PASSENGERS' PERSPECTIVE TOWARD AIRPORT SERVICE QUALITY AT SUVARNABHUMI INTERNATIONAL AIRPORT

DR. ARISARA SEYANONT

THE RESEARCH WAS FINANCIALLY SUPPORTED BY
THE UNIVERSITY OF THE THAI CHAMBER OF COMMERCE
2011

Research Title: Passengers' Perspective toward Airport Service Quality at Suvarnabhumi International Airport

Researcher: Dr. Arisara Seyanont Department of Hotel and Tourism Management
School of Business
University of the Thai Chamber of Commerce

Year of Accomplishment: 2011 No. of Pages 95

Keyword: Airport Service Quality, Passenger Satisfaction, Suvarnabhumi International Airport

---

Abstract*

The purpose of this study is to contribute to the development of a conceptual model of perceived service quality in airports by adapting the concept of expectations underlies the selection of Fodness and Murray's (2007: 492-506) methodology for measuring service quality with focus on passenger perceived service quality. In this study the researcher used quantitative method to test an objective approach to measuring passengers' perception and satisfaction of airport service quality at Suvarnabhumi International Airport, Thailand. Questionnaire collected from 500 passengers who had travel by departure, arrival, or transit at Suvarnabhumi International Airport. The results of factor analysis identified three factors: 1) Environment Service Provider, 2) Personnel and Passengers' Relationship, and 3) Servicescape. The findings of this study indicated that the passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction. In comparing the perception of airport service quality attributes and passengers' demographic profiles (purpose of travel, trip orientation, and frequency of travel) among Thai and foreigner passengers, the results showed that there were significant differences in airport service quality attributes among Thai and foreigner passengers.

*This research was funded from University of the Thai Chamber of Commerce

Acknowledgement

I am heartily thankful to the University of the Thai Chamber of Commerce, which financially supported me to do my research “Passengers’ Perspective toward Airport Service Quality at Suvarnabhumi International Airport”. I would like to thank my husband and my son, who have supported me in completing this study successfully. Lastly, I would like to thank all of those who supported me in doing completion of this research.

Dr. Arisara Seyanont

Researcher

Table of Contents

APPENDIX

List of Tables

List of Figures

VITA

Researcher	Dr. Arisara Seyanont
Education	B.S. (Accounting), (First Class Honors), Bangkok University, Thailand M.B.A. (Business Administration), Jacksonville State University, U.S.A. Ph.D. (Human Environmental Sciences), Oklahoma State University, U.S.A.
Working Place	The University of the Thai Chamber of Commerce
Telephone	02-697-6120

CHAPTER I
INTRODUCTION

The airport industry is changing rapidly. Today's air travelers have meaningful choices among airports and there is an increasing urgency among airport marketers to differentiate themselves by meeting the needs of customers better than the competition. Airports are one of crucial elements of the transportation system. They offer all the infrastructure need to allow passengers and freight to transfer from surface to air mode of transport and allow airlines to take off and landing. The basic airport infrastructure and facilities consist of runways, taxiways, apron space, passenger terminals, cargo warehouses and ground transport interchanges. Airport brings together a wide range of facilities and services in order to be able to fulfill their function within the air transportation industry. These services include air traffic control, security, fire and rescue in the airfield. Handing facilities are provided for passengers, their baggage and freights can be successfully transferred between aircraft and terminal, and processed within the terminal. Airports also offer a large variety of commercial facilities ranging from shops, restaurants, business center, hotels, conference services, and duty free shops.

Airport infrastructure is the first and last point of tourists' contact in their holiday destination; thus, it constitutes the mobility axe of tourists. These activities have to be "processed" through airport in an efficient way to minimize travel time and to enjoy shopping and leisure time in the commercial area of the airport at the end of their holidays. It is relevant to evaluate airport facilities quality as a factor of tourism service commodity. Airport facilities give them the first impression they will have about the expected quality of their holiday time. When passengers are processed by airports they use several services such as, check-in, passport and security controls in departure, and baggage claim service and passport control when arriving.

Airport customers are remarkable varied and include passengers, airlines, employees, concessionaires, tenants and others. Passengers' perception of airport service quality is only one of several variables (e.g. routes, scheduling, location and prices) that contribute to overall airport attractiveness, it is nevertheless an important variable because of the increasing importance of a customer orientation to competitive advantage in this industry. At the airport, passengers encounter a bundle of tangible and intangible services in a physical setting than

Bitner (1992: 57-71) might characterize as an “elaborate servicescape”, similar to hospital, with many corridors, queues, signs and complex interactions.

Airports, where a vast number of customers use a diverse supply of varying services, are an interesting target for service quality studies. However, Freathy and O’Connell (2000: 109) state that airports have been governmental owned. Consequently, airports did not enjoy the improvements triggered by competition and hence, there have been few studies of service quality expectations at airports. Another likely reason might be the complex airport setting, comprised of diverse services, making it complicated to measure expectations. Not too long ago, airports adopted commercial activities as a means of bringing extra income to their operations. As a result, airports have become highly commercialized servicescapes where more and more income is generated in retailing and other services operations. Servicescape is referred to by Bitner (1992: 58) as the “built environment” or the “man-made, physical surroundings as opposed to the natural or social environment”.

The end users of airport facilities and services are various types of people, such as passengers, airlines, employees, concessionaires, tenants, and greeters, or local residents. Because of the wide variety of different customers all gathered in one setting, airports had and have the opportunity to expand their commercial activities (Fodness & Murray, 2007: 493; Freathy & O’Connell, 2000: 104). This fact, while bringing more customers and consequently higher profits for the airport facilities, might have generated problems as well, such as the airport’s distraction from concentrating on passengers’ expectations and thinking about short and mid-term commercial income. According to World Airport Week, cited by Fodness and Murray (2007: 493), air travelers usually spend over one hour on average in the airport servicescape. Furthermore, Fodness and Murray (2007: 493) argue that regardless of whom the traveler is or the purpose of the trip, customers are at the airport only to transfer from ground- to air-, or from air- to air transportation. They see the airport as a transition point, not as a destination.

Freathy and O’Connell (2000: 105) agree that going to an airport is fundamentally about catching a flight. This viewpoint, if true, might create a background for managers to see passengers’ expectations as expectations from a transit point. Paternoster (2008: 219-221), on the other hand, views airports as service facilities. The researcher thinks of an airport not only as a transit point but also a destination. Paternoster’s viewpoint, in contrast to the mainstream,

might provide a totally new understanding of what passengers or any customer expects from an airport being a destination. Indeed, this strategic look can be found in the new generation of leading airports that differentiate themselves by trying to be both a transfer point and a provider of service quality.

Aviation trade publications and airport press releases provide evidence that managers in the airport industry clearly understand the importance of their customers' perceptions of service quality (Bomenblit, 2002: 6). Academic and industry researchers regularly measure passenger perceptions of airport service quality to benchmark performance metrics directly from the "voice" of the customer (Chen, 2002: 757-773), to identify opportunities for service improvement (Yeh and Kuo, 2002: 39-48) and to avoid losing valuable passenger traffic (Rhoades et al., 2000: 257).

Suvarnabhumi International Airport Overview

The growth of global tourist industry and modern Bangkok has played a crucial role in establishing Thailand both as a favorite vacation destination and emerging place for business opportunity. In order to secure a title of a world class city, Bangkok has strived to become an aviation hub for the Southeast Asian region. Boosted by Thailand's geographical advantage, the new Bangkok International Airport, which suvarn = golden and bhumi = land (Suvarnabhumi meaning the golden land).

In 1960, Suvarnabhumi Airport began with the commissioning of a study of Bangkok land used planning by the Thai Government. It was concluded that a new international airport should be constructed to replace the Don Muang International Airport north of the city, so that the new airport would be separated from the city and the military airfield. The study recommended a new airport site in a swamp land in Samutprakarn, 25 kilometers east of Bangkok. During 1963-1973, around 32 kilometers of land was appropriated and set aside for the new airport. However, it would take almost another 20 years and several government administrations later before the government approved the construction of the new airport in 1991. After that it was forecast the Don Muang Airport would reach is full capacity in the year 2000, construction has been plagued with corruption scandals, accidents and delays. After an investment of 155 trillion baht, the airport completion date has now been set for September 2006.

Suvarnabhumi International Airport pronounced su-wan-na-poom, also known as (new) Bangkok International Airport, is the international airport serving Bangkok, Thailand. After numerous delays and decades of planning, the airport opened for limited service on 15th September 2006, and opened for all commercial flights on 28th September 2006. The airport is the main hub for Thai Airways International, Bangkok Airways, Orient Thai Airlines, Thai AirAsia and a focus city for Cathay Pacific, China Airlines, EVA Air, Air India, Druk Air, Indian Airlines, Singapore Airlines, SriLankan Airlines and other famous airlines all over the world. The airport is located in Racha Thewa in Bang Phli district, Samut Prakan Province, about 25 kilometers, east of downtown Bangkok. The name Suvarnabhumi was chosen by King Bhumibol Adulyadej and refers to the ancient kingdom hypothesized to have been located somewhere in Southeast Asia that it was designed by Helmut Jahn of Murphy/Jahn architects. This airport has the world's tallest control tower (132.2 meters), and the world's second largest single building and airport terminal (563,000 square meters), just a little smaller than Hong Kong International Airport (570,000 square meters) but larger than South Korea's Incheon International Airport (496,000 square meters). Suvarnabhumi is one of the busiest airports in Asia and Bangkok's primary airport for all commercial airline flights. The airport inherited the airport code BKK from Don Mueang after the older airport ceased commercial flights. Months into its opening, issues such as congestion, construction quality, signage, provision of facilities, and soil subsidence continued to plague the airport, prompting calls to reopen Don Mueang to allow for repairs to be conducted. Expert opinions varied widely regarding the extent of Suvarnabhumi International Airport problems as well as their root cause. Prime Minister Surayud Chulanont decided on 16th February 2007 to reopen Don Mueang for domestic flights on a voluntary basis, with 71 weekly flights moved back, initially, with no international flights allowed.

Suvarnabhumi International Airport was opened on September 28, 2006; it has become one of the keys economic strength for country. Prior to establish this new airport Bangkok was serve by old Don Mueang International Airport located on Vibhavadi Rangsit Road that is now used for low cost airline domestic route and charter flight. Donmueang International Airport was replaced by Suvarnabhumi International Airport that has much higher performance in term of infrastructure, facilities, exhibition complexes and the high capabilities in several ways. The Airport is located on area of Bangkok, it is a modern motorway connects the airport, and the heavily industrial Eastern Seaboard of Thailand, where most of the export oriented

manufacturing takes place. Suvarnabhumi Airport has become “The Aviation Hub of Southeast Asia” that every country keeps their eye on because this project is a national priority of the government and it is also the huge investment of the country with long period preparation and construction.

Suvarnabhumi International Airport has 2 runways ad will be able to handle 61 flights per hour, 45 million passengers and 3 million tons of cargo per year. In the ultimate development, it will have 4 runways and will be able to handle 112 flights per hour, 100 million passengers and 6.4 million tons of cargo per year. A total of 5 new airport highway links and a special railway will link to the Bangkok city proper. It took a long time to become a reality; Suvarnabhumi International Airport is being touted as the transportation and logistics center for South East Asia. Suvarnabhumi International Airport was the innovation of the Helmut Jahn of Murphy – Jahn Architect group and architectures.

In 2005, the number of passengers and passenger traffic capacity at Don Muang Airport (International Airport) accommodated a total of 39 million domestic and international passengers, which was higher than that of the airports in Singapore and Kuala Lumpur. Suvarnabhumi Airport’s potential passenger traffic capacity is as high as 45 million passengers per year, which would be the highest in the region. Tourist arrivals greatly contribute to the use of airports for travel and as a transit point. In 2005, visitor arrivals to Thailand, Singapore and Malaysia totaled 11.5 million, 8.9 million and 16.4 million passengers, respectively. The more Thailand is able to attract tourist arrivals, the higher passenger traffic at Suvarnabhumi Airport will be (Kasikorn Research Center, 2006)

After this new airport operated, it has been several service problems. They start with computer break-down at several check-in counters, leaky roofs and delays in getting baggage from the airplanes to the departure terminal. Many passengers complain its facilities that are not adequate for all passengers and services are underprivileged. Airport management tries to solve the problems by surveys about what passengers need and how to improve airport service quality to become international standards.

The root cause of the problems appeared to be a rush to open the airport before it was really ready, and several senior Airports Authority of Thailand officials have been removed from their posts as a result of the mess. Don Muang Airport is reopened on February 2007 for both international and domestic flights, to relieve some of the pressure from Suvarnabhumi and to

allow the much needed repairs to take place. In practice, it could well mean passengers needing to travel between the two airports (a one hour or longer journey) in order to board a connecting flight.

Suvarnabhumi is organized into 4 separate levels: Level one is the bus and taxi lobby where passengers can go to get downtown. Level two is the arrivals area. Level three is the "Meeting Center" level, where the majority of Suvarnabhumi's facilities are. Level four is departures. And facilities at the airport are bars, restaurants (mostly fast food with Pizza Hut, KFC, Burger King, foodcourt on the walkway between the international and domestic terminals, duty free, and normal shops, etc.

Suvarnabhumi airport has become a key economic strength for the nation, as a modern motorway connects the airport, Bangkok, and the heavily industrial Eastern Seaboard of Thailand, where most of the export oriented manufacturing takes place. Despite little media attention paid to cargo, around the clock cargo shipments with excellent connection to exporters is a significant reason for its construction (as lobbying by Japanese exporters and Japanese government support were major facilitators), and the export led recovery of the Thai baht and the nation's strong current account surplus since its opening is further evidence of its massive effect.

One of the biggest challenges of Suvarnabhumi International Airport management is how to provide and maintain passenger satisfaction. Even though airport is usual monopolies, the elements of airport service have become more critically important. Management teams increasingly do research and focus on passenger perspective and the research finding agrees that airport service quality and passenger satisfaction are identified as a key success factor in the battle of air transportation industries.

Suvarnabhumi International Airport has a great opportunity to build a reputation, the highest international standard, and to generate additional substantial revenue from financial and commercial services including retail and entertainment businesses in airport area. Thus, Suvarnabhumi International Airport has a great impact to Thai's economic and image directly. Then the existing problems are also the negative image and significant problem for contribution to its attractiveness as a major aviation hub as well. For all this reasons, it is necessary to measure passengers' satisfaction level toward airport service quality that use Suvarnabhumi International Airport for developing the high quality of international airport service.

Problem Statement

There are several ways to measure service quality (Yang, 2003, p. 311; Douglas & Connor, 2003, p. 167). Some consider quality from the customers' point of view while others take the management perspective. Johnson and Mathews (1997: 291-292) highlight two approaches to assessment of service quality from the customers' perspective, one based on expectancy and the other on performance. According to Douglas and Connor (2003: 171) there has been no evident proof that the measure is not applicable or useless. After pointing out its shortcomings,

Parasuraman, Berry and Zeithaml (1991: 335-364) introduced the GAP model in the late 80s, many studies have been performed on SERVQUAL, the measure of service quality developed from the GAP model. Many of these studies have questioned the use of SERVQUAL in different contexts and backgrounds. Cronin and Taylor (1992: 55-68) developed SERVPERF, a performance based measure that reduced the number of items that needed to be measured from 62 to 31. Studies in 1992 and 1994 by Cronin and Taylor in different industries such as banking, dry cleaning and fast food were the first studies to show the shortcomings of this model. First, the durability of the service dimensions amongst diverse types of service industries has proved to be fragile. Second, the validity and reliability scales on the difference between performance and expectations have been critically questioned. Third, supplementary relationships linking service dimensions are implied by the model, even though this may not be a pragmatic assumption. Finally, the static view of service quality within the SERVQUAL measure makes it far away from the reality (Ruyter, Wetzels, & Lemmink, 1996: 34).

Not only has the airport research tradition largely ignored the gap-theory method of service quality measurement, the marketing and service literatures (the major proponents of gap-theory method service quality research) have focused little attention on airports or on passengers, a remarkably diverse group who consume in transit as they spend extended periods of time in elaborate servicescapes where they find themselves as the result of a highly limited process of decision making As a result, while it is possible to describe passenger preferences on issues ranging from airport signage to restroom cleanliness, there is no generally accepted theory-based model of airport service quality nor is there a comprehensive profile of the experiences, expectations, and perceptual influences of passengers (Fodness and Murray, 2007) .

The lack of competition among airports as discussed earlier, the marketing and services literature has shown little interest in airports and especially on air travelers; a diverse group who consume while spending much time in the airport's complex servicescape (Fodness & Murray, 2007: 493). The reason for this complexity is the diverse mix of services and service providers all packaged under one name, the airport, making it difficult to apply the common service quality measures to this particular complicated context.

To summarize the current situation of service quality theory in the airport industry there are compelling reasons to manage service quality; as a matter of fact service attributes are commonly measured by airports. However, there is a limited amount of conceptual and empirical work on passengers' perceptions of airport service quality and even less studies on passengers' expectations but most importantly no widely accepted and integrated model of the multi-dimensional passenger expectations (Fodness & Murray, 2007: 493-494).

Airport passengers come from different countries and cultures around the world, it is difficult for airport management to recognize what kind of service that passengers expect to perceive from airport service provider and what is their perception of their service encounter. To better serve numerous kinds of passengers, it is important to have a clear understanding of what they want in each service sector and how they perceive the actual service quality. This paper will examine which attributes of airport service quality influence to passengers' satisfaction at Suvarnabhumi International Airport.

Purpose of the Study

The purpose of this study is to contribute to the development of a conceptual model of perceived service quality in airports by adapting the concept of expectations underlies the selection of Fodness and Murray's (2007: 492-506) methodology for measuring service quality with focus on passenger perceived service quality. Fodness and Murray suggested that for a model to be fully developed as a global measure of airport service quality, it should be tested in different locations. Lubbe, Douglas, and Zambellis (2010: 1-4) worked on service quality and focused on service performance and importance measure methodologies for analyzing airport service quality by applying model of Fodness and Murray's (2007).

Research Objectives

The following four objectives are addressed in this study:

1. To examine the passengers' perception of airport service quality in different airport service sectors.
2. To determine which attributes of airport service quality have influenced and affected passengers' satisfaction at Suvarnabhumi International Airport.
3. To determine which attributes of airport service quality have influenced and affected the importance perception of passengers at Suvarnabhumi International Airport.
4. To determine the level of passengers' satisfaction toward airport service quality.

Definition of Terms

For the purpose of this study, the following terms are defined:

1. Airport Service Quality – is measured service quality by establishing and monitoring service by direct customer input which measure both internal and external service performance. Internal measure service performances are number of complaints, wait/service time for baggage delivery or check-in, etc. External measure service performances are attitudes and opinions of customers directly. (Yeh and Kuo, 2002: 39-48)
2. Customer Satisfaction – is defined as a person's attitude of pleasure or disappointment resulting from comparing of pre-purchase expectations and perceived performance (Kother, 2000: 36).
3. Overall Service Quality – is measured of how well the service level matches customer expectations. Overall service quality is described as "the consumer's judgment about an entity's overall service quality and can be viewed as a form of attitude resulting in comparison of expectations and perceptions of the service performance." Delivering a high level of overall service quality measns conforming to customer expectations on a consistent basis (Lewis and Booms, 1983).
4. Perceived Service Quality (PSQ) – is defined as "a global judgment or attitude relating to the superiority of a service." From their perspective, the perception of service quality is a reflection of the degree and direction of discrepancy between consumers' perceptions and expectations (Parasuraman, Zeithaml, and Berry, 1985).

