

# Factors Influencing the Service Quality of Thai Airways International Flights

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## Abstract

The purposes of this article were to analyze factors influencing the service quality of Thai Airways International Flights, to identify the key problems related to service quality, and to suggest measures for improving the service quality of Thai Airways International Flights. Based on a mixed-method approach, a questionnaire survey of 400 examples from passengers who had experienced flying with Thai Airways at Suvarnabhumi Airport was conducted during the period of June-July 2020, and an in-depth interview of 20 key informants was supplemented for obtaining opinions on service quality improvements. The results found that factors influencing the service quality were covering tangibles, reliability, responsiveness, assurance, empathy, safety, Star Alliance Member airlines, technologies and innovations, service quality strategies, and corporate governance. The key problems in service quality as responded by passengers and key informants gave strong weights on the old model of the aircrafts, passenger seats, and entertainment systems onboard. Besides, technologies for booking and purchasing air tickets were inefficient. Recommendations for improving the service quality of Thai Airways are proposed with priority setting its competitive goal of service quality with the five-star airlines and the World's Best Airline by Skytrax. Thai Airways also should have a clear strategic policy direction towards good corporate governance, free from political intervention, sustainable human resources, and organizational development.

**Keywords:** Factors, Service quality, Thai Airways International Flights

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## ปัจจัยที่มีอิทธิพลต่อคุณภาพการบริการของสายการบินไทย ในเที่ยวบินระหว่างประเทศ

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วัชรวิวัฒน์ คำเขียว<sup>1</sup> และไพโรจน์ ภัทรนารกุล<sup>2</sup>

### บทคัดย่อ

บทความวิจัยนี้มีวัตถุประสงค์เพื่อวิเคราะห์ปัจจัยที่มีอิทธิพลต่อคุณภาพการบริการในเที่ยวบินระหว่างประเทศของการบินไทย เพื่อระบุปัญหาสำคัญที่เกี่ยวกับคุณภาพการบริการและเพื่อเสนอแนะมาตรการในการปรับปรุงคุณภาพการบริการในเที่ยวบินระหว่างประเทศของการบินไทย โดยใช้วิธีการวิจัยแบบผสมผสานซึ่งใช้แบบสอบถามในกลุ่มตัวอย่างจากผู้โดยสารจำนวน 400 คนและการสัมภาษณ์เชิงลึกกลุ่มผู้ให้ข้อมูลหลักจำนวน 20 คน ผลการวิจัยพบว่า ปัจจัยที่มีอิทธิพลต่อคุณภาพการบริการในเที่ยวบินระหว่างประเทศของการบินไทยครอบคลุมสิ่งที่จับต้องได้ ความน่าเชื่อถือ การตอบสนอง ความมั่นใจ ความเอาใจใส่ ความปลอดภัย การเป็นสายการบินพันธมิตรสตาร์อัลไลแอนซ์ เทคโนโลยีและนวัตกรรม กลยุทธ์คุณภาพการบริการใหม่ๆ และหลักบรรษัทภิบาล ในขณะที่ปัญหาคุณภาพการบริการพบว่า การบินไทยมีเครื่องบินรุ่นเก่าและระบบความบันเทิงบนเครื่องบินทันสมัย เทคโนโลยีในการจองและซื้อตั๋วเครื่องบินยังไม่มีประสิทธิภาพ คุณภาพการบริการไม่สม่ำเสมอ ส่วนข้อเสนอแนะในการปรับปรุงคุณภาพการบริการของการบินไทยควรให้ความสำคัญในการตั้งเป้าหมายการแข่งขันด้านคุณภาพการบริการกับสายการบินระดับห้าดาวและสายการบินที่ดีที่สุดในโลกโดย Skytrax นอกจากนี้ การบินไทยควรมีนโยบายเสริมสร้างบรรษัทภิบาลเพื่อต่อต้านการทุจริตคอร์รัปชัน ลดการแทรกแซงทางการเมือง การพัฒนาบุคลากรและองค์กรสู่ความยั่งยืน

**คำสำคัญ:** ปัจจัย, คุณภาพการบริการ, เที่ยวบินระหว่างประเทศของการบินไทย

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## Introduction

Thai Airways (THAI) is the National Airline of Thailand operated for several years with Thai charm to passengers around the world to their destinations. Thai Airways also has a hub at Suvarnabhumi Airport in Thailand for domestic and international flights with 103 aircraft for operations. The main flights of Thai Airways emphasize international flights operating 775 weekly international flights spanning two geographical zones in the Asia-Pacific Regional, and intercontinental routes (Thai Airways International Public Company Limited, 2018; 2019).

