

**CUSTOMER JOURNEY MANAGEMENT MODEL FOR PHUKET
INTERNATIONAL AIRPORT**



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**A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Integrated Tourism and Hospitality
Management)
The Graduate School of Tourism Management
National Institute of Development Administration
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INTERNATIONAL AIRPORT**
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ABSTRACT

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Phuket International Airport, managed by Airports of Thailand (AOT), faces challenges due to its high traffic volume, leading to various issues impacting passenger experiences. Despite its popularity, there's a lack of effective customer journey management. Therefore, this study aims to: 1) study the customer journey management policy of Phuket International Airport, 2) to study factors of customer journey management of Phuket International Airport influencing customer experience, 3) to study and evaluate the efficiency of customer journey management at Phuket International Airport, and 4) to propose the customer journey management model for Phuket International Airport.

The literature review provides insights into customer journey management at Phuket International Airport, aiming to develop a tailored model. This study employed a mixed research methodology, collecting quantitative data via 400 questionnaires distributed to airport passengers, and qualitative data through semi-structured interviews with 5 airport representatives, 5 airline representatives, and 10 passengers. Content analysis was used for interviews, while descriptive statistics (e.g., frequency, percentage, mean, and standard deviation), inferential statistics (e.g., paired sample t-test and ANOVA), and Importance-Performance Analysis (IPA) were employed to analyze the quantitative data.

The research findings revealed that, 1) Phuket International Airport's customer journey management policy emphasizes professionalism, security, and efficiency, with strengths in employee quality, service provision, and technology integration. However, issues remain regarding waiting areas, airport access, potential monopolistic practices, and limited amenities. 2) Evaluation of customer journey management importance revealed that 'deboarding,' 'immigration,' and 'accessibility' significantly influence

customer experience, necessitating management's prioritization of these factors. 3) Overall, the efficiency of customer journey management is rated as 'efficient,' with most attributes in the 'Keep Up the Good Work' quadrant of the Importance-Performance Analysis. However, urgent attention is needed for transportation, WIFI quality, and wait times. 4) A distinctive customer journey management model featuring a tailored 7-touchpoint departure process and a 5-touchpoint arrival process is proposed to enhance the airport experience.



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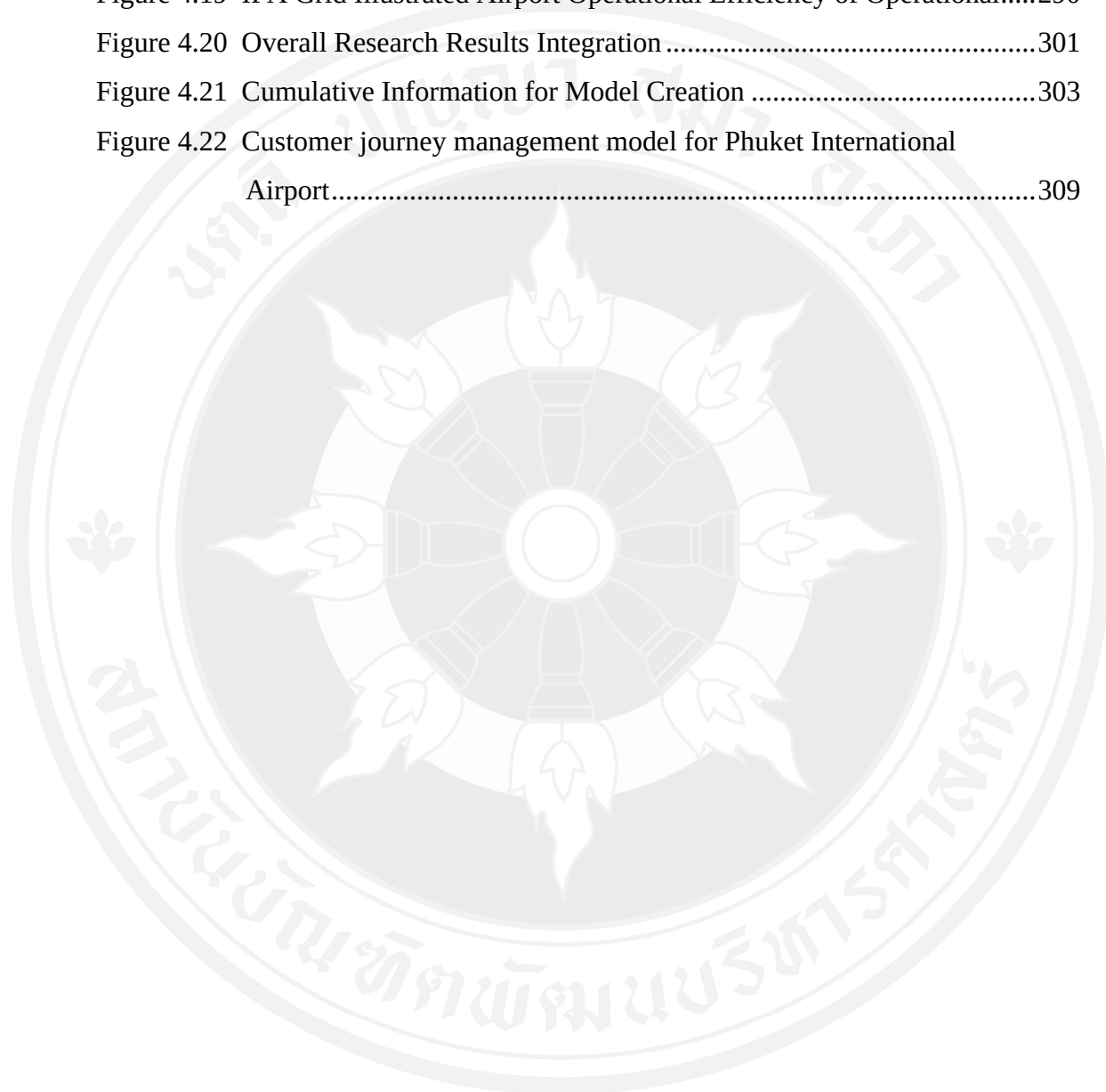
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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter will describe significant details of customer journey management model for Phuket International Airport. Firstly, the importance of air transport towards tourism development will be explained. Then, the reasons for conducting the current study especially in terms of economic growth dimensions, which annually generate billions of dollars to many countries around the world as well as an increasing number of tourists, will be described. The rapid growth of an aviation industry causes several problems particularly in touchpoint service areas. Those problems are, for example, related to airport congestion, check-in processes, and security and service management. All these problems will directly affect the customer's journey experience. Therefore, background of the study, problem statement, research gaps and reasons for conducting the research will be mentioned in this chapter.

The study of "Customer Journey Management Model for Phuket International Airport" will cover the investigation of four research objectives including airport management policies, journey management factors affecting customer experience, customer journey management efficiency and suggestions for customer journey development of Phuket International Airport which will be further proposed to relevant organizations. And the end of this chapter will frame the scope of the study extensively. Scope of content, areas, demographics, and time will be explained.

1.2 Air Transportation and Tourism

Air transportation has been one of the main revenues of transport which is significant to both domestic and international travel. It is an important channel for the world's major economic growth and development. Also, air transportation is a part of

industries that represent many dimensions of economic potential. Those industries consist of aviation industry, airline industry, air traffic control services industry, aircraft maintenance, airline nutrition industry and especially the tourism industry which directly and indirectly require air transport services to facilitate their business. Annually, the air transport makes more than \$ 896.9 billion in GDP to the tourist industry worldwide (Aviation Benefits Beyond Borders, 2018a)

With regards to dimensions of economic development, incomes generated from air travel in the last decades was regarded as a prosperous of the commercial aviation industry. From 2000 to 2019, the revenues received from air passengers using aviation industry services around the world increased from US \$ 374 billion to \$ 561 billion. In 2019, the increase of the revenues (Figure 1.1) was consistent with the growth of world tourism since these two industries, the aviation industry and the tourism industry, mutually depend on each other. This growing of the revenues emphasizes the significance of the aviation industry on the economic development of countries (Statista, 2020).

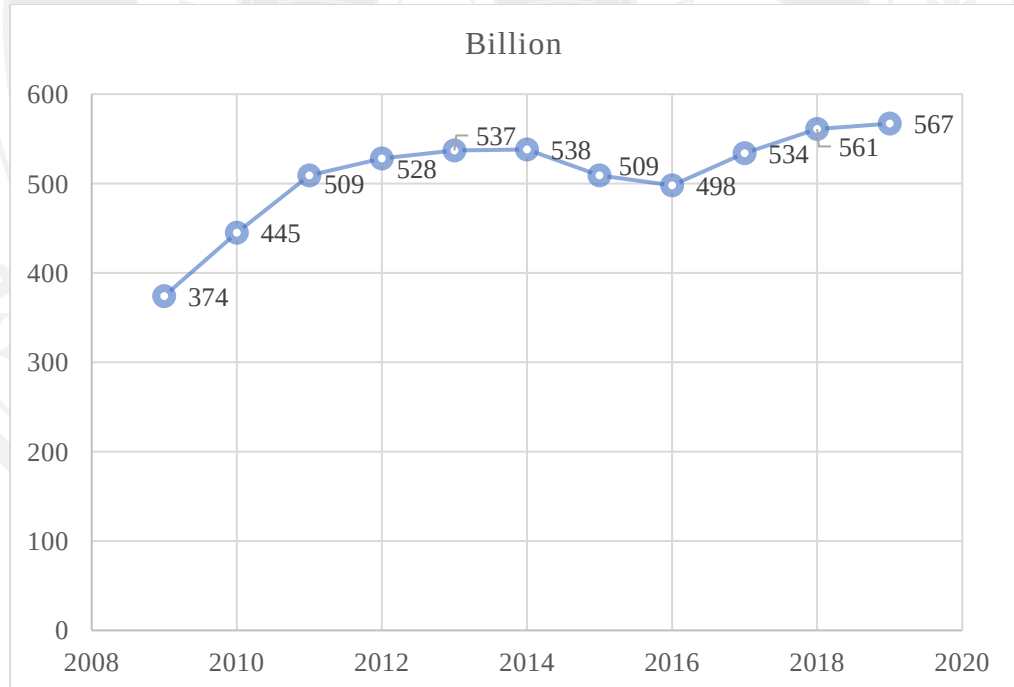


Figure 1.1 Global Air Transport Incomes

Source: Statista (2020).

Air transport plays the most important role in the world's tourism. According to a report of world tourism situation 2018 written by the United Nation of World Tourism Organization (UNWTO), Tourism industry has been one of the most important drivers of global economy. This is because the growth of revenue from tourism industries have been found at the higher rate than the growths of global economy for ninth consecutive years. In 2017, there were 1.4 billion international tourists travelling around the world. This number is grown by 5.6 percent from the number of international tourists in 2016. Moreover, the money the tourists spent during their journey generated \$ 1.7 trillion in service sector exports. This number was increased for 4.4 percent from last year, and it was the greatest number compared to other types of tourism.(UNWTO, 2018) There was the highest increase of tourists in Asia, but it was the lowest number of tourists in Americas. (Figure 1.2)

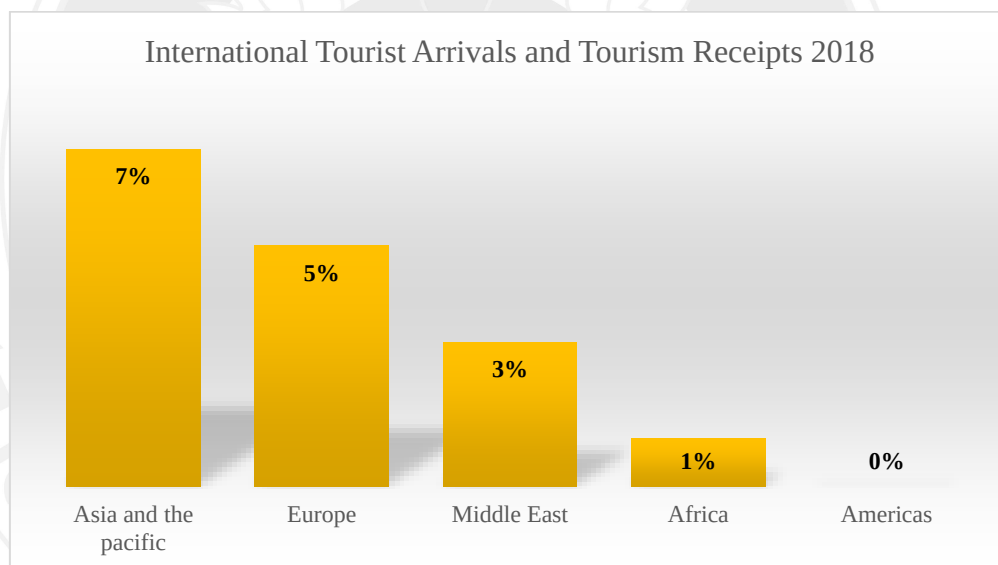


Figure 1.2 Expansion Rates of International Tourists and Tourism Receipts
Source: UNWTO (2018).

1.3 Airport

From the expansion of worldwide tourists, it urges air transport and airports to become the significant means of transportation and shipping for international journeys. Regarding the airports, they are crucial for regional tourism and infrastructure growth

as they link people together by transporting tourists and being a channel for regional communication. Such the connection will ensure that the tourists will reach their destinations easily. Besides, the airports are the first connecting point of tourists and local people leading to sustainable social and cultural benefits (Ramgulam et al., 2012). They bring about a positive change of economy, society and environment. From an economic perspective, it could be assumed that the airports would be one of key channels generating earnings for a country. This is confirmed by the study of Airports Council International (ACI). The ACI explored 919 airports around the world and found that the receipt volume from worldwide air industries was totally \$ 161.3 billion in 2017 (U.S. Global Investors, 2020), and this earning supported over 65.5 million jobs around the world including 10.2 million direct jobs, 10.8 million indirect jobs, 7.8 million induced jobs and 36.7 million jobs in tourism (Aviation Benefits Beyond Borders, 2018b). In addition, the International Civil Aviation Organization (ICAO) believed that the air passenger volume in the next 20 years will be raised for 4.5 - 4.6 percent a year. This is in accordance with the prediction of the Revenue Passenger-Kilometers (RPK) of AIRBUS CO., LTD. This company believed that the number of their air passengers will increasingly expand to 4.4 percent per year in the next 20 years, and it will go up to 5.5 percent in Asia Pacific particularly. This company also estimated that the number of global air passengers will be growing to 4.7 percent annually. Specifically, Asian air transport (excluding China) will be raised for 5.7 percent per year. Moreover, the International Air Transport Association (IATA) also stated that the number of air passengers in Asia Pacific will be increased from 35 percent to 40 percent by 2034 (IATA, 2015). Overall, the increase of air passengers around the world will generate incomes contributing to employment, investment, and income distribution local people, and these are very important for economic and tourism development (Watawuti & Vongsaroj, 2018). Therefore, all countries in the world always improve their airports' qualities by keeping them modern with the hope to generate more incomes.

The airports can be divided into several types depending on the services they provide. In general, there are two types of airports that provide commercial services including a domestic airport and an international airport. However, in Thailand, the airport will be grouped following its regulator including Department of Airports Thailand (DOA), Airports of Thailand Public Company Limited (AOT), Bangkok

Airways Public Company Limited (BA) and Royal Thai Navy (RTN). The DOA regulates 22 airports, and the AOT monitors 6 main Thai airports. The BA is responsible for 3 airports while the Thai Navy serves one commercial airport. (The Civil Aviation Authority of Thailand, 2019). Among these four commercial agencies, the AOT can generate the highest income from air transport.

The AOT is responsible for six main airports in Thailand. Those airports consist of Suvarnabhumi Airport (BKK), Mae Fah Luang Chiang Rai International Airport (CEI), Chiang Mai International Airport (CNX), Don Mueang International Airport (DMK), Hat Yai International Airport (HDY), and Phuket International Airport (HKT). Recently, there is more increasing numbers of passengers and demands for air transport services. In 2018, these six airports serviced 874,999 flights, but the number of flights increased to 896,097 in 2019. This number is higher than the flight volume of the DOA that operates 22 airports in Thailand as shown in Figure 1.3.

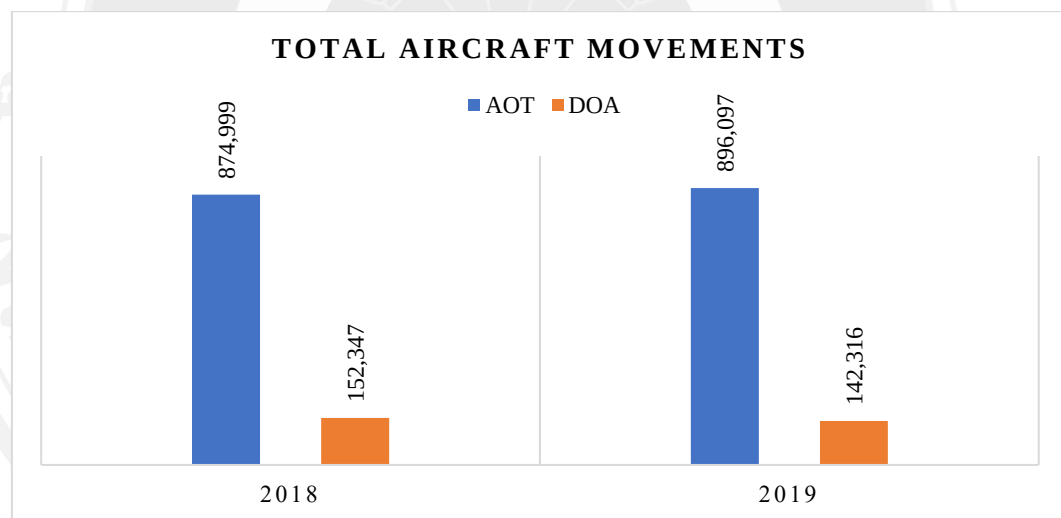


Figure 1.3 Flight Volume of Thailand in 2018-2019

Source: The Civil Aviation Authority of Thailand (2019).

From the previous mentioned paragraphs, it could be seen that airports truly influence the growth of tourism industries. They are the main means of international journey that positively generate several changes in tourism and income amount resulting in employment, investment, and income distribution.

1.4 Customer Journey Management at the Airport

The rapid growth of the air industry makes air transport becomes more popular among people. The number and frequency of flights at the airport reflect its service quality. However, due to the intensive competition of the airport, an understanding of Customer Journey Management (CJM) is needed for more effective airport operation. At present, with the development of technology, air passengers can directly and indirectly use the airport services through many touchpoint channels. This change forces many airports to create a variety form of services to serve the best airport experience to their passengers (Brynjolfsson et al., 2013; Lemon & Verhoef, 2016).

Obviously, several world-class airports have always improved their services qualities, especially the use of Touchpoint to facilitate passengers' arrival and departure processes. All the touchpoints must produce convenience, speed, and satisfaction to passengers. It should finally lead to a continuous and effective supply chain.

According to (DKMA, 2014), a positive customer experience can raise airport trade competition. With the shortened cycle of products and services, it creates more trade. Therefore, instead of directly selling the products and services to customers, many airports choose to sell impressive experiences the customers will receive from them. Many people are likely to prefer the special experiences at the airport and pleased to pay for more naturalness. Consequently, the growth of airport receipt does not merely depend on the products they offer (Gilmore & Pine, 2002). Rather, it depends on the customer experience (CX) that involves attractive and memorable engagement activities. The impressive customer experience becomes the key business goal which offers several advantages for a business competition (Gilmore & Pine, 2002; Lemon & Verhoef, 2016; Oh et al., 2007). For example, Singapore Changi Airport has been ranked as the best airport in the world for 10th times within 20 years (Skytrax, 2019). Also, this airport has won this award for seven consecutive years. In their terminal building, the Fast and Seamless Travel (FAST) system is used. This system consists of an automatic check-in point, an automatic drop-bag point, an automatic passport and person checkpoint, and an automatic boarding point. The automatic check-in point is used to automatically issue a boarding pass and a luggage tag while the automatic drop-bag point will scan customers' luggage bags for dangerous objects. There will be a

warning sound if a dangerous object is found. If it is not, the luggage will be loaded onto a plane. At the automatic passport and person checkpoint and the automatic boarding point, there will be automatic face recognition machines to screen passengers. All these boarding processes work under the control of IT system. It is very convenient, fast, and secure, and it also requires a small number of staff to supervise. Apart from these, advanced security and scanners are also used for baggage check. Passengers do not have to remove their laptops, tablets, and other electronic devices away from their luggage. This process is less time-consuming (Changi Airport, 2019). All these effective managements are the keys contributing to the success of Changi Airport.

In addition to the positive experiences of customers that affect future use of the service and reputation of the airport, the customer journey management also has effects on the airport by increasing non-aeronautical incomes and being choices for transit passengers (CAA, 2013; DKMA, 2014; Graham, 2014; Parrella, 2013). Therefore, the customer journey management (CJM) at the airport is significant to build memorable customer experience.

1.5 Phuket International Airport

Phuket can make the highest receipt from tourism since it consists of sufficient hotels, department stores, and public utility that tourist investment. This city is also the center of five Andaman provinces which includes Ranong, Phangnga, Phuket, Krabi and Trang (OSM Andamnan, 2018). Phuket is in the Indian Ocean of Andaman coast. This city has outstanding potential of becoming the international marine tourism destinations with beaches, seaside, islands, and ecotourism. In addition, Phuket is the world's top tourist attractions known as "Andaman Paradise" or "Pearl of Andaman". There are many world-renowned tourist attractions in Phuket such as Phi Phi Island, Similan Islands, and Surin Islands. In terms of Phuket International Airport, located in the north end of Phuket Island, so this airport is recognized as the gate to Phuket and other provinces. It is a regional air and sea transport hub with convenient transfer to other countries (Osmsouth, 2019) or even other southern provinces of Thailand. The Phuket International Airport code is "HKT". It is one of six airports which are under the operation of AOT. This airport provides both domestic and international transport.

It has the third largest flight and passenger density in Thailand, after Suvarnabhumi Airport and Don Mueang International Airport. However, in southern Thai part, Phuket is the aviation hub with the first regional largest flights and passenger density. This airport plays an important role in promoting tourism in the south of Thailand and the Andaman coast (Aviation Industry Promotion, 2018).

Phuket Airport is a coastal airport with beautiful scenery. It is a gateway to the Andaman Sea of Thailand. Every year, the airport will improve its quality to welcome the increasing number of travelers (Figure 1.4). This airport can accommodate 12.5 million passengers per year. However, it is found that there are 17-18 million passengers visiting this airport every year (AOT, 2020a). This over passenger indicates that Phuket tourism and Phuket International Airport have been steadily popular among Thai and foreign tourists.

Upon arrival at Phuket Airport, passengers typically initiate the check-in process either at the counter or through an automated check-in machine to obtain their boarding pass and register their baggage into the system. Subsequently, passengers undergo a security check, which includes physical examination and inspection of carry-on baggage, aimed at preventing dangerous items from entering the airport's secure area.

For international flights, passengers must undergo document verification and stamping by immigration officials. Following this, passengers wait in the boarding area until their departure is announced. Upon boarding, passengers present their boarding pass and proceed through the boarding gate.

Due to the rapid growth rate of Phuket International Airport, it has experienced overcapacity issues, resulting in passenger dissatisfaction, such as late check-in, failed security audits, or baggage loss. These problems significantly reduce passenger satisfaction and lead to frustration. Unexpected delays at various stages of the process make passengers feel as though they are wasting time and experiencing undue stress. Safety concerns have also heightened. Inadequate security verification processes or issues with them can leave passengers uncertain about their safety. Due to the rapid growth rate of Phuket International Airport, it has experienced overcapacity issues, resulting in passenger dissatisfaction, such as late check-in, failed security audits, or baggage loss. These problems significantly reduce passenger satisfaction and lead to

frustration (MGRonline, 2018). Unexpected delays at various stages of the process make passengers feel as though they are wasting time and experiencing undue stress. Safety concerns have also heightened. Inadequate security verification processes or issues with them can leave passengers uncertain about their safety. Moreover, lost or delayed baggage causes inconvenience and disrupts ongoing travel, potentially resulting in missed connecting flights or difficulties reaching their final destination. Additionally, negative experiences may prompt passengers to share unfavorable reviews or comments, impacting the airport's reputation and influencing future travel decisions.

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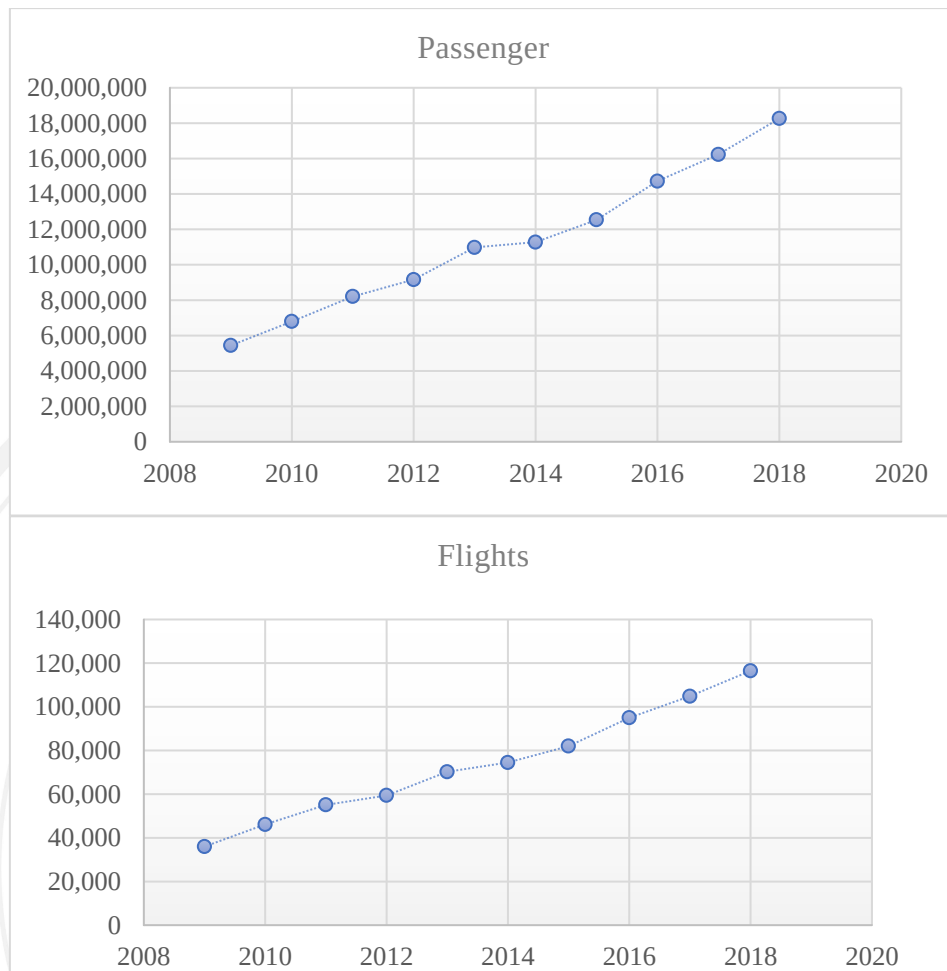


Figure 1.4 The Statistics of Customer and Flight Volume of Phuket International Airport in the Last 10 Years

Source: AOT (2020a).

Figure 1.4 reveals that Air transportation of Phuket has a lot of influences in customer journey. From the travel statistics in the past ten year, it was found that the numbers of customers and flights tend to increase continuously. In the fiscal year 2019, there were still a growing number of foreign tourists at Phuket International Airport while the number of domestic passengers from Bangkok airports is found to be dropped (Figure 1.5). Totally, there were 53 scheduled airlines with 115,527 international and domestic flights. Overall, the flight volume decreased at 0.82 percent. For the international transport, there were 63,451 flights with a 1.43 percent decrease. Regarding the domestic flights, the total number of flights was 52,076, and it dropped at 3.44 percent. In terms of passenger accommodation, Phuket International Airport

could accommodate 17,848,662 passengers in 2019. From this number, it decreased at 2.26 percent. In this year, there were 10,318,327 international passengers with 0.77 percent decrease and 7,530,335 domestic passengers with 4.22 percent decrease. (AOT, 2019c)

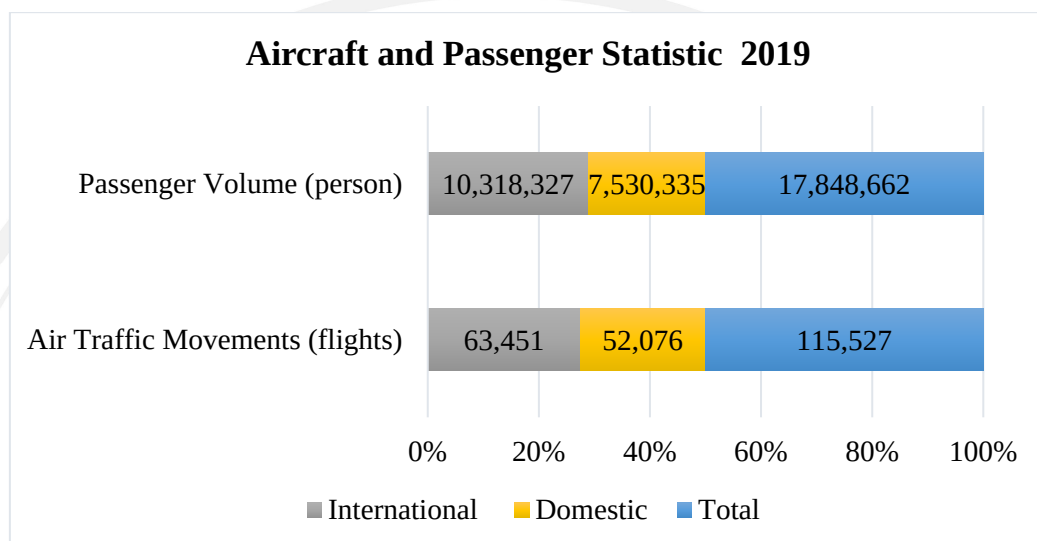


Figure 1.5 The Statistics of Passenger and Flight Volume of Phuket International Airport in 2019.

Source: AOT (2019c).

And in the part of a total volume of cargo and postal parcel (Table 1.1), at 54,102 tons, declined by 12.21%, comprising international cargo transport at 41,972 tons, declined by 6.05%, and domestic cargo transport at 12,130 tons, declined by 28.43% (AOT, 2019d).

Table 1.1 Overall Statistics of Air Transport of Phuket International Airport in 2019

HKT Air Traffic Statistics			
Subject/Year	2018	2019	%
Air Traffic Movements (flights)	116,487	115,527	-0.82%
Total Passenger Volume (person)	18,260,833	17,848,662	-2.26%
Freight and Postal Parcel Volume (tons)	61,624	54,102	-12.21%

Source: AOT (2019d).

As being promoted to become a tourism city with ability to generate a huge income to the city, Phuket tends to welcome more and more domestic and foreign tourists via air transport. In response to the development policy of the AOT, Phuket International Airports is determined as “a Gateway to the Andaman”. It becomes a main gate to beautiful tourist attractions where visitors will experience a warm welcome with smiles and the hearts of Thais. The Phuket International Airport is also the premium destination where tourists can find luxury retails, world class restaurants as well as other great services (AOT, 2019b). Consequently, this airport as one of the major airports of Thailand must have sufficient potential to support the growth of the aviation and air transport with a complete and modern infrastructure and CJM.

1.6 Problem Identification

As previously mentioned, the continuous increasing number of tourists at Phuket International Airport causes over passenger. This urges the airport to improve many aspects of organization in order to serve this demand as well as to compete other foreign international airports (Chuangchoo, 2019; Jaruswitsarut et al., 2014). The increase of passengers also causes various problems such as a delay in in-line screening of passenger baggage, inadequate seats, insufficient restrooms, too expensive restaurants and other problems that have been complained via social media (MGRonline, 2018). Passengers navigating through Phuket International Airport often found themselves ensnared in serpentine lines and interminable wait times, a frustrating

ordeal that encompassed every stage of their journey, from check-in to boarding. The strains on infrastructure were palpable, with check-in counters, security checkpoints, and immigration counters teeming with travelers, each vying for attention in a cacophony of impatience and exasperation (Bangkok Post, 2017).