Table 1

Hypotheses of Airport Service Quality

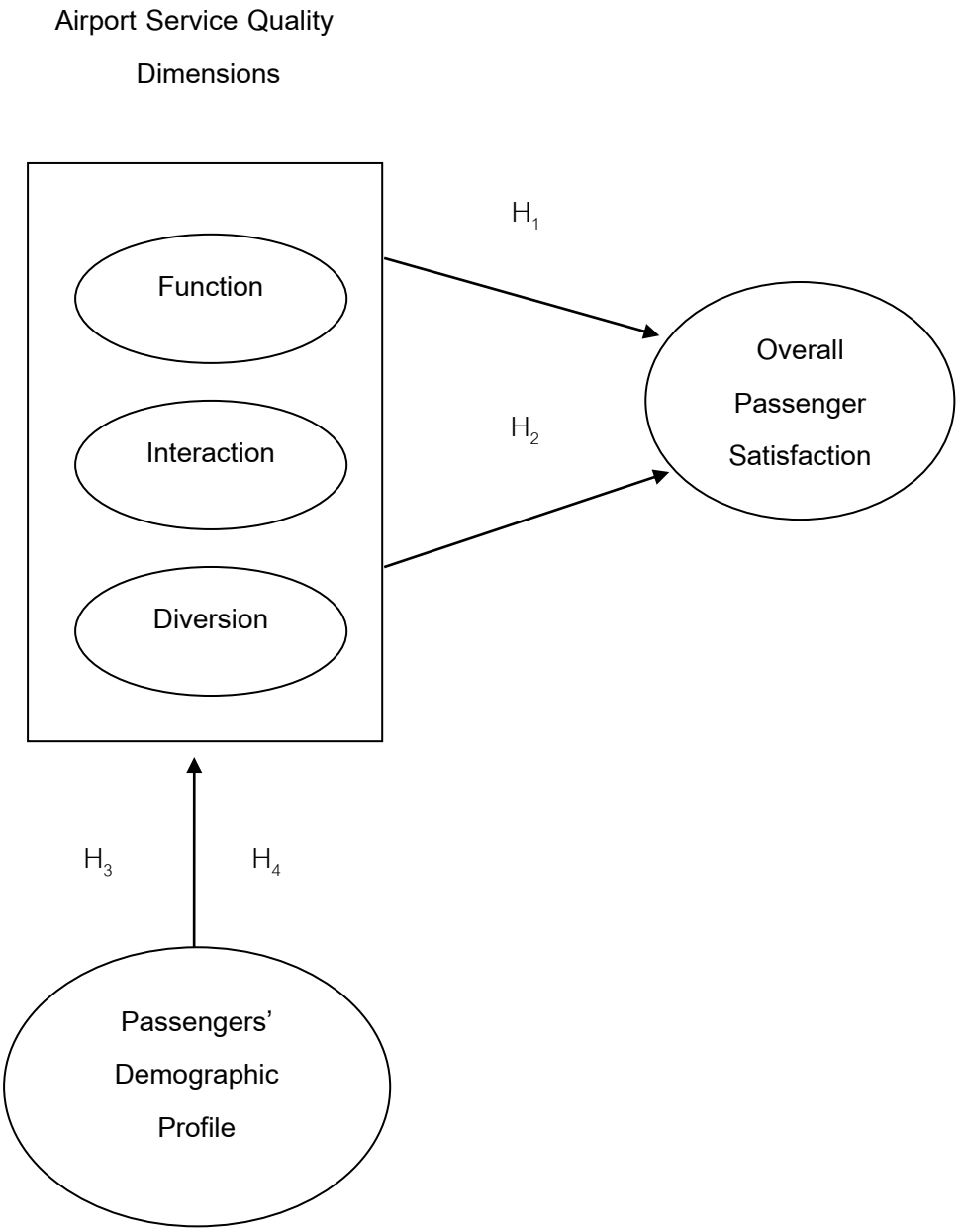
Hypotheses	Antecedents of Airport Service Quality Factors
H_1:	Passengers' satisfaction perceptions factors have positive influence on overall satisfaction.
H_2:	Passengers' importance perceptions factors have positive influence on overall satisfaction.
H_3:	There is a significant difference in airport service quality factors based on passengers' demographic profile (purpose of travel, trip orientation, and frequency of travel).
H_4:	There is a significant difference in airport service quality factors between type of passengers (Thai and Foreigner).

Significance of the Study

This research contributed both academically and practically. First, this study provided evidence of the airport service quality attributes that influenced passengers' satisfaction. Second, this study provided a practical airport marketing perspective airport manager for measuring airport service quality in order to: 1) assess passenger perceptions of airport service quality at Suvarnabhumi International Airport, 2) identify and prioritize service areas requiring managerial attention and action to ensure and improve service quality and passenger satisfaction, and 3) provide the airport's managers wit indications of how to establish and sustain competitive advantage based on a service quality strategy.

Figure 1

Conceptual Model of Airport Service Quality



Chapter Summary

Chapter 1 provided an outline of the research purpose, objectives, hypotheses, and conceptual model of Airport Service Quality which researcher adapted Fodness and Murray's (2007) model and used in this study, Chapter 2 provided an in-depth theoretical background with respect to the constructs that appear in this study. It presented a review of the literature on the concept model airport service quality of Fodness and Murray's (2007) and other researchers.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, the theoretical bases for this study are supported by a discussion of previous studies and existing research relevant to the constructs of interest in the model and their proposed relationships. The importance of service has obtained a substantial amount of attention by many managers and academic scholars in a variety of fields. Identifying the nature of the relationship between service quality and relevant constructs appears to be advantageous as it assists in the development of better managerial decisions. The review of literature is organized in three sections: 1) The Development of Airport Service Quality Model, 2) Airport Service Quality, and 3) Passenger Satisfaction

There are several reasons why airport managers and governments measure airport performance to measure efficiency from a financial and an operational perspective (Doganis, 1992), to evaluate alternative investment strategies, to monitor airport activity from a safety perspective and to monitor environmental impact. Airport efficiency and productivity studies have received considerable emphasis in academic circles. Oum et al. (2003: 285-297) have conducted a global airport benchmarking research which measures and compares the productive efficiency of a relative sample of airports located on the Asia Pacific, Europe and North America. Airport managers require information to enable them to identify areas that are performing well and appropriate corrective action needs to take place. Governments require information to regulate airport activity. The airport customers will also be interested in assessing its performance. It is important to recognize that airlines are the key customers of airports and that the airlines act as an intermediary between the airport and passengers or freight shippers. Thus the different stakeholders will have varying performance information requirements.

The Development of Airport Service Quality Model

Fodness and Murray (2007: 492-506) constructed out preliminary conceptual model of the expectations of the airport experience using data obtained from the passengers in qualitative research and from the proscriptions provided by relevant literatures. In addition to providing the data for development of preliminary conceptual bases for passengers' expectations of airport service quality, the researchers generated an item pool for the construction of a related expectations measurement instrument. Three different qualitative methodologies – in depth interviews, focus groups and content analysis of verbatim comments were used to focus on passenger expectations of airport service quality. Participants in the in-depth interviews and focus groups were asked about their expectations of an d experiences at airports in general, as well as their attitudes toward and their opinions of specific airports with which they were familiar. The results from the three qualitative studies were compiled to create a master list of airport service quality themes. Multiple mentions of the same theme were eliminated. The final list of 65 airport service quality themes appears.

After researchers get the results of qualitative research on the passenger airport experience to gain an understanding of the dimensions of passengers' expectations of airport service quality. The researchers were designed to develop rather than to test hypotheses because the airport quality management and passenger satisfaction literatures lack established theory suggesting formal relationships among the variables of interest. The resulting model of airport service quality expectations is composed of three primary dimensions – servicescape, interaction and services (see figure 2). And the model suggested that each dimensions has three subdimensions.

Dimensions 1: Servicescape

Bitner (1992: 58) defines servicescape as the "built environment" or the "man-made, physical surroundings as opposed to the natural or social environment". Bitner (1992: 57-71) theorized that the facility itself the "servicescape" has a significant influence on overall service encounter quality perceptions. Slack (1999: 364) define the servicescape as an element of the service experience. As an example, the physical environment and the various offerings available in an airport departure lounge are determining the customer experience.

The servicescape included all the objective factors controllable by the service provider that facilitate customer actions during the service encounter and enhance their overall service quality perception. Airports require passengers' physical presence and often a significant time commitment, the physical environment of the airport can influence perceptions of the overall quality of the service encounter. The basic servicescape construct includes three key elements: 1) spatial layout and functionality, 2) ambient conditions, and 3) signs/symbols.

The servicescape is not only about affecting the service quality but also represents a firm's intangible asset (Reimer & Kuehn, 2005: 800). Using an airport as an example, signs and symbols, coupled with other facilities and general ambience of the terminal together create a servicescape. This environment has been intentionally designed to attract and engage passengers who are in transit or about to board a flight and streamline the functions of the airport.

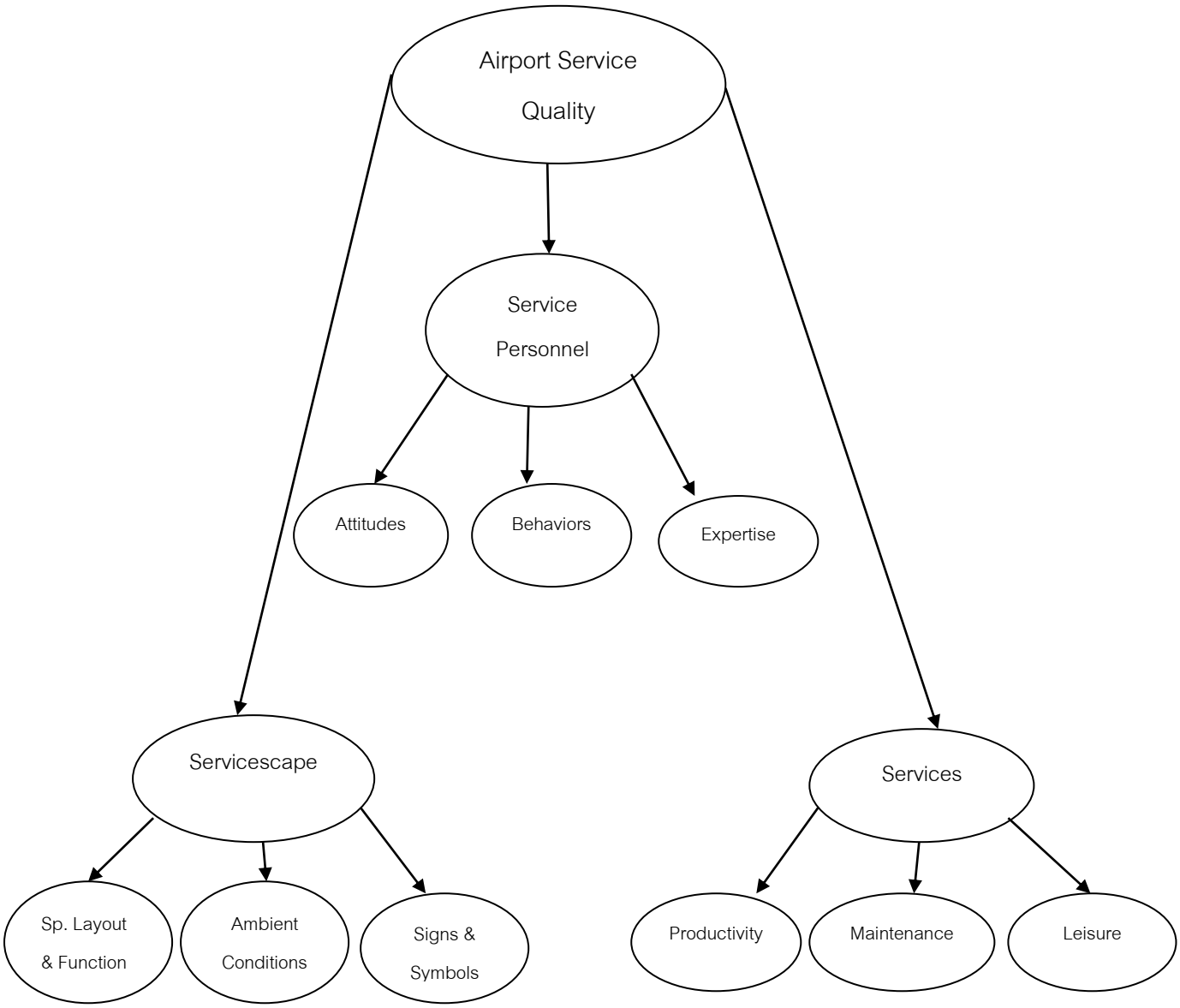
Reimer and Kuehn (2005: 801) provide another example with a restaurant. Customers might expect a well-designed servicescape in a high-price restaurant, but less in the case of a cheap restaurant. The servicescape might impact more on customer perceptions of the service quality in an expensive restaurant, where a substantial part of the price relates to the environment. The restaurant example shows the influence of the servicescape on customers' perceptions and expectations of a service. On the other hand, it should be pointed out that the effect of the servicescape can cause problems and challenges for the firm as well. As an example, a service provider might have a problem to meet the increased expectation levels that customers have due to the premium servicescape.

Fodness and Murray (2007: 492-506) qualitative research identified three components of servicescape. The first servicescape subdimension combined elements of both spatial layout and functionality, readily recognizable from Bitner (1992: 57-71) description of the servicescape. From the results of the participants in the in-depth interviews and focus group of Fodness and Murray indicated that the critical importance of being able to find their way through the airports to either their departure gate, facilities (i.e. restrooms) or amenities (i.e. shops and snack bars). The second servicescape subdimension was ambient conditions which was similar to Bitner (1992: 57-71) original dimension. Themes included: "An airport should be clean", "An airport should have soothing music playing throughout its facilities and terminals", and "An airport should offer as much natural light through windows, skylights, etc. The third

subdimension was signs and symbols which closely resembled the original Bitner (1992: 57-71). From the three qualitative studied of Fodness and Murray in the in-depth interviews' passengers stressed the importance of both informational signage (flight information displays or "FIDS") and directional signage "An airport's external signs should clearly direct me to airport services such as parking, car rentals, terminals, etc." As a symbol, airport décor was the sole implicit signal specifically mentioned by passengers in all three qualitative studies.

Figure 2

Preliminary Conceptual Model for Airport Service Quality of Fodness and Murray (2007)



Source: Fodness, D. and Murray, B. (2007). Passengers' Expectations of Airport Service Quality. *Journal of Service Marketing* 21(7), 492-506.

Fodness and Murray (2007: 492-506) claim that their findings offer a guideline for airports with ambitions to use service quality as a part of the differentiation strategy. However, the model has its limitations. Fodness and Murray (2007: 492-506) point out themselves that their single study cannot be generalized to form a comprehensive conceptualization of airport service quality. Based on Espinozas (1999: 448-449) study at two airports, cultural differences are suggested to have an effect on perceived service quality. Also, Fodness (1994: 578) argued that the trip characteristics are one of the most influential factors on travelers' expectations. As well, airport characteristics are a matter of discussion on effecting expectations of services (Graham, 2005: 108-109). All this together indicates a need to test Fodness and Murray's (2007) model in other cultures and countries as well as among other types of travelers and airports.

Dimension 2: Service Providers

A second influence on service quality perceptions where customers' physical presence is required for service delivery is interactions with service personnel (Bitner, 1990: 71-84, 1992: 57-71 and Brady and Cronin, 2001: 34-49). The most widely known and discussed means used to measure consumer perceptions of service interaction quality is SERVQUAL. The SERVQUAL measurement tool suggested that a consumer's perception of service quality involved the difference between his or her expectations about the performance of a general class of service providers and his or her assessment of the actual performance of specific firm within that class. Parasuraman, Zeithaml, and Berry (1988:12-40) suggested SERVQUAL's five dimensions framework of service quality (tangibles, reliability, responsiveness, assurance, and empathy) analyzed service quality. SEVQUAL has been applied and tested in a number of empirical studies involving services with elaborate servicescapes, including hotel (Lau et al., 2005: 46-55), restaurants (Heung et al., 2000: 86-96), e-service (Lee and Lin, 2005: 161-176), leisure (Yu et al., 2006:126-132), information service (Landrum and Prybutok, 2004: 628-642), airport (Martin-Cejas, 2006: 874-877; Lubbe et al., 2010: 1-4), and public transport (Zakaria et al., 2010: 84-92). Therefore, the second dimension of this model of airport service quality expectations was service providers.