Thai Airways faces several managerial problems under a state enterprise framework. According to the research of Kamkiew (2015) found that Thai Airways had high costs due to overstaffing and maintenance costs of diverse modes of aircrafts, which hindered the competition with other airlines. Under the state enterprise system, Thai Airways must comply with bureaucratic rules and regulations, the practice of nepotism in recruitment and position transfer, and the lack of management independence due to political intervention as well. Damrongchaitham (2018) also informed a clear example to the general public that flight TG 971 from Zurich to Bangkok was delayed because pilots and Zurich Airport Service Managers followed the relevant operational procedures and regulations. The lack of coordination among staff in solving the problems of passive crew seats, and resulting in flight delays affecting passengers.

Thai Airways also did not reach the top 5 airlines in the world and top 3 airlines in Asia by Skytrax as desirable goals setting to receive both Awards (Thai Airways International Public Company Limited, 2011). Meanwhile, Skytrax (2021) disclosed an assessment report that Thai Airways was just in the category of a 4-Star Airline since the 5-Star Airlines rating recognizes very high standards of both Airport and onboard products provided by an airline to satisfy their customers.

With regard to governance issues, the Anti-Corruption Organization of Thailand (2020) had announced that the case of the Rolls-Royce scandal in paying bribes to Thai Airways high officials was revealed by the UK Serious Fraud Office (SFO). According to the findings of the SFO investigation, the case of Thai Airways bought engines from Rolls-Royce 3 times and paid a total of 1,273 million baht in bribes.

Hence, various factors have become constraints to Thai Airways in meeting global competitiveness compared with other excellent airline services, such as Qatar Airways (QR) and Singapore Airlines (SQ).

The current situation of Thai Airways is in the crisis stage. The annual report of Thai Airways revealed that during 2014-2020. Thai Airways had lost a total profit of approximately 199,970 million baht (Thai Airways International Public Company Limited, 2014; 2015; 2016; 2017; 2018; 2019; 2020). Thai Airways now is on a roadmap to crisis recovery and needs to submit a strategic plan following the compliance of the Central Bankruptcy Court guidance (Thai Airways International Public Company Limited, 2020). Furthermore, the COVID-19 pandemic situation has a strong effect on Thai Airways from canceling all flights, especially international flights as well. Thus, the paper aims to study factors influencing the service quality of Thai Airways International Flights, to analyze key problems, and to propose measures for improving the service quality of Thai Airways International Flights.

## Literature Review

### Services quality

#### 1. Airline services quality

The evidence from literature when considering the service quality of airline businesses focuses on how to meet passengers' satisfaction and impression of the airlines. Further, they will give word of mouth to invite other people flying with the airlines because their received services quality experiences at the ground airports and onboard as well. The service quality of airlines business as proposed by Parasuraman et al. (1990); Parasuraman and Berry (1991) are SERVQUAL model. These components are used as a standard guidance for measuring service quality which covers 1) tangibles, 2) reliability, 3) responsiveness, 4) assurance, and 5) empathy. These factors have influence customers' assessments of service quality. The tangibles component is the appearance of physical facilities, equipment, personnel, and communications materials. Reliability is the ability to provide reliable and accurate promised services to customers. Responsiveness is the willingness to assist customers and to provide prompt service. Assurance is the knowledge and courtesy of employees and their ability to convey

trust and confidence. Empathy is also a critical component in the provision of caring and individualized attention to customers.

In addition, the service quality of airlines businesses must be compiled with safety measures and standard operations among the international safety airlines. Since Thai Airways and other airlines must follow the rules and regulations of the international safety standards under the International Civil Aviation Organization (ICAO), the Federal Aviation Administration (FAA), the European Union Aviation Safety Agency (EASA), and the International Air Transport Association (IATA) as well. These organizations strictly operate with high safety to passengers, airlines, and airlines staffs. In Thailand, all airlines must follow the rules and regulations of the Civil Aviation Authority of Thailand (CAAT) who gives the licenses for the airlines to fly domestic and international flights, controls pilots and the flight attendant's qualifications, airports safety, and set flight schedules following the international safety standards.