Furthermore, the airport grappled with a chronic shortage of parking facilities, an issue that manifested in the air and on the ground. The dearth of parking spaces, both for aircraft and ground transportation vehicles, led to a veritable labyrinth of congestion, impeding the fluid management of aircraft movements and exacerbating logistical challenges (The Phuket News, 2018). Compounding these woes were staffing deficiencies that left airport personnel stretched thin, their resources strained under the weight of escalating passenger numbers. From baggage handling to security screening, and even customer assistance, the palpable impact of staff shortages reverberated throughout the airport, impeding the delivery of seamless services and leaving travelers grappling with the fallout (The Phuket News, 2016).

Moreover, the burgeoning influx of passengers placed an untenable burden on the airport's existing infrastructure, which struggled to accommodate the swelling tide of travelers. Terminals, already bursting at the seams, found themselves overrun with passengers, leading to a scarcity of seating areas and a dearth of retail and dining options, further exacerbating the harrowing experience of navigating the airport (The Phuket News, 2015).

These myriad service-related challenges underscored the pressing need for holistic improvements in infrastructure, staffing, and operational efficiency at Phuket International Airport.

According to Wannaphong (2014) has studied An Economic Impact of Development Project: Case of Phuket International Airport. Research aims to estimate the economic impact of the project on the development of Phuket International Airport. The result revealed that the positive economic impact borne to Phuket province was about 32 billion baht or almost 120 percent increasing from initial impact of 15 billion baht. Therefore, the researcher realized that customer journey development in various touch points in the airport as mentioned above. It is imperative that studies be conducted to appropriate guidelines for customer journey management at the airport. To enable

relevant agencies to apply this research into the part of development of Phuket International Airport.

For Phuket, research on airport operations has been inclusive. Most research literature focuses on factors of service qualities, using figures from secondary data (Prakasit & Paithoon, 2018; Wannasatit, 2011). Some researched studied only service quality perception at check-in counter (Theeraphan et al., 2018). and service competencies (Kittiphich & Paithoon, 2020).

Additionally, several studies have been conducted in other areas. such, sustainable development and socially responsibility, (Jaruswitsarut et al., 2014; Phiphat, 2015) economic impact and loss of cost from passengers arrived, (Kamonnat, 2018; Wannaphong, 2014). Including marketing strategies for airline (Posri & Khaysuwan, 2018). Which mainly focuses on specialized studies.

1.7 Research Gap

Based on international airport literature reviews on customer journey management of the airport. It has been found that most studies have focused on Service quality/perceived (Bezerra & Gomes, 2016; Brida et al., 2016; Jen et al., 2013; Martin-Domingo et al., 2019; Okumus et al., 2013; Pantouvakis & Renzi, 2016) Safety/Security (Chung et al., 2017; Halbherr et al., 2013; Knol et al., 2019; Schouten, 2014; Stewart & Mueller, 2014) And other specialized studies consisting of Airport facility (Bezerra & Gomes, 2016; Jung & Yoo, 2016; Sun & Schonfeld, 2015; Van Oel & van den Berkhof, 2013). Factors of management and satisfactions (Burrows, 2015; Kierzkowski & Kisiel, 2017; Okumus et al., 2013).

Consistent with the study of Thailand, several previous studies have been conducted to explore specific aspects of an airport corresponds in Thailand. Most airport related studies focus on specific research. (Table 1.2) such as quality and perceptions of service quality management (Bongkodrat et al., 2020; Chayada et al., 2018; Kunnapat, 2015), customer behaviors (kongkoon & Burin, 2014), airport security system (Sittipat & Vichit, 2018), strategies and policies (Chaiyaphong & Ekaporn, 2018; Waraporn, 2017), airport facilities (Sukpongthai & Phungbangkruay, 2020), information and public relations (Chalantip & Supaporn, 2019), Various factors (Lapa

[illegible]

Authors	Service quality/ Perceived	Policy	Consumer behavior	Safety/Security	Service management	Airport facility	Information	Factors of management	Satisfaction/ Impression	Airport brand	Customer journey /touchpoint	Airport experience	Airport capacity
Van Oel and van den Berkhof (2013)						*							
Chen et al. (2014)				*									
Jiang and Zhang (2014)												*	
kongkoon and Burin (2014)		*											
Schouten (2014)				*									
Stewart and Mueller (2014)				*									
Su (2014)										*		*	
Supitchaya (2014)	*												
Burrows (2015)										*			
Kunnapat (2015)	*												
Losekoot (2015)												*	
Sun and Schonfeld (2015)						*							
Bezerra and Gomes (2016)	*				*	*							
Brida et al. (2016)	*						*						

Authors	Service quality/ Perceived	Policy	Consumer behavior	Safety/Security	Service management	Airport facility	Information	Factors of management	Satisfaction/ Impression	Airport brand	Customer journey /touchpoint	Airport experience	Airport capacity
Bongkodrat et al. (2020)	*												
Sukpongthai and Phungbangkruey (2020)			*			*			*				
Sumrith et al. (2020)								*	*				
Theeraphan et al. (2020)	*								*				

Table 1.2 shows that. From studies on the previous studies relevant to airport customers, most of them are specialized studies. But studies related to customer journey management at airports and the airport's overall policy have not been before. This is another important factor in creating a good passenger experience. This is in line with (Følstad & Kvale, 2018) stats that, mainly studies on customer journey management come from design, management and marketing.

1.8 Research Questions

- 1) What are the key components of Phuket International Airport's customer journey management policy?
- 2) What factors within the customer journey management framework at Phuket International Airport significantly influence customer experience?
- 3) How efficient is the current customer journey management system at Phuket International Airport.

4) What recommendations can be made to enhance the customer journey management model for Phuket International Airport?

1.9 Research Objectives

- 1) To study the customer journey management policy of Phuket International Airport.
- 2) To study factors of customer journey management of Phuket International Airport influencing customer experience.
- 3) To study and evaluate the efficiency of customer journey management at Phuket International Airport.
- 4) To propose the customer journey management model for Phuket International Airport.

1.10 Research Output

- 1) Identify the management policies of Phuket International Airport.
- 2) Discover management guidelines that affect the customer journey management at Phuket International Airport.
- 3) Find out the assessment results of management efficiency affecting the customer experience at Phuket International Airport.

1.11 Research Outcome

Government sector, Airports of Thailand Public Company Limited (AOT) and the Civil Aviation Authority of Thailand (CAAT) can apply the results of this study to develop a model to increase the efficiency of airport performance.

Relevant operators and airport executives can design more suitable management models, and they can use the study results to improve the effectiveness of journey management leading to better customer experiences and services.

Scholars, researchers, and people interested in studying a model that affects customer journey management at Phuket International Airport can use this study as a guideline for further study.

1.12 Scope of the Study

This study investigates a management model that affects the journey experience of customers at Phuket international airport. The scope of this study are as follows.

1.12.1 Scope of the Content

The current study explores how different travel management styles impact customer experience at Phuket International Airport. Policies related to airport operations and potential factors influencing customer experience will be studied and evaluated to enhance customer journey management. This study will concentrate on gathering data solely from foreign passengers taking international flights to and from Phuket International Airport.

1.12.2 Scope of the Population

To identify the appropriate model for developing customer journey management, the current study will gather qualitative data from three distinct groups: 1) executives or representatives from Phuket International Airport; 2) executives or representative employees from airlines offering services at Phuket International Airport; and 3) foreign passengers at Phuket International Airport. These three participant groups will be queried about their models and recommendations for enhancing customer journey management. Additionally, the final group of participants will be invited to assess the quantitative data on management factors that influence customer experience at airports.

1.12.3 Scope of Study Area

Phuket international airport is the research study area. Foreign customers waiting to board a plane at the international departure gate will be asked to complete the questionnaire.

1.12.4 Scope of the Study Period

The study has been conducted during August 2020-July 2024. Approximately, it will take one year to complete all research processes including reviewing of previous

literature, designing research tools, gathering, and analyzing the data, and reporting research findings.

1.13 Definition of Terms

“Customer Journey Management” (CJM) refers to management processes that involve understanding a customer and managing their experience throughout a journey (Grewal & Roggeveen, 2020). In this study, it means examining foreign passengers waiting to board a plane at the international departure gate of Phuket International Airport, focusing on their use of airport touchpoint services such as accessibility, check-in, luggage handling, safety and security, passport control, mobility, and airport facilities.

“Customer Experience” (CX) means experience of foreigner passengers at Phuket International Airport. Specifically, the CX of this study covers passenger experiences in terms of physical experience, emotional experiences, service experience, and Thainess experience . Timdang (2020)

“Airport” means an authorized commercial airport which provides full service and necessary facilities to international and domestic passengers. In this study, it refers to Phuket international airport.

“Phuket International Airport” refers to the international departure gate at Phuket International Airport.

“Customer Touchpoint” refers to any point of interaction that allows airport passengers to use airport services both directly and indirectly, and it significantly influences customer experiences. In this study, a total of 12 touchpoints will be discussed, divided into 7 touchpoints for international departure passengers and 5 touchpoints for international arrivals, namely, 1) accessibility to the airport, 2) check-in process, 3) baggage handling process, 4) safety management, 5) passport/ID control, 6) mobility, 7) airport facilities, 8) deboarding, 9) immigration, 10) baggage reclaim, 11) customs, and 12) before leaving the airport.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter discusses literature review relating to different aspects of customer journey management model for Phuket International Airport. The discussion starts with section one, airport management, which provides a general overview of the airports, airport composition, operating system inside the airport, the importance of the airlines, and performance of the airport. Then followed by discussion on customer journey management (CJM) focusing on the understanding of customer journey, customer experience, customer touchpoints, and the factors that affect CJM. (Rawson et al., 2013; Sismanidou & Tarradellas, 2017)

The next section explains Thailand airports management which studies Thailand airport development direction, air transportation statistics and Thailand airport development policy. The discussion focuses on the policies of Departure of Airports (DOA) and Airport of Thailand (AOT). The last section discusses details of Phuket International Airport, explaining an overview of the airport, domestic and international flight routes, including popular routes and various facilities. Details described above can be summarized in Table 2.1 as follows.

Table 2.1 Content Structure of the Literature Review Chapter

Sections	Topics and Sub-Topics
2.1 Introduction	-
2.2 Airport Passenger Management	2.2.1 Overview of Airport 2.2.2 Airport Components 2.2.3 Airport Operations 2.2.4 Airline

Sections	Topics and Sub-Topics
	2.2.5 Airport Efficiency Services
	2.2.6 Related Research on Airport Passenger Management
2.3 Customer Journey Management	2.3.1 Customer Journey
	2.3.2 Customer Journey Map
	2.3.3 Customer Experience
	2.3.4 Customer Touchpoints
	2.3.5 Airport Experience and Touchpoints
	2.3.6 Airport Experience and Touchpoints Variables
2.4 Thailand Airports Management	2.4.1 Thailand Airports
	2.4.2 Thailand Airport Development Direction
	2.4.3 Air Transportation Statistics
	2.4.4 Thailand Airport Development Policy
	2.4.4.1 Department of Airports (DOA) Development Policy
	2.4.4.2 Airports of Thailand (AOT) Development Policy
2.5 Phuket International Airport	2.5.1 Overview of Phuket International Airport
	2.5.2 Flight Routes and Flight Scheduled
	2.5.3 Busiest International Routes to and From Phuket International Airport
	2.5.4 Passenger Load Factor
	2.5.5 Low-Cost Carriers Air Traffic

Sections	Topics and Sub-Topics
	2.2.6 Airport Facilities
2.6 Related Research on Phuket International Airport	-

2.2 Airport Passenger Management

2.2.1 Overview of Airport

Hounslow Heath Aerodrome airport was considered by many experts and aviation enthusiasts as the first official commercial international airport. The airport started to operate civilian flights and commercial flights in 1919 and became the oldest airport in the world. Typical airports must consist of several components such as a runway for takeoffs and landings, apron, hanger and control tower (AQT Solutions, 2017). The International Civil Aviation Organization (ICAO) has defined the airports as a “designated area on land or water (including buildings and equipment) intended to be used in whole or in part for arrivals and departures to/from the airport, and aircraft movements” (International Civil Aviation Organization, 2018). The airport must consist of different elements which will be discussed in the next section.

2.2.2 Airport Components

(The Constructor, 2020) defines that the airport must consists of runway, taxi way, apron, terminal building, control tower, and hanger parking. This definition is in line with Hussain’s concept (Hussain, 2014) which defines elements of the airport to be consisted of 1) Runway, 2) Terminal building, 3) Apron, 4) Taxi ways, 5) Aircraft stand, 6) Hanger, 7) Control tower, and 8) Parking lot. Above definitions are different from the concept of (Rodrigue, 2020) where he broadly states the two major components of the airport are airfield and terminal. A typical airport consists of a runway for takeoffs and landings of planes and taxiways etc. In conclusion, airport components refer to different areas both indoor and outdoor that are used to facilitate aviation and airport operations and it requires effective management.

2.2.3 Airport Operations

Airport operations cover all airport operation work process to ensure a smooth service and airport customers' positive experience such as airlines and airline customers. Airport management is divided into four parts as landside operations, airside operations, billing and invoicing, and information management (Everglades University, 2020). In general, all airport management is divided into two major parts which are airside management and landside management (Chang et al., 2016; Gibbons & Wu, 2017; Janic, 2016; Zhang et al., 2018). Details are as follows.

2.2.3.1 Airside

Airside is an area within an airport where planes take off and taxi as well as surrounding areas including buildings or parts of buildings that go into that area where access is controlled. The key elements in the airside are the runway, taxiway, apron and ramp etc.

2.2.3.2 Landside

Landside is an area and buildings within the airport that are not in the airfield zone. Landside zone is accessible by non-passengers without control. Key elements of the landside area are the terminal building, warehouse building, traffic system within the airport including parking space etc. These elements are clearly visible from outside of the airport.

Sukhuman (2014) divides passenger related airport operations into two different procedures which are 1) departure procedures and 2) arrival procedures. The two procedures are categorized as a sub-function of airside and landside operations. Figure 2.1 shows how departure and arrival procedures fit into the overall airport operations.

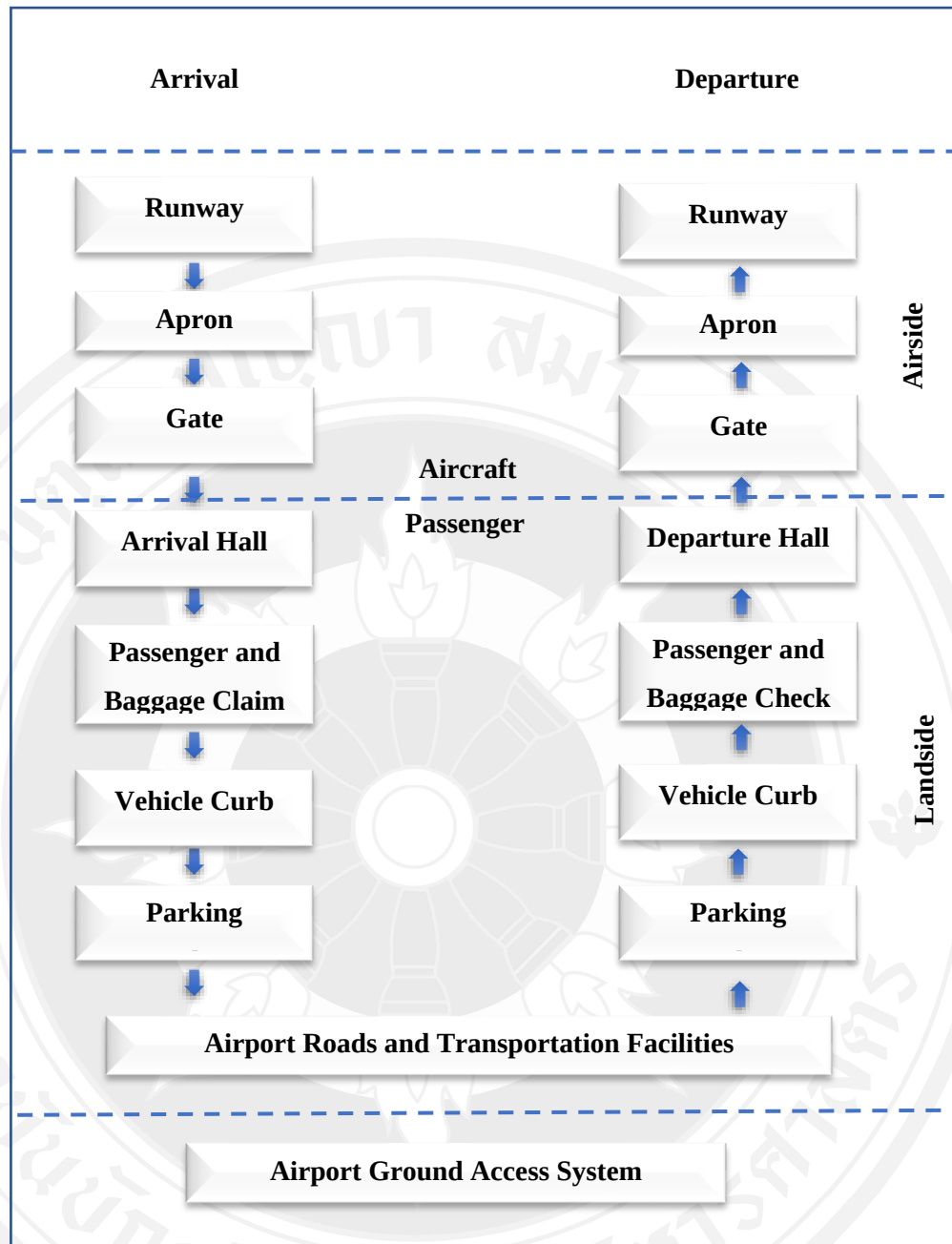


Figure 2.1 Airport Operations Procedures

Source: Adapted from AOT (2018c); Sukhuman (2014).

In conclusion, an airport is generally divided into two main areas: airside and landside. Landside allows public access without any control whereas access to airside zone is strictly controlled including all areas of the airport that surround the aircraft and parts of the terminal accessible to passengers and staff (Aviajoin, 2018).

2.2.4 Airline

Most passengers using air travel for their journey use airline service. The service consists of three main steps: 1) Pre-flight process consists of booking and purchasing tickets, checking in baggage, ticket check and passport control, customs clearance and boarding 2) In-flight process which starts from departure from the starting point to the final stage of arrival at the destination airport and 3) Post-flight process consists of leaving the aircraft, baggage claim, passport control and customs clearance (Skorupski & Uchroński, 2018; Zografos et al., 2013). Maintaining the quality of these 3 services will have a direct impact on the customer experience and satisfaction (Faiyetole & Yusuf, 2018) where most of the above procedures take place within the airport. Therefore, customer journey management can be affected by and related to airport management.

2.2.5 Airport Efficiency Services

The services provided by airports can be divided into two groups, namely, aviation and non-aviation services. Examples of aviation services could be the provision, maintenance and operation of the infrastructure required for the aircraft to take off, land, and stand, the provision and maintenance of the equipment and information technologies required for baggage handling and check-in of passenger, aviation safety services, etc. Aviation services also include ground handling services, such as preparation of the aircraft for flight, luggage loading, passenger transport, etc. Meanwhile, non-aviation services include car parking, commercial activities at the airport (catering, commerce), business lounges, rent, advertising, and so on. Direct customers of aviation services are airlines, and those of non-aviation services – passengers (Pabedinskaite & Akstinaite, 2014).

Airport efficiency has a direct impact on safety, user satisfaction and the financial performance of the airport, airlines, and service providers. ICAO requires that states shall take all necessary steps to secure the co-operation of operators and airport administrations in ensuring that satisfactory facilities and services are provided for rapid handling and clearance of passengers, crew, baggage, cargo and mail at their international airports (Rodríguez-Sanz et al., 2018).

Research on airport facility management guidelines Peeranthorn (2018) explains that efficiency of airport facility management is divided into two components. The first component is service personnel, and the second component is property management which means facility management. Therefore, the efficiency of airport facility management relies on the operator's service skills and (Boonlert, 2008) further explains that the key factors contributing to the efficiency of the airport's facility management can be measured in four areas which are safety, comfort, speed of service and economy. Evidently, most of the airport management is focused on airport facilities serving airlines and airport users. Therefore, airport operators have designed terminals and buildings to facilitate their access to the service. In addition, Airport Council International (ACI) has ranked its member airports with aim to develop and improve all aspects of the airport services. There are 8 criteria and 33 topics used in the assessment as follows (Airport Council International, 2014).

2.2.5.1 Access

- 1) Ground transportation to/from airport
- 2) Availability of parking facilities
- 3) Value for money of parking facilities
- 4) Availability of baggage cars/trolleys

2.2.5.2 Check-in

- 1) Waiting time in check-in queue/line
- 2) Efficiency of check-in staff
- 3) Courtesy, helpfulness of check-in staff

2.2.5.3 Passport/personal ID control

- 1) Waiting time at Passport/Personal ID inspection
- 2) Courtesy and helpfulness of inspection staff

2.2.5.4 Security

- 1) Courtesy and helpfulness of security staff
- 2) Thoroughness of security inspection
- 3) Waiting time at security inspection
- 4) Feeling of being safe and secure

2.2.5.5 Finding your way

- 1) Ease of finding your way through airport

- 2) Flight information screens
- 3) Walking distance inside the terminal
- 4) Ease of making connections with other flights

2.2.5.6 Airport facilities

- 1) Courtesy, helpfulness of airport staff
- 2) Restaurant/eating facilities
- 3) Value for money of restaurant/eating facilities
- 4) Availability of bank/ATM facilities/money changers
- 5) Shopping facilities
- 6) Value for money of shopping facilities
- 7) Internet access/WIFI
- 8) Business/Executive lounge
- 9) Availability of washrooms/toilets
- 10) Cleanliness of washrooms/toilets
- 11) Comfort of waiting/gate areas

2.2.5.7 Airport environment

- 1) Cleanliness of airport terminal
- 2) Ambience of the airport

2.2.5.8 Arrivals services at this airport

- 1) Passport and Personal ID inspection
- 2) Speed of baggage delivery service
- 3) Customer inspection

Boonlert (2008) states that characteristic of a well-managed airport is an indicator of airport service efficiency. Any airport should therefore have ten key characteristics as listed below.

- 1) Entry-exit of passengers must be fast
- 2) Luggage handling must be efficient
- 3) The service must be of quality
- 4) The size of the airport must be appropriate to handle the traffic efficiently
- 5) Facilities for passengers must be good and enough
- 6) Good duty-free shops

- 7) Effective floor planning
- 8) Good environment
- 9) Good transportation system to the city
- 10) Good and effective security measures.

The study of effective management of the airport facilities made us aware of the role and functions of the airports in different forms that is available to the passenger. They also know the airport rating from ACI that serves to bring the results of the service to develop and improve the airport in all aspects. Also, in accordance with The Airport Council International Quality Scale. That has set a tool to measure service quality of airports around the world (Airport Service Quality: ASQ) Which consists of seven factors: 1) Access 2) Check-in 3) Passport and personal ID control 4) Security 5) Finding your way 6) Airport facilities and 7) Airport environment.

Therefore, for the relevance of this research the researchers grouped the variables to measure management performance passenger travel in Phuket. using criteria related to ASQ, which are appropriate and applicable to this study (Figure 2.2).

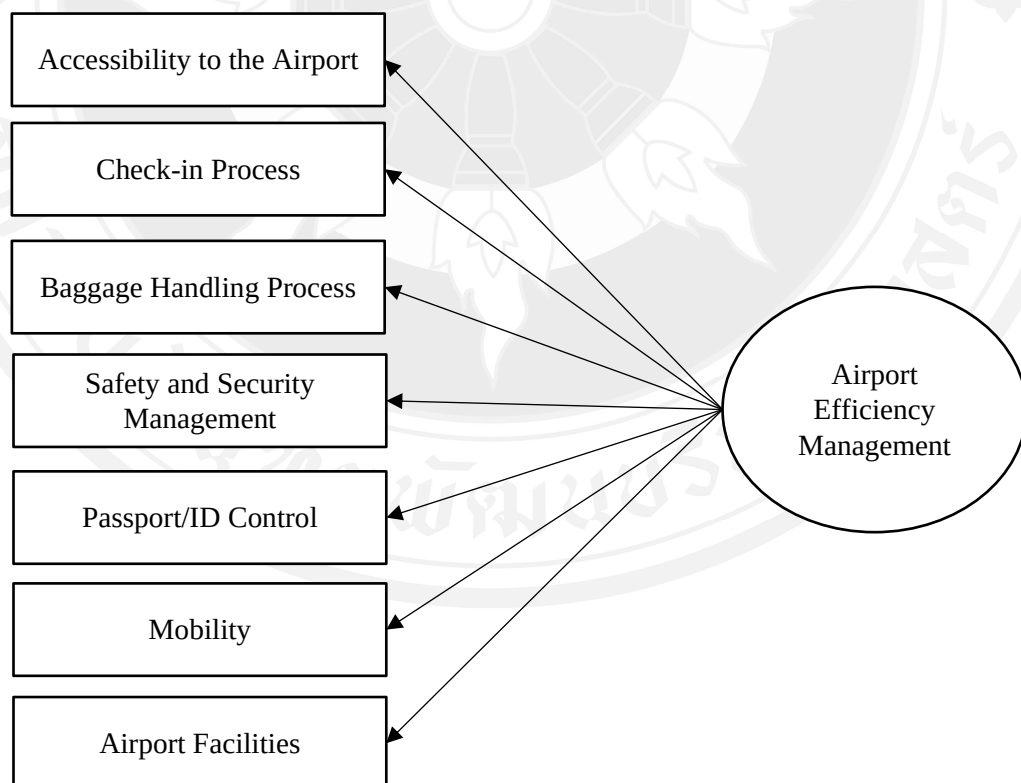


Figure 2.2 Airport Efficiency Management Observed Variables Used in the Research

2.2.6 Related Research on Airport Passengers Management

Several studies of airport passenger's management in various disciplines such as customer experience and customer satisfaction, total airport management, service quality, and Passenger-centric management as described in Table 2.2.

According to many researchers (Liu, 2019; Nurhadi et al., 2019; Otieno & Govender, 2016; Patel, 2018; Rossi et al., 2018; Wattanacharoensil et al., 2016; Wattanacharoensil et al., 2017), airport passengers management must focus on customer experience, which measures the importance and give comprehensive insight regarding passengers' experience while using the airport terminal. Additionally, Suárez-Alemán and Jiménez (2016), Huderek-Glapska and Nowak (2016), Jiang and Zhang (2016) describe in their research that the airport service quality management is crucial for the airport service industry to measure the satisfaction levels for service.

Service quality and customer satisfaction 'was addressed by several authors Burrows (2015) state that the developed a passenger proposition should base on four pillars location, network, customer service and, most importantly, speed of transit. In support of this, (Jiang & Zhang, 2016) give some insights for the measurement and management of service quality at airports to improve customer satisfaction.

According to these authors, it is crucial for airlines to assess customer expectations about airport services at individual and competitive levels. Brida et al. (2016) state that airports should improve mainly the way of communicating flight information to users and the location of the different airport's utilities. Relevant factors are waiting times, differentiation through service quality, appropriate data collection from passengers, fulfillment of service quality as per customers 'expectations and identification of key roles of service providers and services in the competitive environment (Yang et al., 2015). Correspond to the results of Liu (2019), more satisfying customer journey through the airport could be measured after the service development insertion.

Table 2.2 Related Research on Airport Passengers Management

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Kalakou et al. (2015)	Future airport terminals: new technologies promise capacity gains	To analyze the profound changes that will materialize in the passenger buildings over the next years because of technology innovation, passenger, and airline traits, and to assess the consequences for airport operations and facilities.	Passenger process times at the check-in and security checkpoints are significantly reduced,	Airport planning Airport capacity Future airport terminals Communications Simulation
Helm et al. (2015)	Advancing Total Airport Management–An Introduction of Performance Based Management in the Airport Context	The objective of this paper is to introduce the concept of Performance Based Airport Management by combining and extending the existing concept of Total Airport Management	The paper presents our advanced approach of Performance Based Airport Management (PBAM)	Total Airport Management KPI
Burrows (2015)	Measuring the customer's journey through London City Airport	To understanding, communicating, and delivering on your airport's passenger proposition.	LCY has developed a passenger proposition based on four pillars location, network, customer service	Customer proposition Customer Satisfaction

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Chang et al. (2015)	Performance evaluation of airport safety management systems in Taiwan	This research intended to establish airport SMS components and elements to evaluate international airport SMS performance by reviewing the SMS manuals of the ICAO, Taiwan CAA, and U.S. FAA.	The weight ranking and the rank order of the airport SMS components from high to low is: Safety risk management, Safety policy and objectives, Safety promotion and Safety assurance.	Safety Management System; SMS Risk management ANP
Otieno and Govender (2016)	Managing airport service quality, the impact of self-service technologies	this article is written, intends to investigate how the implementation of self-service technologies (SSTs) at the ORTIA's international departures passenger check-in has impacted service experience and quality.	The data confirmed that there is an association between convenience and fulfilment; between ease of use and fulfilment, and between reliability and fulfilment, although some relationships were not very strong.	Service experience Self-service
Suzan and Fawzy (2016)	The effect of airport and in-flight service quality on customer satisfaction	The study aims to evaluate the airline service quality dimensions during the travel cycle perceived with the respect to passenger's needs.	The study assumed that the airline service as a flight consists of five phases "Reservation, scheduling, check-in, airport, and on-board services", and every phase consists	customer satisfaction service quality

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Brida et al. (2016)	Customer perception of service quality: The role of Information and Communication Technologies (ICTs) at airport functional areas	This paper aims to assess service quality in an airport environment and examining how ICTs services affect passenger's perception about the quality of service at airport functional areas.	of many indicators which effects on the airline service quality. Airports should improve mainly the way of communicating flight information to users and the location of the different airport's utilities.	Service quality Airport passengers' perceptions
Jiang and Zhang (2016)	An assessment of passenger experience at Melbourne Airport	This paper aims to assess the service quality at Melbourne airport by conducting an airport user survey.	The results demonstrate that there are significant discrepancies between passengers' expectations of service quality and their perceptions of service quality at the airport.	Airport service quality Airport management
Suárez-Alemán and Jiménez (2016)	Quality assessment of airport performance from the passengers' perspective	This paper aims to analyses whether users' perceptions of airport performance reflect the impact of the quality of different airport management schemes and characteristics.	Our estimations show that private participation at airports leads to a higher perception of quality.	Airport management Service quality

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Huderek-Glapska and Nowak (2016)	Airport and low-cost carrier business relationship management as a key factor for airport continuity: The evidence from Poland	The study aims to explore management strategies and the quality of airport airline relations in key areas, the attraction and retention of low-cost services.	The conducted study confirmed the hypothesis that the business relationship management between LCCs and airports is a key factor determining the ability of regional airports to continue and develop operations.	Airport management Business relationship management
Jiang and Zhang (2016)	An assessment of passenger experience at Melbourne Airport	This paper aims to assess the service quality at Melbourne airport by conducting an airport user survey.	The results demonstrate that there are discrepancies between passengers' expectations of service quality and their perceptions of service quality.	Airport service quality Airport management
Otieno and Govender (2016)	Managing airport service quality – the impact of self-service technologies	This study intends to investigate how the implementation of self-service technologies (SSTs) at the ORTIA's international departures passenger check-in has impacted service experience and quality.	The impact of self-service technologies on service quality, confirmed that there is an association between convenience and fulfilment; between ease of use and fulfilment, and between reliability and fulfilment, although	service experience self-service

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Wattanacharoensil et al. (2016)	An Airport Experience Framework from a Tourism Perspective	This research explores the current airport experience and adds to research on airport experience by clarifying ten key components necessary for airport passenger experience propositions based on existing research	some relationships were not very strong. The psychological aspect, and the service marketing and management and supporting these findings with empirical evidence from case studies.	Experience creation
Milbredt et al. (2017)	Passenger-centric airport management via new terminal interior design concepts	The goal of our new design concept for terminals is providing information to passengers, where and when they need it.	The impact of information displays is modeled by a microscopic simulation. Adopting the assumption that the information displays make it easier for the passengers to figure out the way through the terminal,	Terminal Interior Design Passenger-centric Management
Wattanacharoensil et al. (2017)	An analysis of the airport experience from an air traveler perspective	This study investigates the nature of airport experience (AE) from the perspective of air travelers.	First, an airport is a representative of a destination. Second, an airport exhibits the positive characteristics of a destination. Finally, an airport	Airport Service Tourism Experience

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Sabel (2018)	A More Satisfying Customer Journey Through Mariehamn Airport: How to develop the customer experience with service design methods	The purpose of the master's thesis was to develop the customer experience at Mariehamn Airport with service design methods.	is perceived as an internal component of tourism experience. The results of a more satisfying customer journey through Mariehamn Airport could be measured after the service development insertion. The positive trend in the customer satisfaction was not only met, it exceeded the criteria stipulated by Fina via.	Service design, Customer experience Customer satisfaction
	Airport Passenger Processing Technology: A Biometric Airport Journey	This thesis analyzes the current passenger processing technology implemented at airports around the world and their associated challenges that passengers face.	The results show that a single token ID is beneficial to the time it takes to process a passenger. Furthermore, it demonstrates that implementation of a single token ID with self-service technology can provide enhanced passenger travel experience, improving operational process efficiency, all while ensuring safety and security.	Passenger experience

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Rossi et al. (2018)	How to drive passenger airport experience: a decision support system based on user profile	The aim of the study is to design a system both to improve passengers' experience by reducing time-spent queuing and waiting and to raise airport revenues by increasing the time passengers spend in discretionary activities.	The passengers experienced less queuing and waiting time; the time saved was spent in discretionary activities, improving passengers' airport experience, and increasing airport revenues.	Passenger experience
Wiltshire (2018)	Airport competition: Reality or myth?	The purpose of this paper is to examine several the indicators which might signal either the existence of competition between airports or the ability of airlines to constrain airport behavior or alternatively	The paper finds limited evidence of secondary airports being able to compete effectively with their larger neighbors.	Airline Airport competition
Prentice and Kadan (2019)	The role of airport service quality in airport and destination choice	This study investigates whether airport service quality is related to airport and destination choice.	The results confirm that overall airport service quality is significantly related to airport reuse and destination revisit.	Service quality Airport Satisfaction

Authors (Year)	Topic	Research Aims / Highlights	Significant Results	Issue / Theme
Liu (2019)	Enhancing Mobility around Schiphol Airport for International Passengers	This study presents the process and results of the graduation project: Enhancing Mobility Experience around Schiphol Airport for International passengers.	Passengers feel supported during the process of choosing routes and tickets and feel easier on completing the tasks of finding the spot and getting on the vehicle in an unfamiliar environment.	Passenger experience
Nurhadi et al. (2019)	The Practice of Digitalization in Improving Customer Experience of Indonesian Commercial Aviation Industry	This research is aimed to give comprehensive insight regarding passengers' experience while using air transportation in Indonesia and the minimum effort that the industry has put to maximize customer experience.	The findings show that regardless the frequency of flights taken in the past year, passengers are mostly dissatisfied with the wi-fi in Indonesian airport and Indonesian airlines in-flight entertainment.	Customer experience Passenger touchpoints

Among related research on airport passenger's management themes mentioned above, most still emphasize customer experience and airport service quality management. And the relevant factors are waiting times, differentiation through service quality etc. Thus, airport passenger's management is one important aspect of airport management (Helm et al., 2015). It can be concluded that there are various factors in determining the airport passenger's management. In this, it is essential for managers to manage effectiveness based on different factors. From the above discussion, it can be concluded that customer experience helps managers to manage the services of airports.