Dimension 3: Services

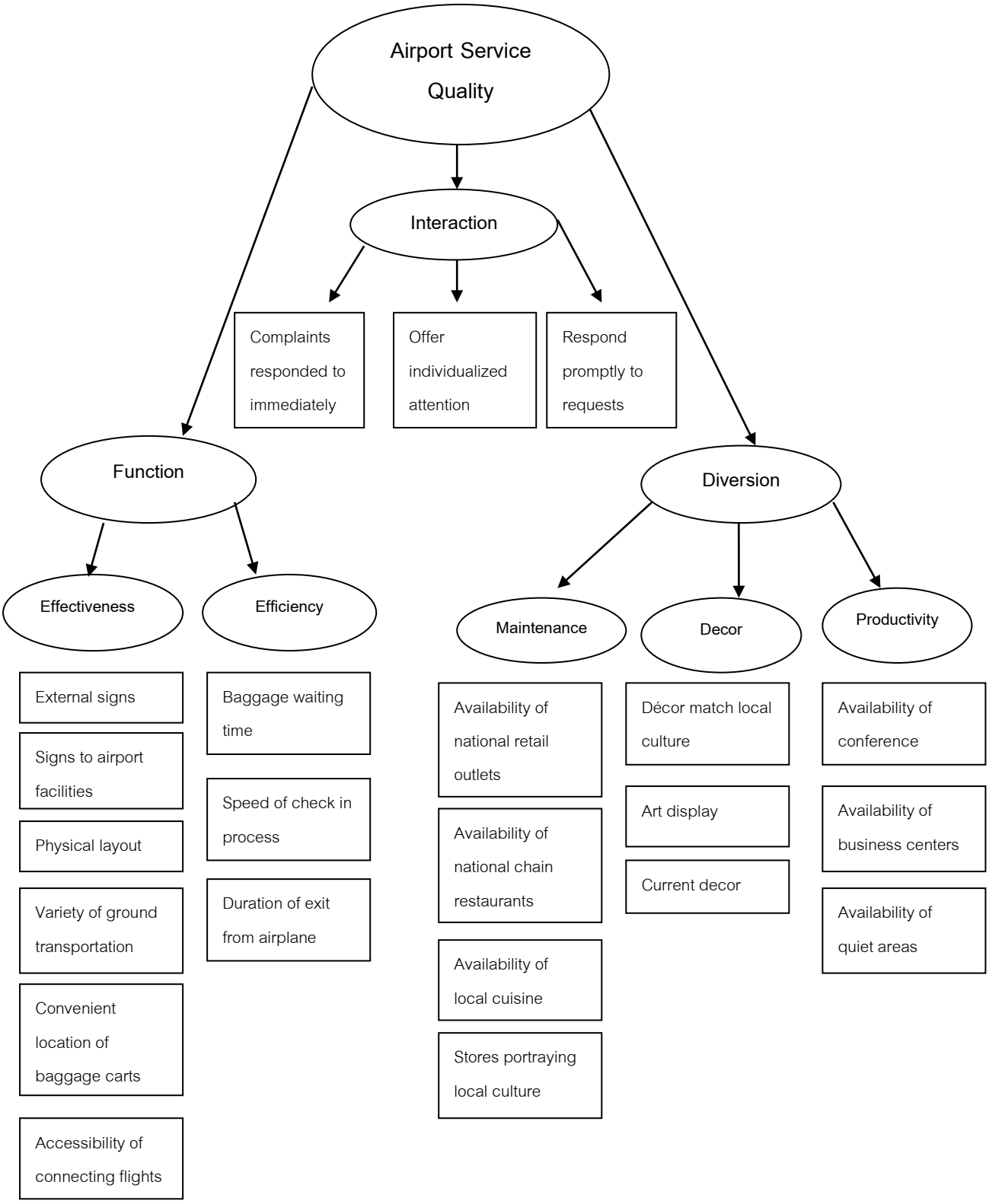
The necessity for passengers to be physically presented in the airport emphasizes issued of time and of how time was spent. SERVEQUAL focused on time spent waiting. Servicescape theory addressed in terms of spatial layout and functionality. Research showed that a passenger has entered the terminal his or her average wait can exceed one hour (Darko, 1999: 36-39). Factors such as flight delays and cancellations due to security, breakdowns and weather, can prolong time spent at the airport. The previous literature suggested that passengers at the airport have the potential for actively seeking to achieve goals and objectives related to work, related to keeping their body and possessions functioning properly and related to whatever they do with their free time. Three domains of activity that the airport experiences can precious time spent waiting. Thus, the third dimension in Fodness and Murray model of airport service quality was the services offered by the airport. Themes related to leisure activities identified in all three qualitative studies included “An airport should offer services such as massage booths, salons and recliner lounges” and “Airports should house educational museums for passengers to enjoy during layovers”.

Final Model of Airport Service Quality

Fodness and Murray (2007: 492-506) used 65 airport service quality themes to test preliminary model in figure 2 by testing 12 hypotheses. Each airport service quality theme was paired with a seven-point scale ranging from 1 = strongly disagree to 7 = strongly agree. To test the hypotheses, data were analyzed using both exploratory and confirmatory factor analysis (CFA). Confirmatory factory analysis was used to confirm the second-order dimensionality suggested by the qualitative research and literature review, as modified by the results of the exploratory factor analysis. The scales used to test dimension/subdimension hypotheses were: servicescape, service provider, and services. For each of the three scales, exploratory factor analysis initially resulted in a number of factors, retention of which was at first based on whether the individual factor had an eigenvalue greater than or equal to one. The reduced factor solution for each scale was then subjected to a varimax rotation seeking more easily interpretable results. Churchill (1979: 64-73) selected only items that loaded on a single factor for the final version of the scale, which all items less than 0.6 were removed. Items were reduced and sub-dimensions were modified for each scale in an iterative process (see figure 3)

Figure 3

Final Model of Airport Service Quality of Fodness and Murray (2007)



Source: Fodness, D. and Murray, B. (2007). Passengers' Expectations of Airport Service Quality. *Journal of Service Marketing* 21(7), 492-506.

Lubbe et al. (2010: 1-4)described the function dimension had two sub-dimensions, the first relates to how effectively passengers move through an airport, basically how well people find their way to either their departure gate or facilities and amenities such as restrooms and restaurants; and the second to how efficiently passengers move through the airport; the timeliness of their movements. The second dimension interaction was mainly related to problem-solving behaviors of airport service personnel. Thus, where the customer's physical presence was required for service deliver, the interactions a passenger had with service providers influence the passenger's quality perceptions. Fodness and Murray (2007: 492-506) described the third dimension, diversion, as a "turning aside from focusing on the fact that the passenger was, in effect "trapped" in the airport servicescape toward activities that redirect their attention or stimulate them aesthetically". The sub-dimensions are referred to as productivity décor and maintenance, where the label "diversion" captures in essence that the passenger was caught up in the airport experience. The alpha for the global construct was estimated at 0.85 and for the second-order constructs at 0.79 (Function), 0.74 (Interaction), and 0.80 (Diversion). Cronbach's alpha was computed for subdimensions and the values ranged from 0.81 to 0.61. All of the items loaded higher than 0.60 and which can be considered a test of convergent validity of the scale. Researchers used this procedure on all possible pairs of the dimensions and found values ranging from 0.75 to 0.98.

Airport Service Quality

Airport service quality literature and research is distinguished from the mainstream service quality perspective (e.g. the gap theory model) by its focus on quality at the attribute level. Researchers attempting to measure airport service quality typically proceed from a list of objective indicators of service that are developed from discussions with airport stakeholders rather than passengers, including airport and airline operators, consultants, regulators and travel industry managers.

Rhoades et al. (2000: 257- 262) addressed efforts to design a quantitative index of characteristics and factors that comprise quality in airport facilities and operations from the perspective of all airport service customers including airlines, airport tenants, airport service operators, and consumers of airline and air cargo operations. Researchers reviewed existing literature to develop a list of "key airport quality factors" from the perspective of "various

stakeholders". They collected data from airport operators and consultants who were asked to weight the relative importance of the identified factors to airport service quality.

Respondents were asked to "rate the same factors from a passenger perspective in order to gauge the extent to which their perceptions were "passenger-focused". Factor analysis of the data from the 150 responses received 27 percent response rate, the factor analysis results identified four factors: passenger service issues, airport access, airline-airport interface, and inter-terminal transport. The results of an initial survey of airport directors and consultants have identified 12 broad factors that, most affect the quality of airport operations. These factors included parking, capacity, ground transportation, shopping and restaurant services, and waiting area considerations.

Yeh and Kuo (2002: 39-48) presented a fuzzy multi-attribute decision making approach for evaluating passenger service quality of 14 major Asia-Pacific International Airport via surveys. Researchers consulted Taiwanese airport managers, government officials, academics and travel agents to identify six airport service categories: comfort, processing time, convenience, courtesy of staff, information visibility and security. Researchers used these categories as the basis for collecting data from 15 Taiwanese tour guides and operators. The data was analyzed using fuzzy multi-attribute decision making analysis (MADM) to demonstrate "an effective alternative to performance evaluation of airport services involving subjective assessments of qualitative attributes. Researchers recognized that the population sample should have included passenger opinions from all the countries involved in this study.

Piyajitmetta (abstract: 2003) studied the factors affecting to Thai passengers' total satisfaction on service of Thai Airways International in Bangkok Metropolitan area: a case study of sector Bangkok – Hong Kong – Bangkok. The researcher collected the data from 385 Thai passengers who have utilized and consumed the services of Thai Airways International of routing Bangkok – Hong Kong – Bangkok. Questionnaires were introduced to be data collection Device. This research used statistics was percentage; mean score, standard deviation, Independent t-test and One-Way ANOVA, were introduced to analyze differences. One Way Analysis of Variance was arranged through Least Significant Difference (LSD), and the factors affecting the total satisfaction of passengers were analyzed by regression's statistic to screen the multi colinearity by factor analysis. All analysis was processed by SPSS version 10.

Results showed that the number of female was more than male. Most of them were between 26 - 35 years of age; follow by rank between 36 - 45 years and 46 - 55 years respectively. Married passengers were more than single. Graduated passengers were found mostly, follow by post graduated passengers and under graduated respectively. Employees of private enterprises were found mostly and follow by officers/state enterprise staff and then the fewest were businessmen/ owner of company or shop. Most of them earned monthly income between Baht 20,001 - 40,000, follow by Baht 20,001 and fewer, income range between 40,001 - 80,001 and above respectively and most of them travel one to five times in average. For the differences found that passengers who held post graduated degree showed the difference from those graduated degree and under graduate. The research found three factors about the factors affecting to Thai passengers' total satisfaction on service of Thai Airways International in Bangkok Metropolitan area for the Sector Bangkok – Hong Kong – Bangkok.

First factor was "satisfaction of services of ticketing offices", consisted of four attributes were: satisfaction of kindness of staff, satisfaction of politeness of staff, satisfaction of check-in staff, and satisfaction of purchasing Thai Airways International Public Company limited because of their good service, that increase 1 point will affect to total satisfaction of passengers .371 points that came first in their mind. Second factor was "service on board", consisted of two attributes were: satisfaction of in-flight convenient equipments and entertainment, and satisfaction of in-flight service of aircrews and foods/beverages that increase 1 point will affect to total satisfaction of passengers .336 points. Third factor was "safety" consisted of safety of traveling, in-flight's safety belt at passengers' seats, skill and experience of Thai's pilots, having oxygen mask and life vest, that increase 1 point will affect to total satisfaction of passengers .192 points that also be fond of. And the last factor was "other services", consisted of passengers' satisfaction of purchasing high price ticket because of good service, satisfaction of purchasing high price ticket because of safety of aircraft, satisfaction of purchasing high price ticket because of new aircraft, Satisfaction of on time flight schedule, that increase 1 point will affect to total satisfaction of passengers .102 points.

Magri and Alves (2005: 9-17) made a study of passenger perceptions of service quality at six Brazilian Airports. This research conducted a service quality survey by the Airports Council International (ACI), they defined 36 attributes involving not just services, but also the airport installations that most affect passengers, making for quite a sound data set.

Researchers calculated 36 attributes including: availability of luggage carts, thermal comfort, acoustic comfort etc. The results showed that the perception of quality was fragmented, offered managers a poor view of how improving any given attribute will impact passengers' overall perception of airport quality.

Sohail and Al-Gahtani (2005: 482-493) studied the King Fahd International Airport in Dammanm, Saudi Arabia. This study reviewed the development of King Fahd International Airport in Saudi Arabia and its efforts at increasing customer satisfaction and operational efficiency. This survey was conducted by using a questionnaire to measure the travelers' evaluation of airport services. This study used the instrument of Rhoade et al. (2000: 257-262) as a guideline, twelve broad factors that mostly affect the quality of airport operations were identified in designing a quantitative index of characteristics and factors that comprise quality in airport facilities. These factors included parking, capacity, ground transportation, shopping and restaurant services, and waiting and operations.

Empirical research was used to determine the factors that influence travelers' evaluation of service quality. With data collected from 188 respondents, the study evaluated the satisfaction level of travelers on 25 variables. The items were recorded on a seven-point scale where 1 = much less than expected and 7 = much better than expected. The second part of the questionnaire was designed to get the age, the gender, nationality, and income of respondents only for classification purposes. The results of this study indicated that travelers are generally satisfied with the KFIA. Frequent travelers have expressed a higher degree of satisfaction as compared to less frequent travelers in all the examined dimensions. It also pointed out that the airport has scored below expectation values for services relating to flight information, guidance in the airport, cleanliness, parking space, and check-in facilities.

Martin-Cejas (2006: 874-877) analyzed the level of service of Gran Canaria Airport facilities as an approximation to evaluate the quality of tourism services. Researcher used a linear programming model to determine the level of service established in a check-in service at airport. The first and last perception of quality in a tourist destination take placed at the airport. Average waiting time and crowding level for airport facilities are two relevant aspects in quality perception of tourists when arriving at their destination. The results showed that Gran Canaria airport facilities service quality improvement was crucial for the health of the touristic sector in the island. It had at least two relevant consequences. First, tourists should have enough time to

do last-minute shopping in a commercial area of the airport. Second, developing leisure and commercial areas at airports creates opportunities to generate enough commercial revenue to cross-subsidize operation cost.

Park (2006: 1-17) investigated how in-flight service, reservation and ticketing, airport service, reliability, employee service, flight availability, passenger satisfaction, pricing (value), and airline image determine passengers' future behavior intentions. The researcher developed airline service quality measures, in-depth interviews and focus group interviews were held with airline staff, airline passengers, and academics in the aviation field. During the in-depth interviews, participants were asked to express their views on airline service quality-especially what comprises airline service quality, what kind of service airlines provide, and how airline service quality differed from service quality in other service industries. This study tested structural equation modeling was applied to data collected from Australian domestic air passengers.

The findings presented a model of individual dimensions of airline service quality which based on the proposed conceptual framework of the linkages between constructs. All hypotheses relationships appeared to be statistically significant, except for four casual paths. These results indicated that there were significant relationships between in-flight service, employee service, passenger satisfaction, airline image, value, and behavioral intentions. These variables were directly or indirectly related to passengers' repurchase intentions and word-of-mouth communications. The results from a study of Australian domestic passengers implied that airlines should recognized the relative importance of individual service dimension and developed various strategies to guarantee providing quality services to passengers. Airlines should realize that improvements in important airline service dimensions should enhance passengers' repurchase intention and their recommendation to other passengers through increased passenger satisfaction. Failure to provide quality services to passengers may cause lowered passenger satisfaction and airline image and may cause negative impact on passengers' future behavioral intentions.

Somkiat Naiwikul (2007: 1-69) investigated the satisfaction of the airport users on the service of Ubon Ratchathani International Airport, and compare the satisfaction of the airport users categorized by the users' gender, age, occupation, income, educational level, and the users' service using. The samples used in this study consisted of 384 subjects altogether

gained by using the simple random sampling technique. Likert five-point scale was used in questionnaires with Cronbach's alpha reliability of 0.95. Descriptive statistics (percentage, mean, standard deviation) and t-test were employed for data analysis. The results showed that the overall and individual aspect satisfaction of the users of the Ubon Ratchathani International Airport was found at high level. The comparison of the users' satisfaction by demographic profile (gender, occupation, and educational level) was not different significant. But the users' overall satisfaction by income was different significant.

Kitrungruang (2009: 1-83) studied Thai passengers' satisfactions with services at Suvarnabhumi Airport, Samutprakan Province. The objectives of this research were studied the satisfaction of Thai passengers and compare their satisfaction with demographic profiles. The researcher used questionnaires and collected data from 400 airport customers. The statistics used in data analysis were frequency, percentage, means, standard deviation, t-test, and analysis of variance.

The findings revealed that the level of Thai passengers' overall satisfaction with Suvarnabhumi Airport's services, Samutprakan Province was high. The aspects that received high satisfaction aspects were car park lots, facilities within passenger terminal building, shops inside building, and securities and immigration inspection. The satisfaction aspects rated at medium level were arrival process, departure process, and cleanliness of inside and outside of passenger terminal building. The results of compare Thai passengers' satisfaction with services of Suvarnabhumi Airport's , Samutprakan province with demographic profiles (gender, , age, education level, occupation and salary) showed that there were not significantly different in their satisfaction with Suvarnabhumi Airport's services, Samutprakan Province.

Anakamaneekul (abstract: 2010) studied the attitudes of Thai passengers toward the services at Suvarnabhumi Airport. The objectives of this research were: (1) the personal factors of respondents, (2) the attitudes of Thai passengers toward the services at Suvarnabhumi Airport, (3) the problems of using the services at Suvarnbhumi Airport, and (4) the comparison of the personal factors and the attitudes of Thai passengers toward the services at Suvarnbhumi Airport. This research instrument used was questionnaires. The research population was the Thai passengers who used the services at Suvarnabhumi Airport. The sample size of 400 passengers was calculated using Taro Yamane's formula. The data was processed and

analyzed by using statistical application program. Statistics used in analyzing the data are percentage, means, standard deviations, and Chi-Square and Eta values.

The findings showed that: (1) For personal factors of respondents: the majority of respondents were female, aged between 45-54 years, held bachelor's degree, worked in the low-level managerial positions in governmental agencies or state enterprises, traveled for tourism purpose; (2) For the attitudes of Thai passengers toward the services: the overall levels of attitudes were at a moderate level with the importance levels from high to low as: food and beverages, parking space and airport traffic, weapons and illegal items search, seat reservation, ground service personnel, boarding pass service, communications facilitation, passenger baggage management, and passenger waiting rooms; (3) For the problems of using the services: the results show that seat reservation was the most serious problem, followed by communication facilitation, and the least problem was weapons and illegal items search; (4) For the comparison of the personal factors and the attitudes of Thai passengers toward the services; it was found that passengers with different gender, age, position, educational level occupation and purposes of travel had no differences in attitudes toward the services at Suvarnabhumi.

Lubbe et al. (2010: 1-4) applied the concept of expectations underlies the selection of Fodness and Murray's (2007: 492-506) methodology for measuring service quality with its focus on passenger expectations in service quality. This research investigated passengers' perceptions of airport service quality at O.R. Tambo International Airport, South Africa. Researchers applied a conceptual model for service quality structured that had three dimensions: function, interaction and diversion, which each dimension having subdimensions associated with them in the passengers' mind. The function dimension had two subdimensions, the first related to how effectively passengers move through an airport, basically how well people find their way to either their departure gate or facilities and amenities such as restrooms and restaurants; and the second to how efficiently passengers move through the airport; the timelines of their movements. The second dimension was interaction, related to problem-solving behaviors of airport service personnel. The interactions a passenger had with service providers influence the passenger's quality perceptions. And the third dimension was diversion, which Fodness and Murray describe as a "turning aside from focusing on the fact that the passenger is, in effect "trapped" in the airport servicescape toward activities that redirect their attention or

stimulate them aesthetically". The subdimensions are referred to as maintenance, décor, and productivity.

The study showed that the importance of service quality measurement and management at airports was seen as important but for airport service strategies to yield the desired results; passengers themselves need to be the ones to define and evaluate service. The results proved significant in terms of the investment made by the airport in staff training and highlighted areas for improvement. The results showed that business travelers and leisure travelers have different opinions regarding the importance of services offered by airports and of the level of performance at ORTIA in particular. Significant differences also occur in the perceptions of frequent travelers and infrequent travelers.

Torma & Farmahini (2010: 1-72) tested the general applicability of the hierarchical structure for airport service quality expectations' model by testing it in a Swedish context. A self-filled questionnaire asking about expectations on airport service quality was handed out to passengers in waiting areas at Arlanda Airport and Umeå City Airport in Sweden. The data was analyzed using factor analysis and a preliminary model was shaped. The outcome of this study showed that the model is applicable in a Swedish context after considering two main concerns. First the rapid change of technology in the airport industry reflected in self-services, and second the passengers' interest in the local setting in which the airport is situated. These findings, together with available literature and logical reasoning, were used to reveal a re-specified model that is suggested to be validated by confirmatory factor analysis.

Zakaria et al. (2010: 84-92) applied Service Quality dimensions to investigate the relationship between independent variables which was tangible, reliability and responsiveness dimension that influences the Service Quality of the public transports which was buses and taxis in Lembah Bujang area and which Service Quality dimension were mostly influences the Service Quality. The researchers used simple random samplings which were 300 respondents. The data was collected using questionnaire. The data was analyzed using statistical software SPSS version 15.0 with the used of Cronbach's Alpha, Pearson Correlation, Descriptive Statistic, and Multiple Regression Analysis. The reliability analyzed through Cronbach's Alpha value at 0.903.