Emmanuel (2019) studied on service quality of the airlines covering Virgin Atlantic Airlines, British Airways, and Med-view Airlines. The study indicated top priority services were on put safety and security, attractive appearance, staff attitudes, uniforms, flight attendant politeness, staff behaviors ensure customers, networks to ensure good service quality, and good communication skills. Meanwhile, consistent with the research of Khuong and Uyen (2014) had a research survey and evaluate the indicators of service quality of Vietnam Airlines (VN) were the best employee services, safety, facilities, on-time, ground services, airport baggage services, image, and service quality as well. The principles of safety make all passengers feel confident and trust that yields a good image to the airline as well. Safety is one core component to support the airlines towards the World's Best Airlines, the 5-star airlines by Skytrax, and customer satisfaction. Moreover, it is essential for airlines to have the licenses for service to passengers and can fly to other countries according to the standard permit of ICAO (International Civil Aviation Organization, 2020).

Airline services quality also is set among the World's largest alliance airlines, namely, Star Alliance Member airlines. Star Alliance (2020) has 26 member airlines that enable all passengers to enjoy using international airports, airport lounges, transferring their flights, fast-tracking, and solving the problems of airlines canceled

flights easily and rapidly with the alliance member airlines. It also has a unique vision for innovation, the highest standards of safety, and customer services. Star Alliance Member airlines have the 5- star airlines by Skytrax are ANA All Nippon Airways (NH), Asiana Airlines (OZ), EVA Air (BR), Lufthansa (LH), and Singapore Airlines (SQ) only services for passengers.

Related to the research of Sanphetphanich and Promsit (2014) studied premium airline service quality improvement strategy for business class travelers into Thailand and proposed AIRSERVE as a strategy for quality improvement. Under the AIRSERVE Model: A stands for global air network or Alliance; I stands for premium In-flight products; R stands for reliable high safety standard; S stands for superior service promises; E stands for an exclusive personal touch; R stands for effective recovery guarantee; V stands for valuable privileges and benefits, and E stands for express connectivity.

## **2. The World's Best Airline Awards**

All of the full-service airlines want to receive the World's Best Airlines by Skytrax in England. There had been a survey of airlines service quality from passengers around the world since 1989. Skytrax (2021) describes the World's Best Airline Award as an index of excellence in the services quality of the airlines. A key of this survey is for customers to make their own opinion and personal choices as to which airlines. They consider being the World's Best Airline in the year as the Passenger's Choice Awards like Oscar Award of airlines. Similarly, the research of Kamkiew (2020) reported that the passengers were satisfied with the airline's services quality of the new aircrafts, high technologies and innovations at the airports and onboards, excellent services by cabin crews, and airline safety similar to the World's Best Airlines and the 5-star airlines by Skytrax, thus they would vote for the airlines that can receive this award easily. For instance, Qatar Airways and Singapore Airlines always receive this award for several years because both airlines are the 5-Star Airlines and the World's Best Airlines by Skytrax that can make passengers satisfying with the high standard services. Kamkiew (2015) also highlighted the components of excellence in Thailand aviation business from the cases study of Thai Airways (TG) and Thai Smile Airways (WE) which emphasized strategic planning and operation performance, customer focus, measurement

analysis and knowledge management, workforce focus, leadership, good governance, and the World's Best Airline award by Skytrax in England.

### **3. A 5-Star Airline by Skytrax**

All full-service airlines require the 5-star airlines by Skytrax that can guarantee services quality for passengers similar to the 5-star hotels around the world. Skytrax (2021) explains that Skytrax Star Ratings are the best recognized as an international standard of airlines worldwide. The ratings are based on assessments of products and service's high standards for both aircrafts and airport environments. A 5-Star Airline by Skytrax is an airline with high-quality products, good services, cabin cleanliness, consistent services, and high security at the ground airports and onboard as well. Therefore, the 5-star airlines have received very high popularity from customers' experience when they fly with the 5-star airlines to their destinations. Nowadays, just eleven 5-star airlines in the world are ANA All Nippon Airways (NH), Asiana Airlines (OZ), Cathay Pacific (CX), EVA Air (BR), Garuda Indonesia (GA), Hainan Airlines (HU), Japan Airlines (JL), Lufthansa (LH), Qatar Airways (QR), Singapore Airlines (SQ), and Korea Air (KE). These 11 airlines out of more than 100 full-service airlines encourage customer satisfaction and loyalty from quality services similar to the 5-star hotels with excellent services quality and customer satisfaction extremely.