2.3 Customer Journey Management

2.3.1 Customer Journey

Understanding the experiences and customer journeys are essential to any business and nowadays, customers can interact with many more channels of customer touchpoints due to the increasing technological advancement. These changes have led companies to add a variety of service models to create and deliver better customer experiences (Brynjolfsson et al., 2013; Lemon & Verhoef, 2016). If companies want to drive more business transactions, the key factor is having target customers data, from defining a customer persona then to communicate how a product or service can help eliminate pain or solve problems for those potential customers including providing a good experience for customers using customer journey or CX analysis (Academy, 2019). CX essentially refers to the sequence of events which may be designed or may occur naturally, that the customer must learn, place order and interact with the company's offerings as well as products, service or experience. Norton and Pine (2013) have stated that a route of customer journeys can be pre-designed, or it can occur naturally without any interference. During the journey, customer will have to learn about purchasing and interacting with company or brand. The customer journey reflects the sequence that has been specially designed to create value for customers as well as profit for the company and stand out from competitors. Additionally, (Crazyegg, 2018) defines the meaning of customer journey that it is a story about understanding customer behavior and customers will return to use the service again if the quality of service in each touch point is improved well.

Research of Salilathip (2018) outlines the consumer journey both in the past and present. It provides an overview of before, during and after purchasing a product or service. There are four stages of the traditional customer journey (Alves et al., 2012; Lemon & Verhoef, 2016). (Figure 2.3).

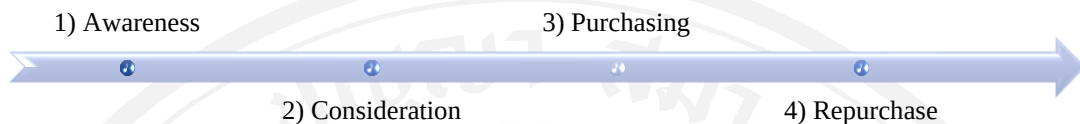


Figure 2.3 Traditional Customer Journey

Source: Adapt from Salilathip (2018).

1) Awareness is the first step in keeping the target customer informed about the product's detail and be aware how the brand is different from other brands. Originally, communication was done through mass media, including advertising through television, radio, magazine, and billboard (Alves et al., 2012; Domazet et al., 2017). The awareness of target customers was achieved more when advertisement was done in more frequency, during prime time that target customers watch the media and through popular media with more coverage area. In some cases, or in certain target groups, opinions of close friends or family play important role and people trust the product presenter which mostly are famous actor/actress. The content must be told as a story therefore, brands have to spend a lot of money to generate awareness.

2) Consideration is the stage where the target customer perceives the brand's information and searches for additional information both from going to the store, selling points, finding detailed information on the website of the company and various public relations materials to understand more about products such as product specifications, raw materials, prices and brands. Target group may not have immediate purchase requirements.

3) Purchasing is when the target group creates purchase demand and therefore goes to a store that distributes products or services. Therefore, providing information at the point of purchase or service will be extremely important. Explaining details of the product and how the product is more outstanding than other brands;

informing the promotional program to encourage buying and purchasing in larger numbers; form of payment; after-sales service are all important and require a salesperson's sales skills (Domazet et al., 2017). If the item is on sale without salesman to explain in detail, packaging will be of great importance. Packaging must stand out from other brands, in addition to its physical appearance, colors used and image, the packaging also must meet the needs of use more than competitors and packaging must have clear detailed description of the product to result in a purchase. Packaging will be of great importance. Packaging must stand out from other brands, in addition to its physical appearance, colors used and image, the packaging also has to meet the needs of use more than competitors and packaging must have clear detailed description of the product to result in a purchase.

4) Repurchase or Loyalty Building is when a purchase is done, product used, and service received. Customers evaluate their satisfaction in using the product or receiving a service against expectations. If customers are satisfied and there are no other brands that can produce better products, then repurchase will occur and that is what every brand and business want to happen.

When consumer behavior and business environment change, consumers have more access to the internet, and businesses are increasingly adapting to trade and online marketing. These are the factors that motivates the change in buying decisions of consumers from before purchase, during purchase, and after purchasing goods or services (Ayanso et al., 2015). There are six stages of consumer journey through digital media as shown in figure 2.4.

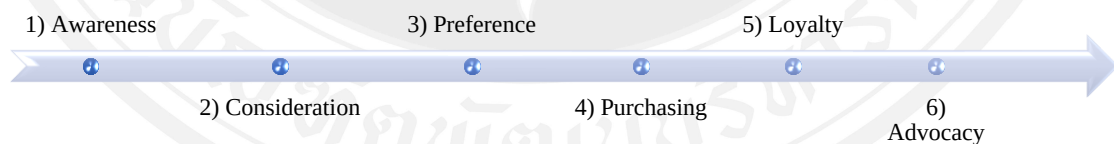


Figure 2.4 Digital Customer's Journey

Source: Adapt from Salilathip (2018); Ayanso et al. (2015).

1) Awareness is the way businesses communicate to their target customers through more diversified and multiple communication channels especially through social media, including Facebook, where consumers are often informed of

advertising business, on Instagram, which is often seen the picture of interesting products, on YouTube, where stories are told in the form of videos. In addition, consumers may see advertisements in various media including radio, television, and billboards. Therefore, it is evident that the channels for communicating information to consumers to provide consumers with detailed information of the product are very diverse. Each media can access or present information to customer groups differently. Each business will use a different strategy when choosing types of media, characteristics of the content, frequency of reaching consumers. These are key success factors when trying to reach out to target customers to raise their awareness (Edelman, 2010; Greene & Oliva, 2009; Lemon & Verhoef, 2016; Vivek et al., 2012).

2) Consideration is when the information is known then target customers will search for more information to compare details of products with other brands and evaluate options for making purchasing decisions. Nowadays, consumers often search for more information using online media. Consumers read product reviews by people who have used products or services and use search engines to find information on the internet to find additional information. When customers are searching for more information about the product, it means that the customer has the need, is interested in the product, or knows the brand. Hence, encouraging purchases with various marketing tools can stimulate purchasing decisions. However, it is difficult for businesses to control this information because it is the information from consumers who have used actual products and services, and this information is therefore highly reliable. If the review is positive information, it will make it easier for new consumers to make purchasing decisions. If it is negative, it may make new consumers shy away from buying products or using services. Therefore, at present, if the customer is dissatisfied with the brand, businesses need to quickly respond and address the problem for their customers to avoid negative information being circulated in online media. In addition, the target group may communicate with the business via online channels such as sending messages via LINE application or Facebook to request more detailed information for decision-making (Webster & Hume, 2016; Vivek, Beatty & Morgan, 2012; Edelman, 2010; Greene et al., 2009).

3) Preference is when customers search for information and evaluate different options. If customers start to feel like a brand, they will press the Like button

and share the brand on their messages or social media. Customers may subscribe to get more information that the company sends to online media. If this behavior occurs, it is like that they will make a purchase (Webster & Hume, 2016; Howard & Kerin, 2013; Vivek, Beatty & Morgan, 2012; Edelman, 2010).

4) Purchasing is when a purchase has been made. Having various distribution channels that are easy to access, simple, and offer different online payment channels at the convenience of the customer are all essential to achieve a successful sale. A business that has complicated purchase process may chase away its own customers even though customers prefer a brand, they can change their mind and decide not to buy (Webster & Hume, 2016; Vivek, Beatty & Morgan, 2012; Greene et al., 2009).

5) Loyalty occurs after the purchase is made and customers have used the product or service. If customers are satisfied and feel the difference of the product from other brands, they will be loyal. Businesses need to focus on target customers who are loyal through Customer Relationship Management and Customer Experience Management in order to keep customers loyal to their brand and repurchase. The brand must make customers feel that they are important for the brand (Ali et al., 2013; Greene & Oliva, 2009; Kandampully et al., 2015; Laroche et al., 2013).

6) Advocacy is when a customer has purchased a product or used a service and will then make a negative and positive referral through various online media. Positive referral is when the consumer uses the product or service and feels loyal, bonded to the brand, then they will share their impression of the product or service in social media. This step is considered to have tremendous impact on sales generation and can be done in a variety of formats including telling stories of the impressions and products through personal social media such as Facebook, Instagram, or public online media such as on Pantip website etc. Referral can occur in a form of satisfaction rating of the service in which businesses have to constantly monitor messages related to brands and products. The negative message must be responded to quickly to prevent negative impact on the brand (Howard & Kerin, 2013; Vivek, Beatty & Morgan, 2012; Greene et al., 2009; Gonring, 2008). Building a positive customer experience can help to achieve a positive preference loyalty and advocacy.

In conclusion, customer journey is the consumer journey that correlates with the organization or brand before, during and after purchasing a product or service. Businesses can develop strategies or methods that will meet consumers' needs better, is able to plan future marketing strategies as well as to motivate consumers to be interested in products and services, develop products and services to meet the needs and to achieve more effective after-sales satisfaction (Flom et al., 2011).

2.3.2 Customer Journey Map

Customer journey map or CJM is a visualization of the customer journey. It serves to tell the story of the customer experience with brands across all contact channels, whether your customers interact with you through social media or other channels. Visualizing the customer's CJM will ensure that no customer is dropped through service defects. The process also allows service providers to gain insight into common customer pain points (Salesforce.com, 2020). CJM provides a clear but structured picture of the consumer experience which is different from conventional blueprints (Raijmakers et al., 2012). In addition, (Rechardson, 2010) further explains that a customer journey that will be exposed to providing services such as physical products and intangible services such as experiences, consists of four main factors namely action, motivation, questions, and barriers. The four factors are related during different processes, if any step is stuck or interrupted, it will affect the next step and may cause the service to be stopped.

2.3.3 Customer Experience

Customer Experience (CX) refers to the interactions between customers and the organization as well as business relationships. Interaction may include building awareness, discovering, training, support, purchasing and service where building a customer experience is an essential part of service (Aconnect, 2017). In general, the customer experience is defined as holistic and it relates to the customer's cognitive, emotional, social, and physical responses to direct or indirect contact with the service provider or products through various touchpoints during the entire customer journey (Bolton et al., 2018).

McColl-Kennedy et al. (2015) states that the customer experience is not only built on elements that the service provider can control, such as service, classification, and price but also to the elements beyond control such as the motivation of other customers. In addition, (Klaus & Maklan, 2013) has introduced a new measure that is well suited to the modern concept of the customer experience that is “customer experience quality” or EXQ. It is found that this method could better explain and predict both loyalty and advice than customer satisfaction.

McColl-Kennedy et al. (2019) has introduced three key customer experience management practices. First, it introduces a new conceptual framework for customer experience management that was combined with previous research to better understand and improve the concept. The practice is comprised of value creation elements. Second, it demonstrates the benefits of managing customer experience based on a conceptual framework that combines quantitative and qualitative measurements. Third, it provides step-by-step instructions for implementing the guideline. This therefore shows that the analysis and managing a customer experience using big data techniques can provide important insights. (MacDonald, 2020) also notes that CX is an integral part of Customer Relationship Management (CRM), and importantly customers who have a positive business experience are more likely to become repeated and loyal customers. On the other hand, bad experience, dissatisfaction or disappointment will not only make customers walk away but also make them into company’s critics who can destroy the strength of the brand (Motivate Design, 2019)

Kandampully et al. (2018) CEM involves working and conducting various activities within the organization collectively whether it is a strategy (a clear focus on customer), marketing (directing the company’s efforts to build long-term relationships both internally and externally), operations (customer building, trust in performance and company identity), service design (arrangement of front and back operations to accommodate both internal and external customers), human resources (providing creative, innovative and energy sources that support the company in any situation), technology (enabling and engaging the company’s innovation in all aspects of the organization) and social media (maintaining a communication channel to attract individual customers and communities). Therefore, CEM is not limited to one area of

the organization. Rather, it refers to the efforts of the entire organization collectively built through the participation of customers and employees.

Unlike (Privage, 2018) that views from marketing point of view that CX is a marketing model that understands the ideas and needs of the new generation rather than traditional marketing. CX is therefore a marketing activity that creates a good customer experience starting from receiving content from the media, getting interested in the product or service, doing some research, making a decision to buy a product or service, and sharing their impression of the product or service and spreading word of mouth. This is consistent with (Homburg et al., 2017) that describes customer experience management or CEM as one of the most promising marketing approaches in the consumer industry. It aims to achieve and maintain customer loyalty over the long term.

Timdang (2020) examines experiential marketing models for foreign tourists found that. This research is an interesting new idea in practice. There are five key elements: Sense, Feel, Think, Act and Relate. And a tourist experience marketing measurement model consisting of observable variables, including physical experience, emotional experiences, service experience And Thainess experience.

To summarize the concepts and theories related to CX shows that the customer experience is a key part of the service. It involves the cognitive, emotional, social, and physical responses of the customer. It also includes elements of the carrier's control, such as the attraction of other customers. If you give customers positive experiences with the company, it will likely lead to customer loyalty and repeat customers coming back.

To derive an important parameter to measure passenger experiences within Phuket international airport. Therefore, researchers have used Timdang (2020)'s experiential marketing measurement model for foreign tourists, which consists of 4 observable variables: physical experience, emotional experiences, service experience And Thainess experience. (Figure 2.5)

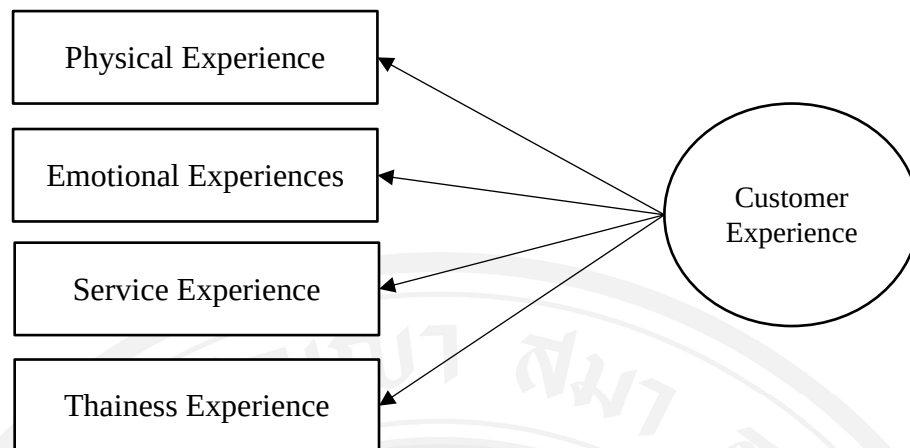


Figure 2.5 Customer Experience and Observed Variables Model

Source: Timdang (2020).

Evidently, the consumer journey concept is directly aligned with the consumer experience. In addition, the theory of a model of experiential marketing for foreign tourists is used as the main structure for analysis to be able to classify consumer experience more clearly.

2.3.4 Customer Touchpoints

A touchpoint can be defined as the occurrence of direct contact between a customer and a product or service, or with a representation of a company or a third party. The significance and meaning of touchpoint may vary according to the lifespan of the customer. Customers can also identify their touchpoints either from the customer's point of view or from the company's point of view (Meyer & Schwager 2007; Roto et al. 2016). Interactions of customers with touchpoints are what can ultimately create a service experience, and the quality of service can be determined by determining how seamless touchpoints work together for individual customers (Polaine, Lovlie, & Reason, 2013). It is inline Su (2014) statement that touchpoint design is an important part of service design since touchpoints are the service interface which customers interact directly. The quality of contact points directly affects the customer experience. Hence, the adaptability of the customer touchpoints is an important part of the contact points quality. Many companies communicate with customers in different ways using different points of contact (Dhebar, 2013)

Touchpoint refers to the different points in the experience of contact between a company and a customer (Homburg et al., 2017) including cognitive, emotional, behavioral, emotional and social components (Lemon & Verhoef, 2016; Verhoef et al., 2009) Some researchers argue that (Halvorsrud et al., 2016) other words could be synonyms of a channel of contact, including “point of contact” and “moment of truth” (Aichner, 2012). In general, each interaction between a customer and a company can be a determining factor and lead to an overall positive or negative customer experience. (Aichner & Gruber, 2017). Unexpected longer waiting times, one unfriendly staff or slow loading websites can upset customers, although all the rest may be perfect (Schüller, 2013). Customers and companies are now interacting through multiple channels and media, making the customer journey more complex (Lemon & Verhoef, 2016; Rawson et al., 2013).

Unlike research result produced by TechTarget (2019) that indicates that customer touchpoints can be direct or indirect contact furthermore, customer contact points can also occur both within and outside a brand’s control, and can occur before, during, or after purchase of a product or service. During the customer journey, every customer contact point has the potential to alter brand awareness and loyalty.

2.3.5 Airport Experience and Touchpoints

Airport experience has become an important concept for airport operators since the beginning of the millennium. Partly due to a growing understanding that airport experiences can improve travel and generate revenue from non-flying activities (DKMA, 2014) as well as increase competitiveness of the airport (Wattanacharoensil et al., 2016). The International Air Transport Association (IATA) is the pioneer to use the Fast Travel Program, a concept that was created to drive more self-service passengers in six steps for the convenience, speed and creating a good experience for passengers (IATA, 2013).

Relevant literature reviews are reviewed to present multidimensional views of the human experience in the previous sections. Summarizing from the general component of the identified human experience, it can be inferred that the passenger experience at the airport is personal and can be measured by satisfaction and it is influenced by the context in which it occurs: place, time and interaction with others. In

the specific context of airport passenger experiences, Harrison (2015) describes the airport passenger experience as “activities and interactions that passengers experience in the airport (passenger terminal)”. They categorize the passenger experience into two broad categories: (1) Necessary activity and (2) (Discretionary activity). Both categories of activity are shown in figure 2.6.

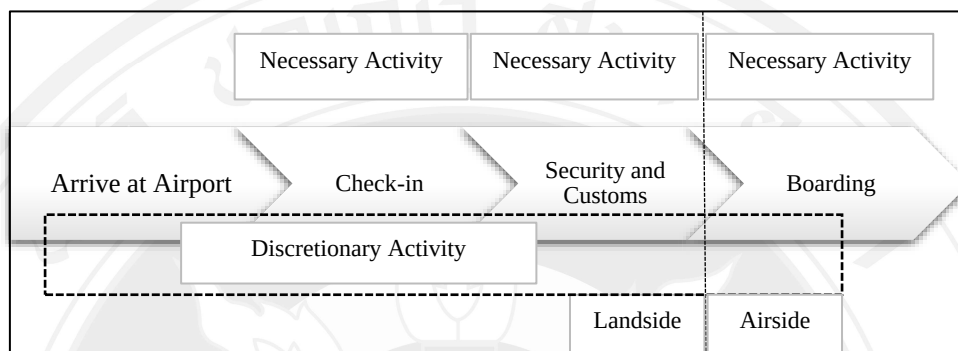


Figure 2.6 The Categories of Passenger Experience

Source: Harrison (2015).

Figure 2.6 shows the sequence of processes that passengers encounter during the departure at many international airports. Necessary activity is the activities that passengers must perform in a specified order, namely airport arrival, check-in, security and customs and boarding. On the other hand, discretionary activity means activities that are not compulsory and do not have to follow any step such activities as money exchange or having meals.

The airport experience is also a key factor in airport management for several reasons: (1) A positive airport experience can increase the satisfaction of future travelers (DKMA, 2014). (2) An airport experience can help increase non-flying income for operators (DKMA, 2014; Graham, 2014) (3) An airport experience affects choice of airline and destination and it also affects airlines in choosing an airport as a destination or a hub. (CAA, 2013; Parrella, 2013). (4) An airport experience can be a key differentiator tool especially when there are other major transportation hubs in the same region. (DKMA, 2014)

The customer touch points will occur in chronological order of the process. The timeline of the process is divided into three periods: Pre-service, Service, and Post-

service. Dirsehan (2019) has defined the details of the contact points into 33 points as follows (Figure 2.7).

Pre-Service Period (Before Passengers Arrive At the Airport)	Service Period (When Passengers are at the Airport)	Post-Service Period (After Passengers Leave the Airport)
1. Preparing luggage 2. Buying tickets (online or through agencies) 3. Transportation (public or private) to the airport 4. Checking in online 5. Visiting the airport's website or mobile application 6. Searching for information about facilities at the airport 7. Seeing advertising (on a street billboard, a website, or a social media service) about the airport	1. Using the parking lot 2. Security screening process 3. Checking in at the airport 4. Delivering luggage 5. Asking for help from airport personnel (such as asking for general information or for a wheelchair) 6. Eating or drinking in the cafés at the airport (including smoking rooms) 7. Using an ATM to withdraw money. 8. Exchanging money 9. Using lounge services 10. Using the toilets 11. Shopping at the airport 12. Paying for stamp fees 13. Passport control 14. Tracking flight gates on the screens 15. Going to flight gates 16. Visiting duty-free stores 17. Waiting in the waiting areas (such as reading a book or listening to music) 18. Connecting to Wi-Fi 19. Taking photos in the airport 20. Boarding	1. Baggage collection (at the destination airport) 2. Calling (informing) family about arrival 3. Talking to friends or family about experiences at the airport 4. Communicating with the airport post-services (completing a survey about experiences at the airport) 5. Writing about the airport on the Internet 6. Sharing photos taken at the airport on social media

Figure 2.7 Three Periods of Customer Touch Points Process

Source: Dirsehan (2019).

Society of International Telecommunication and Aeronautical or SITA a multinational organization providing IT and telecommunication services to the air transport industry with approximately 400 members and 2,800 customers worldwide, has released the annual passenger IT trends survey on how passengers feel at each

touchpoint in the travel process. In terms of negative emotions, a total of 10 service touchpoints have been designated, namely ticket booking, check-in, luggage tagging, bag deposit, security check, passport verification, waiting in the airport, boarding, on the plane, and luggage claims (Future Travel Experience, 2015) which is different from (Travel Tech Consulting, 2014) that has set all 5 major airport contact points as 1) Airport, 2) Check-in, 3) Security, 4.) Lounge, and 5) Boarding.

Additionally, (Su, 2014) has identified 26 main points of contact from the customer's itinerary within Helsinki International Airport, Finland. All points of contact are classified into 3 parts: initiative touchpoints, interactive touchpoints, and passive touchpoints, as shown in Figure 2.8.

Initiative Touchpoints				Interactive Touchpoints		Passive Touchpoints	
1	Intro of packing • Images/Texts	9	Plastic tray	17	Interaction with staff	25	Internal broadcast
2	Departure flights info • Texts	10	Direction guidance • Images/Texts	18	Computer interface • Images/Texts	26	Catchphrase on ground
3	Number of checks in area by airline • Images/Texts	11	Signage system • Images/Texts	19	Pick up service Intro to use by • Images/Texts/Braille		
4	Airport (commercial) services	12	Luggage check in info • Images/Texts	20	Interaction with machine		
5	Shops Lounges Cafes Bars	13	Buses, taxi and other transportations	21	Body check		
6	Luggage track and light info on screen • Text/Images	14	Intro of hand luggage • Images/Texts	22	Open luggage for detail check		
7	Intro of security check processes • Images/Texts	15	Luggage carts	23	Show boarding pass		
8	Chairs near boarding gate	16	Measure hand luggage • Images/Texts	24	Information desk		

Figure 2.8 Customer Touch Point at the Helsinki International Airport

Source: Su (2014).

It could be said that the passenger experience and touchpoints are the relationship between the passenger and the airport (operators) that are formed during the time through activities or interactions between passengers and the airport. It may be necessary activities or discretionary activities and may occur in chronological order,

which can be divided into three periods: pre-service period (Pre-service), during the service (Service) and after the service (post-service). Activities can also be classified into 3 main areas: initiative touchpoints, interactive touchpoints, and passive touchpoints. Each activity represents the interaction between passenger or automated service and terminal. This can be an integral part of income and an important tool.

2.3.6 Airport Experience and Touchpoints Variables

Harrison (2015) states that passenger experience is personal and could be measured by satisfaction; in order to derive factors affecting the passenger's airport experience, the researcher then summarizes the additional variables which are passengers' airport experience and touchpoints as shown in Table 2.3.

Table 2.3 Airport Experience and Touchpoints Variables

Author	Accessibility	Check in	Lounge/restaurant	Bag drop	Security	Passport Control	Dwell time/shopping	Boarding	Cleanliness	Terminal Facilities	Staff	Price	Mobility	Financial services	Directions and signage.
Al-Refaie et al. (2013)										/					
Widarsyah (2013)	/		/		/	/	/			/					
Lin and Chen (2013)							/								
Ariffin and Yahaya (2013)			/						/	/				/	/
Jen et al. (2013)									/	/					
Okumus et al. (2013)	/	/		/	/		/		/	/	/				/
Chen et al. (2014)	/				/					/					
Chumakova (2014)					/				/						

Author	Accessibility	Check in	Lounge/restaurant	Bag drop	Security	Passport Control	Dwell time/shopping	Boarding	Cleanliness	Terminal Facilities	Staff	Price	Mobility	Financial services	Directions and signage.
Potgieter et al. (2014)	/	/	/		/	/	/			/				/	
Ching (2014)			/	/			/		/	/					
Su (2014)		/		/	/	/	/	/	/	/	/	/			/
Yang et al. (2015)			/	/			/			/	/				
Bezerra and Gomes (2015)		/			/				/	/		/	/		
Paramonovs and Ijevleva (2015)	/	/	/	/			/	/		/	/	/			
Yang et al. (2015)			/	/			/			/	/				
Ali et al. (2016)	/								/	/					
Kotopoulos and Nikolopoulou (2016)	/	/	/			/									
Yang and Santonino III (2016)	/			/											
Hemdi et al. (2016)		/													
Moon et al. (2016)	/								/	/					
Ming-kei and Yui Yip (2016)			/	/	/	/	/		/	/					
Gambo (2016)		/		/											
Fitantri et al. (2017)				/											
Bogicevic et al. (2017)		/		/						/					
Geng et al. (2017)										/					
Ceccato and Masci (2017)					/				/						/

Author	Accessibility	Check in	Lounge/restaurant	Bag drop	Security	Passport Control	Dwell time/shopping	Boarding	Cleanliness	Terminal Facilities	Staff	Price	Mobility	Financial services	Directions and signage.
A Adeniran and SO Fadare (2018)	/			/	/		/		/	/			/		
Bellizzi et al. (2018)					/				/	/	/				
AO Adeniran and SO Fadare (2018)		/	/	/	/	/	/	/	/	/	/	/	/	/	/
Peeranthorn (2018)	/	/	/	/	/		/		/	/				/	
Dirsehan (2019)	/	/		/	/	/		/		/					
Kim and Park (2019)					/										
Prentice and Kadan (2019)	/				/										
Adeniran et al. (2020)				/	/	/				/					
Isa et al. (2020)		/			/	/				/					
Knoch et al. (2020)					/	/				/		/			
Total	8	17	10	15	20	10	13	4	15	26	6	5	3	4	10

Literature reviews show that there are many variables involved in handling of passenger experience and can be classified into many aspects (e.g. Figure 2.7 and 2.8). Additionally, fifteen variables are included in table 2.3, so the researcher has divided variables into groups to explore international airport passenger experience management factors and seven main factors are identified as 1) accessibility, 2) check-in, 3) luggage, 4) security, 5) passport control, 6) mobility and 7) airport facilities. Details of each main factors are as follows:

2.3.6.1 Accessibility to the Airport

Accessibility to the airport is a key criterion for airport competition. Accessibility refers to the entrance and exit of the personal car, public transport, as well as prices and expenses for services such as airport parking, fare of public transport etc. The parking lot should be the location closest to the service area and it must be convenient for passengers to enter and exit. This is consistent with (Zentrum et al., 2010) saying that quality of accessibility in general (time, cost of access) is the most important factor in determining the quality of airport access.

The researcher has studied the importance of airport accessibility with focus on only the journey within the airport to the terminal. Accessibility variables are shown in Table 2.4.

Table 2.4 Accessibility Variables in Previous Research

Author	Public transport	Car Park	Transportation cost
Chao et al. (2013)	/	/	/
Okumus et al. (2013)	/	/	/
Oh and Jin-Woo (2014)	/	/	/
Ansari and Agarwal (2015)	/	/	/
Paramonovs and Ijevleva (2015)	/	/	/
Ali et al. (2016)	/	/	/
Jiang and Zhang (2016)	/	/	/
A Adeniran and SO Fadare (2018)	/	/	/
Isa et al. (2020)	/	/	/

The researcher considers that airport accessibility factor is one of the important factors and there are three indicators defined for this factor which are 1) public transport, 2) car parks, and 3) cost of transportation (Figure 2.7). Therefore, it can be hypothesized that:

“H1 Accessibility has influence on passenger experiences who uses the service at Phuket International Airport.”