The results indicated there were positive correlations between Service Quality and tangible, reliability and responsiveness of Service Quality dimensions. The result of the first objective stated that the tangible dimension (cleanliness/ comfortableness of physical facilities)

influenced the service quality of the public transports. The result of the second objectives stated that the reliability dimension (punctuality/ frequencies) influenced the service quality of the public transports. The result of the third objectives stated that the responsiveness dimension (attitudes/ willingness employees) influenced the service quality of the public transports. Researchers recommended the future research should focus on other service quality dimension which was empathy and assurance in SERVQUAL model of Service Quality.

Passenger Satisfaction

Passenger satisfaction is a key performance indicator for the operation of an airport. International airports located at different regions or countries by and large do not compete with one another. Passengers often do not have a choice between airports, regardless of price and quality levels of airports services. In other words, passenger demand for airport services is likely to be relatively inelastic (Doganis, 1992). Thus, the evaluation of passenger satisfaction levels on airport services has become an important issue for airport management. The evaluation of the airport's passenger service is an on-going process and requires continuous monitoring to maintain high levels of service quality across a number of distinctive service areas (attributes).

The service literature has been contributed to the confusion over the relationship between passenger satisfaction and service quality. The most important that service providers need to know are how their objectives meet or exceed the passengers' satisfaction with their performance. The importance of this issue has been led to several recent efforts to clarify the relationship between satisfaction and service quality. Some authors suggested that service quality was a vital antecedent of customer satisfaction and concretely, some relevant aspects of quality perception as promptness of service and on-time programming (Getz et al., 2001: 380-390).

Airport infrastructures are the first contact point for passengers when they arrive at their destination. Therefore, airport facilities give them the first impression they will have about the expected quality of their airport. When passengers are processed by airports they use several services such as, check-in, passport and security controls in departure, and baggage claim service and passport control when arriving. If an airport cannot attend to all these services efficiently, airport service quality will be low and passenger perception of the airport facilities

becomes negative. For instance, in departure, once the process has ended, passengers go to a boarding area where they can enjoy a leisure area, do last-minute shopping and use some other services like restaurants. Time spent by passengers at ticket counters and other controls limits their time to enjoy airport leisure areas. If the level of service is low and passengers spend too much time in these controls, their perception of the airport service quality will perhaps decline.

Satisfaction can be defined as "the consumer's fulfillment response. It has been a judgment that a product or service feature, or the product or service itself, provides (or is providing) a pleasurable level of consumption-related fulfillment, including levels of underfulfilment or overfulfilment" (Oliver, 1996: 14). The concept of consumer satisfaction occupies a central position in marketing thought and practice. Conceptually, satisfaction is an outcome of purchase and use results from the buyer's comparison of the rewards and costs of the purchase in relation to the anticipated consequences. Operationally, satisfaction is similar to attitude in that it can be assessed as the sum of the satisfactions with the various attributes of the product or service. La Tour and Peat (1979: 432-437) asserted that the primary distinction between satisfaction and attitude derived from temporal positioning: attitude was positioned as a predecision construct and satisfaction was a postdecision construct. Satisfaction has been defined as "an overall evaluation of performance based on all prior experiences with a firm."

Spreng and MacKoy (1996: 201-214) also studied the relationship between service quality and satisfaction based on their modified Oliver's (1993) satisfaction/service quality model. Their modified model fitted the data well where service quality was hypothesized to influence satisfaction. In their study, the path coefficient between two constructs appeared to be significant (t = 9.4). Woodside et al. (1989: 5-17) supported the causal relation of service quality and satisfaction with data collected in area of health care. Several researchers stated that overall service quality is determined only by the customer's perception of a service, rather than the difference between the customer's expectation and actual service performance.

According to Walker and Baker (2000: 413), a few researchers have seen satisfaction and service quality as equal. Nevertheless the authors of this study, together with most researchers, believe they are not only different but also that service quality is subordinate to satisfaction. Walker and Baker (2000: 413) specifically point out that the level of quality will affect the customers' judgment of satisfaction. Multiple studies show that improved service

quality ensures higher levels of customer satisfaction and is one of the most important strategies for business competitiveness in services, resulting in increased levels of profit (Herstein & Gamliel, 2006: 306; Yang, 2003: 310). Newman and Pyne (1996: 12) added that the improvement of service quality offers firms social equity besides commercial outcomes. Customer satisfaction has been seen to affect customer loyalty, which might lead to higher revenue in the future. Nevertheless, service quality too leads to market leadership resulting in customer loyalty and higher revenues (Gilbert & Veloutsou, 2006: 298). Service quality is the focus of this study.

Chapter Summary

This chapter reviewed previous literature about the development model of airport service quality of Fodness and Murray (2007), literature review of airport service quality and passenger satisfaction of other researchers. The next chapter described the research methods used in this study. The research methodology used in this study was 1) Population and Sample Size, 2) Instruments and Reliability, 3) Data Collection, and 4) Data Analysis.

CHAPTER III

METHODOLOGY

The purpose of this quantitative study was to design, implement and test an objective approach to measuring passengers' perception and satisfaction of airport service quality at Suvarnabhumi International Airport, Thailand. This chapter provided a discussion on the research methodology used to conduct the study. It has been organized in the following manner: 1) Population and Sample Size, 2) Instruments and Reliability, 3) Data Collection, and 4) Data Analysis.

Population and Sample Size

Population was the total number of passengers both Thai and foreigner who had travel by departure, arrival, or transit at Suvarnabhumi International Airport. The researcher used the convenience sampling method to collect the data. The sample population in the study is 500 passengers (Thai and foreigner) who had travel at Suvarnabhumi International Airport for departure, arrival and transit during the month of January 2011.

The sample size for the study was 500 for ensuring statistical power as suggested by Hair, Anderson, Tatham, and Black, (1998). Regarding the sample size in the factor analysis, the researcher generally would not factor analyze a sample of fewer than fifty observations, and preferably the sample size should be 100 or larger. As a general rule, the minimum sample size is to have at least five times as many observations as there are variables to be analyzed, and the more acceptable size would have a ten-to-one-ratio (Hair, Anderson, Tatham, and Black, 1998).

Sample Size

According to Israel (1992), if the population is large, then Israel's equation to yield a representative sample for proportions needs to be used.

$$n_o = \frac{Z^2 \sigma^2}{e^2}$$

when n_o = sample size

Z = standard error associated with chosen level of confidence (95%)

σ = standard error of overall mean of service quality attributes of pilot study

e = acceptable error ± 10% ($p \leq 0.10$)

The resulting sample is demonstrated below:

$$n_o = \frac{(1.96)^2(1.06)^2}{(0.10)^2}$$

= 430 passengers

Therefore, sample size of this study will be 430 passengers but the researcher will be collected the data about 500 questionnaires. And a pilot study of a sample size of 30 is conducted at Suvarnabhumi International Airport to ensure the reliability and validity of the designed questionnaire.

Instruments

A self-administered questionnaire was developed from Fodness and Murray (2007). The data collection instrument consisted of five-point Likert scale. The relevant literatures and survey instruments developed by past researchers provided the basis for developing the questionnaire for this study. The questions asked reflect Fodness and Murray's multi-dimensional scale to assess passengers' perception for both satisfaction and importance of airport service quality at Suvarnabhumi International Airport, Thailand. The questionnaires had four parts: 1) the satisfaction of airport service quality, 2) the importance of airport service quality, and 3) overall service quality, and 4) demographic profile.

The first part of the questionnaire was to assess the respondents' perception of satisfaction of airport service quality attributes, consisted of 22 items of airport service quality. This part also included overall satisfaction. All of the statements were rated on five-point Likert scale, ranging from 1 = very unsatisfied, 2 = unsatisfied, 3 = neutral, 4 = satisfied, and 5 = very satisfied.

The second part of the questionnaire was to assess the respondents' perception of importance of airport service quality attributes, consisted of 22 items of airport service quality.

All of the statements were rated on five-point Likert scale, ranging from 1 = very unimportant, 2 = unimportant, 3 = neutral, 4 = important, and 5 = very important.

The third part of the questionnaire was to assess the respondents' perception of overall service quality of each dimension of airport service quality, rated on five-point Likert scale, ranging from 1 = very poor, 2 = poor, 3 = neutral, 4 = good, and 5 = very good.

The fourth part of the questionnaire was asked about the demographic profile of respondents.

Reliability and Validity of Airport Service Quality

A pilot test was conducted to assess how well the instrument captures the constructs it was supposed to measure and to test the internal consistency and the comprehension of the questionnaire items (Appendix A and B). A pilot test was conducted with a convenience sampling of 30 passengers who had travel by departure, arrival, or transfer at Suvarnabhumi International Airport in the period of January 2011.

A reliability analysis (Cronbach's alpha) was performed to test the reliability and internal consistency of the airport service quality dimensions. Fodness and Murray (2007: 492-506) stated the alpha for the global construct was estimated at 0.85 and for the second-order constructs at 0.79 (Function), 0.74 (Interaction), and 0.80 (Diversion). Cronbach's alpha was computed for subdimensions and the values ranged from 0.81 to 0.61. The results also showed all possible pairs of the dimensions and found values ranging from 0.75 to 0.98. All of the items loaded on the factors higher than 0.6 (Churchill, 1979: 64-73) to which they were assigned, however, which can be considered a test of convergent validity of the scale. Park (2007: 238-242) was performed to test the reliability and internal consistency of the six dimensions of service quality to capture service attributes was significantly differentiated by passengers, the alpha was more than 0.7 of reliability. According to Nunnally (1967: 226), coefficients greater than or equal to 0.50 are generally acceptable and are a good indication of construct reliability. An alpha value of at least 0.70 should be considered acceptable as the minimum estimate of reliability for basic research.

Reliability and Validity of Satisfaction

Chang (1998) developed the service quality in fitness services (SQFS) scale and provided evidence of its reliability. In the process of developing the scales, internal consistency was examined for the items of customer satisfaction. The estimated internal consistency (Cronbach's alpha) of the customer satisfaction with services scale ranged from 0.59 to 0.74 with the significance level at 0.5 (Chang, 1998). According to Nunnally (1967: 226), the mean of the estimated internal consistency value was 0.67 and this was deemed acceptable. To be more specific, Nunnally (1967: 226) suggested that "in the early stages of research on predictor tests or hypothesized measures of a construct, one saves time and energy by working with instruments that have only modest reliability, for which purpose reliabilities of 0.60 or 0.50 will suffice".

Data Collection

For the data collection process, this research used a self-administered questionnaire to ask the passengers who had travel by departure, arrival, or transit at Suvarnabhumi International Airport in January 2011. The respondents completed the questionnaire in four parts: 1) Passengers' satisfaction perception of airport service quality, 2) Passengers' importance perception of airport service quality, and 3) Overall Service Quality, and 4) Demographic Profile (Appendix A and B). The respondents were asked to indicate each statement on a five-point Likert scale.

Data Analysis

A formal coding sheet was designed and used to code all the questions in a systematic way. In order to achieve the stated objectives and to test the hypotheses, various kinds of statistical techniques were employed (Table 2). These techniques included basic descriptive, factor analysis, multiple regressions analysis, and one-way analysis of variance (ANOVA). Data were entered into the Statistical Package for Social Sciences Windows Version 11.0 (SPSS) program to analyze the findings.

Table 2

Statistical Techniques Employed in This Study

Statistical Techniques Employed	Research Purposes	Hypotheses
Basic Descriptive (means, standard deviations, and frequency)	Examine the distribution of responses	
Factor Analysis	Delete the intercorrelations among the dimensions	
Multiple Regression Analysis	To extent service quality factors predict overall overall passenger satisfaction	Hypothesis 1 Hypothesis 2
One-Way Analysis of Variance (ANOVA)	Test significance of overall service quality based on passengers' demographic profile (purpose of travel, trip of orientation, and frequency of travel)	Hypothesis 3
	Test significance of overall service quality between types of passengers (Thai and Foreigner)	Hypothesis 4
Independent-Samples t Test	To compare the mean among Thai and foreigner passengers relative to the 22 airport service quality attributes	

Descriptive Statistics

The data frequencies were analyzed to detect any discrepancy due to data entry errors or missing value. Basic descriptive statistics of means, standard deviations, and frequency examined the distribution of responses.

Factor Analysis

In this study, principal component analysis (factor analysis) was implemented to discover the underlying dimensions of service quality attributes of passengers' perception. The criteria for the number of factors to be extracted were based on eigenvalue, percentage of variance, significance of factor loading, and assessment of the structure. Factors with eigenvalue greater than 1 were considered significant. A variable was considered to be of practical significance and included in a factor when its factor loading was equal to or greater than 0,40 (Hair et al., 1998). There were several assumptions used in factor analysis (Hair et al., 1998):

- The anti-image correlation matrix was used to assess the sampling adequacy of each variable.
- Variables with a measure of sampling accuracy that failed below the acceptable level of 0.50 should be excluded from the analysis.
- Barlett's test of sphericity was large and significant, and the Kaiser-Meyer-Olkin measure was greater than 0.60 then factorability was assumed.

Multiple Regression Analysis

Multiple regression analysis was used to predict the relationship between airport service quality attributes (function, interaction, and diversion), passenger satisfaction, and overall service quality. The result of regression used an equation that represented the best prediction of a dependent variable from several independent variables.

One-Way Analysis of Variance (ANOVA)

One-way analysis of variance (ANOVA) was used to find the significant difference of airport service quality attributes according to demographic profile of respondents in nationality,

purpose of travel, trip of orientation, and frequency of travel. In this study, one-way analysis of variance was used to test hypothesis 4.

There were two assumptions in Analysis of Variance (Keppel and Wickens, 1997):

1. Normal distribution-populations from which the samples had been drawn should be normal.
2. Homogeneity of Variance- the scores in each group should have homogenous variances.

Independent-Samples t Test

Independent-samples t test was used to compare the means among Thai and foreigner passengers. In order to compare the responses of Thai and foreigner passengers relative to the 22 airport service quality attributes. The results showed that the test for homogenously of variance was achieved through. The use of Levene test for equality of variance. Since the test is significant ($p < .05$), the researcher rejected the null hypothesis and accepted the alternative hypothesis that the variances are unequal.

Chapter Summary

This chapter has described the study's methodology, population and sample size, instruments and reliability, data collection, and data analysis. Self-administered questionnaire was used to determine the passengers' perception of airport service quality for both satisfaction and importance of airport service quality. The target population of this study was the passengers who had travel by departure, arrival, or transfer at Suvarnabhumi International Airport in the period of January 2011. The researcher used the convenience sampling method to collect the data. Data analysis techniques used in evaluating the hypotheses included, basic descriptive, factor analysis, multiple regression analysis, and one-way analysis of variance (ANOVA). The next chapter was the results of the hypotheses.

CHAPTER IV

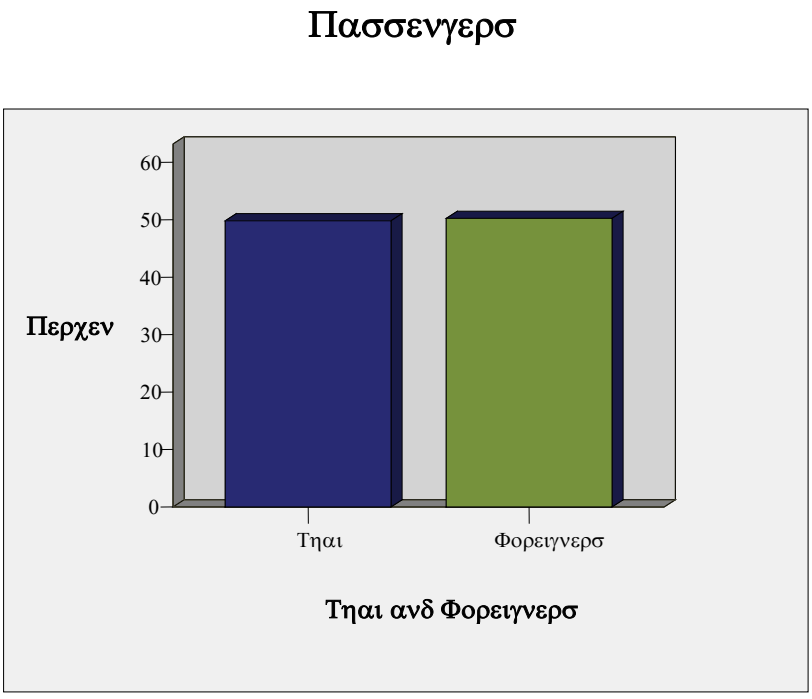
RESULTS

The purpose of this study is to contribute to the development of a conceptual model of perceived service quality at Suvarnabhumi International Airport. This chapter presents an analysis and interpretation of the data and a discussion of the results. For this chapter is comprised of five sections: 1) Description of the Subjects, 2) Customers' demographics, 3) Factor Analysis, 4) Reliability of the Instrument, and 5) Results of Hypotheses Testing.

Description of the Subjects

A total of 500 questionnaires were distributed to passengers who had travel by departure, arrival, or transfer at Suvarnabhumi International Airport in January 2011. Of the 500 questionnaires were returned completed and usable. The respondents consisted of: 249 Thai passengers (49.8%) and 251 foreigner passengers (50.2%) (Figure 4).

Figure 4
Passengers Distribution



Passengers' Demographics

As shown in Table 3, the respondents consisted of 252 female (50.4%) and 248 male (49.6%). Among the 500 respondents, 183 respondents came from Thailand (36.6%), 112 respondents came from Europe (22.4%), 42 respondents came from Japan (8.4%), 34 respondents came from China (6.8%), 30 respondents came from North America (6.0%), 28 respondents came from South America (5.6%), 26 respondents came from other Asian countries (5.2%), 25 respondents came from other countries (5.0%), 14 respondents came from Australia/New Zealand (2.8%), and 6 respondents came from Africa (1.2%). The purpose of travel of respondents were 150 respondents (30.0%) for vacation/pleasure, 113 respondents (22.6%) for work, 94 respondents (18.8%) for visit friends/relatives, 58 respondents (11.6%) for education, 56 respondents (11.2%) for business/professional, and 29 respondents (5.8%) for others purposed. The trip orientation of Suvarnabhumi International Airport consisted of 265 respondents (53%) were arrival, 198 respondents (39.6%) were departure, and 37 respondents (7.4%) were transit the flight. The respondents used Suvarnbhumi International Airport to travel in the last 12 months were: 2 times with 153 respondents (30.6%), 3 times with 86 respondents (17.2%), more than 5 times with 81 respondents (16.2%), one time with (14.8%), 5 times with 58 respondents (11.6%), and 4 times with 48 respondents (9.6%).

Table 3

Demographics Characteristics of Respondents

	Frequency	Percentage (%)
Gender		
Female	252	50.4
Male	248	49.6
Country of Residence		
Thailand	183	36.6
Japan	42	8.4
China	34	6.8
Other Asian Countries	26	5.2
Europe	112	22.4
North America	30	6
South America	28	5.6
Africa	6	1.2
Australia/New Zealand	14	2.8
Others	25	5
Purpose of Travel		
Education	58	11.6
Work	113	22.6
Vacation/Pleasure	150	30
Business/Professional	56	11.2
Visit Friends/Relatives	94	18.8
Others	29	5.8
Trip Orientation		
Departure	198	39.6
Arrival	265	53
Transit	37	7.4

Table 3

Demographics Characteristics of Respondents (cont.)

