has the significant at 0.05 level of significance

From Table 3, it found that there are two factors in two dimensions of service quality as follows: assurance --- factor "Safety flight"; responsiveness --- "Convenience in reserving the seats". Comparing the Exp (B) value between Thai Air Asia and Nok Air, indicate that for factors "Safety flight", Thai Air Asia has the greater value of Exp (B) of 1.472 than Nok Air of 0.680. It states that this factor is more likely influence on consumers' satisfaction toward Thai Air Asia than Nok Air. While, for factors "Convenience in reserving the seats", Nok Air has the greater value of Exp (B) of 1.551 than Thai Air Asia of 0.645. It states that this factor is more likely influence on consumers' satisfaction toward Nok Air than Thai Air Asia.

Table 4: Summaries of parameter estimates of Multinomial Logistic Regression for comparing factors between Thai Air Asia and Thai Lion Air

Dimension of service quality	Thai Air Asia			Thai Lion Air		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Responsiveness						
Speed in managing the ticket	0.481**	0.016	1.618**	-0.481**	0.016	0.618**
Carefulness in transmitting the luggage	0.409**	0.032	1.505**	-0.409**	0.032	0.664**
Empathy						
Crews are always willing to serve customers	0.487**	0.021	1.628**	-0.487**	0.021	0.614**
Reliability						
Crews completely communicate all information to customers	-0.725**	0.002	0.484**	0.725**	0.002	2.065**

Remarks: 1. * it has the significant at 0.10 level of significance
        2. ** it has the significant at 0.05 level of significance

From Table 4, it found that there are four factors in three dimensions of service quality as follows: responsiveness --- "Speed in managing the ticket" and "Carefulness in transmitting the luggage", empathy --- "Crews are always willing to serve customers", and reliability --- "Crews completely communicate all information to customers". Comparing the Exp (B) value between Thai Air Asia and Thai Lion Air, indicate that for factors "Speed in managing the ticket (1.618)", "Carefulness in transmitting the luggage (1.505)", and "Crews are always willing to serve customers (1.628)", Thai Air Asia has the greater value of Exp (B) than Nok Air. It states that these factors are more likely influence on consumers' satisfaction toward Thai Air Asia than Thai Lion Air. While, for factor "Crews completely communicate all information to customers", Thai Lion Air has the greater value of Exp (B) of 2.065 than Thai Air Asia of 0.484. It states that this factor is more likely influence on consumers' satisfaction toward Thai Lion Air than Thai Air Asia.

Table 5: Summaries of parameter estimates of Multinomial Logistic Regression for comparing factors between Nok Air and Thai Lion Air

Dimension of service quality	Nok Air			Thai Lion Air		
	B	Sig.	Exp(B)	B	Sig.	Exp(B)
Assurance						
Safety flight	-0.441*	0.062	0.643*	0.441*	0.062	1.554*
Responsiveness						
Speed in managing the ticket	0.369*	0.064	1.447*	-0.369*	0.064	0.691*
Empathy						
Crews are always willing to serve customers	0.411*	0.053	1.508*	-0.411*	0.053	0.663*
Reliability						
Crews completely communicate all information to customers	-0.692**	0.004	0.50**	0.692**	0.004**	1.998**

Remarks: 1. * it has the significant at 0.10 level of significance
　　　　 2. ** it has the significant at 0.05 level of significance

From Table 5, it found that there are four factors in four dimensions of service quality as follows: assurance --- factor "Safety flight", responsiveness --- "Speed in managing the ticket", empathy --- "Crews are always willing to serve customers", and reliability --- "Crews completely communicate all information to customers". Comparing the Exp (B) value between Nok Air and Thai Lion Air, indicate that for factors "Speed in managing the ticket (1.447)", and "Crews are always willing to serve customers (1.508)", Nok Air has the greater value of Exp (B) than Thai Lion Air. It states that these factors are more likely influence on consumers' satisfaction toward Nok Air than Thai Lion Air. While, for factors "Safety flight (1.554)" and "Crews completely communicate all information to customers (1.998)", Thai Lion Air has the greater value of Exp (B) than Nok Air. It states that these factors are more likely influence on consumers' satisfaction toward Thai Lion Air than Nok.

Conclusions

By applying multinomial logistic regression analysis, the results shown that the important factors in four dimensions of service quality will have the effect on consumers' satisfaction toward Thai domestic low cost airlines presented as follows:

> Assurance --- Safety flight
> Responsiveness --- Speed in managing the ticket, Convenience in reserving the seats,
> > and Carefulness in transmitting the luggage
> Empathy --- Crews are always willing to serve customers
> Reliability --- Crews completely communicate all information to customers

LCA in the study should focus on these dimensions of service quality in order to increase the customer base and make more market share in this segmentation as follow.

For Thai Air Asia, factors "Safety flight", "Speed in managing the ticket", "Carefulness in transmitting the luggage", and "Crews are always willing to serve customers" are factors which customers feel satisfied the most. This means that Thai Air Asia can provide these factors well. Therefore Thai Air Asia should maintain and provide good services to customers in these factors. For factors "Convenience in reserving the seats" and "Crews completely communicates all information to customers" are factors which customers feel satisfied the least. This means that Thai Air Asia should set training program for their staff in providing good service/information and friendly with passengers in order to increase the impressive of passengers in the future.

For Nok Air, factors "Speed in managing the ticket", "Convenience in reserving the seats", "Crews are always willing to serve customers" are factors which customers feel satisfied the most. Therefore Nok Air should maintain and provide good services to customers in these factors. For factors "Safety flight" and "Crews completely communicate all information to customers" are factors which customers feel satisfied the least. This means that Nok Air should has new modern aircraft more and more in order to make customers trust in the airline including should set training program for their staff in providing good service/information and friendly with passengers in order to increase the customers' reliability in the future continuously.

For Thai Lion Air, factors "Safety flight" and "Crews completely communicate all information to customers" are factors which customers feel satisfied the most. This means that Thai Lion Air can provide these factors well. Therefore Thai Lion Air should maintain and provide good services to customers in these factors. For factors "Speed in managing the ticket", "Carefulness in transmitting the luggage", "Crews are always willing to serve customers" are factors which customers feel satisfied the least. This means that Thai Lion Air should immediately improve these factors to satisfy customers increasing sales and set training program for their staff providing good service. Crews should be always willing to serve customers and friendly with passengers in order to increase the impressive of passengers in the future.

Acknowledgements

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