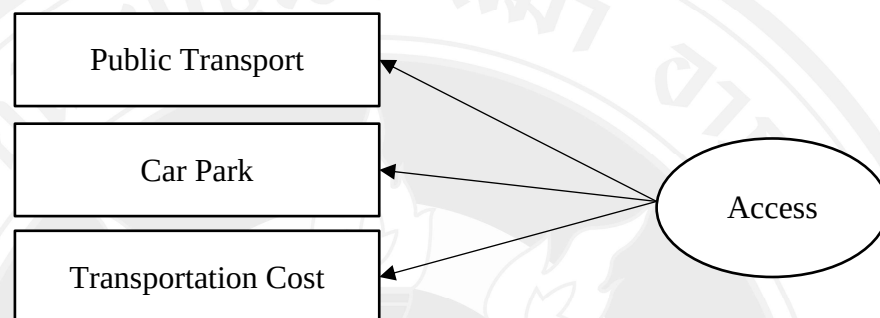


Figure 2.9 Accessibility and the Observed Variables

2.3.6.2 Check-in

Traditional check-in procedure is performed by the airline staff or other staff assigned to perform the task. The procedure starts by checking air tickets and passenger travel documents, then a boarding pass is issued and placing a bag tag on luggage. Following the release of e-tickets by United Airlines in 1994, there are now more options for self-service available including automatic ticketing machines or kiosks, or online check in via the internet or mobile applications etc. (Kalakou et al., 2015). Automatic check-in also helps to reduce the waiting time for passengers at the check-in area (Bezerra & Gomes, 2015; Chen et al., 2014; Prentice & Kadan, 2019). According to a survey of SITA (2012), nearly 70% of passengers check in today using self-service channels. Research by (Bogicevic et al., 2017 533) suggests a positive correlation between airport self-service technology and the confidence and pleasure benefits of travelers. Passengers who must load their luggage can also use the service at the automatic counter. Passengers can scan their passports, print baggage tags to place on the luggage, and load the luggage quickly (approximately 20-30 seconds) without support staff at the automatic delivery area (Future Travel Experience, 2015).

Generally, airlines will set the opening and closing times of the check-in point in relation to the time of the planned departure. For international airlines, check-in opens 2 hours or 2.5 hours before takeoff and gates close 30 minutes before takeoff (for full service and chartered flights). Low-cost airlines close the service 40 minutes earlier (Artur & Tomasz, 2017). In addition, the check-in area must be aligned with the existing check-in desk and personnel (Kalakou et al., 2015; Mota, 2015).

Factors related to the check-in process from literature reviews can be divided into sub-indicators as shown in Table 2.5.

Table 2.5 Check-in Processes Variables in Previous Research

Author	Mobile Self-service and Kiosk	Wait time check-in/ queue	Check in area and desks	Courtesy of Check in staffs	Check-in process efficiency
Castillo-Manzano and López-Valpuesta (2013)	/	/			
Chao et al. (2013)		/		/	/
Okumus et al. (2013)	/	/		/	
Chen et al. (2014)	/				
Ansari and Agarwal (2015)				/	/
Araujo and Repolho (2015)		/	/		/
Bezerra and Gomes (2015)		/		/	/
Paramonovs and Ijevleva (2015)		/		/	/
Ali et al. (2016)			/		
Jiang and Zhang (2016)	/	/		/	
Bogicevic et al. (2017)	/				
Di Pietro et al. (2017)		/			
Elias Gonçalves and Caetano (2017)		/		/	

Author	Mobile Self-service and Kiosk	Wait time check-in/ queue	Check in area and desks	Courtesy of Check in staffs	Check-in process efficiency
Hai et al. (2017)		/	/	/	
A Adeniran and SO Fadare (2018)			/		
AO Adeniran and SO Fadare (2018)		/			
Negri et al. (2019)		/			/
Isa et al. (2020)	/	/		/	

Thus, Figure 2.10 shows four key indicators for the passenger check-in process: 1) Mobile / Self-service / Kiosk, 2) Wait time check-in / queue, 3) Check in area and desks, 4) Courtesy of Check in staffs and Check-in process efficiency.

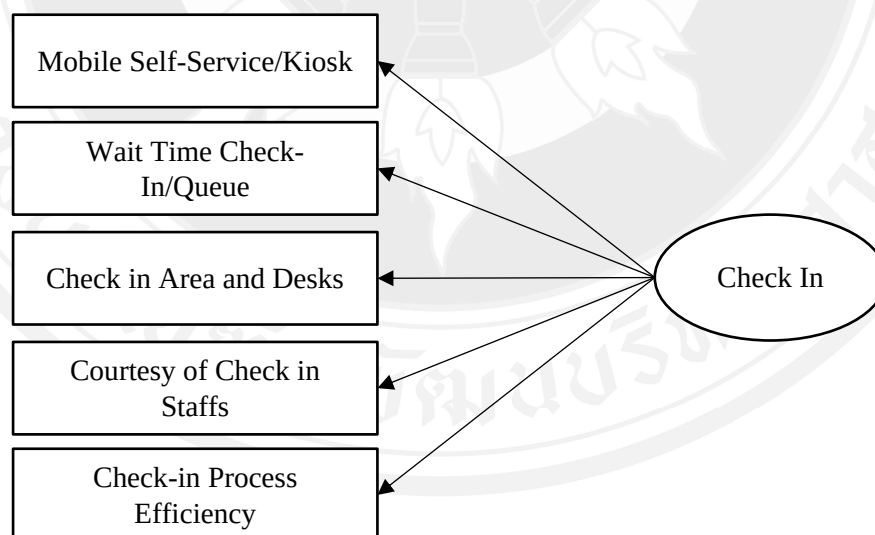


Figure 2.10 Check-in Processes and the Observed Variables

Literature review shows that check-in process is a key factor in passenger travel within the airport because check-in can be considered as the first stop of the necessary touch point or necessary activity based on the concept of (Harrison, 2015), which positively affects overall tourist satisfaction especially the indicators mentioned above. Therefore, it can be hypothesized that:

“H2 Check-in processes influences passenger experiences that use the service within Phuket International Airport.”

2.3.6.3 Luggage

An attempt to provide excellent service for airport baggage handling becomes one of the important factors in improving the quality of passenger satisfaction. Research by Fitantri et al. (2017) indicates that satisfaction index of Soekarno-Hatta international airport has not reached satisfaction especially in regard to efficiency and management processes. This is consistent with research from (Kalakou et al., 2015; Kim & Park, 2019) where they encourage the airport to develop its own self-service luggage drop facilities for the speedy convenience and reduce the queue time at the check-in counter. In addition to matters directly related to baggage, the easy-to-use luggage trolley is equally important (Bezerra & Gomes, 2015; Paramonovs & Ijevleva, 2015) whether it is a trolley stop or a direction sign and how to use it etc (Ravindaranaath et al., 2017). There is also a number of studies on luggage safety (Mwanza & Chingarand, 2013; Sakano et al., 2016), and sub-indicators are as shown in Table 2.6

Table 2.6 Luggage Processes Variables in Previous Research

Author	Luggage self service	Trolleys Availability	Quality of trolleys	Luggage safety	Luggage process efficiency
Chao et al. (2013)	/				

Author	Luggage self service	Trolleys Availability	Quality of trolleys	Luggage safety	Luggage process efficiency
Ansari and Agarwal (2015)	/	/			/
Bezerra and Gomes (2015)		/			
Ali et al. (2016)		/	/		
Jiang and Zhang (2016)		/			
Bogicevic et al. (2017)	/				/
Elias Gonçalves and Caetano (2017)		/	/		
Hai et al. (2017)		/	/	/	
A Adeniran and SO Fadare (2018)		/			
AO Adeniran and SO Fadare (2018)		/	/	/	

Hence, the passenger baggage handling process should include a number of key indicators: luggage safe service, trolleys availability, quality of trolleys, luggage process efficiency and luggage safety (Figure 2.11).

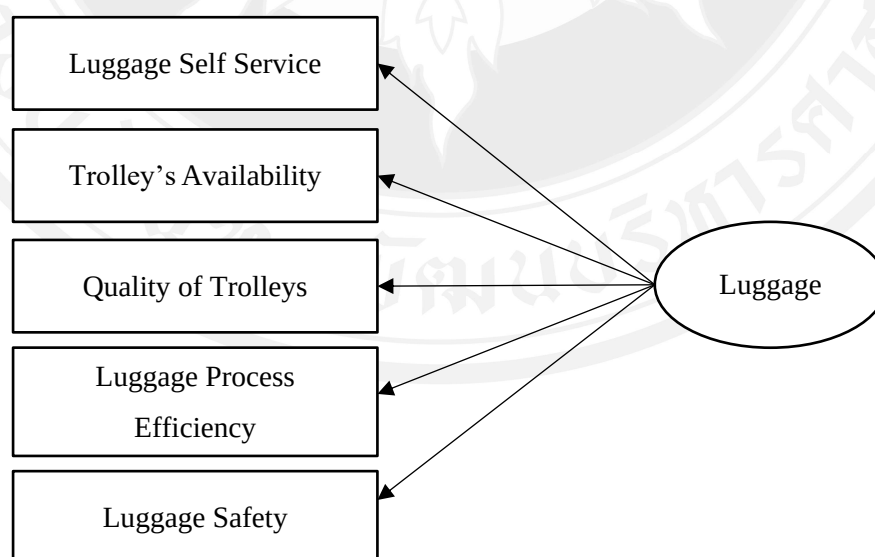


Figure 2.11 Luggage Processes and the Observed Variables

Reviews of previous studies show that the process of handling passenger baggage is another important factor for passenger travel within the airport especially the indicators mentioned above therefore, it can be hypothesized that:

“H3 Luggage process influences passenger experiences that use the service within Phuket International Airport.”

2.3.6.4 Safety and Security

After the 9/11 attack, global airport security standards have increased even more (Blackwood, 2015; Hsu, 2013). Many airports have found that their security checkpoints are overloaded with passenger capacity after a relatively prolonged use of other safety measures (such as shoe removal and scans). There are concerns that additional delays could increase pressure on security guards and reduce effectiveness of security checks (Bezerra & Gomes, 2015; Pantouvakis & Renzi, 2016). Variables of security process can be summarized as shown in Table 2.7.

Table 2.7 Safety and Security Variables in Previous Research

Author	Waiting time	Courtesy of staff	Feeling of safe and secure	Screening process/Thoroughness	Competence of staff
Chao et al. (2013)	/	/	/	/	
Alards-Tomalin et al. (2014)		/	/		/
Bezerra and Gomes (2015)	/	/	/	/	
Paramonovs and Ijevleva (2015)	/	/			/
Jiang and Zhang (2016)	/	/			
Pantouvakis and Renzi (2016)		/	/		
Sakano et al. (2016)	/	/	/	/	/
Sakano et al. (2016)	/	/		/	/
Ceccato and Masci (2017)	/	/		/	/

Author	Waiting time	Courtesy of staff	Feeling of safe and secure	Screening process/Thoroughness	Competence of staff
Elias Gonçalves and Caetano (2017)	/	/		/	
Güreş et al. (2017)			/	/	
Hai et al. (2017)	/		/		/
Moon et al. (2017)			/		
A Adeniran and SO Fadare (2018)	/	/		/	
AO Adeniran and SO Fadare (2018)	/	/		/	
Isa et al. (2020)	/	/	/		

Table 2.7 shows there are five safety process indicators: 1) waiting time, 2) courtesy of staff, 3) feeling of safe and secure, 4) screening process / thoroughness, and 5) competence of staff which can be grouped into observable variables as shown in Figure 2.12. From the same study, it is observed that there are many studies on airport safety procedures, therefore leading to the following hypothesis that:

“H4 Safety and Security influences passenger experiences that use the service within Phuket International Airport.”

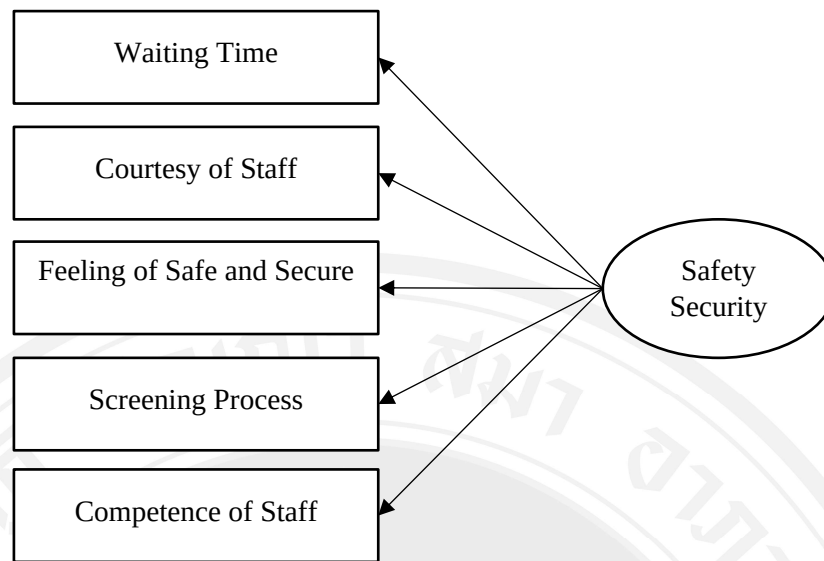


Figure 2.12 Luggage Processes and the Observed Variables

2.3.6.5 Passport Control

Around the world, there are mass movements of travelers through established and regulated air transport sectors who will carry out terrorist acts and other serious crimes. Border controls, travel document security and identification control are central to combatting terrorism and trans-border crime (ICAO, 2015).

A passport is one of the most important forms of identification a person can possess. It is important to have a passport if you plan to travel to a different country so that you will be able to prove who you are and where you are from. Since travel security measures have increased it is almost impossible to travel without a passport (Zubrick, 2017). For a review of the variables related to passport control, the sub-variables can be summarized as in Table 2.8.

Table 2.8 Passport Control Variables in Previous Research

Author	Waiting time	Courtesy of staff	Screening process	Feeling of safe and secure
Chao et al. (2013)	/	/	/	/
Su (2014)	/			
Jiang and Zhang (2016)	/	/		
Ming-kei & Yui Yip (2016)	/			
Moon et al. (2017)				/
A Adeniran and SO Fadare (2018)	/	/	/	
AO Adeniran and SO Fadare (2018)	/	/	/	
Dirsehan (2019)	/			
Isa et al. (2020)	/	/		/
Knoch et al. (2020)	/			

A passport is one of the most reliable forms of identification. Which travels through almost all countries must use a passport for identification. Therefore, the process of controlling the passport is another important factor. Four indicators can be defined: 1) Waiting time 2) Courtesy of staff 3) Screening process and 4) Feeling of safety and security (Figure 2.13). Therefore, it can be hypothesized that:

“H5 Passport Control influences passenger experiences that use the service within Phuket International Airport.”

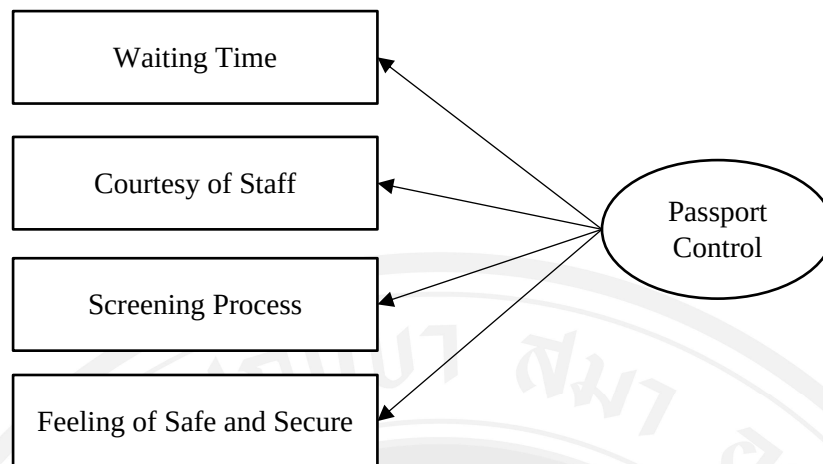


Figure 2.13 Passport Control and the Observed Variables

2.3.6.6 Mobility

Airport mobility is another essential touchpoint for travelers. It is classified as discretionary Activity (Harrison, 2015, p. 551). This section will discuss the convenience of traveling within the airport such as signposts or the clarity of symbols, the convenience and distance to travel to or from a connecting flight, announcements, and facilitation for the disabled. In principle, if you are a passenger with disability or reduced mobility, you have legal right to receive free assistance commonly called “Special Assistance” when traveling by plane (review, 2019)

Literature reviews on mobility inside the airport identify indicators as shown in Table 2.9. Indicators are summarized to group the variables as shown in Figure 2.14.

Table 2.9 Mobility Variables in Previous Research

Author	Flight connection	Flight information	Walking distance	Signage	Availability of assistance for disabled
Chao et al. (2013)	/	/	/	/	
Jen et al. (2013)		/	/		
Okumus et al. (2013)				/	
Ansari and Agarwal (2015)			/		
Bezerra and Gomes (2015)		/	/	/	
Paramonovs and Ijevleva (2015)			/	/	/
Ali et al. (2016)				/	/
Ming-kei and Yui Yip (2016)		/			
Jiang and Zhang (2016)	/	/		/	
Pantouvakis and Renzi (2016)				/	
Ceccato and Masci (2017)				/	
Hai et al. (2017)				/	
Elias Gonçalves and Caetano (2017)	/			/	
A Adeniran and SO Fadare (2018)		/		/	
AO Adeniran and SO Fadare (2018)	/	/		/	
Kayapınar and Erginel (2019)	/			/	
Isa et al. (2020)	/	/	/		

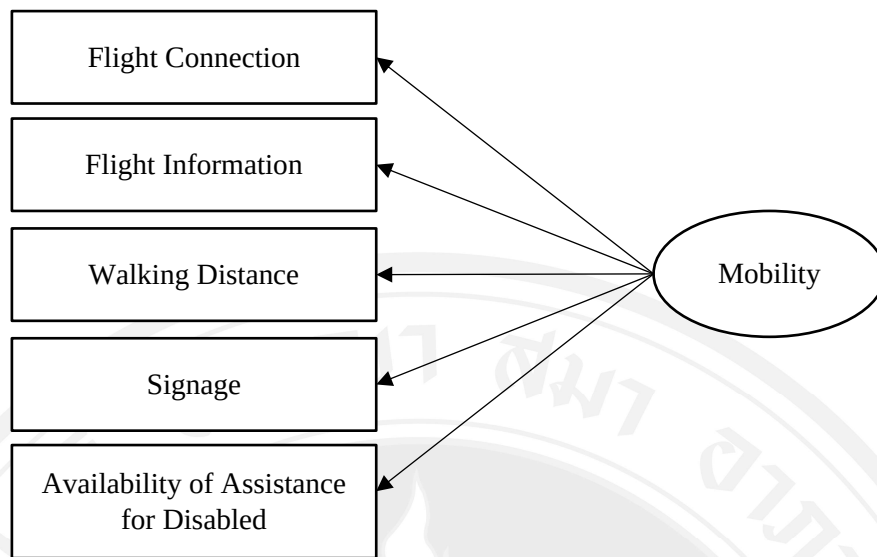


Figure 2.14 Mobility and the Observed Variables

Mobility is another important factor for passengers. Due to a change or notification within the airport which can happen at any time and if the airport lacks clarity on these features, it may result in damage to the passengers. Therefore, the hypothesis is:

“H6 Mobility in the airport influences passenger experiences that use the service within Phuket International Airport.”

2.3.6.7 Airport Facilities

Airport facilities are fundamental factors that are necessary for all passengers. Speed and convenience have made air travel gain popularity. When low-cost airlines emerge, they gain popularity at a rapid rate because besides being convenient and fast, affordability is one of the reasons that air travel has become so popular, and the aviation industry has grown exponentially. As a result of this phenomenon, all airports have to adapt to compete more in terms of service and facilities. The facilities used in this study are not subject to all international standards and recommendations of the International Civil Aviation Convention (Gazette, 2015 656), but are subject to management of the airport. The indicators related to various facilities can be summarized in Table 2.10.

Table 2.10 Airport Facilities Variables in Previous Research

[illegible]

Author	Shopping variety	Food & Beverage /Dining options	Price	WIFI	Lounge	Cleanliness of toilets/ Facilities	Availability toilets	Charging stations/Seating	Availability of Banks/ATM/Exchange	Availability of play areas for children	Availability and quality of stores	Courtesy and helpfulness of airport staff	Environment at the station; temperature light	Air-bridge/ bus carrying passengers	Availability of drinking water
Pantouvakis and Renzi (2016)													/		
Ceccato and Masci (2017)						/	/						/		
Elias Gonçalves and Caetano (2017)	/		/			/	/	/					/		
Hai et al. (2017)	/	/	/	/		/			/		/	/	/	/	/
A Adeniran and SO Fadare (2018)	/		/	/		/		/	/	/		/			
AO Adeniran and SO Fadare (2018)	/	/	/	/			/		/	/			/		
Kayapinar and Erginel (2019)		/		/					/						
Isa et al. (2020)	/	/		/	/	/						/			

Indicators shown in Table 2.10 can be grouped into two activity groups which are activities that require money to receive services (require money) and activities that do not require money to use the service (require no money). Require money activities include 1) Shopping variety. 2) Food & Beverage / Dining options. 3) Lounge. 4) Price 5) Availability and quality of stores, and 6) Availability of banks / ATM / Money Exchange. Require no money include 1) WIFI. 2) Cleanliness of toilets and facilities. 3) Availability toilets. 4) Charging stations / seating. 5) Play areas for children. 6) Courtesy and helpfulness of airport staff. 7) Environment such as

temperature and light. 8) Air-bridge / bus carrying passengers, and 9) Availability of drinking water. Figure 2.15 shows a summary of variables in both activity groups.

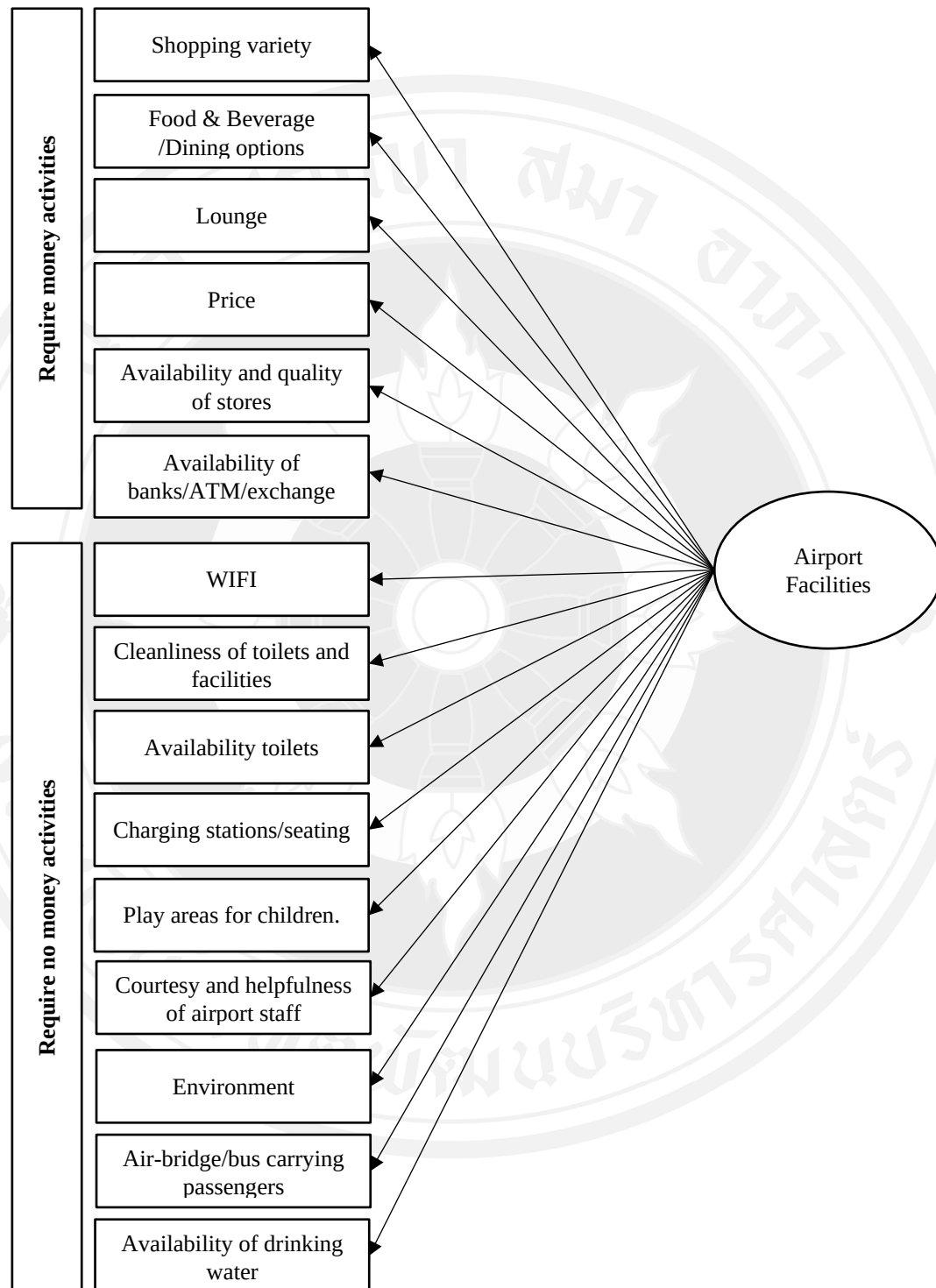


Figure 2.15 Airport Facilities and the Observed Variables

According to a review of the literature, airport facilities are another essential factor that international must have because most passengers of international flights will spend more than 2 hours per person at the airport at the least. Therefore, passengers' satisfaction depends on their experience from the minute they reach the airport, expecting to feel relaxed throughout the check-in, waiting and boarding process. Consequently, the hypothesis is:

“H7 Airport facilities at the airport influence passenger experiences that use the service within Phuket International Airport.”

2.3.7 Passengers Socio-demographic Profiles

To collect data from air passengers, (Kittiphich & Paithoon, 2020) employed seven socio-demographic variables into a study of the confidence of passengers affecting the service quality of ground receptionists in low cost airlines at Phuket International Airport. The study of (Kittiphich & Paithoon, 2020) put age, gender, education, occupation, income, residence and marital status into their study. Similar to various research, (Bongkodrat et al., 2020; Kittiphich & Paithoon, 2020; Kunnapat, 2015; Posri & Khaysuwan, 2018; Prakasit & Paithoon, 2018; Theeraphan et al., 2020; Theeraphan & Phumipat, 2019).

However, Thailand airports concern all religious people, since the airports provide religion concerns called prayer rooms. Thus, religion is another socio-demographic variable to be used in this research, as it may have effects on some other airport services. Besides socio-demographic factors necessary to the research, behavioral factors are crucial to study air passengers (Jiang & Zhang, 2016; Kittiphich & Paithoon, 2020; Prakasit & Paithoon, 2018; Theeraphan et al., 2020; Theeraphan et al., 2018; Wannasatit, 2011) consider some behavioral variables of passengers including purpose of trip, and travel frequency on air transport a year (Kittiphich & Paithoon, 2020; Nurhadi et al., 2019; Theeraphan et al., 2020; Theeraphan et al., 2018).

To the literature review, there are 16 socio-demographic variables of passengers used in this research comprise of 1) gender, 2) age, 3) education, 4) occupation, 5) income, 6) residence, 7) marital status, 8) religion, 9) number of visits, 10) time at the airport, 11) number of companions, 12) estimated spending at the airport, 13) purpose

of trip 14) activities at the airport 15) requirement of facilities at the airport and 16) products and services spent on in the airport.

2.4 Thailand Airports Management

2.4.1 Thailand Airports

Aviation in Thailand began to play a role in the reign of King Vajiravudh (Rama 6) in the year 1911 when the Ministry of Defense sent three Thai soldiers to study aviation in France. When all three officers graduated, King Rama VI procured eight aircraft carriers and shipped back to Thailand. A military aviation department was established using the Royal Bangkok Sports Club as the airport (Thaifly.com., 2020 382).

In 1933, the Civil Aviation Division was changed to the Commercial Aviation Division under the office of Permanent Secretary, Ministry of Economics. Later in the year 1948, Don Mueang Airport entered the supervision of the Department of Civil Aviation, air force and civil aviation was separated out of military aviation. Civil aviation business was transferred to the Ministry of Transport and eventually in the year 1954, it was promoted as Civil Aviation Authority (Blockdit, 2019 383). Later, the National Assembly enacted the Airport Authority act B.E. 2522 by requiring the establishment of an airport authority under the name “Airports Authority of Thailand” abbreviated as AAT. Since the start of operation of Bangkok Airport on July 1, 1979, AOT has changed the management direction to be more business oriented. AAT later has been assigned to operate four regional airports from the Department of Commercial Aviation, namely Chiang Mai Airport (transferred on March 1, 1988), Hat Yai Airport (transferred on August 26, 1988), Phuket Airport (transferred on October 8, 1988) and Chiang Rai Airport (transferred on October 2, 1998). The AAT was corporatized from a state enterprise to become Airports of Thailand Public Company Limited (AOT), a public limited company on September 30, 2002. AOT starts to operate Suvarnabhumi Airport on August 4, 2003. AOT has improved the buildings and facilities of those airports in order to increase the efficiency of providing services in all aspects and has developed a plan to develop airports in accordance with the growth of aviation transport (AOT, 2018a).

According to information of the Department of Airports and AOT, there are thirty-two commercial airports in Thailand spread across different regions, divided into twenty-two airports operated by the Department of Airports (formerly Civil Aviation), six airports operated by AOT, three airports operated by Bangkok Aviation Public Company Limited, and one airport operated by the Royal Thai Navy. The summary is as shown in Table 2.11 (CAAT, 2019).

Table 2.11 List of Operators and Airports Operated in 2019

Airport Operators	Airports	IATA Code
Department of Airports Thailand: DOA (22 Airports)	1) Buriram Airport	BFV
	2) Chumphon Airport	CJM
	3) Hua Hin Airport	HHQ
	4) Khon Kaen Airport	KKC
	5) Krabi International Airport	KBV
	6) Lampang Airport	LPT
	7) Loei Airport	LOE
	8) Mae Hong Son Airport	HGN
	9) Mae Sot Airport	MAQ
	10) Nakhon Phanom Airport	KOP
	11) Nakhon Si Thammarat Airport	NST
	12) Nan Nakhon Airport	NNT
	13) Narathiwat Airport	NAW
	14) Phitsanulok Airport	PHS
	15) Phrae Airport	PRH
	16) Ranong Airport	UNN
	17) Roi Et Airport	ROI
	18) Sakon Nakhon Airport	SNO
	19) Surat Thani Airport	URT
	20) Trang Airport	TST
	21) Ubon Ratchathani Airport	UBP
	22) Udon Thani Airport	UTH

Airport Operators	Airports	IATA Code
Airports of Thailand Public Company Limited: AOT (6 Airports)	1) Chiang Mai International Airport	CNX
	2) Don Mueang International Airport	DMK
	3) Hat Yai International Airport	HDY
	4) Mae Fah Luang -Chiang Rai International Airport	CEI
	5) Phuket International Airport	HKT
	6) Suvarnabhumi International Airport	BKK
Bangkok Airways Public Company Limited: BA (3 Airport)	1) Trat Airport	TDX
	2) Samui Airport	USM
	3) Sukhothai Airport	THS
Royal Thai Navy (1 airport)	1) U-tapao-Rayong-Pattaya International Airport	UTP

Source: AOT (2020d), CAAT (2019).