	Frequency	Percentage (%)
Times Used of Suvarnabhumi Airport		
1 time	74	14.8
2 times	153	30.6
3 times	86	17.2
4 times	48	9.6
5 times	58	11.6
more than 5 times	81	16.2

Factor Analysis

A principal component analysis was conducted on the 22 variables which both variables of satisfaction and important of airport service quality to ensure that the variables were not intercorrelated and that the variables were grouped properly (Table 4 and Table 5). Bartlett's test of sphericity was applied to test for intercorrelated. For data to be appropriate for factor analysis, the results of the Bartlett's test should be significant and the Kaiser-Meyer-Olkin (KMO) measure was greater than 0.60 (Hair, Anderson, Tatham, and Black, 1998). In this study, the value of Kaiser-Meyer-Olkin (KMO) of satisfaction and important of airport service quality was 0.873 and 0.886, and verified that the use of factor analysis was appropriate in the study. Bartlett's test of sphericity value Chi Square (χ^2) was 3444.000 and 3988.745, with both p = .000, indicating that the data were suitable for factor analysis.

The varimax rotation procedure was used to produce an orthogonal transformation matrix yielding independent factors, which provided unique information. Only the factors with eigenvalues equal to or greater than 1 were considered as significant. Examination of the screen plot and interpretation of the resulting factors lead to three factors of both satisfaction and important of airport service quality with eignevalues were 1.687 and 1.647 which were greater 1.00. Statements with loadings of 0.40 or greater on a single factor were used in interpreting the factors.

After analyzing the variables of satisfaction of airport service quality, the data with principal component analysis of factor analysis to delete the intercorrelations among the dimensions and results were three factors with 22 variables (Figure 5). The first factor was labeled as “Environment Service Provider,” consisted of nine variables and explained 28.723% of the variance in the data, with an eigenvalues of 6.319. The second factor was labeled as “Personnel and Passengers’ Relationship,” consisted of eight variables and explained 9.086% of the variance in the data, with an eigenvalues of 1.999. The third factor was labeled as “Servicescape”, consisted of five variables, and the total variance explained was 7.670% with an eigenvalues of 1.687 (Table 6)

After using the factor analysis to delete the intercorrelations variables among the dimensions of important of airport service quality. The results were three factors with 19 variables (Figure 5): the first factor was labeled as “Environment Service Provider,” consisted of nine variables and explained 31.007% of the variance in the data, with an eigenvalues of 6.821. The second factor was labeled as “Personnel and Passengers’ Relationship,” consisted of six variables and explained 8.273% of the variance in the data, with an eigenvalues of 1.820. The third factor was labeled as “Servicescape”, consisted of four variables, and the total variance explained was 7.485% with an eigenvalues of 1.647 (Table 7)

Figure5

Final Conceptual Model of Airport Service Quality

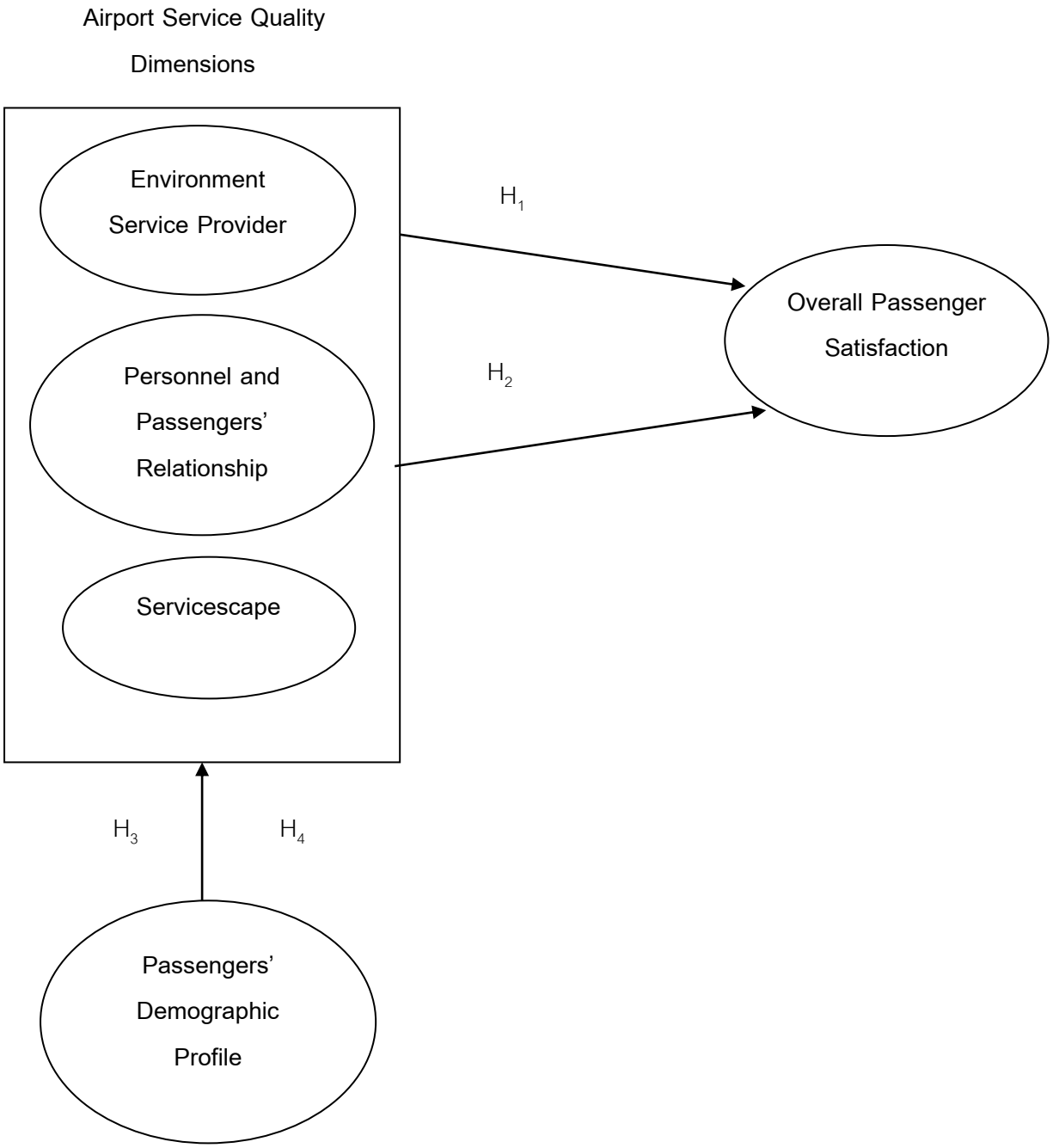


Table 4

Descriptive of Satisfaction of Airport Service Quality Attributes

	N	Mean [(a)]	Std. Deviation
An airport's external signs clearly direct me to airport services.	500	3.93	.864
Internal signs throughout an airport clearly directing me to airport.	500	3.94	.753
An airport's physical layout makes it easy to you to find what you need.	500	3.93	.753
A variety of ground transportation options to the nearest city are available.	500	3.94	.773
Baggage carts are conveniently located.	500	3.97	.728
Transferring or connecting flight is easily for you.	500	3.99	.756
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.	500	3.78	1.007
It upsets you when you have to wait in line more than ten minutes during check in process.	500	3.59	.971
You can exit the airplane within ten minutes of landing.	500	3.75	.792
Your complaints are responded to immediately at an airport.	500	3.78	.855
Employees at an airport available to offer you individualized attention.	500	3.89	.798
Employees at an airport respond do not busy to respond to you request promptly.	500	3.77	.865
Conference facilities are available to you at an airport so that you can conduct meetings.	500	3.86	.790
An airport has business centers.	500	3.95	.849
An airport should have quiet areas in which to nap, read, or do business.	500	3.84	.886
An airport's decor match the local culture of the city at which it is located.	500	4.01	.773
An airport display art.	500	3.95	.800
An airport has current decor	500	4.00	.757
Nationally known retail outlets are available at airport.	500	3.96	.814
National chain restaurants are available at airport.	500	4.03	.777
The local cuisines are available at airport.	500	3.83	.783
A variety of specialty retail stores sell the local culture products at the airport.	500	3.84	.732
Valid N (listwise)	500		

(a) Each statement is assessed on five-point Likert scale from 1 = very unsatisfied to 5 = very satisfied, with 3 = neutral.

Table 5

Descriptive of Important of Airport Service Quality Attributes

	N	Mean [(a)]	Std. Deviation
An airport's external signs clearly direct me to airport services.	500	4.19	.804
Internal signs throughout an airport clearly directing me to airport.	500	4.19	.756
An airport's physical layout makes it easy to you to find what you need.	500	4.14	.761
A variety of ground transportation options to the nearest city are available.	500	4.14	.782
Baggage carts are conveniently located.	500	4.07	.733
Transferring or connecting flight is easily for you.	500	4.18	1.940
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.	500	3.92	.815
It upsets you when you have to wait in line more than ten minutes during check in process.	500	3.94	.878
You can exit the airplane within ten minutes of landing.	500	3.91	.812
Your complaints are responded to immediately at an airport.	500	3.99	.764
Employees at an airport available to offer you individualized attention.	500	4.03	.767
Employees at an airport respond do not busy to respond to your request promptly.	500	4.02	.803
Conference facilities are available to you at an airport so that you can conduct meetings.	500	3.91	.835
An airport has business centers.	500	3.90	.813
An airport should have quiet areas in which to nap, read, or do business.	500	3.95	.776
An airport's decor match the local culture of the city at which it is located.	500	3.97	.792
An airport display art.	500	3.92	.767
An airport has current décor.	500	3.98	.784
Nationally known retail outlets are available at airports.	500	3.98	.770
National chain restaurants are available at airports.	500	3.98	.737
The local cuisines are available at airports.	500	4.03	.768
A variety of specialty retail stores sell the local culture products at the airport.	500	4.06	.786
Valid N (listwise)	500		

(a) Each statement is assessed on five-point Likert scale from 1 = very unsatisfied to 5 = very satisfied, with 3 = neutral.

Table 6

Factor Analysis of Satisfaction of Airport Service Quality

Service Quality Attributes	Factor 1 Environment Service Provider	Factor 2 Personnel and Passengers' Relationship	Factor 3 Servicescape	Communalities
Factor 1: Environment Service Provider				
National chain restaurants are available at airports.	0.710			0.536
Nationally known retail outlets are available at airports.	0.694			0.532
An airport has current décor.	0.672			0.464
An airport display art.	0.651			0.433
An airport's decor match the local culture of the city at	0.634			0.414
An airport has business centers.	0.545			0.377
A variety of specialty retail stores sell the local culture	0.522			0.395
The local cuisines are available at airport	0.481			0.370
An airport should have quiet areas in which to nap or to do business	0.448			0.311
Factor 2: Personnel and Passengers' Relationship				
It upsets you when you have to wait in line more than ten minutes during check in process.		0.745		0.581
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.		0.734		0.556
Employees at an airport respond do not busy to respond to your request promptly.		0.675		0.495
You can exit the airplane within ten minutes of landing.		0.657		0.478
Your complaints are responded to immediately at airport		0.540		0.388
Conference facilities are available to you at an airport so that you can conduct meetings.		0.457		0.369
Employees at an airport available to offer you individualized attention.		0.453		0.351
Transferring or connecting flight is easily for you		0.426		0.368
Factor 3: Servicescape				
An airport's external signs clearly direct me to airport services.			0.800	0.649
Internal signs throughout an airport clearly directing me to airport.			0.789	0.659
An airport's physical layout makes it easy to you to find what you need			0.692	0.529
A variety of ground transportation options to the nearest city			0.603	0.434
Baggage carts are conveniently located.			0.440	0.317
Eiigenvalue	6.319	1.999	1.687	
Variance Explained (%)	28.273	9.086	7.67	
Cumulative Variance (%)	28.723	37.808	45.478	
Cronbach's alpha	0.817	0.801	0.758	

Note: Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA): 0.873 Bartlett's Test of Sphericity: 3444.000, p = 0.000

Table 7

Factor Analysis of Important of Airport Service Quality

Service Quality Attributes	Factor 1 Environment Service Provider	Factor 2 Personnel and Passengers' Relationship	Factor 3 Servicescape	Communalities
Factor 1: Environment Service Provider				
National chain restaurants are available at airports.	0.722			0.549
An airport has current décor.	0.714			0.534
An airport display art.	0.702			0.509
Nationally known retail outlets are available at airports.	0.636			0.446
The local cuisines are available at airports.	0.634			0.464
Conference facilities are available to you at an airport so that	0.594			0.425
An airport's decor match the local culture of the city at which it is located.	0.560			0.362
A variety of specialty retail stores sell the local culture	0.542			0.354
An airport has business centers.	0.495			0.370
Factor 2: Personnel and Passengers' Relationship				
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.		0.789		0.675
It upsets you when you have to wait in line more than ten minutes during check in process.		0.785		0.680
You can exit the airplane within ten minutes of landing.		0.671		0.534
Employees at an airport available to offer you individualized attention.		0.580		0.483
Your complaints are responded to immediately at an airport.		0.560		0.446
Employees at an airport respond do not busy to respond to your request promptly.		0.454		0.425
Factor 3: Servicescape				
Internal signs throughout an airport clearly directing me to airport.			0.792	0.686
An airport's external signs clearly direct me to airport services			0.735	0.600
An airport's physical layout makes it easy to you to find what you need.			0.734	0.592
A variety of ground transportation options to the nearest to city are available.			0.671	0.535
Eiigenvalue	6.809	1.833	1.632	
Variance Explained (%)	30.948	8.33	7.419	
Cumulative Variance (%)	30.948	39.278	46.697	
Cronbach's alpha	0.840	0.802	0.813	

Note: Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA): 0.886 Bartlett's Test of Sphericity: 4008.239, p = 0.000

Reliability of the Instrument of Satisfaction of Airport Service Quality Factors

Reliability of the scores for each of three factors was estimate by calculating Cronbach's alpha coefficient using SPSS version 11.0. The reliability coefficients for each of three factors of satisfaction of airport service quality scale were as follows: (1) Environment Service Provider (α= 0.82); (2) Personnel and Passengers' Relationship (α = 0.80); (3) Servicescape (α = 0.76). Since all of Cronbach's alpha coefficients for the scales were greater than 0.60, the scales were deemed acceptable (Fodness and Murray, 2007: 501). The reliability coefficients for the scales utilized in this study were reported in Table 8.

Table 8

Reliability of Each Satisfaction Measurement of Airport Service Quality

Measurement	Factor	Number of Items	Cronbach's Alpha
Airport Service Quality	1) Environment Service Provider	9	0.80
	2) Personnel and Passengers' Relationship	8	0.82
	3) Servicescape	5	0.76

Reliability of the Instrument of Important of Airport Service Quality Factors

Reliability of the scores for each of three factors was estimate by calculating Cronbach's alpha coefficient using SPSS version 11.0. The reliability coefficients for each of three factors of important of airport service quality scale were as follows: (1) Environment Service Provider (α= 0.84); (2) Personnel and Passengers' Relationship (α = 0.80); (3) Servicescape (α = 0.81). Since all of Cronbach's alpha coefficients for the scales were greater than .60, the scales were deemed acceptable (Fodness and Murray, 2007: 501). The reliability coefficients for the scales utilized in this study were reported in Table 9.

Table 9

Reliability of Each Important Measurement of Airport Service Quality

Measurement	Factor	Number of Items	Cronbach's Alpha
Airport Service Quality	1) Environment Service Provider	9	0.84
	2) Personnel and Passengers' Relationship	6	0.80
	3) Servicescape	4	0.81

Results of Hypotheses Testing

Multiple Regression Analysis

H_1: Passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction.

As shown in Table 10, the regression model considered overall passenger satisfaction to be the dependent variable and the three factors of airport service quality to be independent variables. The standard (simultaneous model), all independent variables (three factors of airport service quality) entered and utilized for the 500 respondents. The result of hypothesis1 indicated that the airport service quality factors had a positive influence on overall passenger satisfaction. The results of the regression model indicated that the regression model was statistically significant ($F (3, 496) = 65.624$, $p = .000$). The coefficient of determination (R^2) of 0.284 showed that 28% of the overall passenger satisfaction was explained by the three factors of airport service quality. The value of variance of inflation (VIF) indicated that there was no multicollinearity among the independent variables.

All of the three underlying factors; 1) Environment Service Provider, 2) Personnel and Passengers' Relationship and 3) Servicescape all appeared to be significant independent variables that influence on overall passenger satisfaction. The coefficients indicated that factor

1 – Environment Service Provider (Beta = 0.423) had the most positive impact on overall passenger satisfaction, followed by factor 3 – Servicescape (Beta = 0.306), factor 2 – Personnel and Passengers' Relationship (Beta = 0.110). Therefore, hypothesis 1 "Passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction" was supported.

Table 10

Regression Model of Hypothesis 1

H_1: Passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction.

Equation: $Y\_ (OCS) = a + B_1X_1 + B_2X_2 + B_3X_3 + \varepsilon$

$Y\_ (OCS) = 3.970 + .423X_1 + .110X_2 + .306X_3 + .597$

$Y\_$ = the predicted criterion score (overall passenger satisfaction)

X_1 = factor 1 – Environment Service Provider

X_2 = factor 2 – Personnel and Passengers' Relationship

X_3 = factor 3 – Servicescape

ε = standard error

a = a constant calculated from the scores of all participants

B= a coefficient that indicates the contribution of the predictor variable to the criterion variable

Dependent variable:	Overall Passenger Satisfaction
Independent variables:	Three Factors of Airport Service Quality
Multiple R =	0.533
R^2 =	0.284
Adjusted R^2 =	0.280
Standard Error =	0.597
F =	65.624
p =	0.000*

** $P \leq 0.05$

	Unstandardized Coefficient		Standardized Coefficient	
Variable	B	Std.Error	Beta	p
Constant	3.970	.027		.000*
F1: Environment Service Provider	.297	.027	.423	.000*
F2: Personnel and Passengers' Relationship	.077	.027	.110	.004*
F3: Servicescape	.215	.027	.306	.000*

**P≤.05

H_2: Passengers' importance perceptions of the airport service quality have positive influence on overall passenger satisfaction.

Table 11 explained the results of regression analysis of three factors of airport service quality as independent variable with overall passenger satisfaction as dependent variable. The standard (simultaneous model), all independent variables (three factors of airport service quality) entered and utilized for the 500 respondents. The result of hypothesis 2 indicated that the airport service quality factors had a positive influence on overall passenger satisfaction. The results of the regression model indicated that the regression model was statistically significant ($F (3, 496) = 44.694$, $p = 0.000$). The coefficient of determination (R^2) of 0.213 showed that 21% of the overall passenger satisfaction was explained by the three factors of airport service quality. The value of variance of inflation (VIF) indicated that there was no multicollinearity among the independent variables.