### **4. Customer satisfaction**

Customer satisfaction is one of the key indicators in the assessment of the services quality of airlines. Thai Airways International Public Company Limited (2013) reported that THAI had the problems and complaints on services in various aspects: 1) check-in service in economy class with long queues, 2) seat reservation, and booking tickets were waiting a long time, 3) the seats on the airplane were uncomfortable, 4) In-flight meal service for outbound flights from Bangkok (Suvarnabhumi Airport) should improve the taste quality and choice of cuisines, and 5) entertainment systems onboard should have the varieties as well.

Thai Airways International Public Company Limited (2018) also reported that customer services in 2018 of Thai Airways remained the commitment to continuously developing and improving the quality of products and services. Thus, each target group of customers could experience 'A Touch of Thai' at every service point, starting

with pre-flight services, in-flight services, as well as post-flight services. As a service provider, Thai Airways developed a clear operational plan, concept, and image under the policy of 'Service from the Heart'.

Thai Airways has developed a service process that covers every point of contact with its customers, booking tickets, check-in systems, and onboard to ensure high-quality products, and services to passengers throughout the experience. Thai Airways International Public Company Limited (2019) mentioned that Thai Airways wanted to improve and develop a full-service to ensure customers satisfaction and efficiency in providing on-ground services to onboard services. Customer satisfaction with service is one critical factor for Thai Airways to gain trust among customers to return to use the services continuously.

## Research Methodology

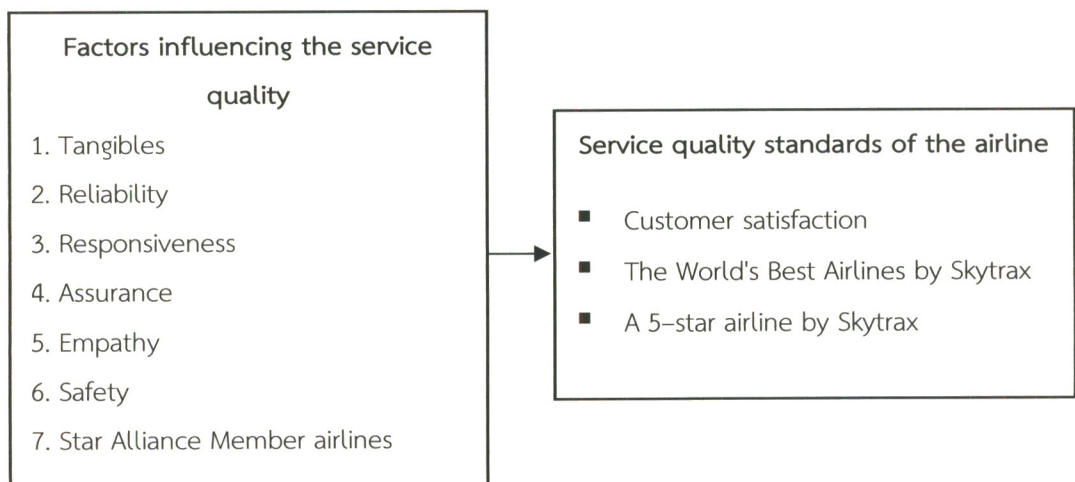
The research methodology for this research was mixed-method research. The researchers adopted the service quality principles created by Parasuraman et al. (1990), and Parasuraman and Berry (1991). Key components for evaluating the service quality comprising, tangibles, reliability, responsiveness, assurance, and empathy. It is also following the basic guidelines of aviation safety of International Standards and Thailand Standard (e.g., the International Civil Aviation Organization, 2020; the Civil Aviation Authority of Thailand, 2019; the Federal Aviation Administration, 2020; the International Air Transport Association, 2020; European Union Aviation Safety Agency, 2020). Moreover, the researchers utilized the Star Alliance Member airlines can connect the passenger flights to destinations around the world easily, conveniently, and rapidly. Thai Airways was one of the five airlines that established the Star Alliance Member airlines with Air Canada (AC), Lufthansa (LH), Scandinavian Airlines (SK), and United Airlines (UA) in 1997. The Star Alliance Member airlines are the largest global airline alliance in the world that brings together 26 member airlines over 5,000 airplanes fly to more than 1,300 destinations in 195 countries with codeshare, join the Star Alliance members, connecting flights, lounges, and services (Star alliance, 2020). Hence, all of these factors were independent variables of this research as tangibles,



reliability, responsiveness, assurance, empathy, safety, and Star Alliance Member airlines.

Dependent variables were customer satisfaction, the World's Best Airlines, and a 5–star airline by Skytrax considered the indicators of assessment the services quality airlines (Skytrax, 2020; Thai Airways International Public Company Limited, 2019). Therefore, the causal relationships between independent and dependent variables of this research are illustrated in figure 1.