Department of Airports: DOA is a departmental agency under the Ministry of Transport having the authority to develop networks, promote airport affairs and manage almost 30 airports throughout Thailand, which used to be under the supervision of the former Department of Civil Aviation of Thailand. Later, the International Civil Aviation Organization found flaws in the structure and authority of the Department of Civil Aviation, especially the separation of powers and responsibilities between the regulators and the service providers. The new structure has been improved, separating the regulator work into the Civil Aviation Authority of Thailand and changed the name of the Department of Civil Aviation to “Department of Airports” (Department of Airports, 2018 387)

Bangkok Airways Public Company Limited was the first private aviation company in Thailand to start a charter service under the company name Sahakol Air in 1968 and operated the first private domestic flights in 1986. Bangkok Airways has also invested in the construction and maintenance of three other airports which are Samui airport (1989), Sukhothai airport (1998) and Trat airport (2006) (Bangkok Airways Public Co., 2020 388).

The Royal Thai Navy, Ministry of Defense, has approved U-Tapao-Rayong-Pattaya International Airport as the Navy wants to build a Naval Airfield. As the Thai government and the United States joint project, area survey was conducted in Chonburi Province and Rayong Province in the year 1962. The Cabinet approved the resolution that the US government to renovate U-Tapao Airport in 1965 as a unit for transporting combat units to various strategic points within the country. After the U-Tapao airport renovation by the Department of Commercial Aviation, the Cabinet thought that U-Tapao Airport should be used more therefore approved a development of U-Tapao Airport to be an international commercial airport under the name “U-Tapao-Rayong-Pattaya International Airport”. The airport is under supervision of the Royal Thai Navy in collaboration with the Department of Commercial Aviation, Ministry of Transport (UTAPAO International Airport, 2018, p. 389).

2.4.2 Air Transportation Statistics

There are thirty-eight operating airports serving the public in Thailand but only thirty-two airports are used by commercial flights. When considering the number of passengers for each airport, it is found that airports under the responsibility of AOT have the highest passenger proportion of 86.63 percent of the total number of passengers, followed by airports under the Department of Airports with number of passengers accounted for 10.80 percent of the total number of passengers. Airports under the company Bangkok Airways Public Company Limited is accounted for 1.57 percent, and airports under supervision of the Royal Thai Navy is accounted for 1 percent of the total number of passengers (Figure 2.16) (CAAT, 2019)

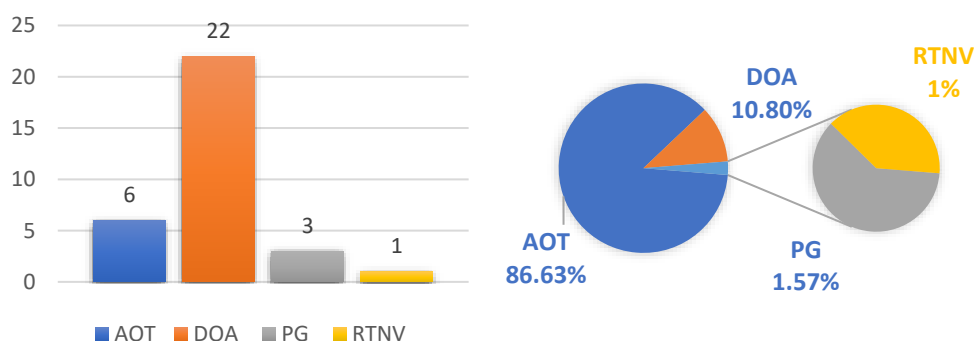


Figure 2.16 Number of Commercial Airports in Thailand and Proportion of Service Users Classified by Airport Affiliation.

Source: DOA, AOT, U-Tapao Airport Authority, Bangkok Airways Public Company Limited, Civil Aviation Authority of Thailand.

When considering the top 10 airports with the highest number of passengers and flights (Figure 2.17), it is found that in 2019, Suvarnabhumi Airport had the highest number of passengers and total flights. The number of passengers was 65.5 million, representing a growth of 5.57 percent compared to the previous year and the number of flights was 379,511, a 0.20 percent decrease from the previous year. Followed by Don Mueang Airport and Phuket Airport respectively (CAAT, 2019)

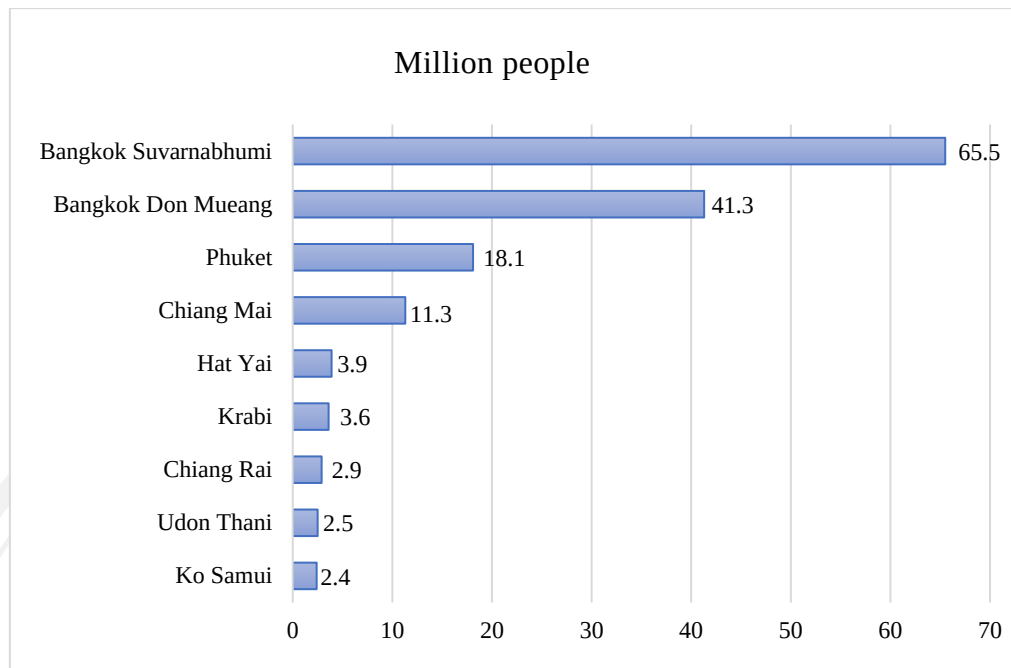


Figure 2.17 Overall Picture of the Top 10 Airports with the Highest Number of Passengers

Source: DOA, AOT, U-Tapao Airport Authority, Bangkok Airways Public Company Limited, Civil Aviation Authority of Thailand.

In terms of cargo transportation, the top 10 destinations with the most frequent scheduled air cargo shipments from Thailand is accounted for 67.43% of the total cargo volume. Hong Kong is the destination with the highest air freight volume from Thailand with 177,701.55 tons or accounted for 12.03 percent of the total freight volume. Followed by Japan which has a cargo volume of 158,637.81 tons or 10.74 percent. Third is the transportation of goods between Thailand and China, with a cargo volume of 139,429.44 tons or 9.44 percent. Domestic goods transportation within Thailand is ranked 7th with the volume of 72,274.15 tons or 4.89 percent of the total freight volume in Thailand (Figure 2.18).

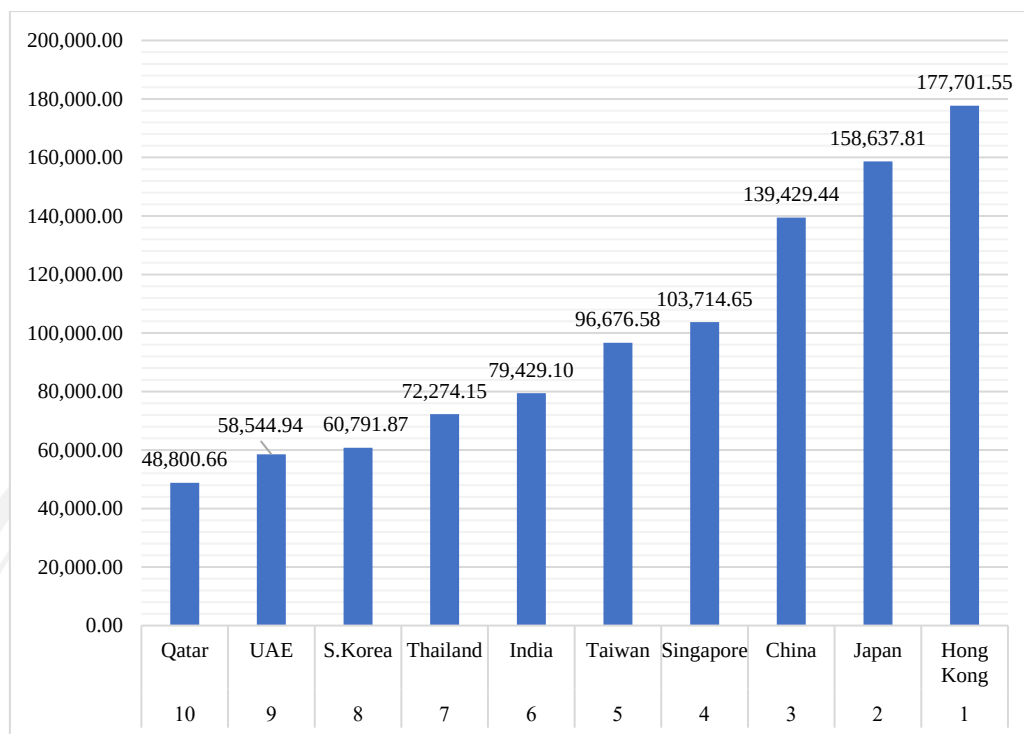


Figure 2.18 Top 10 Air Freight by Country of Destination

Source: DOA, AOT, U-Tapao Airport Authority, Bangkok Airways Public Company Limited, Civil Aviation Authority of Thailand.

2.4.3 Thailand Airport Development Direction

The airport is an important infrastructure of the aviation transport system, which brings in revenue and links to various businesses, but the airport integrated development planning is lacking, hindering the airport to operate at its full capacity and potential. In addition, the province, which does not yet have an airport, has requested the construction of an airport in the area. Hence, to provide Thailand with guidelines for the development of the existing airport and the construction of a new airport to accommodate the increasing demand in the future, the Civil Aviation Authority of Thailand (CAAT) has developed a master plan for the establishment of a commercial airport in Thailand. Airports in Thailand are divided into four clusters to define roles and guidelines for development in accordance with changing circumstances (CAAT, 2018) as shown in Table 2.12

Table 2.12 Airport Clusters in Thailand

Airport Group	Definition	Airport
Primary Hub	- Located in a mega city.	Suvarnabhumi
Airports	- Operate both domestic and international flights (short-haul, medium-haul, and long-haul flight) with connecting flights to major hubs in other countries. - More than 25 million passengers per year	Don Muang
Secondary Hub	- Located in very large city.	Chiang Mai
Airports	- Capable of operating Point to Point flights - Operate both domestic and international flights (short-haul, medium-haul and long-haul flight) with connecting flights but with less frequency than major hub airport. - Between 5-25 million passengers per year	Phuket
Regional Airports	- Located in large cities that meet the air travel needs of people in that province and region. - Mainly serves domestic flights, with some short-haul and medium-haul international flights. - Between 1-5 million passengers per year	Krabi Hat Yai Udon Thani Surat Thani Samui Chiang Rai Khon Kaen Ubon Ratchathani Nakhon Srithammarat

Airport Group	Definition	Airport
Local Airports	- Located in a provincial area to serve the air travel need of the residents in a particular province or area. - mainly serves domestic flights. - Less than 1 million passengers per year	Trang, Phitsanulok, Sakon Nakhon, Nan, Nakhon Phanom, Roi Et, Lam Bang Loei, Narathiwat Mae Sot, U Tapao, Buriram, Phrae, Mae Hong Son, Hua Hin, Pai, Petchaboon, Nakhon Ratchasima, Tak, Mae Sariang

Source: CAAT (2018).

The Master Plan has set vision and strategic goals for 20-year development to be in line with the 20-year national strategy established by the government (Ratchakitcha, 2018-2037) to achieve results according to the policy set that is to become the aviation hub of the country based on a vision “airport system that connects and drives the country’s development” under the airport development strategy in 6 areas as shown in Table 2.13 (CAAT, 2018)

Table 2.13 Vision of CAAT by Strategic Goals

Strategic Dimension	Goals
Safety & Security	- The airport must be able to operate not less than the safety and security standards prescribed by CAAT. - Accidents and incidents that occur at the airport must not increase. - Violations of security standards cannot be increased.

Strategic Dimension	Goals
Accessibility	- 80% of the population nationwide has access to airports with domestic flights, connect to primary hub airports, secondary hub airport and / or regional airports for a duration not exceeding 90 minutes by road or rail. - 80% of the population nationwide has access to airports operating international flights within 180 minutes of any form of transportation.
Connectivity	- The airports must maintain and develop aviation services to be able to connect to other airports suitable for the type of airport. - The airports must integrate the development of other modes of transport with aviation transport services that are suitable for the type of airport.
Service Quality	- The airport must be able to operate not less than the safety and security standards prescribed by CAAT. - The airports must have the ability to provide services and develop services in accordance with the needs and expectations of the users.
Operational Efficiency	- The airports must be able to operate efficiently and use of resources effectively to deliver value to key stakeholders.
Sustainability	- The airports must be able to develop and maintain a balance of operations and airport development in three main dimensions: social, economic, and environmental dimensions.

Source: CAAT (2018).

According to the master plan, existing airports need to develop airside and landside to meet the increasing traffic volumes in the future. In addition, it is necessary

to build two new airports: (1) Southern region in Phuket province and the suitable area is Khok Kloi Subdistrict, Takua Thung District, Phang Nga Province and (2) Northern region in Chiang Mai / Lamphun province and the suitable area is San Kamphaeng District, Chiang Mai Province, and Ban Thi District, Lamphun province.

2.4.4 Thailand Airport Development Policy

2.4.4.1 Department of Airports (DOA) Development Policy

The structure and authority of the former Department of Civil Aviation has been improved by separating the regulator from service provider, therefore, in order to determine the operational direction of the Department of Airports in a 5-year period (2017-2021) for use as a framework to formulate an action plan to drive the organization, in line with the national strategy and the strategy of the Ministry of Transport and in accordance with the roles, duties and missions that have been defined, the Department of Airports has made a strategic plan for the Department of Airports for the year 2017-2021 to define the vision, mission, main goals and strategic framework for use in the operation of the department as follows (Department of Airports, 2019) (Figure 2.19)

Vision	- International standard airports to promote the country's transport network
Mission	- To develop airports to cover all areas and support the growth of air transport. - To operate the airport according to international standards - To manage the organization effectively
Strategic Framework	- To provide and develop airports to promote the aviation network to cover all areas. - To improve and maintain infrastructure as well as facilities in compliance with international and environmentally friendly standards. - To develop and improve airport management efficiency. - To develop the organization under the principles of good governance - To manage human resource efficiently

Figure 2.19 Vision, Mission, and Strategy Framework of the Civil Aviation Authority of Thailand

Source: Department of Airports (2019).

2.4.4.2 Airports of Thailand (AOT) Development Policy

AOT operates the airport business in Thailand with its core business comprised of airport management and development. There are 6 airports under the responsibility and AOT generates revenue from 1) revenue from aviation business (Aeronautical Revenue), which consists of aircraft take-off and landing charges, parking charge, passenger service charge, and aircraft service charges. 2) the non-aeronautical revenue which consists of concession revenue, office, and real property rents. Both revenues are referred to as “service revenue”. 3) Other income (exchange rate gain and interest) (AOT, 2019c)

AOT has set a 20-year operational direction based on key factors including the 20-year National Strategic Framework Policy (2017-2036) (Ratchakitcha, 2018-2037) as well as factors and business trends: dynamics of significant changes (megatrends) such as globalization, urban expansion, population structure change, technological disruption, sustainability awareness and terrorism threats in a five-year operation plan. In order for AOT’s development approach to be consistent and in line with plans and policies at various levels, it is important to consider important factors when determining the AOT’s five-year operation direction., Policies needed to be considered include the national economic and social development plan no. 12 (2017-2021), draft of the national reform plan, Thailand 4.0 policy, Ministry of Transport strategy (2017-2021), 5-year enterprise strategy (2017-2021), and the super holding company policy as stated in the AOT enterprise plan fiscal year (2017-2021) (AOT, 2018b).

AOT laid out its vision to drive the organization to become “the operator and manager of a world class smart airport or “AOT Operates the World’s Smartest Airports)” under the mission of operating and promoting the airport business including operating other businesses related to or in continuation with the airport business operation with consideration for sustainable development. AOT promotes five core values including service minded, confidence (safety & security), teamwork, open minded (innovation) and pride (integrity) (AOT, 2016) in order to push forward the organization by having important strategies to drive the operational direction to achieve the goals, together with a focus on creating shared values and a sense of responsibility to the society, community and environment (Corporate Social Responsibility: CSR) and

good corporate governance in all levels of operations in accordance with the sustainable development guidelines.

Therefore, in order for AOT's management to be able to compete internationally and to become the aviation hub in Southeast Asia, AOT has set a competitive strategy which includes 1) airport development for competition and 2) airport development for the national logistics system. Well-operated Suvarnabhumi Airport will be part of the country's major logistics drive. Suvarnabhumi Airport creates a free zone to facilitate and provide privileges for goods transportation in order to offer a faster goods handling (AOT, 2018b) which will increase the quantity of goods transported through the Suvarnabhumi airport. As for the role of regional airports, AOT will accelerate strategy development to support logistics system and promote tourism, expand flight route network to cover all continents, become logistics hub for goods in the GMS countries and South Asia sub-continent, including to develop Chiang Mai and Phuket airports as the gateway to the region.

AOT's structure consists of an AOT board of directors and five specific committees to help screen important tasks (AOT, 2020c) include 1) the Audit Committee, 2) the Nomination Committee, 3) the Remuneration Committee, 4) the Risk Management Committee, and 5) the Corporate Governance Committee (Figure 2.20) with the President as the highest executive of the company. There are also several other core departments (for example Chief Financial Officer, Information and Communication Technology Group, and engineering and construction) under the management of AOT. At present, all six airports are divided into 5 sections which are 1) Regional Airport, 2) Suvarnabhumi Airport, 3) Don Muang International Airport, 4) Chiang Mai International Airport, and 5) Phuket International Airport. This research mainly focuses on customer management at Phuket International Airport.

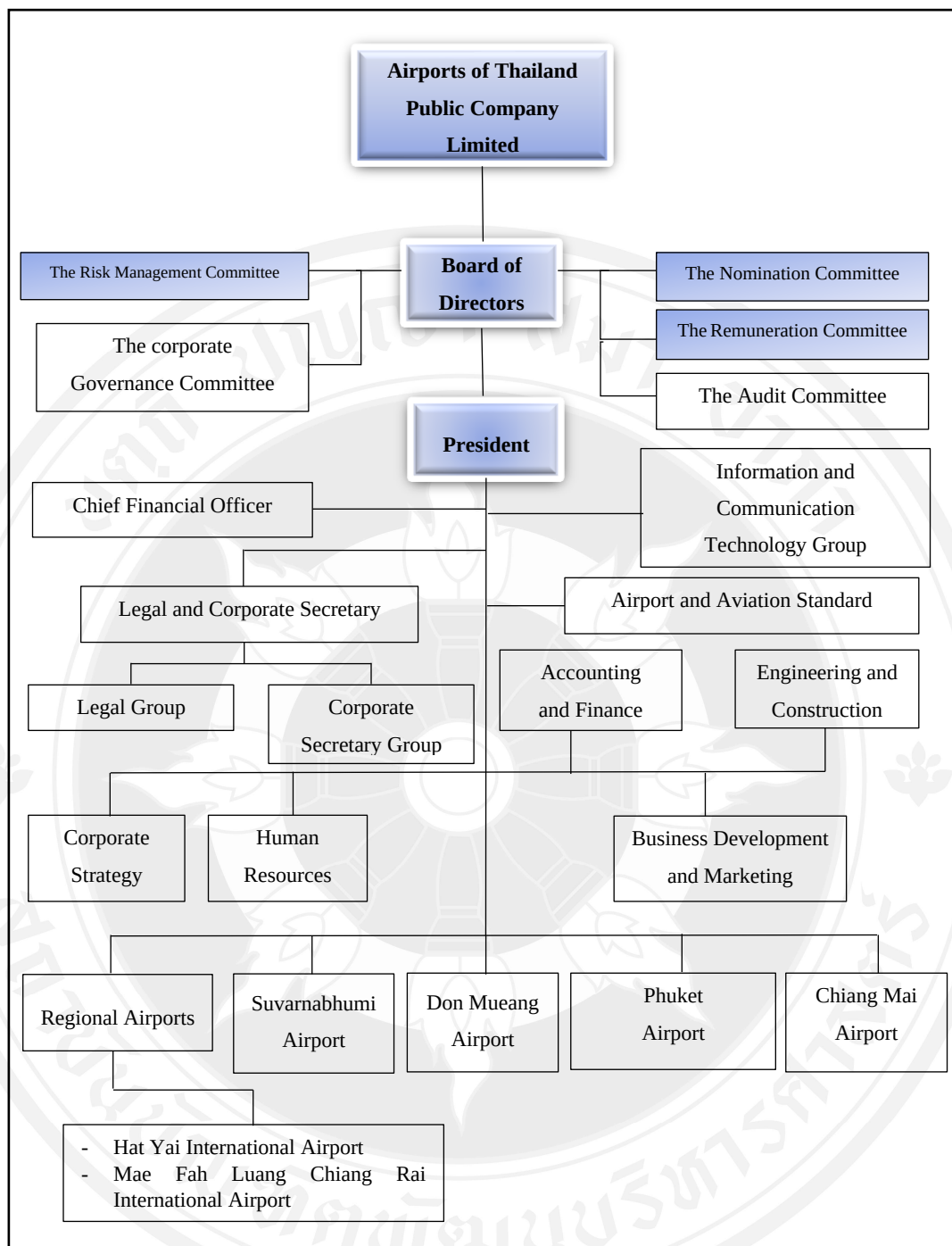


Figure 2.20 AOT Management Structure

Source: AOT (2020c).

2.5 Phuket International Airport

2.5.1 Overview of Phuket International Airport

Phuket is the largest island in Thailand and is already known by many. The beauty of the beach owned by this island is so enchanting that it always attracts a lot of people. Almost every holiday season arrives, the island is always visited by tourists who want to spend their holiday time enjoying the beautiful beach atmosphere. So, always make the name Phuket on a list of islands that must be visited. To visit Phuket, you must first go to Phuket International Airport.

Phuket International Airport, or Phuket Airport (HKT) has a strategic role as “Gateway to the Andaman”, the main gateway to beautiful beach destinations serving users with a smile and warm hearts of Thai people. It is a “premium” destination full of luxury retailers, world class restaurants and great services. Phuket Airport has air traffic volume second only to Suvarnabhumi Airport and Don Mueang Airport (AOT, 2020a). Located in Phuket province, an island on the Andaman coast, Phuket Airport plays the role of Gateway to the Andaman, bringing travelers from all over the world to beautiful marine and beach destinations. In 2019, Phuket Airport has approximately 17.8 million passengers annually, comprising 10.3 million international and 7.5 million domestic passengers, respectively.

HKT was under the Phuket Airport Development Project (fiscal year 2010-2014) and opened for service with new building on 25 June 2018 (AOT, 2019d), able to accommodate 12.5 million passengers per year. Considering the continued increase in air traffic volume, in 2017 there were 16.85 million passengers per year and in 2019, it increased to 17.8 million per year resulting in an approval to the construction of Phuket Airport Phase 2, estimated to have an investment of 5,749.449 million baht and when Phase 2 is completed, Phuket Airport will have the capacity to accommodate passengers of no less than 18 million passengers per year. After the completion of Phuket Airport Phase 2, Phuket Airport will reach its fullest capacity.

2.5.2 Flight Routes and Flight Scheduled

HKT is the third busiest airport in Thailand. This is due to the high attraction of tourists who want to visit this beautiful island. There are currently many flight schedules to access HKT for both domestic flights from Bangkok as well as for overseas flight schedules.

Majority of foreign tourists to Phuket are Chinese, Russian, Indian, Australian, South Korea and German (Ministry of Tourism and Sports, 2019 398). The purpose of travel is for leisure and tourism. Phuket Airport serves passengers from 23 countries worldwide from 65 origin airports show in Table 2.14 (CAAT, 2019).

Table 2.14 Number of Scheduled Flights for Each Route and Airport in Phuket in 2019

No.	Country	No. of Airports	Frequency (Flight Per Year)
1	Arab Emirates	2	1761
2	Australia	2	665
3	Cambodia	2	694
4	China	24	25,135
5	Denmark	1	33
6	Finland	1	148
7	Germany	1	157
8	Hong Kong	1	3,917
9	India	3	3,368
10	Iran	1	19
11	Korea	1	1,927
12	Macau	1	582
13	Malaysia	3	7,935
14	Myanmar	2	72
15	Qatar	1	1,623
16	Russia	4	1,378
17	Singapore	1	8,051

No.	Country	No. of Airports	Frequency (Flight Per Year)
18	Sweden	1	27
19	Switzerland	1	146
20	Thailand	9	50,313
21	Turkey	1	584
22	Uzbekistan	1	16
23	Viet Nam	1	788

Source: CAAT (2019).

Passengers can either travel on scheduled or non-scheduled flights, i.e., regular services, charter, or private flights. Most of HKT passengers travelled by scheduled services, especially for international flights (figure 2.21). The proportions reflected the same direction as flight operation, while airport capacities were limited, most slots were given to schedule operation. The available slots for non-scheduled operation tended to be lower because most slots were already allocated to scheduled services.

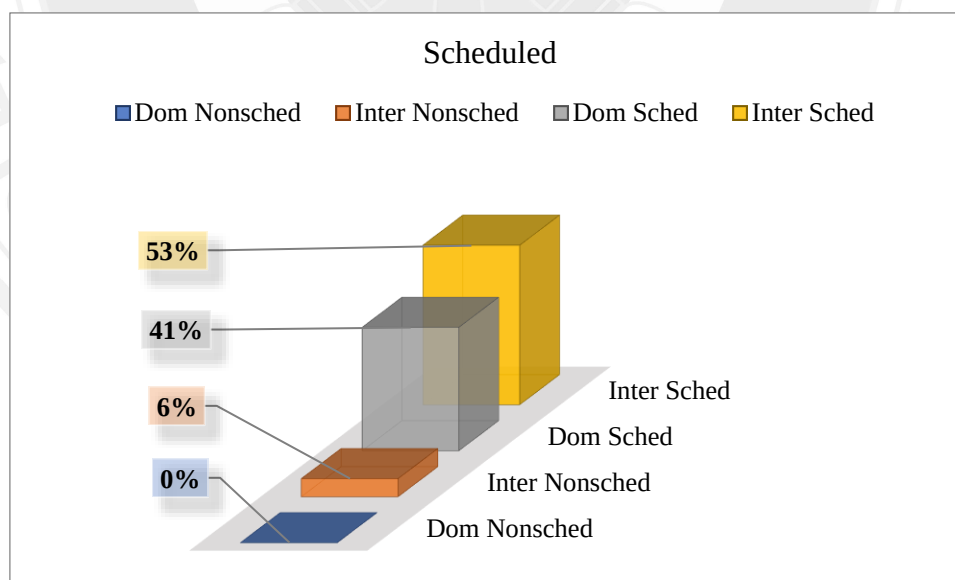


Figure 2.21 HKT, Scheduled and Non-scheduled Flights

Source: CAAT (2019).

2.5.3 Busiest International Routes “To” and “From” Phuket

International Airport

The passenger by airport ranked the airport by number of origin/destination passengers, regardless of type of flight operations. In general, top-rank international cities paired with each airport were within Asia Pacific. The passenger by airport ranked the airport by number of origin/destination passengers, regardless of type of flight operations. In general, top-rank international cities paired of each airport with HKT were within Asia Pacific (AOT, 2019a, 2019c). (Table 2.15) And the busiest domestic routes are Suvarnabhumi, Don Mueang, Chiang Mai, Rayong-Pattaya-U-Tapao and Samui (Table 2.16).

Table 2.15 Busiest International Routes to and From HKT by Passenger (Top 10)

Rank	Airport	2018	2019	Change%
1	Singapore	1,058,769	1,052,635	- 0.58%
2	Kuala Lumpur	862,940	871,584	+ 1.00%
3	Shanghai–Pudong	773,536	760,864	- 1.64%
4	Hong Kong	673,725	642,904	- 4.57%
5	Chengdu	412,805	546,908	+ 32.49%
6	Seoul–Incheon	433,483	461,967	+ 6.57%
7	Doha	342,930	422,087	+ 23.08%
8	Beijing–Capital	394,165	412,213	+ 4.58%
9	Dubai–International	427,354	367,967	- 13.90%
10	Moscow– Sheremetyevo	325,456	362,977	+ 11.53%

Source: AOT (2019a).

Table 2.16 Busiest Domestic Routes to and from HKT by Passenger (Top 5)

Rank	Airport	2018	2019	Change%
1	Suvarnabhumi	3,361,531	3,371,171	+ 0.29%
2	Don Mueang	3,333,957	3,005,310	- 9.86%
3	Chiang Mai	473,694	415,771	- 12.23%
4	Rayong-Pattaya-U-Tapao	158,721	165,992	+ 4.58%
5	Samui	173,256	154,242	- 10.97%

Source: AOT (2019a).

2.5.4 Passenger Load Factor

The passenger load factor showed the average ratio of passengers to available seat of both international scheduled and domestic scheduled flight in each month. Generally, the average load factor of domestic flights was higher than international flights due to the smaller size of aircraft. The average load factor during October-March was higher than the rest of the year, which represents the high and low season. In 2019 (figure 2.22), The average load factor at HKT were 77% (CAAT, 2019).

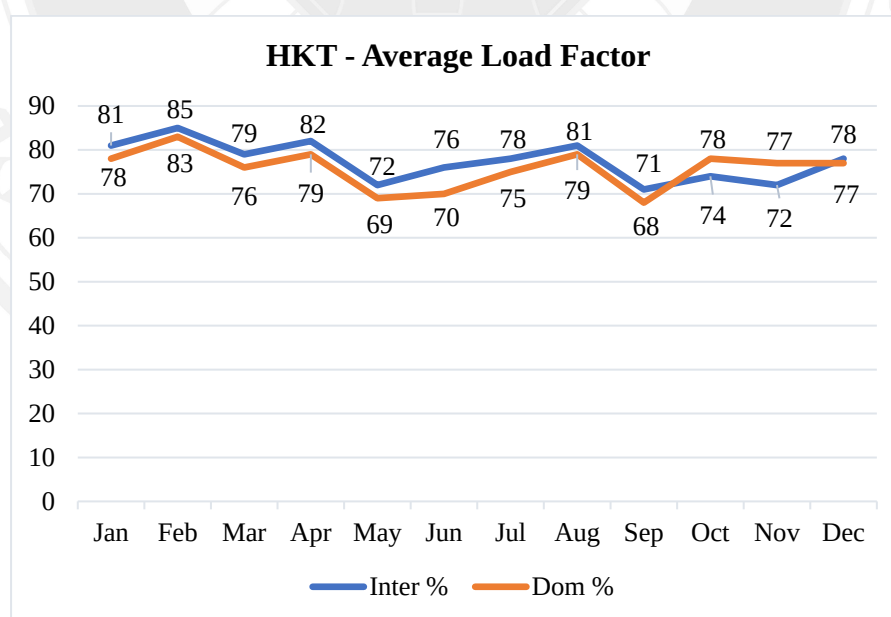


Figure 2.22 HKT-Average Load Factor 2019

Source: CAAT (2019).

2.5.5 Low-Cost Carriers Air Traffic

In 2003, the low-cost airlines or LCC have launched in Thailand. The first low-cost airline in Thailand was One-Two-Go airline operated by Orient Thai Airlines in December 2003. Thai Air Asia and Nok Air were active respectively in early and mid-2004. The low-cost market in Thailand boosted significantly despite economic recession in 2008 and 2019. LCC can manage to capture high growth when compared with conventional carriers. However, due to airport capacity constraints, the growth tended to be diminished over recent years.