All of the three underlying factors; 1) Environment Service Provider, 2) Personnel and Passengers' Relationship and 3) Servicescape all appeared to be significant independent variables that influence on overall passenger satisfaction. The coefficients indicated that factor 3 - Servicescape (Beta = 0.356) had the most positive impact on overall passenger satisfaction, followed by factor 1 – Environment Service Provider (Beta = 0.221), and factor 2 – Personnel and Passengers' Relationship (Beta = 0.193). Therefore, hypothesis 2 "Passengers' important

perceptions of the airport service quality have positive influence on overall passenger satisfaction" was supported.

Table 11

Regression Model of Hypothesis 2

H_2: Passengers' important perceptions of the airport service quality have positive influence on overall passenger satisfaction.

Equation: $Y\_ (OCS) = a + B_1X_1 + B_2X_2 + B_3X_3 + \varepsilon$

$Y\_ (OCS) = 3.970 + .221X_1 + .193X_2 + .356X_3 + .626$

$Y\_$ = the predicted criterion score (overall passenger satisfaction)

X_1 = factor 1 – Environment Service Provider

X_2 = factor 2 – Personnel and Passengers' Relationship

X_3 = factor 3 – Servicescape

ε = standard error

a = a constant calculated from the scores of all participants

B= a coefficient that indicates the contribution of the predictor variable to the criterion variable

Dependent variable:	Overall Passenger Satisfaction
Independent variables:	Three Factors of Airport Service Quality
Multiple R =	0.461
R^2 =	0.213
Adjusted R^2 =	0.208
Standard Error =	0.626
F =	44.694
p =	0.000*

** $P \leq 0.05$

	Unstandardized Coefficient		Standardized Coefficient	
Variable	B	Std.Error	Beta	p
Constant	3.970	.028		.000*
F1: Environment Service Provider	.155	.028	.221	.000*
F2: Personnel and Passengers' Relationship	.136	.028	.193	.000*
F3: Servicescape	.250	.028	.356	.000*

**$P \leq .05$

One- Way Analysis of Variance

H_3: There is a significant difference in airport service quality factors based on passengers' demographic profile (purpose of travel, trip orientation, and frequency of travel).

One-way ANOVA was used to determine whether there were statistically significant differences in airport service quality factors based on passengers' demographic variables (purpose of travel, trip orientation, and frequency of travel). Passengers' demographic (purpose of travel, trip orientation, and frequency of travel) were treated as independent variables and airport service quality factors as dependent variables. If the results of the ANOVA were significant, Tukey's HSD test was carried out to assess the significance of pairwise post hoc differences. All the statistical significance tests were performed with the alpha level set at 0.05.

Factor 1 – Environment Service Provider

As shown in Table 12, the results of the ANOVA indicated that there were significant difference in airport service quality factor 1 based on purpose of travel ($F (5, 494) = 2.328$, $p = 0.042$) and frequency of travel ($F (5, 494) = 2.543$, $p = 0.028$). The result of the post hoc analysis showed that the respondents' frequency of travel had significant difference of passengers' travel one time and more than five times. In addition, there were no statistically significant differences in airport service quality factor 1 – Environment Service Provider based on trip orientation ($p > .05$).

Table 12

ANOVA of Airport Service Quality Factor 1 – Environment Service Provider by Purpose of Travel

Sources	Sum of Squares	df	Mean Square	F	P
Purpose of Travel	11.489	5	2.298	2.328	.042*
Error	487.511	494	.987		
Total	499.000	499			

** P≤.05

ANOVA of Airport Service Quality Factor 1 – Environment Service Provider by Frequency of Travel

Sources	Sum of Squares	df	Mean Square	F	P
Frequency of Travel	12.523	5	2.505	2.543	.028*
Error	486.477	494	.985		
Total	499.000	499			

**P≤.05

Factor 2 – Personnel and Passengers' Relationship

As shown in Table 13, the results of the ANOVA indicated that there were significant difference in airport service quality factor 2 based on trip orientation (F (2, 497) = 5.982, p = 0.003) and frequency of travel (F (5, 494) = 2.936, p = 0.013). The result of the post hoc analysis showed that the respondents' trip orientation had significant difference between departure and arrival at the airport. And the respondents' frequency of travel had significant difference among two groups. First, the respondents' frequency of travel had significant difference of passengers' travel two times and five times. Second, the respondents' frequency

of travel had significance of passengers' travel three times and five times. In addition, there were no statistically significant differences in airport service quality factor 2 – Personnel and Passengers' Relationship based on purpose of travel (p > .05).

Table 13

ANOVA of Airport Service Quality Factor 2 – Personnel and Passengers' Relationship by Trip Orientation

Sources	Sum of Squares	df	Mean Square	F	P
Trip Orientation	11.730	2	5.865	5.982	.003*
Error	487.270	497	.980		
Total	499.000	499			

** P≤.05

ANOVA of Airport Service Quality Factor 2 – Personnel and Passengers' Relationship by Frequency of Travel

Sources	Sum of Squares	df	Mean Square	F	P
Frequency of Travel	14.402	5	2.880	2.936	.013*
Error	484.598	494	.981		
Total	499.000	499			

** P≤.05

Factor 3 – Servicescape

As shown in Table 14, the results of the ANOVA indicated that there were significant difference in airport service quality factor 3 based on purpose of travel (F (5, 494) = 2.452, p = 0.033) and frequency of travel (F (5, 494) = 2.983, p = 0.012). The result of the post

hoc analysis showed the respondents' frequency of travel had significant difference among two groups. First, the respondents' frequency of travel had significant difference of passengers' travel two times and five times. Second, the respondents' frequency of travel had significance of passengers' travel five times and two times. In addition, there were no statistically significant differences in airport service quality factor 3 – Servicescape based on trip orientation ($p > .05$).

Table 14

ANOVA of Airport Service Quality Factor 2 – Personnel and Passengers' Relationship by Purpose of Travel

Sources	Sum of Squares	df	Mean Square	F	P
Purpose of Travel	12.086	5	2.417	2.452	.033*
Error	486.914	494	.986		
Total	499.000	499			

** P≤.05

ANOVA of Airport Service Quality Factor 2 – Personnel and Passengers' Relationship by Frequency of Travel

Sources	Sum of Squares	df	Mean Square	F	P
Frequency of Travel	14.627	5	2.925	2.983	.012*
Error	484.373	494	.981		
Total	499.000	499			

**P≤.05

H_4: There is a significant difference in airport service quality factors between types of passengers (Thai and Foreigner).

One-way ANOVA was used to determine whether there was a statistically significant difference in airport service quality factors (Factor 1 – Environment Service Provider, Factor 2 – Personnel and Passengers' Relationship, and Factor 3 - Servicescape) with the type of passengers (Thai and Foreigner). If the results of the ANOVA were statistically significant, Tukey's HSD test was carried out to assess the significance of pairwise post hoc differences. Type of passengers (Thai and Foreigner) was treated as independent variable and airport service quality factors as dependent variable.

As shown in Table 15, the results of the ANOVA revealed that there was statistically significant difference in airport service quality factor 2 – Personnel and Passengers' Relationship ($F(1, 498) = 12.024$, $p = 0.001$) between Thai and foreigner. Since there were fewer than three groups, therefore, pairwise comparison using Tukey's HSD was not used to test for means of airport service quality factor 2 – Personnel and Passengers' Relationship between Thai and foreigner.

Table 15

ANOVA of Airport Service Quality Factor between Thai and Foreigner

Sources	Sum of Squares	df	Mean Square	F	P
Passengers	11.765	1	11.765	12.024	.001*
Error	487.235	498	.978		
Total	499.000	499			

**P≤.05

Independent-Samples t Test

Independent-samples t test was used to compare the means among Thai and foreigner passengers. In order to compare the responses of Thai and foreigner passengers relative to the 22 airport service quality attributes. The results showed that the test for homogenously of variance was achieved through. The use of Levene test for equality of variance. Since the test is significant ($p < 0.05$), the researcher rejected the null hypothesis and accepted the alternative hypothesis that the variances are unequal.

The Satisfaction of Airport Service Quality

Table 16, Independent-samples t test was used to compare the means of satisfaction of airport service quality among Thai and foreigner passengers. In order to compare the responses of Thai and foreigner passengers relative to the 22 airport service quality attributes. Table 17, the independent-samples t test analysis indicated that the satisfaction of airport service quality of foreigner passengers had a higher means than Thai passengers. There was ten airport service quality attributes were significant relative to Thai and foreigner passengers at Suvarnabhumi International Airport:

1. A variety of ground transportation options to the nearest city are available.
2. Transferring or connecting flight is easily for you.
3. It upsets you when you have to wait more than ten minutes to receive your baggage after flight.
4. It upsets you when you have to wait in line more than ten minutes during check in process.
5. You can exit the airplane within ten minutes of landing.
6. Employees at an airport available to offer you individualized attention.
7. Conference facilities are available to you at an airport so that you can conduct meetings.
8. Employees at an airport respond do not busy to respond to your request promptly.
9. The local cuisines are available at airport.
10. A variety of specialty retail stores sell the local culture products at the airport.

Table 16

Independent-Samples t Test of Satisfaction of Airport Service Quality by Type of Passengers (n = 500)

Airport Service	Thai n = 249	Foreigner n = 251	Equal Variances Not Assumed		
			Mean	t	Sig.
Quality Attributes	Mean (SD)	Mean (SD)	Difference		(2 tailed)
An airport's external signs clearly direct me to airport services	3.88(0.91)	3.97(0.81)	-0.0846	-1.095	0.274
Internal signs throughout an airport clearly directing me to airport.	3.91(0.82)	3.97(0.68)	-0.0605	-0.898	0.370
An airport's physical layout makes it easy to you to find what you need.	3.89(0.79)	3.98(0.72)	-0.0925	-1.375	0.170
A variety of ground transportation options to the nearest city are available.	3.84(0.81)	4.05(0.73)	-0.2085	-3.038	0.003*
Baggage carts are conveniently located.	3.91(0.76)	4.02(0.70)	-0.1163	-1.790	0.074
Transferring or connecting flight is easily for you.	3.88(0.80)	4.09(0.69)	-0.2041	-3.045	0.002*
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.	3.64(1.09)	3.92(0.90)	-0.2738	-3.066	0.002*
It upsets you when you have to wait in line more than ten minutes during check in process.	3.45(1.04)	3.73(0.88)	-0.2753	-3.198	0.001*
You can exit the airplane within ten minutes of landing.	3.68(0.82)	3.82(0.75)	-0.1460	-2.067	0.039*
Your complaints are responded to immediately at an airport.	3.74(0.89)	3.82(0.81)	-0.0778	-1.018	0.309
Employees at an airport available to offer you individualized attention.	3.82(0.85)	3.97(0.73)	-0.1569	-2.207	0.028*
Employees at an airport respond do not busy to respond to your request promptly.	3.69(0.91)	3.84(0.81)	-0.1579	-2.046	0.041*
Conference facilities are available to you at an airport so that you can conduct meetings.	3.78(0.79)	3.95(0.78)	-0.1731	-2.462	0.014*
An airport has business centers.	3.93(0.80)	3.97(0.90)	-0.0364	-0.479	0.632
An airport should have quiet areas in which to nap, read, or do business.	3.78(0.92)	3.90(0.85)	-0.1212	-1.532	0.126
An airport's decor match the local culture of the city at which it is located.	4.00(0.78)	4.02(0.77)	-0.0159	-0.230	0.818
An airport display art.	3.93(0.83)	3.96(0.77)	-0.0284	-0.397	0.692
An airport has current decor	4.02(0.80)	3.98(0.71)	0.0320	0.472	0.637
Nationally known retail outlets are available at airport.	3.92(0.83)	4.00(0.80)	-0.0763	-1.049	0.295
National chain restaurants are available at airport.	4.00(0.80)	4.04(0.76)	-0.0398	-0.572	0.568
The local cuisines are available at airport.	3.73(0.82)	3.92(0.74)	-0.1894	-2.722	0.007*
A variety of specialty retail stores sell the local culture products at the airport.	3.5(0.78)	3.92(0.67)	-0.1613	-2.477	0.014*

** $P \leq .05$

Table 17 showed how Thai and foreigners rated the satisfaction of airport service quality attributes at Suvarnabhumi International Airport. With regard to the ten attributes Thai and foreigner passengers stated that “transferring or connecting flight is easily for you” was the most important attributes, followed closely by “a variety of ground transportation options to the nearest city are available”, and “employees at an airport available to offer you individualized attention”. The findings showed that the top five attributes of airport service quality for the Thai passengers that reflected the perspective of the mean value of airport service quality at Suvarnabhumi International Airport were: 1) transferring or connecting flight is easily for you (3.88), 2) a variety of ground transportation options to the nearest city are available (3.84), 3) employees at an airport available to offer you individualized attention (3.82), 4) conference facilities are available to you at an airport so that you can conduct meetings (3.78), and 5) the local cuisines are available at airport (3.73). The top five attributes of airport service quality for the foreigner passengers that reflected the perspective of the mean value of airport service quality at Suvarnabhumi International Airport were: 1) transferring or connecting flight is easily for you (4.09), 2) a variety of ground transportation options to the nearest city are available (4.05), 3) employees at an airport available to offer you individualized attention (3.97), 4) conference facilities are available to you at an airport so that you can conduct meetings (3.95), and 5) the local cuisines are available at airport (3.92).

The Important of Airport Service Quality

Table 18, Independent-samples t test was used to compare the means of the important of airport service quality among Thai and foreigner passengers. In order to compare the responses of Thai and foreigners passengers relative to the 22 airport service quality attributes. The results of the independent-samples t test analysis indicated that the important of airport service quality of Thai passengers had not different means of foreigner passengers. The twenty-two airport service qualities were not significant differences to Thai and foreigner passengers at Suvarnabhumi International Airport.

Table 17

Ten Satisfaction of Airport Service Quality Attributes by Type of Passengers (n = 500)

Airport Service Quality Attributes	Thai n = 249 Mean (SD)	Foreigner n = 251 Mean (SD)	Equal Variances Not Assumed Mean Difference	t	Sig. (2 tailed)
A variety of ground transportation options to the nearest city are available.	3.84(0.81)	4.05(0.73)	-0.2085	-3.038	0.003*
Transferring or connecting flight is easily for you.	3.88(0.80)	4.09(0.69)	-0.2041	-3.045	0.002*
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.	3.64(1.09)	3.92(0.90)	-0.2738	-3.066	0.002*
It upsets you when you have to wait in line more than ten minutes during check in process.	3.45(1.04)	3.73(0.88)	-0.2753	-3.198	0.001*
You can exit the airplane within ten minutes of landing.	3.68(0.82)	3.82(0.75)	-0.1460	-2.067	0.039*
Employees at an airport available to offer you individualized attention.	3.82(0.85)	3.97(0.73)	-0.1569	-2.207	0.028*
Employees at an airport respond do not busy to respond to your request promptly.	3.69(0.91)	3.84(0.81)	-0.1579	-2.046	0.041*
Conference facilities are available to you at an airport so that you can conduct meetings.	3.78(0.79)	3.95(0.78)	-0.1731	-2.462	0.014*
The local cuisines are available at airport.	3.73(0.82)	3.92(0.74)	-0.1894	-2.722	0.007*
A variety of specialty retail stores sell the local culture products at the airport.	3.50(0.78)	3.92(0.67)	-0.1613	-2.477	0.014*

**P≤.05

Table 18

Independent-Samples t Test of Important of Airport Service Quality by Type of Passengers (n = 500)

Airport Service Quality Attributes	Thai n = 249 Mean (SD)	Foreigner n = 251 Mean (SD)	Equal Variances Not Assumed Mean Difference	t	Sig. (2 tailed)
An airport's external signs clearly direct me to airport services	4.14(0.83)	4.24(0.78)	-0.102	-1.427	0.154
Internal signs throughout an airport clearly directing me to airport.	4.20(0.78)	4.18(0.73)	0.030	0.436	0.663
An airport's physical layout makes it easy to you to find what you need.	4.14(0.75)	4.15(0.77)	-0.011	-0.159	0.873
A variety of ground transportation options to the nearest city are available.	4.11(0.81)	4.17(0.76)	-0.059	-0.841	0.401
Baggage carts are conveniently located.	4.03(0.76)	4.12(0.70)	-0.091	-1.395	0.164
Transferring or connecting flight is easily for you.	4.20(2.65)	4.16(0.72)	0.041	0.239	0.811
It upsets you when you have to wait more than ten minutes to receive your baggage after flight.	3.94(0.82)	3.90(0.81)	0.035	0.484	0.628
It upsets you when you have to wait in line more than ten minutes during check in process.	3.97(0.93)	3.90(0.82)	0.068	0.859	0.391
You can exit the airplane within ten minutes of landing.	3.95(0.78)	3.87(0.84)	0.075	1.037	0.300
Your complaints are responded to immediately at an airport.	4.04(0.83)	3.95(0.69)	0.084	1.230	0.219
Employees at an airport available to offer you individualized attention.	4.04(0.81)	4.01(0.72)	0.032	0.469	0.639
Employees at an airport respond do not busy to respond to your request promptly.	4.00(0.85)	4.03(0.76)	-0.032	-0.443	0.658
Conference facilities are available to you at an airport so that you can conduct meetings.	3.85(0.78)	3.97(0.88)	-0.121	-1.620	0.106
An airport has business centers.	3.92(0.83)	3.88(0.80)	0.035	0.483	0.629
An airport should have quiet areas in which to nap, read, or do business.	3.94(0.80)	3.96(0.76)	-0.024	-0.351	0.725
An airport's decor match the local culture of the city at which it is located.	3.91(0.82)	4.04(0.76)	-0.132	-1.872	0.062
An airport display art.	3.93(0.78)	3.90(0.75)	0.027	0.398	0.691
An airport has current decor	3.95(0.82)	4.00(0.75)	-0.052	-0.744	0.457
Nationally known retail outlets are available at airport.	3.98(0.76)	3.98(0.78)	-0.008	-0.118	0.906
National chain restaurants are available at airport.	3.97(0.77)	4.00(0.70)	-0.028	-0.427	0.670
The local cuisines are available at airport.	4.00(0.77)	4.06(0.77)	-0.052	-0.753	0.452
A variety of specialty retail stores sell the local culture products at the airport.	4.08(0.80)	4.04(0.77)	0.048	0.689	0.491

**$P \leq .05$

Chapter Summary

The sample size was sufficient to measure all of the research hypotheses. The reliability coefficients for each of the three factors of the airport service quality scale were as follows: (1) Environment Service Provider (α= 0.82); (2) Personnel and Passengers' Relationship (α = 0.80); (3) Servicescape (α = 0.76). Since all of Cronbach's alpha coefficients for the scales were greater than .60, the scales were deemed acceptable (Fodness and Murray, 2007: 501).

The following summaries the results of hypotheses testing were: Hypothesis 1: Passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction was accepted. Hypothesis 2: Passengers' important perceptions of the airport service quality have positive influence on overall passenger satisfaction was accepted. Hypothesis 3: There is a significant difference in airport service quality factors based on passengers' demographic profile (purpose of travel, trip orientation, and frequency of travel) was accepted. Hypothesis 4: There is a significant difference in airport service quality factors between type of passengers (Thai and foreigner) was accepted. In comparing the means of airport service quality attributes among of Thai and foreigner passengers were significant difference. There was ten airport service quality attributes were significant relative to Thai and foreigner passengers at Suvarnabhumi International Airport.