**Figure 1** Conceptual Framework



Source: Author

Based on the mixed-method research approach by Creswell (2014) clarified the researchers first employed the quantitative results, followed by qualitative results for supporting the quantitative research findings. Third, interpreted how the qualitative research findings can assist to describe the quantitative results with more insight data for interpretations as following

### Part 1: Quantitative research methodology

#### Population

The population of this research was the Thai and foreigner customers who flew with Thai Airways were 24,510,000 people in 2019 (Thai Airways International Public Company Limited 2019, p. 153). They had experiences flying with Thai Airways

International Flights for round trip flights to use the lounges, ground airports, and onboard services to the destinations in the Asia-Pacific Regional, and intercontinental routes as well.

### Sampling

The samples for the questionnaire survey of this research cover the 400 customers who flew with Thai Airways International Flights at Suvarnabhumi Airport in Thailand. The researchers also applied Yamane's Theory (Yamane,1973) by specifying the connection at .05 to the sample as follow:

$$n = \frac{N}{1+N(e)^2}$$

n = size of the sample  
 N = number of population  
 e = estimation error 5%

The researchers determined the number of samples studied as 400 people.

$$n = \frac{24,510,000}{1 + 24,510,000 (.05)^2}$$

$$n = 399.99$$

The researchers utilized the stratified random sampling method by accidental sampling to the sample of this research at Suvarnabhumi Airport in Thailand.

### Research tools

The researchers used the tools with the questionnaires were close-ended questions and open-ended questions for collecting data from the samples of this research.

### Instrument construction and quality inspection of research instruments

The researchers created the questionnaires and arranged for experts for checking the questionnaires on content validity score by the principle of IOC (Index of item objective congruence). This research had the Index of item objective congruence of 1.00. The instruments created for this research must be tested in their validity and reliability for try-out with the customers' who flew with Singapore Airlines (SQ) by using 30 persons at Suvarnabhumi Airport in Thailand. Hence, this research had the Cronbach's alpha coefficient as follows in Table 1:

**Table 1** Cronbach's Alpha Coefficient

Independent variables	Cronbach's alpha	Number of items
1 X Tangibles	.924	8
2 X Reliability	.930	8
3 X Responsiveness	.914	8
4 X Assurance	.944	8
5 X Empathy	.912	8
6 X Safety	.879	8
7 X Star Alliance Member airlines	.971	8
All items	.973	56
Dependent variables	Cronbach's alpha	Number of items
1 Y Customer satisfaction	.913	6
2 Y The World's Best Airlines by Skytrax	.910	6
3 Y A 5 – star airline by Skytrax	.914	6
All items	.838	18

### Data collection

The questionnaire survey was launched to collect data from 400 passengers from both Thai and foreign people flying with Thai Airways International Flights at Suvarnabhumi Airport in Thailand during June and July 2020 with 100 percent respondents.

### Inclusion criteria

The passengers who flew with Thai Airways International Flights could participate and had enough time for making a complete checklist of the close-end and open-end questions with suggestions for data analysis.

### Exclusion criteria

The customers who flew with Thai Airways International Flights. On the other hand, they could not participate and did not give the answers to the questionnaires completely.

### Statistics used in data analysis

In this research, the statistics and data analysis as descriptive statistics were frequency, percentage, mean and standard deviation. An inferential statistic was a multiple regression analysis with statistical computer programs.

**Part 2: Qualitative research methodology**

A qualitative research technique was used to support the results of quantitative research. Key informants were selected from two groups for in-depth interviews. The first group included five Thai passengers and five foreign passengers who flew with Thai Airways International Flights. The second group was selected from five air purser cabin crews onboard and five flight attendants of Thai Airways International Flights. Thus, the total of the key informants were 20 persons in this research by purposive sampling technique.

**Data validation**

The researchers used the principle of triangulation by Denzin (1970) to check the data from all of the key informants on times, places and persons similarly or differently.

**Qualitative data analysis**

The researcher used the principle of qualitative data analysis by Miles and Huberman (1994), covering data reduction, data display, and conclusion drawing and verification for factors influencing the service quality of Thai Airways International Flights.