LCC in Thailand significantly increased from 4.54 million in 2004 to 72.71 million in 2019, with a CAGR of 16.6% over the past 15 years. Low-cost airlines currently held about half of passenger market share. The drastic increase took place after Thai Air Asia switched from Suvarnabhumi to Don Mueang in 2011 and the birth of Thai Lion Air in 2013. Passengers highly gained more than 50 million since 2011, while it took about a decade to reach the first 20 million passengers.

In 2019, Phuket Airport has LCC volume, with details of Aircraft movements 6,029 flights, passenger volume 9,050,041 person and freight and mail (Exclude Transit) 8,76 tons, as shown in Figure 2.23 and List of low-cost carriers of HKT is shown in Table 2.17.

HKT	International	Domestic	Total
Aircraft movements (flights)	30,950	29,343	60,293
Passenger volume (person)	4,604,432	4,445,609	9,050,041
Freight and mail (tons)-Exclude Transit	6,921	1,847	8,768

Figure 2.23 LCC Air Traffic Volume

Source: AOT (2019a).

Table 2.17 List of low-cost Carriers of HKT

No	LCC Carriers	No	LCC Carriers	No	LCC Carriers
1	Air Asia	8	Thai air Asia	15	Malindo Air
2	Tiger Airways	9	Tomsonfly	16	Go Airlines (India)
3	Jetstar Asia	10	Juneyao Airlines	17	Thai Vietjet Air
4	Jetstar Airways	11	Spring Airlines	18	Vietjet Air
5	Firefly	12	Hong Kong Express	19	Indigo Airlines
6	Jin Air	13	Lucky Air	20	9 Air
7	Nok Air	14	Thai Lion Air	21	T' way Air

Source: AOT (2019a).

2.5.6 Airport Facilities

Facility management is crucial to ensure operational functions around the airport work efficiently. Airports wish to maintain a positive brand image and keep their customers happy with consistent services, standard to the customer, a smooth airport operation flow, safe and secure environment, and a smooth security screening flow. It also creates a memorable experience for passengers (ATALIAN Global Services, 2019). This research focuses on the terminal area as a major interface between the airfield and the rest of the airport including facilities for passenger and cargo handling, baggage claim, airport maintenance, operations, and administration activities.

HKT has a lot of facilities that are quite complete for everyone here. At this airport you do not have to worry if you run out of money because here there are several ATMs and currency exchange and if you are hungry, you can find many food shops and convenience stores. HKT also provides clinics and pharmacies, a lounge area equipped with WIFI and many comfortable chairs available, there is also a spa and lounge. These facilities can be enjoyed by tourists using the services of this airport. HKT in processes facilities can be summarized in table 2.18.

Table 2.18 HKT Processes and Facilities

Processes	Related Facilities & Services
1. Access	- Ground transportation - Parking - Baggage trolleys
2. Flight check-in	- Check in counters. - Monitors/TV screens - Conveyor belts - Kiosk
3. Terminal services	- ATM & Exchange - Banking services - Lounges - Water fountains - Flight information displays - Information desks - Lost baggage counters - Newspaper stands. - Post office - Public announcements - Restaurants, dining, food outlets - Seating areas - Shops and Retails - Internet and Telephone - Television watching areas - Toilets - Travel insurance counters - Medical Help & Emergencies - Muslim Prayer Room - Photo Service - Thai Massage
4. Security screening/Custom	- Walk-through metal detectors

Processes	Related Facilities & Services
	- X-ray equipment - Explosive detection equipment - Passport control
5. Departure halls & gates	- Shops and Retails - Seating areas - Television watching areas. - Newspaper stands. - Seating areas - Massage - Pre-boarding announcements
6. Enplaning	- Jet bridges - Transfer vehicles

Source: Adapted from AOT (2020b).

2.6 Related Research on Phuket International Airport

Over the past 10 years, several studies of Phuket International Airport in various disciplines such as service quality (Prakasit & Paithoon, 2018; Theeraphan et al., 2018; Wannasatit, 2011), service competencies (Kittiphich & Paithoon, 2020), economic impact and loss of cost (Kamonnat, 2018; Wannaphong, 2014), sustainable development and socially responsibility (Jaruswitsarut et al., 2014; Phiphat, 2015), and customer satisfaction management (Theeraphan et al., 2020) as described in Table 2.19

Research shows that about Phuket International Airport. has not previously studied CJM within the airport and its overall policies. The researcher tries to fill the gap by studying overall airport management policy. Using the mixed method methodology to achieve policy implications for customer journey management of Phuket International Airport, which will be discussed in the next chapter.

Table 2.19 Related Research on Phuket International Airport

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Wannasatit (2011)	An investigation of service quality at Phuket international airport: an assessment from the passenger's viewpoint	To analyze the factors which are crucial to service quality perception examine importance and performance of service quality at HKT	The study results revealed that the respondents placed high importance on feeling of being safe cleanliness and efficiency of check-in staff as the three ranks of the most importance attributes of service quality at HKT and they were satisfied with the performance of all service attributes at high level, except the operation of phone internet value for money of restaurant and value for money of shopping that ranged moderately	Service quality
Jaruswitsarut et al. (2014)	Key Success Factors for Sustainable development Management of the Phuket International Airport	To study key factors, both internal and external, of success of Airport management for sustainable development, study the level of the successful management to the sustainable development according to	The external and internal factors those related the successful management of Phuket International Airport to the sustainable development Both of the opinions from the respondent group who are Phuket International Airport	Sustainable development

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Wannaphong (2014)	An Economic Impact of Development Project: Case of Phuket International Airport in Thailand.	the perspective from airport staffs and outsiders who work in the airport, study comparison of the opinions between airport staffs' perspective and outsiders who work in the airport to achievement in HKT sustainable development.	staffs, and the outsider were accepted at high level and moderate level respectively.	Economic Impact
		To estimate the total economic impact of development project of Phuket International Airport using Input-Output Multiplier.	The result revealed that the positive economic impact borne to Phuket province was about 32 billion baht or almost 120 percent increasing from initial impact of 15 billion baht	
Phiphat (2015)	Causal Factors of Socially Responsible Leadership Influencing on Corporate Image of Phuket International Airport.	To study the relationship among socially responsible leadership, stakeholders' perception to corporate social responsibility and corporate image of Phuket International Airport,	The results found that correlation coefficient among observable variables were 0.680- 0.789 and had a significant level at every variable	Socially Responsibility

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Benjaporn (2017)	The Users' Perception of a Public Transport of Phuket International Airport	To study context and style of public transportation system, study level of recognition of Users and to set guidelines to develop the public transportation system	The study found that fives parts, standard component of car was at a much level. Service quality of staff was at a level. Productivity was at a moderate level. Maintenance was at a much level and Ambiance were at a much level	Perception
	Government Loss from Luxury Bags and Watches Smuggling: Case Study of Thailand International Airports	focused on loss from Thai passengers arrived in 2017 in 4 Thailand international airports,	It has been found that the loss of Thai government was around 335 million Baht from 890 smuggling cases or approximately 400 thousand Baht per case.	Loss of cost
Kamonnat (2018)	Marketing Strategies Affecting Customers' Decision on Selecting Thai Airways Restaurant at Phuket Airport	To investigate the consumers' behavior in using THAI catering restaurant at Phuket International Airport, study marketing strategies affecting the consumers decision and compare marketing strategies affecting the consumers decision on using THAI	The result showed that most customers were women aged in the range of 35-45 years old, with monthly income ranging from 15,000 to 25,000 bath. The amount of money spent each time was less than 1,000 baths. These customers usually	Marketing Strategies

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Prakasit and Paithoon (2018)	Service quality of Phuket International Airport	catering restaurant at Phuket International Airport with details on personal factors. To investigate service quality of Phuket International Airport	ordered Thai food. As for the factors affecting the decision it was found that it was self-decision making. As for the marketing strategies affecting the consumers in using a THAI catering restaurant at Phuket International Airport, all strategies were rated high with personnel ranking highest 1) Most samples reported an excellence level of overall service quality of Phuket International Airport 2) Foreigner passengers of different gender and the highest completed level of education are similar, while different nationality, religion, occupation, purpose of travel and	Service quality

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Theeraphan et al. (2018)	The Service Quality Perception of Domestic Passenger at Check-in Counter of Nok Air at Phuket Station	To examine the service quality perception of domestic passenger at check-in counter of Nok Air and comparative of service quality perception of counter check-in domestic passenger of Nok Air at Phuket station	travel frequency each showed statistical differences at a.05 The result showed all passengers have the perception of service quality on high level.	Service quality
	Guideline for Development of Service Competencies of Low-cost Airline Ground Staffs: At Phuket International Airport.	To study the confidence of passengers affecting the service quality of ground receptionists in low-cost airlines, to evaluate the competencies for service capabilities of Low-Cost Airline Ground Staffs	The confidence level in service competencies of Low-Cost Airline Ground Staffs was at high level. When separating two study results from service capability competencies of Low-Cost Airline Ground Staffs and Attributes of each staff to work performance.	Service Competencies
Kirtiphich and Paithoon (2020)				

Authors (Year)	Topic	Research Aims/Highlights	Significant Results	Issue/Theme
Theeraphan et al. (2020)	The Influence of Service Quality to Customer Satisfaction for International Airports in Thailand	The objective of this study is to examine the service quality affected to customer satisfaction for the international airports in Thailand	Passengers perceived the quality of services related to passport and personal identification, followed by ticket checking, finding a way, to secure, airport environment, airport facilities and airport entrances and exits respectively	Service quality, Customer satisfaction

Over the past decade, numerous studies have examined various aspects of Phuket International Airport, contributing valuable insights into service quality, economic impacts, sustainable development, and customer satisfaction. For instance, Wannasatit (2011) investigated service quality from passengers' viewpoints, highlighting the importance of safety, cleanliness, and efficient check-in processes. Jaruswitsarut et al. (2014) focused on the key success factors for sustainable management, emphasizing both internal and external factors critical to achieving sustainable development goals. Economic studies, such as Wannaphong (2014), assessed the economic impacts of airport development projects, revealing significant positive effects on the local economy.

Additionally, research by Phiphat (2015) explored the relationship between socially responsible leadership and the corporate image of the airport, while Benjaporn (2017) examined public transportation perceptions among airport users, providing insights into service quality and maintenance standards. Kamonnat (2018) analyzed government losses from smuggling activities, illustrating the economic challenges faced by the airport. Studies on marketing strategies, such as Posri and Khaysuwan (2018), investigated factors influencing customer decisions in airport dining, and Kittipich and Paithoon (2020) provided guidelines for developing service competencies among low-cost airline ground staff. Theeraphan et al. (2020) further explored the influence of service quality on customer satisfaction across international airports in Thailand, offering a comprehensive view of service-related factors affecting passenger experiences.

Despite the extensive body of research on various operational and service aspects of Phuket International Airport, there remains a significant gap in understanding the holistic customer journey management (CJM) within the airport. Previous studies have focused on specific elements such as service quality, economic impact, sustainable practices, and customer satisfaction in isolated contexts. However, they have not comprehensively addressed how these elements interact throughout the entire customer journey from arrival to departure.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The objectives of this research, the customer journey management model for Phuket international airport, are 1) To study the management policy of Phuket international airport. 2) To study factors of customer journey management of Phuket international airport influencing customer experience. 3) To study and evaluate the efficiency of customer journey management at Phuket international airport and 4) To propose the customer journey management model for Phuket international airport. This research uses a mixed-method research methodology. In-depth interview and focus group are used for qualitative research by to answer objective 1, 3 and 4. Data collected from a sample to be used for quantitative research to support the answer to objective 2 and 3. In this chapter, the researcher addresses the following points.

3.2 Research Methodology

Mixed-method research is a combination of research methods at the philosophical or fundamental assumption on facts and the methods of finding facts. The first philosophy is positivism, which believes that fact has a measurable nature (Objective) and can be counted as numbers clearly. The second philosophy is phenomenology, which is subjective, and it depends on the point of a person. The meaning changes according to its context and it cannot be counted in numbers (Wannika, 2017). For those reasons thus, the Purist researcher views that the two philosophies cannot be combined to discover the fact. In addition, many scholars have expressed their views on the definition of mixed-method research as follows:

Johnson and Onwuegbuzie (2004); Brannen (2005); Creswell and Clark (2007); Tashakkori and Teddlie (2008) and Creswell (2015) explain that mixed-method

research is research using both quantitative and qualitative methods. Then findings are integrated to conclude complete results. The combination covers research problem formulation, research methodology, data collection, data analysis, interpretation and generalizing the result (Johnson & Onwuegbuzie, 2004; Creswell & Clark, 2007; Tashakkori & Teddlie, 2008; Creswell, 2015). In addition to the combination of the quantitative and qualitative methods, it is also a combination of data with different characteristics and the use of different samples. (Rahi, 2017).

Qualitative methods are used to gather in-depth details of a specific topic. This method assumes that a single person represents the feeling of the group and emotion of a person is equally important in the interpretation which is ignored by the quantitative method. This method is often used interpretations from authors such as Tashakkori and Creswell who explain that the approach is used when researchers want to observe or interpret environments with the intention of developing theories (Rahi, 2017).

The quantitative method is scientific and can reasonably be identified in a positive paradigm. This approach focuses on gathering new data based on problems from a large population and then analyzes the data but ignores individual emotions and feelings or the surrounding context. Likewise, it has been debated that quantitative strategies address the objectives and evaluate result through actions and opinions which helps researchers explain rather than interpret data (Barnham, 2015).

This research involves a study of several factors regarding passenger journey within Phuket International Airport which accommodates a high volume of passengers each year. This requires a systematic study as well as in-depth data that quantitative research alone may not yield adequate data. Therefore, the researcher chooses to use a mixed methodology research consisting of qualitative research in-depth interviews and focus group discussion with key informants and quantitative research by using survey research to collect data using questionnaires which will result in complete and integral data.

Regarding perspectives of scholars mentioned above, it can be concluded that mixed-method research means seeking knowledge and truth by using a combination of quantitative and qualitative methods in a particular period or continuously in different stages. The results of each method are then summarized together, which would create a deeper understanding of the topic we studied. This research has divided the research

process into 2 steps: quantitative research and qualitative research with the following process.

3.3 Quantitative Approach Design

The questionnaire's survey is used for quantitative research to find the answer to the second objective to understand the factors of customer journey management affecting the customer experience of Phuket International Airport. The questionnaire also evaluates the efficiency of customer journey management of Phuket international airport to answer the third objective. Components of quantitative research are as follows.

3.3.1 Population and Samples

3.3.1.1 Population

The population of interest is 'foreign passengers using international flights via the international terminal.' The annual number of airport passengers at Phuket international airport is higher than one million. This research adopts nonprobability sampling since the names and demographics of all passengers are not available. It is feasible to use nonprobability sampling to calculate sample sizes and to identify sampling techniques because the number and passengers is quite variable and changes daily.

3.3.1.2 Samples

Samples for this study are foreign passengers who used the services at Phuket International Airport in 2022. The sample size was calculated by taking the proportion of foreign passengers, totaling 2.32 million out of the 4.83 million passengers who used the service (TAT Newsroom, 2023). Therefore, the Taro Yamane sampling method was used at a 95% confidence interval and 5% error. The required sample size can be calculated using the following formula.

$$n = \frac{N}{1 + N [e]^2}$$

Where n = Sample size
 N = Total number of population
 [e] = Expected error = 0.05

Sample size of the population for this research is:

$$n = \frac{18,118,440}{1 + 18,118,440 [0.05]^2} = 399$$

Consequently, the sample size for this study is 400 questionnaires will be collected from foreign passengers using the services at the departure hall of Phuket international airport.

To obtain quality samples suitable to answer the objectives of this study, the researcher uses purposive sampling which is non-probability sampling method (Suanders, Lewis, & Thornhill, 2012) by selecting samples from international tourists that uses a full-service loop who use both arrival and departure from Phuket international airport.

3.3.2 Research Tools

A questionnaire survey is used as an instrument to collect data from samples which are international passengers using services at Phuket international airport in 2020. Questionnaire consists of close-ended and open-ended questions developed from literature reviews, concepts, theories, related research, and data collected from in-depth interviews. The questionnaire is divided into 5 sections as follow.

Section 1: Contains questions on CJM factors and efficient management of Phuket International Airport.

Questions in both sections are close-ended multiple choice questions (MCQ) containing both one-response questions and multi-response questions. Researchers determine the answers to questions using a 6-level rating scale according to the (Likert, 1932), since the dual measurement can avoid a neutral answer (Gwinner, 2011; Losby, 2012; Market Directions, 2010). This will make the answer more precise (Positive or Negative), so in this study, the researcher has divided the scale into 6 levels (Losby, 2012; Losby & Wetmore, 2012). Respondents are required to choose itemized rating

scales from the minimum score of 1 to a maximum of 6. For levels of importance, 1 means that the rated attribute or procedure is strongly unimportant, while a 6 means that the item is strongly important. Similarly, with regards to the efficiency measurement, 1 refers to strongly inefficiency whereas a 6 means that an item is perceived to be strongly efficient (Table 3.1).

Table 3.1 Six-Level Evaluation and Statements

Levels	Statements on Importance	Statements on Efficiency
6	Strongly important	Strongly efficient
5	Important	Efficient
4	Somewhat important	Somewhat efficient
3	Somewhat unimportant	Somewhat inefficient
2	Unimportant	Inefficient
1	Strongly unimportant	Strongly inefficient

Source: Adapted from Losby (2012); Sukhuman (2014).

Section 2: Contains questions about customer experience.

Customer experiences cover four observable variables: Physical experience, Emotional experiences, Service experience and Thainess experience. (Timdang, 2020)

Section 3: Contains a question for further comment.

Section 4: Collects socio-demographic profiles of the respondents using 10 close-ended questions. Each question is as below.

- 1) Gender, using nominal scale data measurement level.
- 2) Age, using nominal scale data measurement level.
- 3) Education, using ordinal scale data measurement level.
- 4) Occupation, using nominal scale data measurement level.
- 5) Income using nominal scale data measurement level.
- 6) Residence using nominal scale data measurement level.
- 7) Marital status, using nominal scale data measurement level.
- 8) Religion, using nominal scale data measurement level.

- 9) Number of visits, using ordinal scale data measurement level.
- 10) Time duration at the airport, using ordinal scale data measurement level.
- 11) Number of travel companions, using nominal scale data measurement level.
- 12) Estimated spending at the airport, using nominal scale data measurement level.
- 13) Purpose of trip, using nominal scale data measurement level.
- 14) Activities at the airport while waiting for boarding, using nominal scale data measurement level.
- 15) The requirement of facilities while waiting for boarding, using ordinal scale data measurement level.
- 16) Products and services that are spent on in the airport, using nominal scale data measurement level.

3.3.3 Research Tool Development

It is necessary to test the quality of tools before use during the research tool development process to ensure that it is a good tool of quality to accurately measure variables and produces research results that are acceptable and useful (Heale & Twycross, 2015). The researcher tests the quality of the tool by testing content validity and reliability of the questionnaire. Detailed steps of tool quality testing procedure are as follows.

3.3.3.1 Validity

1) The data obtained from literature reviews are used to construct a questionnaire in accordance with structure and content of each section of the questionnaire. A questionnaire is then proposed to the advisor to seek his/her comment.

2) A revised questionnaire is then reviewed by three experts to determine the content validity. The experts review each item by using the item objective congruence or IOC. Scoring criteria of the IOC is explained below,

Score 1 is given if the question is consistent with the stated scope of content.

A score of 0 is given if the expert is unsure whether the question is consistent with the stated scope of content.

Score - 1 is given if the question is inconsistent with the stated scope of content.

A questionnaire or question that receives an IOC score greater than 0.5 is considered consistent and reserved for data collecting (Altmann et al., 2019; Heale & Twycross, 2015)

Formula
$$IOC = \frac{R}{N}$$

When IOC stands for item objective congruence
 R is a total score from the experts
 N is a number of experts

Experts were those involved in the aviation industry sector and academic field relevant to air transport including academic and research professionals as shown in Table 3.2.

Table 3.2 List of Three Experts Evaluating IOC

Organization	Position	Area of Expert
College of Aviation Development and Training (CADT)	Director of DAA, Dean of CADT	Aviation industry, weather satellite system and education.
Kasetsart university	Lecturer	Tourism, airline, and services management
Phuket Rajabhat University	Assistant Professor	Research statistics and research methodology

Item ratings from experts were used for calculations. An IOC score of more than 0.5 indicates good content validity. In addition, comments on format and wording were also included. Most questions scored high validity, and fifteen questions

were below 0.5. Therefore, those fifteen questions were adjusted according to the comments from the experts (See appendix IOC form).

3.3.3.2 Reliability

1) A questionnaire that is evaluated for its content validity is then used in a tryout with pilot samples which are like real samples such as a try out on thirty domestic passengers using services inside Phuket international airport. After a pilot data is collected then this pilot data is used for testing reliability of the questionnaire using Cronbach's coefficient of alpha value. Cronbach's coefficient of alpha value must be greater than 0.70 for a questionnaire to have high confidence and can be used for main survey (Heale & Twycross, 2015).

2) The results are analyzed to test reliability of the questionnaire, then it can be concluded that the questionnaire is reliable and applicable to be used for data collecting from the samples. The pretest resulted in an Alpha statistic of 0.964.

3.3.4 Data Collection and Analysis

The data source used in this research is the primary data obtained from 400 questionnaire respondents who are passengers using Phuket International Airport. The researcher analyzes data using computer software in the following orders.

1) Multiple regression analysis is used to analyze factors of customer journey management affecting the customer experience of Phuket international airport. The researcher uses an inferential statistical method to find the relationship between independent variable (X) and the dependent variable (Y).

2) In order to analyze the efficiency of customer journey management at Phuket International Airport, used inferential statistics, comprising of a Paired-Sample t test, and a One-Way Analysis of Variance (One-Way ANOVA) were employed to address the stated research questions and research objectives. (Kim, 2015)

3) Analysis of demographic characteristics of respondents. Descriptive statistics are used to find the frequency, percentage, mean and standard deviation (S.D.).

3.4 Qualitative Research

This section discusses qualitative research. In-depth interviews are used to collect data necessary for answering objective 1 and 3 and to partially support the quantitative research. Focus group discussion is conducted by using data collected using questionnaire as discussion topic to answer objective 4. The researcher selects key Informants which are airport management or representatives, airline executives or representative and entrepreneur in the airport.

3.4.1 Population and Samples

3.4.1.1 Population

The population for this research is a group of persons or personnel working at Phuket International Airport who are involved in handling passenger journeys at each touchpoint. Members of the population consist of representatives from the airport departments, representatives from the airline departments, as well as representatives from airport passenger.

3.4.1.2 Samples

The researcher uses a purposive sampling method to select appropriate samples for an in-depth interview. Each sample is selected based on a case and situation to gather in-depth data for this study. The sample consists of 1) representatives from the airport departments, 2) representatives from airlines, and 3) airport passengers. Five executives or representatives from management are purposively selected to represent sample in group 1 and 2 whereas ten airport passengers are purposively selected. Total sample size are 20 samples.

3.4.2 Research Tools and Designs

The researcher uses semi-structured interview questions to encourage the target group to develop a broad concept of pre-designed semi-structured questions. The researcher can shorten, add, or re-adjust the questions according to the situation to gain insights during the interviews. The nature of the questions is open-ended (Williamson, 2013) which consists of 5 sections:

Section 1 general information of the interviewees.

Section 2 Important issues on overall airport management

Section 3 Important issues on customer journey management

Section 4 Questions about internal management

Section 5 Other suggestions on airport

3.4.3 Research Tool Development

The researcher studies and develops tools for qualitative research according to the following steps.

- 1) Study related literature and research to develop semi-structured interview questions by considering concepts to cover the objectives of the study.
- 2) Consult the advisor to help check the accuracy of the interview questions and make improvements according to the suggestion of the advisor.
- 3) Revised interview questions are then examined for validity, revised accordingly, and revised again after a pilot tries out to obtain a more complete and clear research tool for use with the main samples.

3.4.4 Data Collection and Analysis

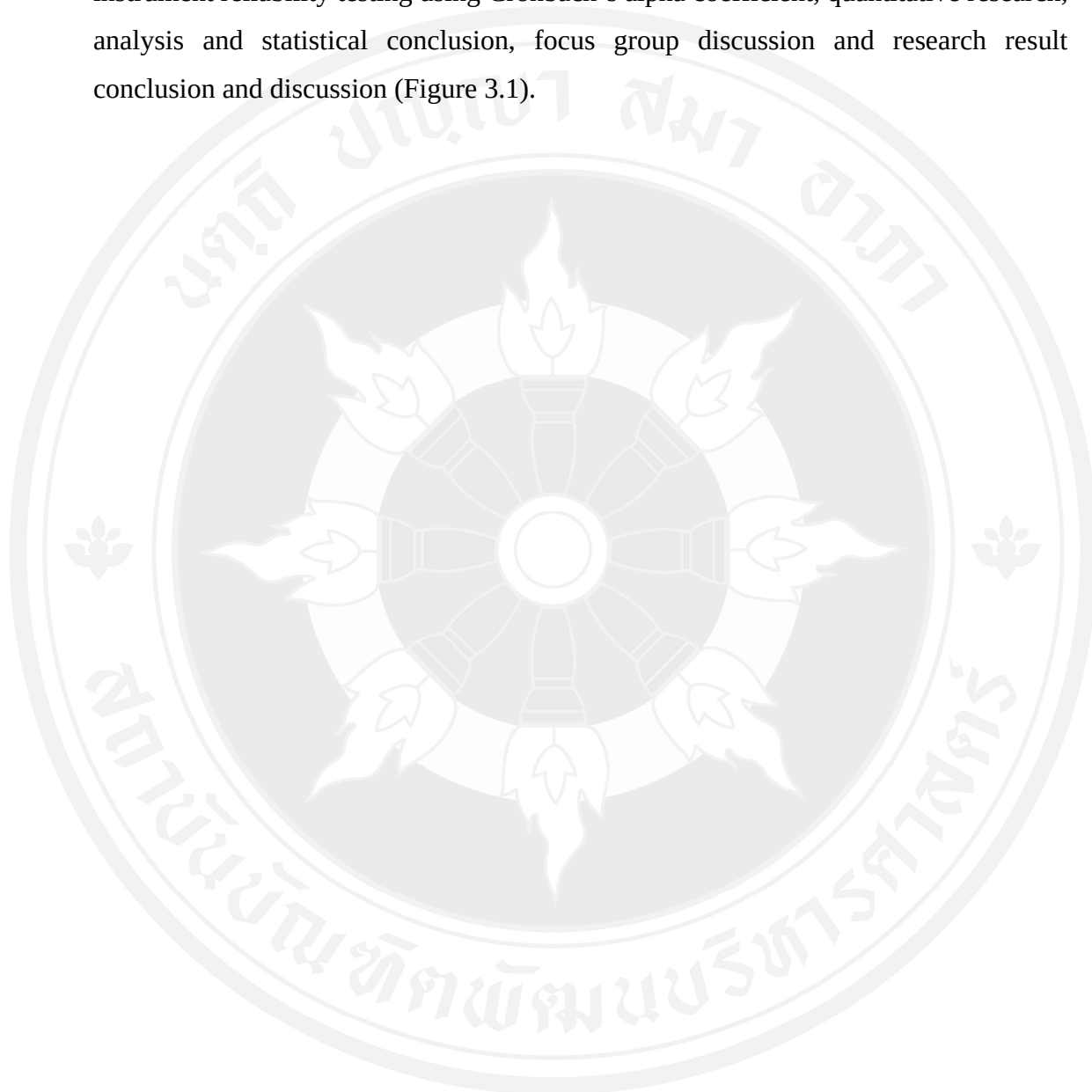
The data sources used in the research consist of 1) primary data collected by interviewing representatives from the airport departments, representative from the airline, and entrepreneurs in Phuket international airport. This data is obtained for developing a questionnaire and used to answer objective 3. The data obtained from the questionnaire is summarized to be used in the focus group discussion; 2) secondary data is the data obtained from documents, literature review, related theories as well as related research to be used to generalize data analysis results.

Data analysis for the study is as follows.

- 1) Confirm the accuracy of data.
- 2) Classify and organize data into categories systematically.
- 3) Conduct content analysis and analytic induction which is to analyze data from different steps into order to draw a conclusion for each topic.
- 4) Present information in narrative form.

3.5 Research Process

This research is designed into a nine-step process consisting of literature review, interview tool developing, qualitative research, content analysis, IOC Try Out, research instrument reliability testing using Cronbach's alpha coefficient, quantitative research, analysis and statistical conclusion, focus group discussion and research result conclusion and discussion (Figure 3.1).



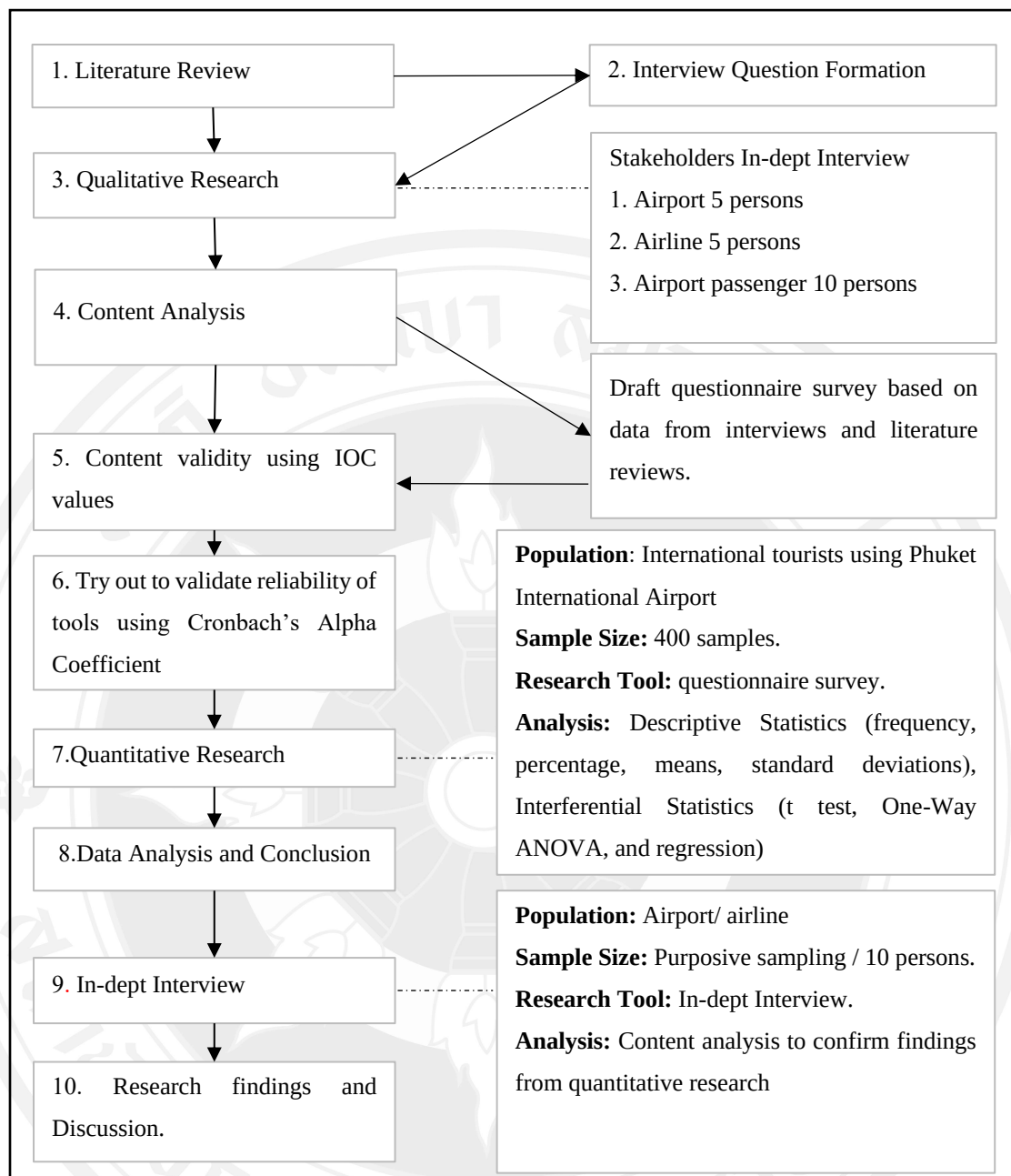


Figure 3.1 Research Process

Step 1 Literature review. Researcher has studied concepts and research related to Airport and Airline Management Customer Journey Management Thailand Airports Management and Phuket International Airport, then developed a qualitative research tool based on data gathered. Semi structured interview questions are designed for an In-Depth Interview with stakeholders.