CHAPTER V

CONCULSIONS

Based on the results of the research, it clearly states that the independent variables influenced the airport service quality at Suvarnabhumi International Airport. The purpose of this study was to contribute to the development of a conceptual model of perceived service quality in airports by adapting the concept of expectations underlies the selection of Fodness and Murray's (2007: 492-506) methodology for measuring service quality with focus on passenger perceived service quality. The study focused on Thai and Foreigner passengers at Suvarnabhumi International Airport, and considered the influence of demographics by focusing on purpose of travel, trip orientation, and frequency of travel.

This study was developed to provide insights into the process of service quality measurement at Suvarnabhumi International Airport and to contribute to the knowledge base in airport service quality theory and practice. This research explores existing practitioner and academic perspectives on airport service quality; develops and proposes a conceptual model of passengers' perceptions of airport service quality from passengers who had travel by departure, arrival, or transit at Suvarnabhumi International Airport; discusses the implications of the study results for airport service quality theory and practice, and offers managerial implication for measurement and management of airport service quality at airports. This chapter consists of four sections: 1) Discussions of the Study, 2) Managerial Implications, and 3) Implication for Future Research.

Discussions of the Study

The researcher collected data from 500 passengers who had travel by departure, arrival, or transit at Suvarnabhumi International Airport, which 249 Thai passengers (49.8%) and 251 foreigners' passengers (50.2%). The questionnaires were used in this study, and consisted of 4 parts: 1) Passengers' satisfaction perception of airport service quality, 2) Passengers' importance perception of airport service quality, and 3) Overall Service Quality, and 4) Demographic Profile.

As the results of descriptive statistics of demographic profiles, gender distribution was 252 female (50.4%) and 248 male (49.6%). The major purpose of travel of respondents were 150 respondents (30.0%) for vacation/pleasure, 113 respondents (22.6%) for work, 94 respondents (18.8%) for visit friends/relatives, 58 respondents (11.6%) for education, 56 respondents (11.2%) for business/professional, and 29 respondents (5.8%) for others purposed. The trip orientation of Suvarnabhumi International Airport consisted of 265 respondents (53%) were arrival, 198 respondents (39.6%) were departure, and 37 respondents (7.4%) were transit the flight. The respondents used Suvarnbhumi International Airport to travel in the last 12 months were: 2 times with 153 respondents (30.6%), 3 times with 86 respondents (17.2%), more than 5 times with 81 respondents (16.2%), one time with (14.8%), 5 times with 58 respondents (11.6%), and 4 times with 48 respondents (9.6%).

The results of principal component analysis (factor analysis) with varimax rotation, the 22 attributes of airport service quality at Suvarnabhumi International Airport were grouped into three factors. The first factor was labeled as “Environment Service Provider,” consisted of nine variables. The second factor was labeled as “Personnel and Passengers’ Relationship,” consisted of eight variables. Finally, the third factor was labeled as “Servicescape”, consisted of five variables

The findings of this study indicated that the reliability coefficients of three factors of passengers’ satisfaction perception were: factor 1 – Environment Service Provider (α= 0.82), factor 2 - Personnel and Passengers’ Relationship (α = 0.80), and factor 3 - Servicescape (α = 0.76). And the Conbrach’s alpha coefficients of three factors of passengers’ important perception were: factor 1 - Environment Service Provider (α= 0.84), factor 2 - Personnel and Passengers’ Relationship (α = 0.80), and factor 3 - Servicescape (α = 0.81). Since all Conbrach’s alpha coefficients for the scales were greater than 0.60, the scales were deemed acceptable (Fodness and Murray, 2007: 501).

To test hypothesis 1 and 2, a linear multiple regression analysis was performed to identify the positive impact of airport service quality factors and overall passenger satisfaction. The result of hypothesis 1 indicated that passengers’ satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction. The coefficients indicated that factor 1 – Environment Service Provider had the most positive impact on overall passenger satisfaction, followed by factor 3 – Servicescape, factor 2 – Personnel and

Passengers' Relationship. Therefore, hypothesis 1 "Passengers' satisfaction perceptions of the airport service quality have positive influence on overall passenger satisfaction" was supported.

The result of hypothesis 2 indicated that the airport service quality factors of passengers' important perception had a positive influence on overall passenger satisfaction. The coefficients indicated that factor 3 - Servicescape had the most positive impact on overall passenger satisfaction, followed by factor 1 – Environment Service Provider, and factor 2 – Personnel and Passengers' Relationship. Therefore, hypothesis 2 "Passengers' important perceptions of the airport service quality have positive influence on overall passenger satisfaction" was supported.

In comparing the perception of airport service quality attributes and passengers' demographic profiles (purpose of travel, trip orientation, and frequency of travel) among Thai and foreigner passengers, there were significant differences in airport service quality attributes among Thai and foreigner passengers. The result of hypothesis 3 indicated that there was a significant difference in airport service quality factors of passengers' satisfaction perception based on demographic variables. The findings showed that factor 1 - Environment Service Provider, and factor 3 – Servicescape were significant difference based on purpose of travel and frequency of travel. And Airport service quality factor 2 – Personnel and Passengers' Relationship was significant difference based on trip orientation and frequency of travel. Therefore, hypothesis 3 "There is a significant difference in airport service quality factors based on passengers' demographic profile" was supported.

The result of hypothesis 4 indicated that there was a significant difference in airport service quality factor 2 – Personnel and Passengers' Relationship between Thai and foreigner. Therefore, hypothesis 4 "There is a significant difference in airport service quality factors between types of passengers (Thai and foreigner)" was supported.

The independent-samples t test analysis indicated that the satisfaction of airport service quality of foreigner passengers had a higher means than Thai passengers. The findings showed that the top five attributes of airport service quality for the foreigner passengers that reflected the perspective of the mean value of airport service quality at Suvarnabhumi International Airport were: 1) transferring or connecting flight is easily for you, 2) a variety of ground transportation options to the nearest city are available, 3) Employees at an airport available to offer you individualized attention, 4) conference facilities are available to you at an

airport so that you can conduct meetings, and 5) the local cuisines are available at airport. And the top five attributes of airport service quality for the Thai passengers that reflected the perception of the mean value of airport service quality at Suvarnabhumi International Airport were: 1) transferring or connecting flight is easily for you, 2) a variety of ground transportation options to the nearest city are available, 3) employees at an airport available to offer you individualized attention, 4) conference facilities are available to you at an airport so that you can conduct meetings, and 5) the local cuisines are available at airport.

The results of the independent-samples t test analysis indicated that the important of airport service quality of Thai passengers had not different means of foreigner passengers. The twenty-two airport service qualities were not significant differences to Thai and foreigner passengers at Suvarnabhumi International Airport.

Managerial Implication

Understanding the relationship between airport service quality and management is important. However, it is perhaps more useful managerially to identify specific variables of airport service quality that most relate to the passengers as appropriate intervention strategies can be formulated. This study has clear implications for service quality measurement and management at airports. The most obvious is that in order for airport service quality strategies and tactics to yield the desired results, service quality of airports must be defined by and measured from passengers themselves.

Airport worldwide have been pressured to significantly change their management technique in maintaining service standards and competing globally. In this age, an essential item for final analysis customer satisfaction, which truly defines the true meaning of present economic activity (Chien et al., 2003). While airports have been driven by profit, and motivated to develop services and products to their customers, they also face challenges in security and other political concerns.

This study offers direction for managers who seek to use service quality as a critical component of their airport's competitive strategy. Customer-driven service quality enhancements affect not only passengers' perceptions, but also the overall attractiveness of the airport relative to its competitors. Thus, allocating an appropriate amount of resources to the

key factors of airport service quality can increase the likelihood of being perceived by a passenger as the best choice, relative to the alternatives available.

In this study, to increase airport service quality that influences passengers' satisfaction, managers should focus on these 10 attributes:

1. A variety of ground transportation options to the nearest city are available.
2. Transferring or connecting flight is easily for you.
3. It upsets you when you have to wait more than ten minutes to receive your baggage after flight.
4. It upsets you when you have to wait in line more than ten minutes during check in process.
5. You can exit the airplane within ten minutes of landing.
6. Employees at an airport available to offer you individualized attention.
7. Conference facilities are available to you at an airport so that you can conduct meetings.
8. Employees at an airport respond do not busy to respond to your request promptly.
9. The local cuisines are available at airport.
10. A variety of specialty retail stores sell the local culture products at the airport.

Implication for Future Research

This study holds implications for further research in the services, service quality and airport service quality and passenger satisfaction domains. Significant contributions could result from additional study of the relationships among service quality, servicescape, service provider, and service experience. Based on the results of this research, the others researchers should develop a formal survey instrument to be administered to various airport stakeholders at large, medium, and small hub airports. The satisfaction of passengers' perception of airport service quality factors will be used to determine the relative importance of the identified airport quality factors to each group. For further study, there are two critical investigations are needed: first, the relationships between airport service quality and other important airport performance measures. Second, the relative importance of service quality in the passengers' airport choice decision is currently the subject of speculation requiring empirical inquiry and specification.

REFERENCES

Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, 54, 69-82.

Bitner, M.J. (1992). Servicescapes: the impact of physical surroundings on customers and employees. *Journal of Marketing*, 56, April, 57-71.

Bomenblit, A. (2002). Hong Kong International Tops Study. *Business Travel News*, 19, October, 6.

Brady, M.K. & Cronin, J.J. Jr. (2001). Some new thoughts on conceptualizing perceived service quality: a hierarchical approach. *Journal of Marketing*, 65, July, 34-49.

Chang, K. (1998). *A Systems View of Quality on Fitness Services: Development of a Model and Scales.* Unpublished Doctoral Dissertation, Ohio State University, Columbus, OH.

Chen, H-L. (2002). Benchmarking and quality improvement: a quality benchmarking deployment approach. *International Journal of Quality & Reliability Management*, 19960, 757-773.

Chien, T., Chang, T. & Su, C. (2003). Did your efforts really6 win customers' satisfaction? *Industrial Management and Data Systems*, Vol. 4, No. 103, 253-262.

Churchill, G.A. Jr. (1979). A paradigm for developing better measures of marketing constructs.

Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing 56*(7), 55-68.

Darko, K.L. (1999). Taking the high road. *American Demographics*, October, 36-39.

Doganis, R. (1992). *The Airport Business*. Routledge, London.

Espinoza, M. M. (1999). Assessing the cross-cultural applicability of a service quality measure: a comparative study between Quebec and Peru. *International Journal of Service Industry Management* 10(5), 448-449.

Farahani, A. F. & Törmä, A. (2010). Assessment of Customers' Service Quality Expectations. Unpublished master research, Umea School of Business. 1-72.

Fodness, D. (1994). Measuring tourist motivation. *Annals of Tourism Research* 21(3), 555-581.

Fodness, D., & Murray, B. (2007). Passengers' expectations of airport service quality, *Journal of Services Marketing*, 21(7), 492-506.

Freathy, P. & O'Connell, F. (2000). Market segmentation in the European airport sector. *Market Intelligence & Planning* 18(3), 102-111.

Getz, D., O'Neill, M., & Carlsen, J. (2001). Service quality evaluation at events through service mapping. *Journal of Travel Research*, 39(5), 380-390.

Gilbert, G.R. & Veloutsou, C. (2006). A cross-industry comparison of customer satisfaction. *Journal of Services Marketing 20*(5), 298-308.

Graham, A. (2005). Airport benchmarking: a review of the current situation. *Benchmarking: An International Journal* 12(2), 99-111.

Graham, A., & Dennis, N. (2007). Airport traffic and financial performance: a UK and Ireland case study. *Journal of Transport Geography* 15(3), 161-171.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis* (5 ed.) Upper Saddle River, NJ: Prentice Hall.

Herstein, R. & Gamliel, E. (2006). The role of private branding in improving service quality. *Managing Service Quality 16*(3), 306-319.

Heung, V.C.S., Wong, M.Y. & Qu, H. (2000). Airport-restaurant service quality in Hong Kong, *Cornell Hotel and Restaurant Administration Quarterly*, 41, 86-96.

Israel, G.D. (1992). *Sampling the Evidence of Extension Program Impact*. Program Evaluation and Organizational Development, IFAS, University of Florida. PEOD-5. October.

Keppel, G., & Wickens, T.D. (1997). *Design and Analysis* (4 ed.). Upper Saddle River, NJ: Prentice Hall.

Landrum, H., & Prybutok, V.R. (2004). A Service Quality and Success Model for the Information Service Industry. *European Journal of Operational Research*, 156, 628-642.

LaTour, S.A., & Peat, N.C. (1979). Conceptual and Methodlogical Issues in Consumer Satisfaction Research. *Advances in Consumer Research. 432-437.*

Lau, P.M., Akbar, A.K., & Fie, D.Y.G. (2005). Service Quality: Study of The Luxury Hotel in Malaysia. *Journal of American Academy of Business*, 7(2), 46-55.

Lee, G.G., & Lin, H. F. (2005). Customer Perceptions of E-Service Quality in Online Shopping. *International Journal of Retail & Distribution Management*, 33(2/3), 161-176.

Lubbe, B., Douglas, A., & Zamebllis, J. (2010). An application of the airport service quality model in South Africa. *Journal of Air Transport Management*, 1-4.

Lewis, R.C., & Booms, B.H. (Eds.). (1983). *The Marketing Aspects of Service Quality*. Chicago: American Marketing.

Magri, A.A. Jr., & Alves, C.J.P. (2005). Passenger terminals at Brazilian airports: an evaluation of quality. *Journal of Brazilian Air Transportation*, 1, 9-17.

Martin-Cejas, R.R.(2006), Tourism service quality begins at the airport. *Tourism Management*, 27, 874-877.

Naiwikul, S. (2007). *Satisfaction of the Airport Users on the Service of Ubon Ratchathani International Airport, Thailand*. Unpublished Master Research, Ubon Ratchathani Rajabhat University.

Newman, K., & Pyne, T. (1996). Quality matters: junior doctors perceptions. *Journal of Management in Medicine 10*(4), 12-23.

Nunnally, J.C. (1967) *Psychometric Theory*. New York: McGraw-Hill.

Oliver, R.L. (Ed.). (1993). *A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts*, Greenwich: JAI Press, Vol. 2.

_____ (1996). *Satisfaction: A Behavioral Perspective on the Consumer*, New York: McGraw-Hill. 14.

Oum, T.H., Yu, C., & Fu, X. (2003). A comparative analysis of productivity performance of the world's major airports: summary report of the ATRS global airport benchmarking research report-2002. *Journal of Air Transportation Management*, 9(5). 285-297.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A Conceptual Model of Service Quality and It's Implication for Future Research. *Journal of Marketing*, 49(3), 25-46.

_____ (1985). A Conceptual Model of Service Quality and Its Implication for Future Research. *Journal of Marketing*, 49(4), 41-50.

_____ (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, Spring, 12-40.

Parasuraman, A., Berry, L.L, & Zeithaml, V.A. (1991). Perceived service quality as a customer-based performance measure: An empirical examination of organizational barriers using an extended service quality model. *Human Resource Management 30*(3), 335-364.

Park, J.W. (2006). The Effects of Individual Dimensions of Airline Service Quality: Findings From Australian Domestic Air Passengers, *Journal of Hospitality and Tourism Management*, 13(2). 161-176.

_____ (2007). Passenger Perceptions of Service Quality: Korean and Australian Case Studies, *Journal of Air Transport Management*, 13, 238-242.

Paternoster, J. (2008). Excellent airport customer service meets successful branding strategy. *Airport Management 2*(3), 218-226.

Piyajitmetta, P. (2003). *Factors Affecting to Thai Passengers' Total Satisfaction on Service of Thai Airways International in Bangkok Metropolitan Area: A Case Study of Sector Bangkok – Hong Kong – Bangkok.* Unpublished Master Research, UbonRatchathani Rajabhat University.

Rhoades, D.L., Waguespack, B. Jr., & Young, S. (2000). Developing a quality index for US airports, *Managing Service Quality*, 10(4), 257-262.

Reimer, A. & Kuehn, R. (2005). The impact of servicescape on quality perception. *European Journal of Marketing* 39(7/8), 785-808.

Ruyter, K.D., Wetzels, M., & Lemmink, J. (1996). The power of perceived service quality in international marketing channels. *European Journal of Marketing 30*(12), 22-38.

Sohail, M.S., & Al-Gahtani, A.S. (2005). Measuring service quality at King Fahd International Airport. *International Journal Services and Standards*, 1(4), 482-493.

Spreng, R.A., & MacKoy, R.D. (1996). An Empirical Examination of a Model of Perceived Service Quality and Satisfaction. *Journal of Retailing*, 72(2), 201-214.

Farahani, A. F. & Törmä, A. (2010). Assessment of Customers' Service Quality Expectations. Unpublished master research, Umea School of Business. 1-72.

Walker, J., & Baker, J. (2000). An exploratory study of a multi-expectation framework for services. *Journal of Services Marketing 14*(5), 411- 431.

Woodside, A.G., Frey, L.L., & Daly, R.T. (1989). Linking Service Quality, Customer Satisfaction, and Behavioral Intention. *Journal of Health Care Marketing*, 9 (December), 5-17.

Yeh, C-H., & Kuo, Y-L. (2002). Evaluating passenger services of Asia-Pacific international airports. *Transportation Research Part E*, 39-48.

Yu, C.H., Chang, H.C., & Huang, G.L. (2006). A Study of Service Quality, Customer Satisfaction and Loyalty in Taiwanese Leisure Industry. *The Journal of American Academy of Business*, 9(1), 126-132.

Zakaria, Z., Hussin, Z.H., Batau, M.F.A., & Zakaria, Z. (2010). Service Quality of Malaysian Public Transports: A Case Study in Malaysia. *Cross-Cultural Communication*, 6(2), 84-92.