**Findings**

**Table 2** General Information of the Passengers Who Flew with Thai Airways International Flights

Demographic	Characteristics	Frequency (n = 400)	Percentage
Gender	Male	195	48.75
	Female	205	51.25
Nationality	Thai	209	52.25
	Foreigner	191	47.75
Frequency of Thai Airways per year	1 time/year	90	22.50
	2 - 5 times/year	275	68.75
	6-10 times/year	19	4.75
	More than 10 times/year	16	4.00
Seat type	Economy class	325	81.25
	Business class	69	17.25
	First-class	6	1.50

Table 2 summarizes the general information of the passengers who flew with Thai Airways International Flights. The total collected samples from respondents were 400 people who were mostly female with 51.25% and male 48.75% respectively. The Nationality was mostly Thai as 52.25%, and foreigners as 47.75% respectively. They also had frequency fly with Thai Airways International Flights mostly were 2-5 times/year as 68.75%, followed by 1 time/year as 22.50%, 6-10 times/year as 4.75%, and more than 10 times/year 4.00% respectively. Lastly, they had the seat type were mostly economy class as 80.25%, followed by business class (Royal Silk Class) as 17.25%, and first-class (Royal First-Class) as 1.50% respectively.

### Hypothesis test results factors influencing service quality of Thai Airways International Flights

**Table 3** Pearson's Correlation Coefficient between Observed Variables

Variable	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	X <sub>5</sub>	X <sub>6</sub>	X <sub>7</sub>	Tolerance	VIF
Y (Service quality)	1									
X <sub>1</sub> (Tangibles)	.873**	1							.078	9.883
X <sub>2</sub> (Reliability)	.710**	.877**	1						.132	7.547
X <sub>3</sub> (Responsiveness)	.865**	.878**	.825**	1					.154	6.495
X <sub>4</sub> (Assurance)	.768**	.820**	.788**	.792**	1				.285	3.508
X <sub>5</sub> (Empathy)	.663**	.829**	.674**	.707**	.702**	1			.286	3.501
X <sub>6</sub> (Safety)	.492**	.467**	.489**	.499**	.445**	.358**	1		.438	2.282
X <sub>7</sub> (Star Alliance member airlines)	.652**	.852**	.863**	.707**	.714**	.713**	.650**	1	.114	8.784

Note. Bartlett's test of sphericity =3142.142, df = 21, p = 0.000, KMO = .819, \*\* p < .01

Table 3 illustrated the factors influencing the service quality of Thai Airways International Flights using multiple regression analysis tests for the relationship between all variables used in this study. Using the correlation matrix between the interperter and the variance inflation factor (VIF) matrix, it found that the absolute values of the coefficients of all variables were between .358 and .878, which were lower than 0.900. Moreover, forecast variables or independent variables have a tolerance between .078-.438 and VIF between 2.282 and 9.883 have little correlation for independent variables. Therefore, independent variables can use in the multiple regression analysis that has no problem with highly correlated (Multicollinearity). There was no assumption of multiple regression analysis that requires the tolerance must be more than 0.10 and the VIF must be less than 10 (Vanichbuncha, 2007).

**Table 4** Analysis of Factors Influencing Service Quality of Thai Airways International Flights by Using Multiple Regression Analysis

Model	Unstandardized			t	P-value
	Coefficients				
	B	Std. Error	Beta		
(Constant)	2.131	.100		21.312**	.000
Tangibles	.718	.041	1.124	17.623**	.000
Reliability	-.190	.031	-.296	-6.066**	.000
Responsiveness	.181	.028	.297	6.555**	.000
Assurance	.091	.020	.151	4.532**	.000
Empathy	-.150	.024	-.207	-6.231**	.000
Safety	.203	.028	.195	7.276**	.000
Star Alliance member airlines	-.279	.042	-.347	-6.584	.000

Note.  $R = .936^a$ ,  $R^2 = .876$ , adjusted  $R^2 = .874$ ;  $F = 396.268$ ;  $p\text{-value} = .000$ ;  $SE_{est} = \pm .100$ ; Durbin Watson=1.949

\*\* Statistical significance at the .01 level.