Step 2-8 Research methodology and Instrument Design. Mixed-method research methodology is used in this study. Exploratory research is used for qualitative research using semi-structured interview questions for in-depth interview. Data collected by in-depth interview is then analyzed using content analysis. Findings from qualitative research enable researchers to develop research conceptual framework and instrument for quantitative research. Questionnaire survey is an instrument used for data collecting. Index of item objective congruence (IOC) is used to validate instrument's validity and reliability is tested. Data is collected and analyzed statistically.

Step 9 and 10 Focus group and conclusion. Researchers use the qualitative and quantitative research data obtained to formulate group discussions with stakeholders to draw conclusions and recommendations on passenger management policy for Phuket international airports.

3.6 Conceptual Research Framework

To study the Customer Journey Management Model for Phuket International Airport, mixed research methodology was employed: qualitative and quantitative methods. The variables were divided into 'independent' and 'dependent' variables, which are related to the quantitative method. 'Qualitative' methods personal interviews were also used to find qualitative data, in accordance to all objectives. Independent variables comprise of two main factors; customer experience of passengers and socio-demographic profiles were considered as sociodemographic variables to be investigated in an association of both importance and efficiency levels of Airport experience and touchpoints. (Figure 3.2)

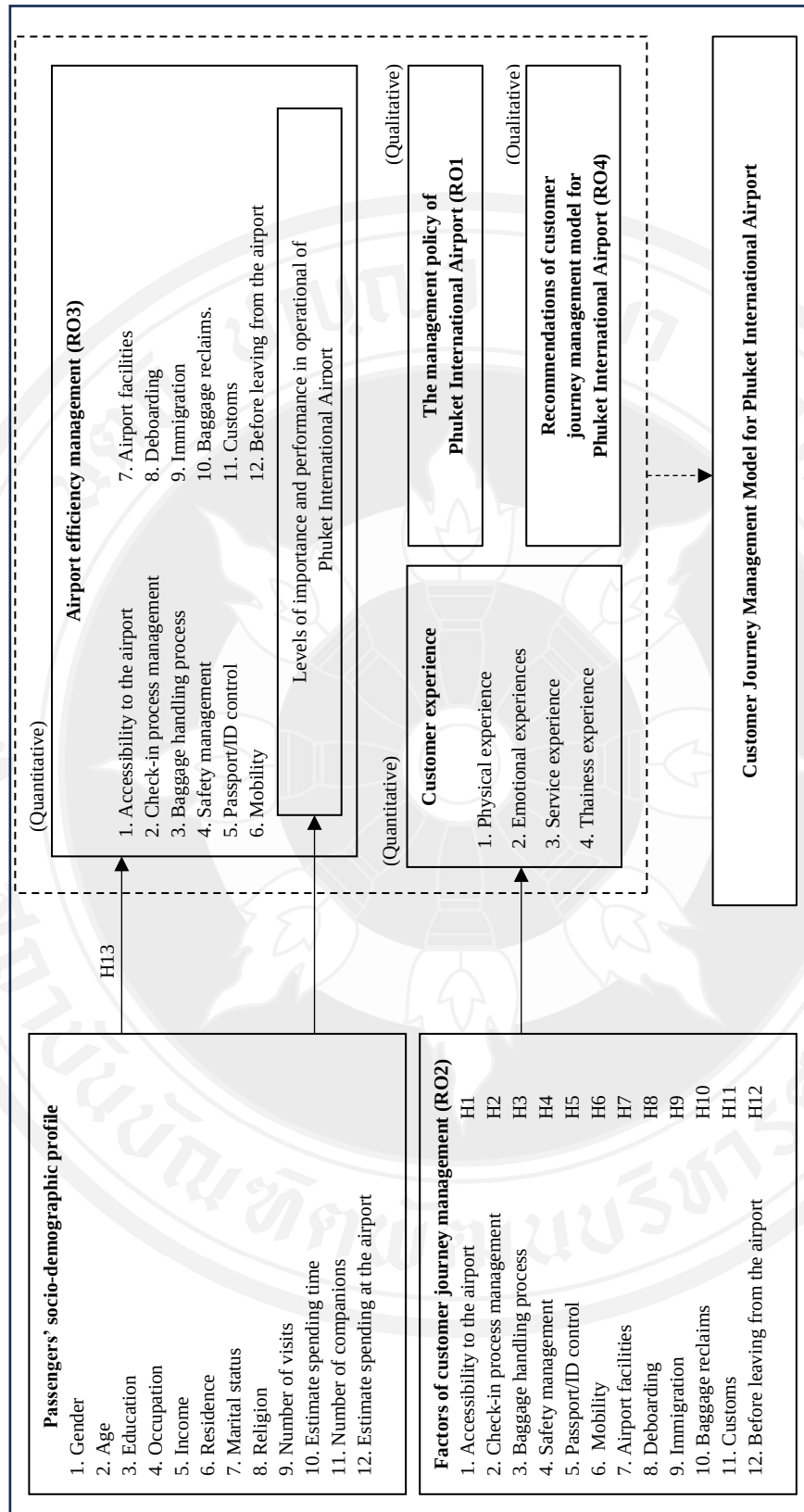


Figure 3.2 Conceptual Research Framework

3.7 Summary Methodology

To conclude, this research uses mixed methodologies (Quantitative and Qualitative methods). The focus is on three relevant groups of the population including airport executives or representatives, passengers, and shop operators. Since all population groups are unknown, non-probability sampling techniques were employed. ‘Purposive sampling technique’ is a mutual technique used in both quantitative and qualitative research methods for all samples. A questionnaire was a research tool used for quantitative results whereas semi-structured interviews and focus group interviews were applied for qualitative data collection (Table 3.3)

Table 3.3 Summary Methodology

Objectives	Research Method	Population	Sample Size	Sampling Technique	Research Tool	Data Analysis
1. To study the management policy of Phuket International Airport.	Qualitative	(1.1) Airport executives/representatives (1.2) Airline executives/representatives (1.3) Airport passengers	5 5 10	Purposive Selection	In-dept interview (Semi-structured)	Content Analysis
2. To study factors of Customer Journey Management of International Airport influencing customer experience.	Quantitative	Departure passengers (Who uses a full-service loop)	400	Purposive Selection	Questionnaire	Descriptive and Inferential statistics
3. To evaluate the efficiency of customer journey management at Phuket International Airport.	Quantitative	Departure passengers (Who uses a full-service loop)	400	Purposive Selection	Questionnaire	Descriptive and Inferential statistics
4. To propose the customer journey management model for Phuket International Airport.	Qualitative	4.1 Airport executives/representatives 4.2 Airline executives/representatives	5 5	Purposive Selection	In-dept interview (Semi-structured)	Content Analysis Content Analysis

CHAPTER 4

RESEARCH FINDINGS

4.1 Introduction

The chapter is systematized as the results of quantitative research and qualitative research. Findings and discussion of this chapter are to analyze and summarize the main findings from titled of ‘customer journey management model for Phuket international airport’. The results of the data are arranged into seven parts as in the details: 4.1 Introduction, 4.2 Customer journey management policy of Phuket International Airport (research objective 1), 4.3 Quantitative descriptive statistic results, 4.4 Factors of customer journey management of Phuket International Airport influencing customer experience (research objective 2), 4.5 Efficiency of customer journey management at Phuket International Airport (Research objective 3), and 4.6 customer journey management for Phuket International Airport, (research objective 4).

4.2 Customer Journey Management Policy of Phuket International Airport (Research Objective 1)

To study the customer journey management policy of Phuket International Airport, data were collected through in-depth interviews with 20 key informants. As mentioned in Chapter Three, three groups of respondents were associated with the interviews as a tool in qualitative research methods. The three interviewing groups comprise 1) executives or representatives from the airport, 2) representatives from airlines, and 3) airport passengers. Semi-structured interviews were conducted to finalize a suitable customer journey management policy for Phuket International Airport.

The researcher conducted interviews with 5 executives or representatives from the airport, 5 representatives from airlines, and, finally, 10 airport passengers. (Table 4.1).

Table 4.1 Key Informants' General Information

Respondents	Sector/Affiliation/Countries	Task/Responsibility
AL1	Thai airway	Supervisor
AL2	Thai airway	Passenger Service
AL3	Nok air	Supervisor
AL4	Singapore airlines	Customer service Assistant
AL5	Emirates Phuket	Senior Airport Services Agent
AP1	Immigration	Executive
AP2	Passenger Service Division	Executive
AP3	Security	Supervisor
AP4	Airside Operations	Supervisor
	Department	
AP5	AOTGA	Ground service
P1	Australia	Leisure / Holidays
P2	Belgium	Leisure / Holidays
P3	Denmark	Leisure / Holidays
P4	France	Leisure / Holidays
P5	Germany	Business
P6	Russia	Business
P7	Belgium	Leisure / Holidays
P8	Denmark	Leisure / Holidays
P9	USA	Leisure / Holidays
P10	England	Visit friends / relatives

4.2.1 Interview Questions

Each group of respondents has five similar interview questions (Table 4.2) comprising of.

- 1) Respondents' profiles
- 2) Important issues on airport management
- 3) Important issues on customer journey management
- 4) Questions about internal management
- 5) Other suggestions on airport

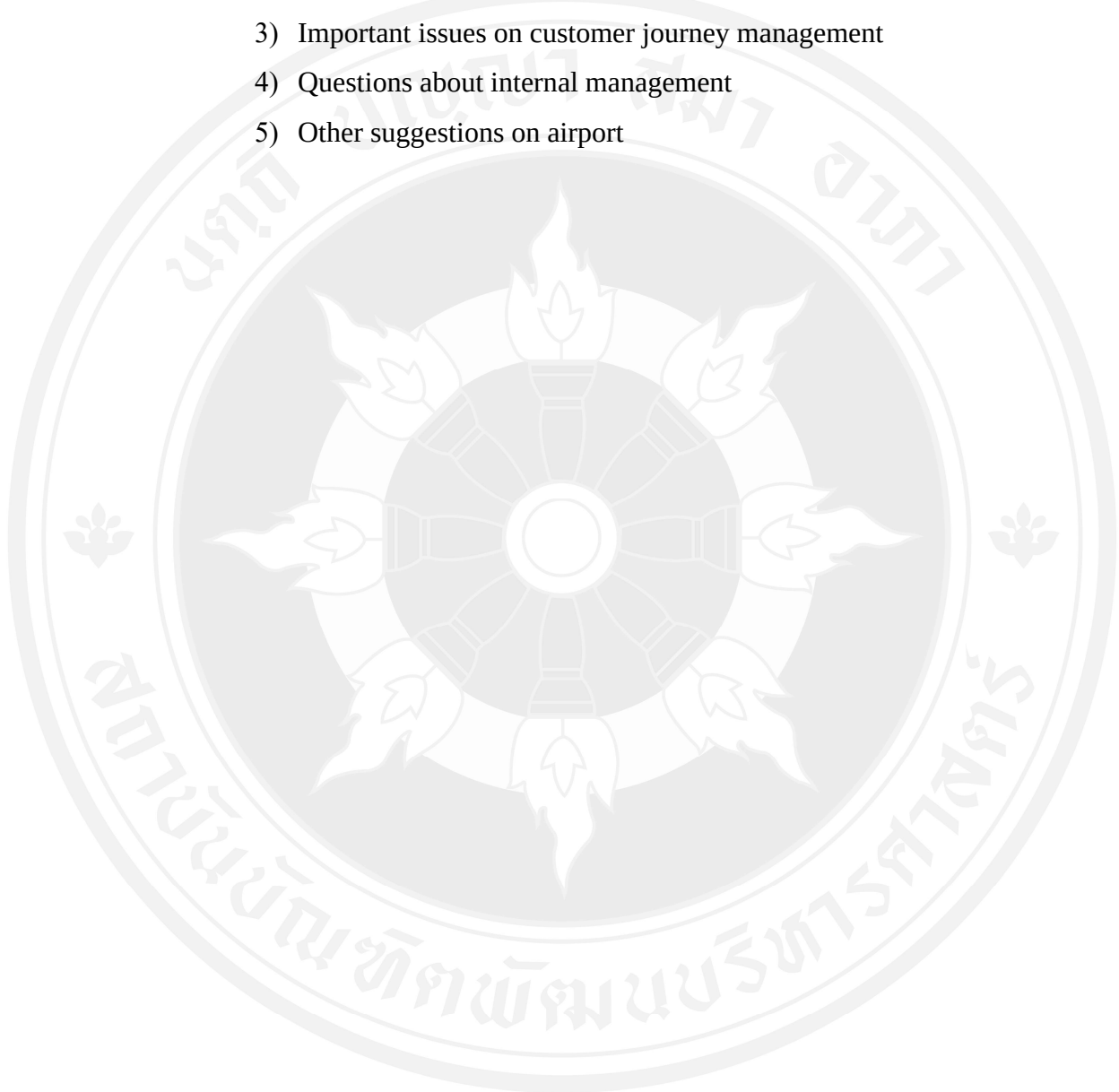


Table 4.2 Interview Questions for Three Responded Groups

Issues, Interviewees, Questions	Airport Executives/Representative (AP)	Airlines/Representatives (AL)	Airport Passengers (P)
Question 1: Respondents' profiles	QAP1: Could you please tell me about your working experience?	QAL1: Could you please introduce yourself and your work experience?	QP1: Could you please introduce yourself and your travel experiences?
Question 2: Important issues on airport management	QAP2: How is the overall management within your sector?	QAL2: How is the overall management within your sector?	QP2: How would you describe the overall condition of this airport?
Question 3: Important issues on customer journey management	QAP3: How does your organization manage the customer experience or customer service?	QAL3: How does your organization manage the customer experience or customer service?	QP3: What factors influence your travel experience?
Question 4: Questions about internal management	QAP 4.1: What are the strengths of your organization?	QAL 4.1: What are the strengths of your organization?	QP4.1: What aspects left an impression on you?
	QAP 4.2: What are the weaknesses of your organization?	QAL 4.2: What are the weaknesses of your organization?	QP4.2: In which areas do you believe this airport could make improvements?
Question 5: Other suggestions on airport	QAP5: At a distance from what we have discussed, what are your other suggestions for this airport?	QAL5: At a distance from what we have discussed, what are your other suggestions for this airport?	QP5: At a distance from what we have discussed, what are your other suggestions for this airport?

Note: QAP: Interview question for airport executives/ representative

QAL: Interview question for airlines staff

QP: Interview question for airport passengers

The 1st question which refers to respondents' personal profiles and background is skipped in this section due to ethical reasons. Interview questions for airline staff and airport executives are mainly aimed at studying the customer journey management policy of Phuket International Airport, which is research objective 1. At the same time, interview results from these two target respondents are used to support and explain the quantitative results on factors of customer journey management of Phuket International Airport influencing customer experience. Similarly, passenger interviews are proposed to support the quantitative results on importance, efficiency, and requirements on airport operational attributes.

4.2.2 Interview results.

In this section, interview results were described by each interview question excluding the 1st question. Question 2 was used to explore important issues about overall management within the organization and the perspective of passengers on the airport's overview. Question 3 was aimed to study about how the organization manages the customer experience or customer service. As for question number 4, will discuss the strengths and weaknesses of the airport, whilst other suggestions on airports were required for the 5th question.

4.2.2.1 Question 2: Important issues on airport management

Airport executives, airlines staff, and the airport passengers raised several important issues. Those important things were grouped into four categories as follows (Table 4.3).

1) Services quality

There is always training for the staff. Focusing on providing quality services under safety standards. Manpower planning for maximum efficiency service in order to achieve a speed and convenience for passenger. Which is consistent with the opinions of most passengers: the staff offer good service, polite, and friendly. The recommendations on this issue from key informants in airline sectors and airport passengers are as follows.

“Our primary focus is on providing excellent service.” (AL5)

“Airport staff are allocated 24 hours a day for both arrivals and departures and train all staff to solve immediate problems because most passenger problems are immediate problems, unpredictable.” (AP1)

“Generally everything looks perfect. Love the help and attention of the staff. Hope to see you soon” (P3)

2) Safety and security

Priority to travel documents, especially documents related to COVID-19. The airport has security maintenance in various aspects such as incident suppression, maintenance, and traffic, checking people and cars, oil cars, and regularly rehearsing and randomly checking explosives. Which, in the view of some passengers feel that the steps are too many. But it is acceptable criteria due to the current Covid-19 situation. The recommendations on this issue from key informants in public sectors and private sectors are as follows.

“In terms of safety and security. We have audited both internally and externally, in addition to checking passengers. We also have daily inspection of airport staff, including equipment and vehicles entering and exiting the airport area. And in adding up, the airport has a random terrorism security check every month.” (AP4)

“Too many are closed for safety reasons because of COVID. We understand, it’s not the airport’s fault.” (P4)

3) Airport management

The airport management has a monthly planning meeting. Come up with new policies for both general customers and VIPs. And looking for add the application platforms in the future to facilitate passengers in every aspect. The airline has re-organization and flight routes to suit the situation. Focus on earning in many ways to diversify risks and reduce costs. Providing services without reducing the rights of passengers and protecting the interests of the organization.

“The airport has a way to make a smart airport by using applications to provide convenience to passengers. From the beginning of the reservation to the

arrival at the airport. and the directions within the airport to the boarding gate” (AP2)

“Adjust flight routes due to the COVID situation and increase revenue from sales promotions in various fields, such as the opening of Pet on Board for those who are interested.” (AL3)

4) Facilitation and Promotion

Facilitate passengers at every step of both arrival and departure terminals. Focus on sales promotions to acquire new customers and especially keeping old customers. Because marketing to acquire new customers will cost more. Therefore, it is important to focus on facilities to create a good experience for passengers to impress and come back again, and on the part of passengers. Most of them need the airport to open more shops and restaurants.

“The cost of obtaining new customers is expensive. It is ten times higher than retaining old customers. How to bind old customers to use our service all the time?” (AL2)

“We really need more shops and restaurants. (P10)”

Table 4.3 Descriptive Interview Results: Important Issues on Airport Management

Important Issues on Airport Management	Airport Executives (AP)		Airlines Staff (AL)		Airport Passengers (P)	
	Question 2 “How is the overall management within your sector?”		Question 2 “How is the overall management within your sector?”		Question 2 “As a passenger, what are your overall impressions of this airport?”	
1. Services quality						
- professional staff	- AP1, AP2, AP3, AP4		- AL1, AL2, AL3, AL4		- P2, P9	
- services/ unexpected services	- AP2		- AL2, AL4		- P3, P5	
- speed /convenient	- AP1		- AL1, AL2 AL5			
- travel document verification	- AP1		- AL1, AL5			
2. Safety and security						
- baggage safety	- AP3, AP4		- AL1		- P1, P4	
- travel document security			- AL1, - AL2			
- service under security	- AP3, AP4		- AL1			
3. Airport management						
- allocate flight routes			- AL2, AL3			
- reorganization			- AL2			
- multiple sources of income			- AL2			
- manage cost			- AL2			
- Planning new policies	- AP2		- AL3			
4. Facilitation and Promotion						
- shop/restaurant					- P1, P3, P5, P10	
- promotional activities			- AL2, AL3			

4.2.2.2 Question 3: Important issues on customer journey management

The passengers, airlines staff, and airport executives perceived some efficient performance of the airports. Similarly, efficient issues were described in these four groups as follows (Table 4.4).

1) Staff and services

Polite and fast service, pay attention to every detail in the service process, such as providing service beyond expectations, issuing a policy that allows pets to be brought on board with passengers and protects the interests of passengers.

“We will provide step-by-step training for staff in passenger handling. If the counter staff encounters difficulties, they will escalate the matter, and if unresolved, it will be brought to the attention of the manager or supervisor.” (AL1)

“There are passenger service activities, specifically “pet onboard” activities, allowing passengers to bring dogs on board. This service will initially be available for domestic flights.” (AL3)

2) Shops and restaurants

Because the airport is not fully open for service. Causing a slight impact on passengers in terms of a variety of shops, restaurants, which the airport has already prepared a plan for management. Just waiting for the entrepreneur to come and rent the space for selling products.

“The airport has allocated space for entrepreneurs to bid on opening shops and restaurants. We are simply awaiting the full reopening of the airport, after which more stores will be introduced to provide services.” (AP2)

“I need more bar/ free lounge” (P4)

3) Airport facilities and equipment

The airport considered facilities and equipment in the airport to be essential to the passenger experience. Therefore, it has been developed to maintain quality and always be clean. Whether in terms of the cleanliness of bathrooms and public areas, technology is also used to increase the convenience and speed of passenger screening Including applying for a visa online as well (E-visa).

“I appreciate clean bathrooms, and, indeed, they are well-maintained here.”

(P10)



Table 4.4 Descriptive Interview Results: Important Issues on Customer Journey Management

Important Issues on Customer Journey Management	Airport Executives (AP)	Airlines Staff (AL)	Airport Passengers (P)
	“How does your organization manage the customer experience or customer service?”	“How does your organization manage the customer experience or customer service?”	What factors influence your travel experience?
1. Staff and services - professional staff - Service with pleasure - speed /convenient 2. Shops and restaurants - more shop/ restaurant - bar/free lough	- AP1, AP2 - AP2, AP3, AP4 - AP1 -AP2	- AL1, AL2, AL3, AL4 - AL1, AL2, AL3 - AL1, AL2, AL4, AL5 - AL5	- P1, P5 - P9 - P1, P2, P3, P4, P7 - P2, P4, P8
3. Airport facilities and equipment - modern equipment/ technology - signs/symbols are clear - clean toilet	- AP1, AP2 - AP2	AL3	- P6, P9 - P10

4.2.2.3 Question 4: Questions about internal management

Interviews with all stakeholders at Phuket International Airport have provided a comprehensive analysis of the airport's advantages and disadvantages. Presenting this information in such a format proves to be highly beneficial as it enables us to consider and analyze data from various perspectives. This approach offers a comprehensive and in-depth understanding of Phuket International Airport, categorized by specific topics. (Table 4.5).

1) Advantages

(1) Staff

Staff are a new generation, have a good knowledge of technology and are multiskilled. Have language skills, able to communicate with passengers in their language. This makes it possible to understand the real needs of passengers and provide the right service.

“A very nice and clean airport with competent staff.” (P4)

(2) Services

Regular training of service personnel, meticulous cares about passenger details. Providing services with convenience and speed under safety standards.

“On the part of the airline. We will mainly focus on service and safety. There is always training for employees to obtain quality service and passenger satisfaction under safety standards.” (AL1)

(3) Technology

Technology is used to help detect both scanning points, check-in counter, and baggage sorting point.

(4) Law

Laws and regulations to support employees to have more confidence in their work, especially those who are working in safety. In addition, there are laws related to economic recovery plans. That allows the airline to operate during the COVID 19. And most importantly, it is indispensable to open the sand box area for Phuket to support tourists.

“Regarding my work, I feel confident and comfortable as there is supporting legislation, making the work more convenient.” (AP3)

“The positive aspect is that the government sector intervenes to assist in managing the airline, overseeing operations to ensure simplicity through the application of legal guidelines for greater orderliness.” (AL2)

(5) Safety and security

Safety strengths encompass a staff team with extensive experience working collaboratively, adeptness in effective procedures, and the utilization of modern control systems. These elements contribute to a smooth and convenient workflow. Focusing is on providing comprehensive safety services, paying attention to every detail to prevent issues that could impact passenger safety. We proactively make timely improvements or corrections to ensure everyone receives safe and satisfactory service.

“Our staff have been working together for an extended period, possessing the necessary expertise and supported by relevant regulations, which enhances the convenience of our work.” (AP3)

“We emphasize both service and safety. Any factors causing passenger dissatisfaction that also impact on safety must be addressed.” (AL1)

(6) Place and location

The place is small, with easy access to the check-in point, ensuring safety and passenger service. Another advantage of Phuket it is the most beautiful tourist destination in the world, makes a lot of tourists want to visit.

“The airport is of a suitable size, straightforward, and provides convenient access to the check-in desk.” (AP2)

“Phuket is a small yet captivating city that attracts many visitors.” (AL3)

I love Phuket; it’s a truly beautiful city. (P6)

2) Disadvantages

(1) Less staff

In some service sectors, employees are considered to be less than they should be, especially during the COVID-19 situation. Some officials have to control travel within the airport, and employees in non-outsourced parts have been reduced, causing insufficient staff.

(2) Waiting place

The airport design utilizes a common atrium system, making it challenging to attend to passengers when issues arise. Separate arrangements should be considered. However, due to limited space in the building, allocating additional space is not feasible. Furthermore, the waiting area at the boarding gate exit becomes cramped when passenger capacity is full, posing encounters for the airport to manage effectively.

(3) Accessibility/transportation

Public transportation in the province is inadequate, hindering accessibility to the airport with only one main route. The absence of buses serving the airport leads to prolonged waiting times for the airport bus, compelling passengers to opt for more expensive taxi services. This contributes to traffic congestion and increased costs associated with public transportation.

(4) Monopoly

Information from the interview indicates that the airport currently exclusively utilizes ground management services from a single agency. This marks a departure from the past when multiple agencies had the opportunity to provide management services. Consequently, a monopoly in management has emerged, potentially impacting passenger service due to the absence of competition. As a result, passengers may not receive optimal service.

“The monopoly on handling inhibits competition.” (AL1)

“Monopoly management may impact the passenger experience. We have to wait and see what the future situation will be like and if there will be any changes.” (AP2)

(5) Shop and restaurant

Many passengers share the same opinion that there are limited shops and restaurants at the airport. Despite the airport's small size and lack of activities, the lengthy waiting times of over three hours make passengers wish for more options. They anticipate an increase in shops and restaurants to provide a variety of choices and alleviate boredom during the waiting period before boarding.

“There's not much food available.” (P7)

“There isn't much in terms of shops and restaurants, so there's pretty much nothing to do—it gets boring.” (P8)

“Food prices are quite expensive compared to other places.” (AL4)

“Most airports have cafes; there should be more restaurants.” (AL5)

Table 4.5 Descriptive Interview Results: Important Questions About Internal Management

Important Questions about Internal Management	Airport Executives (AP)	Airlines Staff (AL)	Airport Passengers (P)
1. Advantages			
- staff	- AP1, AP2, AP3	- AL1,	- P1, P4, P5
- service	- AP2,	- AL1, AL2, AL3, AL4, AL5	- P4, P5, P7, P8, P10
- technology	- AP1, AP2		
- law	- AP3	- AL2	- P2
- safety and security	- AP3, AP4, AP5	- AL1	
- place and location	- AP2	- AL2, AL3	- P1, P3, P6, P9
2. Disadvantages			
- less staff	- AP1, AP3		
- waiting place	- AP2	- AL2, AL4, AL5	- P2, P5
- accessibility/transportation	- AP2, AP3, AP5	- AL2, AL3, AL4, AL5	
- monopoly	- AP2	- AL1, - AL2	
- shop and restaurant		- AL3, AL4, AL5	- P2, P4, P7, P8, P10

4.2.2.4 Question 5: Other suggestions on airport

The ultimate inquiry pertains to encouraging all stakeholders to propose improvements for Phuket International Airport or suggest enhancements to meet the needs of passengers. This summary is illustrated in Table 4.6.

Table 4.6 Descriptive Interview Results: Other Suggestions on Airport

Respondents	Suggestions
AP1	“When it comes to our operations, Immigration is looking to increase the number of inspection sites and personnel.”
AP2	“I’d like the flight names to be written in Chinese since there are many Chinese travelers. For instance, TG320 could be written as (Chinese)320.”
AP3	“I wish transportation could be more convenient. It would be great to have more stores to boost non-aero income. Additionally, amenities like luggage storage would be a welcome addition.”
AP4	-
AP5	-
AL1	“I think it would be beneficial to involve additional handlers to enhance competition. It could significantly improve the experience for passengers.”
AL2	“The seats in the boarding area should have amenities like phone chargers directly on the chairs. Registering for Wi-Fi is currently challenging; it should be simplified for passengers. Airlines having to pay overtime to immigration if flights occur outside of business hours is costly; finding a way to reduce these expenses would be appreciated. Additionally, implementing technology to address the issue of passengers picking up the wrong bags could enhance the overall experience.”
AL3	“We need some upgrades for the equipment, and it would be great to have the space expanded.”

Respondents	Suggestions
AL4	"I wish passengers could understand that airlines and airports are distinct entities; they're not the same thing."
AL5	"It should easily connect to Wi-Fi."
P1	"Good, I hope HKT be full option as soon."
P2	"I'd like more restaurant options and more convenience shops with snacks and drinks"
P3	"Please add a smoking area more bars please."
P4	"Maybe more display/demonstration or aspects of Thai culture."
P5	"Everything is great It's nice and quiet and the staff is always kind and polite."
P6	"I want to have the separate zones for people with children and other people."
P7	"I'd like more restaurant options and more convenience shops with snacks and drinks"
P8	"With more facilities would have made the airport experience more enjoyable."
P9	"Lounges must be open around the clock. Without a break"
P10	"Too many of them closed because of covid. Not the airport fault"

In terms of operations, Immigration is actively seeking to expand both the number of inspection sites and personnel. Additionally, to better accommodate the considerable influx of Chinese travelers, I suggest adopting Chinese translations for flight names, such as representing TG320 as (Chinese) 320. The desire for enhanced transportation convenience is underscored, coupled with the need for more stores to boost non-aero income and the inclusion of amenities like luggage storage to improve overall passenger experience. Moreover, involving additional handlers could foster healthy competition, leading to a significant enhancement in the quality of service provided.

Addressing passenger needs, amenities like built-in phone chargers on boarding area seats and simplified Wi-Fi registration are recommended. To alleviate financial burdens on airlines, finding ways to reduce overtime payments to immigration

for flights outside of business hours is crucial. Implementing technology to prevent passengers from mistakenly picking up the wrong bags would also contribute to an improved overall experience. Upgrades in equipment and expanded airport space are essential considerations to meet growing demands.