Appendix A

English Questionnaire

Questionnaire No. ……

Questionnaire

Part I: Satisfaction of Airport Service Quality

Directions: The following set of statement relates to your perception of airport service quality at Suvarnabhumi International Airport. For each statement following, please circle a number based on a scale from 1 = Very Unsatisfied, 2= Unsatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very Satisfied

	Very Unsatisfied		Neutral		Very Satisfied
Function					
1. An airport's external signs clearly direct me to airport services such as parking, car rentals, terminals, etc.	1	2	3	4	5
2. Internal signs throughout an airport clearly directing me to airport facilities (baggage, ticket counters, security, restrooms, rental cars, transportation services, etc.)	1	2	3	4	5
3. An airport's physical layout make it easy to you to find what you need (i.e. restaurants, restrooms, gates, etc.)	1	2	3	4	5
4. A variety of ground transportation options to the nearest city are available.	1	2	3	4	5
5. Baggage carts are conveniently located.	1	2	3	4	5
6. Transferring or connecting flight is easily for you.	1	2	3	4	5
7. It upsets you when you have to wait more than ten minutes to receive your baggage after a flight.	1	2	3	4	5

next page →

	Very Unsatisfied		Neutral		Very Satisfied
8. It upsets you when you have to wait in line more than ten minutes during the check in process.	1	2	3	4	5
9. You can exit the airplane within ten minutes of landing.	1	2	3	4	5
Interaction					
10. Your complaints are responded to immediately at an airport.	1	2	3	4	5
11. Employees at an airport available to offer you individualized attention.	1	2	3	4	5
12. Employees at an airport do not busy to respond to you requests promptly.	1	2	3	4	5
Diversion					
13. Conference facilities are available to you at an airport so that you can conduct meetings.	1	2	3	4	5
14. An airport has business centers, which provides personal computers, phones, and faxes.	1	2	3	4	5
15. An airport should have quiet areas in which to nap, read, or do business.	1	2	3	4	5
16. An airport's décor match the local culture of the city at which it is located.	1	2	3	4	5
17. An airport display art.	1	2	3	4	5
18. An airport has current décor.	1	2	3	4	5
19. Nationally known retail outlets are available at airports	1	2	3	4	5
20. National chain restaurants are available at airports.	1	2	3	4	5

next page

	Very Unsatisfied		Neutral		Very Satisfied
21. The local cuisines are available at airports.	1	2	3	4	5
22. A variety of specialty retail stores sell the local culture products at the airport.	1	2	3	4	5
Overall Satisfaction					
23. Overall, I am satisfied with this airport service quality.	1	2	3	4	5

Part II: Importance of Airport Service Quality

Directions: For each statement following, please circle a number based on a scale from 1 = Very Unimportant, 2 = Unimportant, 3 = Neutral, 4 = Important, and 5 = Very Important

	Very Unimportant		Neutral		Very Important
Function					
1. An airport's external signs clearly direct you to airport services such as parking, car rentals, terminals, etc.	1	2	3	4	5
2. Internal signs throughout an airport clearly directing me to airport facilities (baggage, ticket counters, security, restrooms, rental cars, transportation services, etc.)	1	2	3	4	5
3. An airport's physical layout make it easy for you to find what you need (i.e. restaurants, restrooms, gates, etc.)	1	2	3	4	5
4. A variety of ground transportation options to the nearest city are available.	1	2	3	4	5

next page

	Very Unimportant		Neutral		Very Important
5. Baggage carts are conveniently located.	1	2	3	4	5
6. Transferring or connecting flight s easily for you.	1	2	3	4	5
7. It upsets you when you when you have to wait more than ten minutes to receive your baggage after a flight.	1	2	3	4	5
8. It upsets you when you have to wait in line more than ten minutes during the check in process.	1	2	3	4	5
9. You exit the airplane within ten minutes of landing.	1	2	3	4	5
Interaction					
10. Your complaints are responded to immediately at an airport.	1	2	3	4	5
11. Employees at an airport are available to offer you individualized attention.	1	2	3	4	5
12. Your complaints are responded to immediately at an airport.	1	2	3	4	5
Diversion					
13. Conference facilities are available to you at an airport so that you can conduct meetings.	1	2	3	4	5
14. An airport has business centers, which provides personal computers, phones, and faxes.	1	2	3	4	5
15. An airport has quiet areas in which to nap, read, or do business.	1	2	3	4	5
16. An airport's décor match the local culture of the city at which it is located.	1	2	3	4	5
17. An airport display art.	1	2	3	4	5
18. An airport has current décor.	1	2	3	4	5

next page →

	Very Unimportant		Neutral		Very Important
19. Nationally known retail outlets should be available at airports	1	2	3	4	5
20. National chain restaurants are available at airports.	1	2	3	4	5
21. The local cuisines are available at airports.	1	2	3	4	5
22. A variety of specialty retail stores sell the local culture products at the airport.	1	2	3	4	5

Part III: Overall Airport Service Quality

Directions: Please circle your perception of each dimension of overall airport service quality: ranging from 1 = Very Poor, 2 = Poor, 3 = Neutral, 4 = Good, and 5 = Very Good

How would you rate each dimension of the overall service quality at Suvarnabhumi International Airport, Thailand on a scale 1 – 5?

	Very Poor		Neutral		Very Good
Function of airport service quality (external signs, signs to airport, physical layout, baggage waiting time, speed of check in process, etc.	1	2	3	4	5
Interaction of airport service quality (complaints responded to immediately, offer individualized attention, and respond promptly to requests)	1	2	3	4	5
Diversion of airport service quality (availability of national retail outlets, availability of national chain restaurants, art display, availability of business centers, etc.)	1	2	3	4	5

next page

Part IV: Demographic Profile

Directions: Please ☒ each of the following questions to provide information about yourself. This demographic information will be used for research purposes only.

1. What is your gender? ☐ Female ☐ Male

2. What is your country of Residence? (Where are you from?)

☐ Thailand ☐ Japan ☐ China ☐ Other Asian Countries ☐ Europe

☐ North America ☐ South America ☐ Africa ☐ Australia/New Zealand

☐ Others

3. What is your purpose of travel?

☐ Education ☐ Work ☐ Vacation/Pleasure

☐ Business/Professional ☐ Visit friends/relatives ☐ Others

4. What is your typical usage of this airport in this time? (Trip orientation)

☐ Departure ☐ Arrival ☐ Transit the flight

5. How many times have you used this airport to travel in the last 12 months?

☐ 1 time ☐ 2 times ☐ 3 times

☐ 4 times ☐ 5 times ☐ more than 5 times

Thank you for participation in this questionnaire

Appendix B

Thai Questionnaire

แบบสอบถามชุดที่ .....

แบบสอบถาม

ส่วนที่ 1: **ความพึงพอใจคุณภาพการบริการสนามบิน**

คำชี้แจง: แบบสอบถามนี้จัดทำขึ้นเพื่อสำรวจความรู้สึกของท่านที่มีต่อคุณภาพการบริการของสนามบินที่สนามบินนานาชาติสุวรรณภูมิ ในแต่ละข้อความต่อไปนี้กล่าวถึงคุณภาพการบริการของสนามบิน โปรดวงกลมล้อมรอบตัวเลขที่ตรงกับระดับความรู้สึกของท่านมากที่สุด โดยตัวเลขแต่ละตัวมีความหมายดังนี้ 1 = **ไม่พึงพอใจมาก**, 2 = **ไม่พึงพอใจ**, 3 = **เฉย ๆ**, 4 = **พึงพอใจ**, **และ** 5 = **พึงพอใจมาก**

	ไม่พึงพอใจ มาก		**เฉย ๆ**		**พึงพอใจ มาก**
ลักษณะทางกายภาพของสนามบิน					
1. ป้ายบอกทางต่างๆนอกสนามบินชี้ทางอย่างชัดเจน (เช่น ที่จอดรถ ที่เช่ารถ ทางเข้า-ทางออกสนามบิน และอื่นๆ	1	2	3	4	5
2. ป้ายต่างๆในสนามบินนั้นชี้ทางอย่างชัดเจนเพื่อบอกทางสิ่งอำนวยความสะดวกต่างๆในสนามบิน (เช่น กระเป๋าเดินทาง เคาน์เตอร์ตั๋วเครื่องบิน ห้องรักษาความปลอดภัย ห้องน้ำ ที่เช่ารถ ที่ให้บริการรถโดยสาร และอื่นๆ)	1	2	3	4	5
3. ผังของสนามบินง่ายสำหรับผู้โดยสาร (เช่น ร้านอาหาร ห้องน้ำ ทางเข้า-ออกในการตรวจวีซ่า และอื่นๆ)	1	2	3	4	5
4. ความหลากหลายของรถโดยสารที่มีให้บริการไปในเมืองที่ใกล้ๆสนามบินมีให้ท่านเลือก	1	2	3	4	5
5. ที่ตั้งรถเข็นกระเป๋าเดินทางสะดวก	1	2	3	4	5
6. การเปลี่ยน หรือ ต่อ สายการบินในการเดินทางง่าย	1	2	3	4	5
7. ท่านรู้สึกเบื่อหน่ายเมื่อท่านต้องคอยรับกระเป๋าเดินทางมากกว่า 10 นาที	1	2	3	4	5

หน้าต่อไป →

	ไม่พึงพอใจ มาก		เฉย ๆ		พึงพอใจ มาก
8. ท่านรู้สึกเบื่อหน่ายเมื่อท่านต้องคอยมากกว่า 10 นาที ในระหว่างที่ท่านต้องเช็คอิน	1	2	3	4	5
9. ท่านสามารถออกจากเครื่องบินได้ภายใน 10 นาที เมื่อเครื่องบินได้จอดแล้ว	1	2	3	4	5
การตอบสนองต่อท่าน					
10. คำร้องเรียนของท่านได้รับการตอบรับทันทีที่สนามบิน	1	2	3	4	5
11. มีเจ้าหน้าที่ที่สนามบินคอยให้บริการเมื่อที่ท่านต้องการ	1	2	3	4	5
12. เจ้าหน้าที่ที่สนามบินไม่ยุ่งมากจนกระทั่งไม่สามารถตอบรับคำร้องของท่านทันที	1	2	3	4	5
ความหลากหลายของการบริการที่สนามบิน					
13. มีสิ่งอำนวยความสะดวกต่างๆเกี่ยวกับการประชุมที่สนามบิน เพื่อที่ท่านสามารถทำการประชุมต่างๆได้	1	2	3	4	5
14. ที่สนามบินมีศูนย์บริการทางธุรกิจ ซึ่งมีให้บริการคอมพิวเตอร์ส่วนตัว โทรศัพท์ และ แฟกซ์	1	2	3	4	5
15. ที่สนามบินมีสถานที่ที่เงียบสงบ เพื่อไว้งีบหลับ อ่านหนังสือ หรือติดต่อทางธุรกิจ	1	2	3	4	5
16. การตกแต่งสนามบินเหมาะสมกับวัฒนธรรมท้องถิ่นของเมืองที่สนามบินได้ตั้งอยู่	1	2	3	4	5
17. ที่สนามบินมีการตกแต่งศิลปะ	1	2	3	4	5
18. รูปแบบการตกแต่งสนามบินทันสมัย	1	2	3	4	5
19. ร้านค้าต่างๆที่เป็นที่รู้จักประจำชาติมีที่สนามบิน	1	2	3	4	5
20. ร้านอาหารประจำชาติที่เป็นประเภท chain restaurant มีที่สนามบิน	1	2	3	4	5

หน้าต่อไป ⟶

	ไม่พึงพอใจ มาก		เฉย ๆ		พึงพอใจ มาก
21. ร้านอาหารท้องถิ่นมีที่สนามบิน	1	2	3	4	5
22. มีร้านค้าหลากหลายที่ขายสินค้าของวัฒนธรรมท้องถิ่นที่สนามบิน	1	2	3	4	5
ความพึงพอใจรวม					
23. ภาพรวม ท่านมีความพึงพอใจในคุณภาพการบริการสนามบิน	1	2	3	4	5

ส่วนที่ 2: ความสำคัญของคุณภาพการบริการสนามบิน

คำชี้แจง: โปรดวงกลมล้อมรอบตัวเลขที่ตรงกับระดับความรู้สึกของท่านมากที่สุด โดยตัวเลขแต่ละตัวมีความหมายดังนี้ 1 = ไม่มีความสำคัญมาก, 2 = ไม่มีความสำคัญ, 3 = เฉย ๆ, 4 = มีความสำคัญ, และ 5 = มีความสำคัญมาก

	ไม่มีความ สำคัญมาก		เฉย ๆ		มีความ สำคัญมาก
ลักษณะทางกายภาพของสนามบิน					
1. ป้ายบอกทางต่างๆนอกสนามบินชี้ทางอย่างชัดเจน (เช่น ที่จอดรถ ที่เช่ารถ ทางเข้า-ทางออกสนามบิน และอื่นๆ	1	2	3	4	5
2. ป้ายต่างๆในสนามบินนั้นชี้ทางอย่างชัดเจนเพื่อบอกทางสิ่งอำนวยความสะดวกต่างๆในสนามบิน (เช่น กระเป๋าเดินทาง เคาน์เตอร์ตั๋วเครื่องบิน ห้องรักษาความปลอดภัย ห้องน้ำ ที่เช่ารถ ที่ให้บริการรถโดยสาร และอื่นๆ)	1	2	3	4	5
3. ผังของสนามบินง่ายสำหรับผู้โดยสาร (เช่น ร้านอาหาร ห้องน้ำ ประตูเข้า-ออก ในการตรวจวีซ่า และอื่นๆ)	1	2	3	4	5
4. . ความหลากหลายของรถโดยสารที่มีให้บริการไปในเมืองที่ใกล้ๆสนามบินมีให้ท่านเลือก	1	2	3	4	5

หน้าต่อไป ⟶

	ไม่มีความสำคัญมาก		เฉยๆ		มีความสำคัญมาก
5. ที่ตั้งรถเข็นกระเป๋าเดินทางสะดวก	1	2	3	4	5
6. การเปลี่ยน หรือ ต่อ สายการบินในการเดินทางง่าย	1	2	3	4	5
7. ท่านรู้สึกเบื่อหน่ายเมื่อท่านต้องคอยรับกระเป๋าเดินทางมากกว่า 10 นาที	1	2	3	4	5
8. ท่านรู้สึกเบื่อหน่ายเมื่อท่านต้องคอยมากกว่า 10 นาที ในระหว่างที่ท่านต้องเช็คอิน	1	2	3	4	5
9. ท่านสามารถออกจากเครื่องบินได้ภายใน 10 นาที เมื่อเครื่องบินได้จอดแล้ว	1	2	3	4	5
การตอบสนองต่อท่าน					
10. คำร้องเรียนของท่านได้รับการตอบรับทันทีที่สนามบิน	1	2	3	4	5
11. มีเจ้าหน้าที่ที่สนามบินคอยให้บริการเมื่อที่ท่านต้องการ	1	2	3	4	5
12. เจ้าหน้าที่ที่สนามบินไม่ยุ่งมากจนกระทั่งไม่สามารถตอบรับคำร้องของท่านทันที	1	2	3	4	5
ความหลากหลายของการบริการที่สนามบิน					
13. มีสิ่งอำนวยความสะดวกต่างๆเกี่ยวกับการประชุมที่สนามบิน เพื่อที่ท่านสามารถทำการประชุมต่างๆได้	1	2	3	4	5
14. ที่สนามบินมีศูนย์บริการทางธุรกิจ ซึ่งมีให้บริการคอมพิวเตอร์ส่วนตัว โทรศัพท์ และ แฟกซ์	1	2	3	4	5
15. ที่สนามบินมีสถานที่ที่เงียบสงบ เพื่อไว้งีบหลับ อ่านหนังสือ หรือติดต่อทางธุรกิจ	1	2	3	4	5
16. การตกแต่งสนามบินเหมาะสมกับวัฒนธรรมท้องถิ่นของเมืองที่สนามบินได้ตั้งอยู่	1	2	3	4	5
17. ที่สนามบินมีการตกแต่งศิลปะ	1	2	3	4	5

หน้าต่อไป ⟶

	ไม่มีความสำคัญมาก		เฉยๆ		มีความสำคัญมาก
18. รูปแบบการตกแต่งสนามบินทันสมัย	1	2	3	4	5
19. ร้านค้าต่างๆที่เป็นที่รู้จักประจำชาติมีที่สนามบิน	1	2	3	4	5
20. ร้านอาหารประจำชาติที่เป็นประเภท chain restaurant มีที่สนามบิน	1	2	3	4	5
21. ร้านอาหารท้องถิ่นมีที่สนามบิน	1	2	3	4	5
22. มีร้านค้าหลากหลายที่ขายสินค้าของวัฒนธรรมท้องถิ่นที่สนามบิน	1	2	3	4	5

ส่วนที่ 3: ภาพรวมของคุณภาพการบริการสนามบิน

คำชี้แจง: โปรดวงกลมล้อมรอบตัวเลขที่ตรงกับระดับความรู้สึกของท่านมากที่สุด โดยตัวเลขแต่ละตัวมีความหมายดังนี้ 1 = **ไม่ดีมาก**, 2 = **ไม่ดี**, 3 = **เฉยๆ**, 4 = **ดี**, **และ** 5 = **ดีมาก**

โปรดกรอกระดับคะแนนภาพรวมของแต่ละส่วนของคุณภาพการบริการสนามบินที่สนามบินนานาชาติสุวรรณภูมิ ประเทศไทย

	ไม่ดีมาก		เฉยๆ		ดีมาก
ลักษณะทางกายภาพของสนามบิน (ป้ายบอกทางนอกสนามบิน ป้ายบอกทางในสนามบิน ผังของสนามบิน เวลาที่คอยกระเป๋าเดินทาง ความเร็วในกระบวนการเช็คอิน และอื่นๆ)	1	2	3	4	5
การตอบสนองต่อท่าน (การตอบรับคำร้องเรียนของท่านทันที มีเจ้าหน้าที่สนามบินคอยให้บริการ เจ้าหน้าที่ที่สนามบินไม่ยุ่งมากจนกระทั่งตอบรับคำร้องของท่านทันที)	1	2	3	4	5
ความหลากหลายของการบริการที่สนามบิน (มีสิ่งอำนวยความสะดวกต่างๆเกี่ยวกับการประชุม มีร้านค้าต่างๆที่เป็นที่รู้จักประจำชาติที่สนามบิน ร้านอาหารท้องถิ่นมีที่สนามบิน และอื่นๆ)	1	2	3	4	5

หน้าต่อไป ⟶

ส่วนที่ 4: ข้อมูลส่วนตัวของท่าน

คำชี้แจง: กรุณาตอบคำถามต่อไปนี้เกี่ยวกับตัวท่าน ข้อมูลในส่วนนี้จะนำไปใช้เพื่อวัตถุประสงค์ในการทำวิจัยเท่านั้น (โปรดทำเครื่องหมาย ☒ หน้าข้อนั้น)

1. เพศของท่าน ☐ หญิง ☐ ชาย

2. ท่านมาจากประเทศอะไร

☐ ไทย ☐ ญี่ปุ่น ☐ จีน ☐ ประเทศอื่นๆในเอเชีย
☐ ยุโรป ☐ อเมริการเหนือ ☐ อเมริการใต้ ☐ แอฟริกา
☐ ออสเตเลีย/นิวซีแลนด์ ☐ อื่นๆ

3. จุดประสงค์ในการเดินทางของท่าน

☐ การศึกษา ☐ การทำงาน ☐ การพักผ่อน/ความเพลิดเพลิน
☐ ธุรกิจ ☐ เยี่ยมเพื่อน/ญาติ ☐ อื่นๆ

4. จุดประสงค์ที่ท่านใช้สนามบินนานาชาติสุวรรณภูมิในครั้งนี้

☐ เดินทางออกนอกประเทศ ☐ เดินทางเข้ามาในประเทศ ☐ เปลี่ยน หรือ ต่อ สายการบิน

5. จำนวนครั้งที่ท่านใช้สนามบินนานาชาติสุวรรณภูมิในการเดินทางในช่วงเวลา 12 เดือน

☐ 1 ครั้ง ☐ 2 ครั้ง ☐ 3 ครั้ง
☐ 4 ครั้ง ☐ 5 ครั้ง ☐ มากกว่า 5 ครั้ง

ขอขอบคุณที่ให้ความร่วมมือในการตอบแบบสอบถาม