Table 4 exhibited factors influencing service quality of Thai Airways International Flights covering: tangibles, reliability, responsiveness, assurance, empathy, safety, and Star Alliance Member airlines which were statistically significant at the .01 level ( $F = 396.268$  and  $p = .000$ ). The Durbin-Watson values were determined in the table where the Durbin-Watson values were 1.949, which ranged from 1.5 to 2.5, indicating that

the independent variables used in the test had no internal relationship. The predicted parameters as tangibles, responsiveness, insurance, and safety had a positive influence on the service quality of Thai Airways International Flights at the statistical significance .01 level. Predict variables as reliability, empathy, Star Alliance Member airlines had a negative influence on service quality of Thai Airways International Flights with statistical significance at the .01 level. This can be considered interesting when it came to constructing the linear regression equation in multiple regression analysis models. It could explain the variance of factors influencing service quality of Thai Airways International Flights with approximately 87.60% (adj. R2 = .876). The coefficient of predictor variables can be written as a predict equation in the raw score and standard score as follows:

$$\hat{Y} = 2.131 + .718 (\text{Tangibles}) X_1 - .190 (\text{Reliability}) X_2 + .181 (\text{Responsiveness}) X_3 + .091 (\text{Assurance}) X_4 - .150 (\text{Empathy}) X_5 + .203 (\text{Safety}) X_6 - .279 (\text{Star Alliance Member airlines}) X_7$$

$$\hat{Z} = 2.131 + 1.124 (\text{Tangibles}) X_1 - .296 (\text{Reliability}) X_2 + .297 (\text{Responsiveness}) X_3 + .151 (\text{Assurance}) X_4 - .207 (\text{Empathy}) X_5 + .195 (\text{Safety}) X_6 - .347 (\text{Star Alliance Member airlines}) X_7$$

Although, reliability was carried out on a reliable and accurate service contract of Thai Airways International Flights that may not provide service passengers with reliability, especially Royal Silk Class and Royal First-Class seats were out-mode and less convenient than competitors, such as Qatar Airways and Singapore Airlines. In addition, Royal Silk Lounges at Suvarnabhumi Airport in Thailand were smaller than competitors and they were the busiest lounges, as rush hours for service quality made passengers boring.

The empathy of Thai Airways International Flights was inconsistent, and unstable for the high-quality standards similar to the 5-star airlines and the World's Best Airlines by Skytrax, such as Qatar Airways and Singapore Airlines. Although, several Thai Airways International Flights can service by individualized attention to passenger's excellent flights. Conversely, some flights were just standard of full-services airlines, not excellent services. They also were not luxury products that can service for First-Class and business class seats onboard, such as Boeing 747-400.

Star Alliance Member airlines have 26 airlines members. However, they have just 5 airlines of Star Alliance member airlines as ANA All Nippon Airways of Japan, Asiana Airlines of South Korea, EVA Air of Taiwan, Lufthansa of Germany, and Singapore Airlines of Singapore only can receive the 5-star airlines by Skytrax. On the other hand, other member airlines are just the 4-star airlines respectively. In addition, some of Star Alliance Member airlines were the lowest service quality of lounges, booking tickets, check-in systems, delay and cancel flights, beverages, cuisines, unclean, old aircrafts, and seats that affect the Star Alliance Member airline's service quality inevitably. Thus, the passengers were not impressed with the services of some Star Alliance Member airlines.

## Discussion and Recommendation

### **The factors influencing service quality of Thai Airways International Flights**

The factors influencing service quality of Thai Airways International Flights were: 1) tangibles, 2) reliability, 3) responsiveness, 4) assurance, 5) empathy, 6) Star Alliance Member airlines, and 7) safety. However, 20 key informants from an in-depth interview of qualitative research, weighted three additional factors influencing the service quality of Thai Airways International Flights by focusing on technologies and innovations, new service quality strategies, and corporate governance as well. These factors also could make Thai Airways International Flights responsive to customers' satisfaction, and reaching a 5-star airline, and the World's Best Airline by Skytrax easily.

### **Problems and obstacles of service quality Thai Airways International Flights**

The problems and obstacles of service quality Thai Airways International Flights as feedbacks from opened questionnaires of quantitative research from the respondents were 400 persons and in-depth interview data from key informants of qualitative research was 20 persons can be summarized in seven aspects. 1) The aircraft and seats were quite old, especially Boeing 747-400, Boeing 777-200/300, and Airbus A330-300. 2. Technologies for booking, selling the tickets and check-in systems were not advanced, while entertainment systems onboard were not modern on Boeing 747-400, Boeing 777-200/300, and Airbus A330-300 so that passengers are dissatisfied. 3) The service quality of Thai Airways International Flights was not consistent with



some of the ground staff and cabin crew onboard services, compared with the 5-star airlines and the World's Best Airlines by Skytrax, such as Qatar Airways and Singapore Airlines. 4) Thai Airways International Flights were quite often not on time for take-off due to the late boarding. 5) Passengers also had to take the shuttle buses to board the aircraft in the middle of the airport, especially at Suvarnabhumi Airport in Thailand. 6) Political intervention in administration within Thai Airways, especially when purchasing new aircrafts, engines, and equipment. 7) The lack of governance had induced corruption cases making Thai Airways fail to have excellent service quality and could not have the capacity to improve its competitiveness.

## Discussion and Recommendations

Factors influencing service quality of Thai Airways International Flights were tangibles, reliability, responsiveness, assurance, empathy, Star Alliance Member airlines, and safety. This study confirmed the work of Jahmani (2017) found that the effect of reliability, responsiveness, empathy, assurance, and tangibles factors on Royal Jordanian service quality and passengers' satisfaction. It also corresponds to the research conducted by Kamkiew (2020) which found that factors influencing the service quality of Thai Smile Airways (WE) were tangibles, reliability, responsiveness, assurance, empathy, safety, Star Alliance Member airlines, technologies and innovations, and service quality strategies as well. Also, related to the research of Sanphetphanich and Promsit (2014) studied premium airline service quality improvement strategy for business class travelers into Thailand was global air network or Alliance, premium In-flight products, high safety standards, superior service promises, exclusive personal touch, effective recovery guarantee, valuable privileges and benefits, and express connectivity. Lastly, consistent with the research of Khuong and Uyen (2014) found that the services quality of Vietnam Airlines (VN) were the best employee services, safety, facilities, on-time, ground services, airport baggage services, image, and service quality as well.

The problems and challenges of service quality of Thai Airways International Flights were related to the outmode aircrafts, uncomfortable seats, and old entertainment systems onboard. The flight booking systems were not responsive to customer needs while the flight departure time was not reliable. Related to Thai Airways International

Public Company Limited (2013) reported that THAI had the problems and complaints on services were check-in service in economy class with long queues, seat reservation, and booking tickets were waiting a long time, the seats on the airplane were uncomfortable, in-flight meal service for outbound flights from Suvarnabhumi Airport in Thailand should improve the taste quality and choice of cuisines, entertainment systems onboard should have the varieties. Also, consistent with the research of Kamkiew (2015) found that Thai Airways had bureaucratic rules and regulations used in the system of state enterprises and a lack of management independence due to political intervention as well. Therefore, Khlaisubun et al. (2019) suggested that Thai Airways should have reduced the number of aircraft models, technologies should be managed, had strategies to differentiate from competitors, and the politicians were not intervened in the administration.

Thus, efforts should be made for improving the service quality in line with the 5-star airlines and the World's Best airlines by the Skytrax organization in England. In addition, preventive measures during the COVID-19 pandemic are necessary for enhancing the standards safety of Thai Airways International Flights as well.

### **Recommendations for Improving service quality of Thai Airways International Flights**

The solutions to solve the problems and obstacles of service quality Thai Airways International Flights are proposed covering the followings:

- 1) Thai Airways should find new aircrafts to replace the old models;
- 2) Passenger seats should be improved with more comfortable, large, modern, keeping up with high technologies and innovations;
- 3) Entertainment systems should be developed with more variety modern programs;
- 4) Raising awareness and preventive measures for safety standards in coping with the COVID-19 pandemic onboard and ground services;
- 5) It should compare services quality with the 5-star airlines, and the World's Best Airlines by Skytrax and study how to improve all services quality, such as Qatar Airways, and Singapore Airlines;

6) Thai Airways should apply the principles of New Public Management (NPM), New Public Service (NPS), and New Public Governance (NPG) paradigms for development management as the National Airline of Thailand;

7) New service quality strategies should address a policy for anti-corruption and free from political intervention; and

8) Thai Airways should concern with human resources development (HRD) in contributing to excellent services and sustainable performance.

## Limitation and Future Research

### Recommendations for future research

Future research should be a comparative study on services quality between Thai Airways International Flights with the 5-star airlines and the World's Best Airlines by Skytrax. Research efforts should be further on service quality as strategies for crisis recovery of Thai Airways in post-COVID 19 pandemics. In addition, standard procedures in health safety on the ground airports and onboard should be explored and developed for ensuring excellent service in a new normal.

### Limitations

This research collected quantitative data from passengers during the COVID-19 pandemic situation so it took a long period in completing the questionnaire survey due to a limited number of passengers of Thai Airways International Flights. In conducting in-depth interviews with key informants, particularly some employees provided the limited information due to Thai Airways was in the process of restructuring, negotiating with creditors, and in the process of applying for the Central Bankruptcy Court for corporate recovery.

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