Additionally, passengers' understanding of the distinction between airlines and airports is highlighted. Ensuring easy Wi-Fi connectivity is fundamental, and optimism is expressed for HKT to become fully operational soon. The request for more dining options, additional convenience shops, smoking areas, and bars is emphasized, along with the possibility of incorporating more displays or demonstrations of Thai culture. Overall, a focus on facility improvements would undoubtedly contribute to a more enjoyable airport experience, including the availability of lounges around the clock. Challenges posed by COVID-related closures are acknowledged, with recognition that these circumstances are beyond the control of the airport. (Figure 4.1)

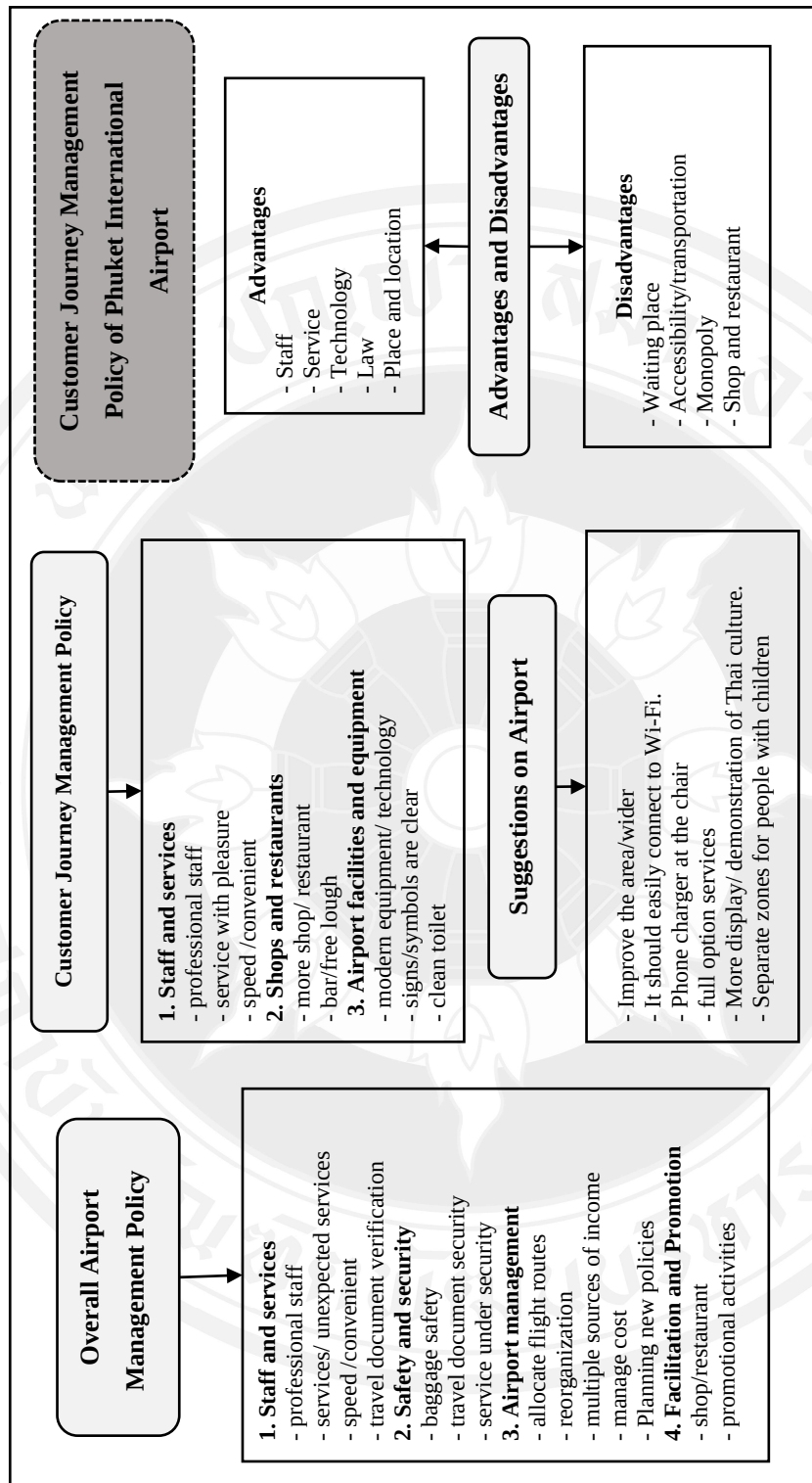


Figure 4.1 Summarize Results of Customer Journey Management Policy of Phuket International Airport

4.2.3 Policy Recommendations and Solutions

The following policy recommendations are derived from in-depth interviews conducted with key informants associated with Phuket International Airport, including airport executives, airline representatives, and passengers. The aim is to enhance the customer journey by addressing critical areas in airport management, customer experience, and operational efficiency. This comprehensive policy is designed to cater to the needs and expectations of passengers while ensuring high standards of service, safety, and overall satisfaction.

4.2.3.1 Service Quality and Training

- 1) Ongoing Staff Training: Implement continuous training programs for airport staff to maintain high service standards. Training should focus on customer service, problem-solving, and emergency response to ensure staff are well-prepared to handle any situation.

- 2) Manpower Planning: Optimize manpower planning to always ensure adequate staffing levels, especially during peak hours. This will help maintain efficiency and minimize wait times for passengers.

4.2.3.2 Safety and Security

- 1) Enhanced Security Protocols: Continue to prioritize safety and security through regular audits, both internal and external. Implement stringent checks for passengers, staff, and vehicles entering the airport premises.

- 2) COVID-19 Measures: Maintain and update health and safety protocols related to COVID-19, ensuring compliance with travel document requirements and health guidelines to protect passengers and staff.

4.2.3.3 Airport Management

- 1) Monthly Planning Meetings: Hold regular planning meetings to review and update airport policies, focusing on both general passengers and VIP services. This will help in adapting to new challenges and improving service delivery.

- 2) Smart Airport Initiatives: Develop and integrate smart airport technologies, such as mobile applications, to enhance passenger convenience from booking to boarding. These technologies should streamline processes like check-in, navigation, and boarding.

4.2.3.4 Facilitation and Promotion

1) Passenger Facilitation: Improve facilities to enhance passenger experience at every stage of their journey. This includes better seating, clear signage, and faster processing times.

2) Marketing and Promotions: Focus on retention marketing strategies to keep existing customers while also attracting new ones. Offering loyalty programs and personalized promotions can help in building long-term customer relationships.

4.2.3.5 Shops and Restaurants

1) Increase Retail and Dining Options: Expand the variety of shops and restaurants within the airport to cater to diverse passenger needs and preferences. This will help in reducing passenger boredom during long waiting times and improve overall satisfaction.

2) Competitive Pricing: Ensure that food and beverage prices are competitive and reasonable, providing good value for passengers.

4.2.3.6 Airport Facilities and Equipment

1) Regular Maintenance: Ensure that all airport facilities and equipment are well-maintained and regularly cleaned. This includes bathrooms, public areas, and technological equipment used for passenger processing.

2) Technological Upgrades: Invest in modern technology to improve efficiency and convenience, such as automated check-in kiosks and e-visa applications.

4.2.3.7 Internal Management

1) Comprehensive Staff Training: Provide extensive training for staff to handle passengers effectively and escalate issues appropriately. This includes special programs like “Pet on Board” for passengers traveling with pets.

2) Language and Communication Skills: Encourage staff to develop multilingual skills to better serve international passengers, enhancing communication and service delivery.

4.2.3.8 Addressing Disadvantages

1) Staffing Levels: Increase staff numbers, particularly in areas impacted by COVID-19, to ensure that service levels are maintained.

2) **Waiting Area Improvements:** Redesign waiting areas to provide more comfort and convenience for passengers. Consider separate waiting areas to manage crowds effectively.

3) **Transportation Accessibility:** Improve public transportation options to and from the airport. Introduce more bus services and alternative transport options to reduce reliance on taxis and alleviate traffic congestion.

4) **Competition in Ground Services:** Encourage competition by allowing multiple agencies to provide ground services, preventing monopolies and improving service quality.

5) **Enhanced Passenger Facilities:** Address the need for more shops and restaurants to offer passengers a variety of options, making their waiting time more enjoyable and less monotonous.

The implementation of these policies will help Phuket International Airport to enhance the customer journey by providing high-quality services, ensuring safety and security, and continuously improving airport facilities and management practices. By focusing on these key areas, the airport can achieve greater passenger satisfaction and operational efficiency, solidifying its reputation as a top travel destination.

4.3 Quantitative Descriptive Statistic Results

The results of quantitative descriptive statistic are divided into four parts 1) the descriptive statistic results of the socio-demographic profiles of the airport passengers, 2) the descriptive statistic results of the levels of importance and efficiency toward airport management attributes, 3) the descriptive statistic results of the customer experience factors and 4) the qualitative descriptive results from suggestions on airport experiences.

4.3.1 Socio-demographic Profiles

Socio-demographic profiles of 400 questionnaire surveys, are described under 16 specific variables: 1) gender, 2) age, 3) education, 4) occupation, 5) income, 6) residence, 7) marital status, 8) religion, 9) number of visits, 10) time at the airport, 11)

number of companions, 12) estimated spending at the airport, 13) purpose of trip 14) activities at the airport 15) requirement of facilities at the airport and 16) products and services spent on in the airport. (Table 4.7-4.11)

From the conclusion of the 400 respondent's profile, 239 (59.8%) were males, and 161 (40.3%) were female. The majority of respondents were Gen Y (1981-1996), representing 46.0% of respondents. The next four groups were generation X (1965-1980) representing 26.8%, Gen Z (1997-2012) 14.5%, baby boomers (1946-1964) 11.5%, and silent generation (1925-1945) 1.3%.

Most of total respondents gained bachelor's degree, 184 (46.0%), below bachelor's degree, 125 (31.3%), and rest 91 (22.8%) respondents achieved Above bachelor's degree. Of the 400 respondents, 87 (21.8%) were private business employees, 75 (18.8%) were temporary workers / Freelance, 73 (18.3%) were business owners, 67 (16.8%) were government/civil servant, 38 (9.5%) were student, and 20 (5.5%) were others. Only 5.5%, 3.3%, and 1.3% respectively were retired persons, unemployed, and housewives.

82.8% of respondents gave information about their average monthly income. This might be because the question related to income, which is sometimes a confidential matter for some respondents. 129 (32.3%) of respondents had an average income of 90,001-200,000 THB per month. 49 (12.1%) of respondents had an average monthly income of more than 200,000 THB, followed by 45 (11.3%) of respondents receive 30,001-50,000 THB per month. and the rest were less than 30,001 THB (10.8%), 70,001-90,000 THB (8.3%), and 50,001-70,000 THB (8.0%) per month respectively.

Focusing on the top five country of residence, 82 respondents (20.5%) were from Australia, followed by 44 respondents (11.0%) from UK, 42 respondents (10.5%) from Russia, 41 respondents (10.3%) from Germany, and 28 respondents (7.0%) from Sweden. Of these, 196 were married (49.0%), 182 were single (45.5%), and 22 were widowed / divorced (5.5%). Exactly, 271 (67.8%) respondents were Christian, 28 (7.0%) were Muslim, 25 (6.3%) were Buddhist, and 76 (19%) were other. (Can see more details in (8) Table 4.7)

232 or 58.0% of the respondents had visited Phuket airport 1-2 times. while 107 or 26.8% respondents had visited 3-5 times, and 61 or 15.3% respondents had visited Phuket airport more than 5 times. Respondents spent time at the departure terminal,

most of 225 (56.3%) respondents spent time 3-4 hours at airports. Followed by 1-2 hours at 147 (36.8%) and more than 4 hours for 28 (7.0%). Considering travelling companions, the majority, or 232 respondents (58%) traveled with 2-3 people, the rests of respondents with 81 traveled with 4-5 persons (20.3%), travel alone 70 persons (17.5%), and more than 6 persons, 17 traveled (4.3%) respectively.

And regarding Estimated spending at the airport, 142 respondents (35.5%) spent 501-1,000 THB per person, 87 respondents (21.8%) spent less than 501 THB, 62 respondents (15.5%) spent 1,001-2,000 THB, 25 respondents (6.3%) spent 3,001-4,000 THB, 24 respondents (6.0%) spent 2,001-3,000 THB, 19 respondents (4.8%) spent 4,001-5,000 THB, and 16 respondents (4.0%) spent more than 5,000 THB per person.

Table 4.7 Frequency and Percentage of Passenger Respondents Based on Socio-demographic

(n = 400)		
Socio-Demographic Profiles	Frequency	Percentage (%)
1) Gender		
Male	239	59.7
Female	161	40.3
2) Age (Generation)		
1925-1945 Silent Generation	5	1.3
1946-1964 Baby Boomers	46	11.5
1965-1980 Gen X	107	26.7
1981-1996 GenY	184	46.0
1997-2012 Gen Z	58	14.5
3) Education		
Below bachelor's degree	125	31.3
Bachelor's degree	184	46.0
Above bachelor's degree	91	22.7
4) Occupation		
Private business employee	87	21.7
Temporary worker / Freelance	75	18.7

Socio-Demographic Profiles	Frequency	Percentage (%)
Business owner	73	18.3
Government / Civil servant	67	16.7
Student	38	9.5
Retired	22	5.5
Unemployed	13	3.3
Housewife	5	1.3
Others	20	5.0
- Healthcare worker	(9)	(2.3)
- Education personnel	(3)	(.7)
- NGO	(1)	(.3)
- N/A	(7)	(1.7)
5) Income (All currency values are based on the estimated average exchange rates for January 2022)		
Less than 30,001 THB	43	10.8
30,001-50,000 THB	45	11.3
50,001-70,000 THB	32	8.0
70,001-90,000 THB	33	8.3
90,001-200,000 THB	129	32.3
More than 200,000 THB	49	12.1
N/A	69	17.2
6) Residence		
Australia	82	20.5
UK	44	11
Russia	42	10.5
Germany	41	10.3
Sweden	28	7
USA	26	6.5
France	24	6
Denmark	21	5.3

Socio-Demographic Profiles	Frequency	Percentage (%)
Belgium	14	3.4
Netherlands	8	2
Switzerland	7	1.8
Norway	6	1.5
Iceland	6	1.5
Brazil	5	1.3
Finland	5	1.3
Poland	5	1.3
Other	36	9.0
- Greece	(4)	(1)
- Iran	(4)	(1)
- Italy	(4)	(1)
- Korea	(4)	(1)
- Canada	(3)	(0.8)
- Qatar	(3)	(0.8)
- England	(2)	(0.5)
- Japan	(2)	(0.5)
- Romania	(2)	(0.5)
- Ukraine	(2)	(0.5)
- Wales	(2)	(0.5)
- Pakistan	(1)	(0.2)
- Saudi Arabia	(1)	(0.2)
- Slovakia	(1)	(0.2)
- UAE	(1)	(0.2)
7) Marital status		
Single	182	45.5
Married	196	49.0
Widowed/Divorced	22	5.5
8) Religion		
Christianity	279	69.7

Socio-Demographic Profiles	Frequency	Percentage (%)
Islam	36	9.0
Buddhism	32	8.0
Other	53	13.3
- Atheist	(14)	(3.51)
- Hindu	(3)	(0.75)
- Theism	(1)	(0.25)
- No religious	(35)	(8.79)
9) Number of visits		
1-2 time (s)	232	58.0
3-5 times	107	26.8
More than 5 times	61	15.3
10) Time at the airport		
1-2 hour (s)	147	36.8
3-4 hours	225	56.3
More than 4 hours	28	7.0
11) Number of Companions		
Travel alone	70	17.5
2-3	232	58.0
4-5	81	20.3
More than 6	17	4.3
12) Estimated spending at the airport (All currency values are based on the estimated average exchange rates for January 2022)		
Less than 501 THB	87	21.7
501-1,000 THB	142	35.4
1,001-2,000 THB	62	15.5
2,001-3,000 THB	24	6.0
3,001-4,000 THB	25	6.3
4,001-5,000 THB	19	4.8
More than 5,000 THB	16	4.0

Socio-Demographic Profiles	Frequency	Percentage (%)
N/A	25	6.3

Most of the 368 respondents (93.9%) went on leisure / holidays. Followed by 30 (7.7%) visiting friends/relatives, while business, education, meeting / seminar, and others were the least popular. Accounted for 2.3%, 1.5%, 1.3%, and 0.8%, respectively (Table 4.8).

Table 4.8 Frequency and Percentage of Respondents on Purpose of Trip

(n = 400)

13) Purpose of trip	Frequency	Percentage (%)
Leisure / Holidays	368	93.9%
Visit friends / relatives	30	7.7%
Business	9	2.3%
Education	6	1.5%
Meeting / Seminar	5	1.3%
Others	3	.9
- Holidays for other	(1)	(.3)
- Accompany student.	(1)	(.3)
- For tanning	(1)	(.3)

264 respondents (68.8%) prefer dining, while 222 respondents (57.8%) prefer waiting at the boarding gate as the second most popular activity. In the meantime, shopping (185) and taking a walk (127) ranked third and fourth, accounting for 48.2% and 33.1%, respectively. And the least preferred activity was buying postcards, accounting for only 1% exhibited in Table 4.9.

Table 4.9 Frequency and Percentage of Respondents on Activities at the Airport

(n = 400)

14) Activities at the airport	Frequency	Percentage (%)
Dining	264	68.8%
Waiting at the boarding gate	222	57.8%
Shopping	185	48.2%
Take a walk	127	33.1%
Update your social media	69	18.0%
Read a book	63	16.4%
Take photos	62	16.1%
Watch a movie	42	10.9%
Take a nap	30	7.8%
Get a massage	27	7.0%
Relax in a club lounge	18	4.7%
Make friends	12	3.1%
Take your kids to a play area	6	1.6%
Buy postcards	4	1.0%
Others	8	2.1
- Work	(3)	(.78)
- Drink	(2)	(.53)
- YouTube/TikTok	(2)	(.53)
- Play cards	(1)	(.26)

The majority of passengers, 108, or 32.80%, require a lounge, while 75, or 22.8%, want a library, 74 or 22.5 % need a shuttle. And other facilities, calculated as a percentage, as follows: theater 16.1% beauty shop 15.5% playground 14% museum 12.8% medical service 10.6% cultural center 7.9% no need 7.3% wheelchair service 5.8% interpreter 4.9% and Others 12.5% as shown in Table 4.10.

Table 4.10 Frequency and Percentage of Respondents on Requirement of Facilities at the Airport

(n = 400)

15) Requirement of Facilities at the Airport	Frequency	Percentage (%)
Lounge	108	32.8%
Library	75	22.8%
Shuttle	74	22.5%
Theater	53	16.1%
Beauty shop	51	15.5%
Playground	46	14.0%
Museum	42	12.8%
Medical Service	35	10.6%
Cultural center	26	7.9%
No need	24	7.3%
Wheelchair Service	19	5.8%
Interpreter	16	4.9%
Others	41	12.5
- Smoking area	(15)	(4.57)
- More restaurant/shop/coffee shops	(13)	(3.96)
- Sports and recreation activities	(6)	(1.83)
- Massages/massage chairs	(3)	(.91)
- Comfortable chairs	(2)	(.61)
- Connection point for laptop	(1)	(.31)
- Thai souvenir shop	(1)	(.31)

And lastly in terms of products and services that passengers spend on in the airport. The top five found that passengers spent the most on food 304 people accounted for 83.7%, beverages 242 (66.7%), souvenir 95 (26.2%), snacks 94 (25.9%), and liqueur 42 (11.6%) respectively (Table 4.11).

Table 4.11 Frequency and Percentage of Respondents on Products and Services
Spent on in the Airport

(n = 400)

16) Products and Services Spent on in the Airport	Frequency	Percentage (%)
Food	304	83.7%
Beverages	242	66.7%
Souvenir	95	26.2%
Snacks	94	25.9%
Liqueur	42	11.6%
Perfume	33	9.1%
Cosmetics	33	9.1%
Local Products	25	6.9%
Cigarettes	23	6.3%
Clothes	21	5.8%
Spa/Massage	17	4.7%
Electronics Appliances	17	4.7%
Executive lounge	13	3.6%
Others	1	.3%
- Neck pillow	(1)	(.3)

4.3.2 Customer Experience Factors

Four variables on travel experiences are employed to collect quantitative data from airport passengers. The reported variables comprise of physical experience, emotional experiences, service experience, and Thainess experience. The quantitative data was collected from 400 respondents who were Phuket airport passengers. This part examines the level of agreement of customer experience factors. The levels evaluated by employing six-level evaluation, with level six referring to “strongly agree” whereas level one stands for “strongly disagree”.

From data collection of experience factors, the level of agreement toward to all factors is at “agree” levels, starting from “physical experience” factor (44.1%, M= 5.01)

When considering into each variable can be sorted as follows; “P1” with the highest mean score (48.5%, M=5.01), “P2” (46.5%, M =4.91), “P3” (42.5%, M = 5.07), and “P4” (39.0%, M =5.03). Next was the “emotional experience” factor, the sum was 39.0%, M = 4.70, can be sorted as follows “E3” (44.5%, M =4.83), “E1” (39.5%, M =4.70), “E4” (37.9%, M =4.76), and “E2” (34.0%, M =4.50). “Service experience” the sum was 43.6%, M = 5.13, can be sorted as “S3” (45.3%, M =5.14), “S2” (43.5%, M=5.04), and “S1” (42.0%, M=5.21). and the last factor “Thainess experience” the sum was 40.8%, M= 5.01, in order as follows “T2” (42.8%, M =4.93), “T3” (41.0%, M =5.01), and “T1” (38.5%, M =5.19) (Table 4.12-4.13).

Table 4.12 Frequency and Percentage of Respondents based on Customer Experience Factors

Customer Experience Factors	Strongly agree (6)	Agree (5)	Somewhat agree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)	$\bar{x}$	S.D.
Physical experience								
1. You are provided with modern and adequate facilities. (P1)	110	194	86	9	1		5.01	.777
(%)	27.5	48.5	21.5	2.3	0.3			
2. You are satisfied with the environment and facilities at the airport. (P2)	101	186	95	15	1	2	4.91	.858
(%)	25.3	46.5	23.8	3.8	0.3	0.5		
3. Security monitoring technology is used within the airport. (P3)	136	170	81	12	1		5.07	.826
(%)	34	42.5	20.3	3	0.3			
4. You felt confident from the COVID-19 information provided by the airport. (P4)	138	156	88	16	1	1	5.03	.888
(%)	34.5	39	22.	4	0.3	0.3		
Total Agreement: Physical experience	485	704	350	52	4	3	5.01	.688

Customer Experience Factors							$\bar{x}$	S.D.
	(%)	Strongly agree (6)	Agree (5)	Somewhat agree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)	
	(%)	30.7	44.1	21.9	3.2	.3	.4	
Emotional experiences								
5. The experiences in the airport give you pleasure. (E1)	90	158	114	22	13	3	4.70	1.028
	(%)	22.5	39.5	28.5	5.5	3.3	0.8	
6. The experiences in the airport give me a sense of happiness. (E2)	79	136	124	36	18	7	4.50	1.144
	(%)	19.8	34	31	9	4.5	1.8	
7. You feel at ease when using services at the airport. (E3)	94	178	103	17	8		4.83	.904
	(%)	23.5	44.5	25.8	4.3	2		
8. Convenience at the airport as an incentive for you to come back again. (E4)	107	151	101	22	9	8	4.76	1.101
	(%)	26.9	37.9	25.4	5.5	2.3	2	
Total Agreement: Emotional experiences	370	623	442	97	48	18	4.70	.915
	(%)	23.8	39.0	27.6	6.1	3.2	1.5	
Service experience								
9. Airport staff provide with a welcoming and humane. (S1)	164	168	59	7	1	1	5.21	.805
	(%)	41	42	14.8	1.8	0.3	0.3	
10. Airport staff understand your needs very well. (S2)	134	174	68	21	2	1	5.04	.895
	(%)	33.5	43.5	17	5.3	0.5	0.3	
11. You are provided by a professional and reliable team. (S3)	142	181	67	9	1		5.14	.786
	(%)	35.5	45.3	16.8	2.3	0.3		

Customer Experience Factors	Strongly agree (6)	Agree (5)	Somewhat agree (4)	Somewhat disagree (3)	Disagree (2)	Strongly disagree (1)	$\bar{x}$	S.D.
Total Agreement: Service experience	440	523	194	37	4	2	5.13	.750
(%)	36.7	43.6	16.2	3.1	0.4			
Thainess experience								
12. You have been served with a smile and friendliness. (T1)	168	154	70	5	1	2	5.19	.844
(%)	42	38.5	17.5	1.3	0.3	0.5		
13. Ambience of the airport expresses Thainess. (T2)	121	171	80	18	8	2	4.93	.970
(%)	30.3	42.8	20	4.5	2	0.5		
14. The Thainess in the airport made you feel delighted. (T3)	123	164	78	22	7	6	4.89	1.054
(%)	30.8	41	19.5	5.5	1.8	1.5		
Total Agreement: Thainess experience	412	489	228	45	16	10	5.00	.836
(%)	34.4	40.8	19.0	3.8	1.4	0.8		

Table 4.13 Agreement Mean Ranking of Customer Experience Factors

Rank	Customer Experience Factors	Mean	S.D.	Agreement Level*	% Counts
Physical experience					
1	3.Security monitoring technology is used within the airport. (P3)	5.07	0.826	Agree	42.5
2	4.You felt confident from the COVID-19 information provided by the airport. (P4)	5.03	0.888	Agree	39.0
3	1.You are provided with modern and adequate facilities. (P1)	5.01	0.777	Agree	48.5

Rank	Customer Experience Factors	Mean	S.D.	Agreement Level*	% Counts
4	2.You are satisfied with the environment and facilities at the airport. (P2)	4.91	0.858	Agree	46.5
Emotional experiences					
1	7. You feel at ease when using services at the airport. (E3)	4.83	.904	Agree	44.5
2	8. Convenience at the airport as an incentive for you to come back again. (E4)	4.76	1.101	Agree	37.9
3	5. The experiences in the airport give you pleasure. (E1)	4.70	1.028	Agree	39.5
4	6. The experiences in the airport give me a sense of happiness. (E2)	4.50	1.144	Agree	34.0
Service experience					
1	9.Airport staff provide with a welcoming and humane. (S1)	5.21	.805	Agree	42.0
2	11.You are provided by a professional and reliable team. (S3)	5.14	.786	Agree	45.3
3	10.Airport staff understand your needs very well. (S2)	5.04	.895	Agree	43.5
Thainess experience					
1	12.You have been served with a smile and friendliness. (T1)	5.19	.844	Strongly agree	42.0
2	13.Ambience of the airport expresses Thainess. (T2)	4.93	.970	Agree	42.8
3	14.The Thainess in the airport made you feel delighted. (T3)	4.89	1.054	Agree	41.0

Note: Agreement levels derived from frequency counts at each level, not the mean scores.

4.3.3 Suggestions on Airport Experiences

On the open-ended part of the questionnaire, a number of suggestions were derived. 118 (40.7%) people from total respondents put their additional suggestions on airport experiences. 36.0% of responded passengers suggested airports to provide smoking area in the terminal whereas 16.9% needed varieties of restaurants. In addition, some respondents required more shops for shopping (11.0%), other facilities/exercise/yoga (5.8%), reasonable prices for food and beverage (4.7%), and separate zones for people with children (2.9%). Other suggestions in smaller percentages are shown below in Table 4.14.

Table 4.14 Frequency and Percentage Suggestions on Airport Experiences

Suggestions on airport experiences	Frequency	Percentage (%)
Smoking area	21	17.8
Varieties of restaurants	17	14.4
Varieties of shops	11	9.3
More facilities/exercise/yoga/sports	10	8.5
Reasonable prices for food	5	4.2
Separate zones for people with children	5	4.2
More comfortable seating	4	3.4
WIFI speed/connecting point	4	3.4
Live music/amusement	4	3.4
More bars	3	2.5
Free drinking water / station	3	2.5
Battery charging/ charger on seat	3	2.5
Massage room	3	2.5
Berger king	2	1.7
Garden/grass & trees to relax	2	1.7
More convenience shops	2	1.7
Vegetarians' food	2	1.7
More display/demonstration or aspects of Thai culture.	2	1.7

Suggestions on airport experiences	Frequency	Percentage (%)
More places to eat	2	1.7
More English sign	1	.8
Internet café	1	.8
More Thai food restaurant	1	.8
Plastic for feet in the custom area	1	.8
Executive lounge at Gate 10 was small	1	.8
Why its only king power?	1	.8
Better information	1	.8
Clearly information for document	1	.8
Nicotine pouches (Snus)	1	.8
Electronic shops.	1	.8
More screens to look where your gate is.	1	.8
Immigration officer not friendly	1	.8
Seats for pregnant women	1	.8

4.4 Factors of Customer Journey Management of Phuket International Airport Influencing Customer Experience (Research Objective 2)

In relation to research objective 2, factors of customer journey management of Phuket International Airport influencing customer experience are investigated. Beneath the main hypothesis at 95% confidence level or with a significance level of 0.05 using a multiple regression analysis by stepwise.

To start, the data from 400 samples were used to conduct multiple regression analyses to determine the predictive abilities of customer journey management factors influence on passenger experiences of Phuket International Airport. Customer experience (EX) were the dependent variables measured on an interval scale. Accessibility (Acces), check-in processes (Check), baggage handling (Bagg), safety management (Safe), passport control (Pass), mobility (Mobi), airport facilities (Faci), deboarding (Debo), Immigration (Immi), baggage reclaims (Bagre), customs (Cust), and before leaving from the airport (Before) were the predictor variables, which were also measured on an interval scale.

4.4.1 Multiple Regression Assumptions

Before the data analysis, the information gathered was assessed by addressing the necessary statistical assumptions of a multiple regression analysis. These assumptions included the following: continuous outcome variable, two or more predictor variables, independence of observations, the presence of a linear relationship, the presence of homoscedasticity, the lack of multicollinearity, no significant outliers, and normal distribution of residuals (Warner, 2013; Multiple regression analysis, 2018). The upcoming section will review each one independently and more closely.

1) Assumption 1: Continuous Dependent Variable

The first assumption is that the dependent variable must be a continuous one (Multiple regression analysis, 2018). For this study, an individual's customer experience was used as the outcome variable, measured on a continuous level. Therefore, this assumption was met.

2) Assumption 2: Presence of Two or More Predictor Variables

The second assumption for multiple linear regression requires that there must be two or more predictor variables (Multiple regression analysis, 2018). This study had twelve predictor variables, including Accessibility (Acces), check-in processes (Check), baggage handling (Bagg), safety management (Safe), passport control (Pass), mobility (Mobi), airport facilities (Faci), deboarding (Debo), Immigration (Immi), baggage reclaims (Bagre), customs (Cust), and before leaving from the airport (Before). All predictor variables were measured on a continuous interval scale. Given this information, this assumption was met.

3) Assumption 3: Independence of Observations

The third assumption considered is that there must be independence of observations. The data collected in the present study involved independent responses to surveys by Durbin-Watson statistic (Between 1.5-2.5), which the value of this research is 2.2.

4) Assumption 4: Linearity

The assumption of linearity required an examination of SPSS's generated scatterplots; due to the numerous variables being considered, the matrix scatterplot did not provide a clear view of the linearity. Therefore, the linearity was assessed by generating twelve separate partial regression plots (Figures 4.2 through 4.13). The

scatterplots indicate linear relationships between each of the independent variables and customer experience.

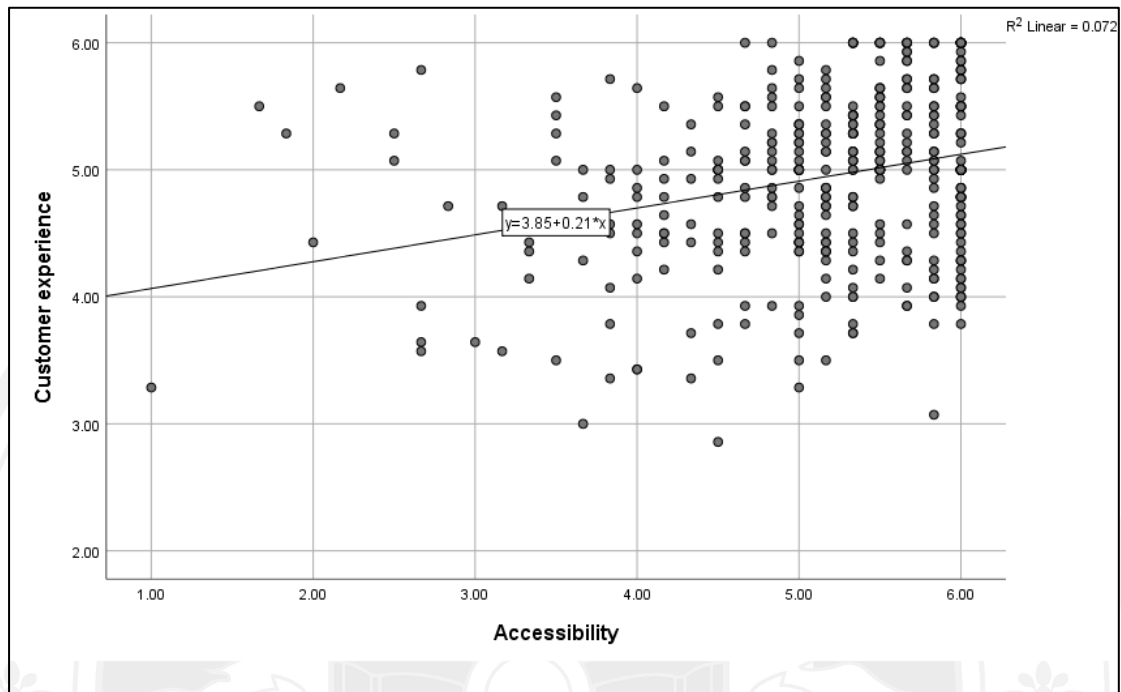


Figure 4.2 Partial Regression Plot: Accessibility and Customer Experience

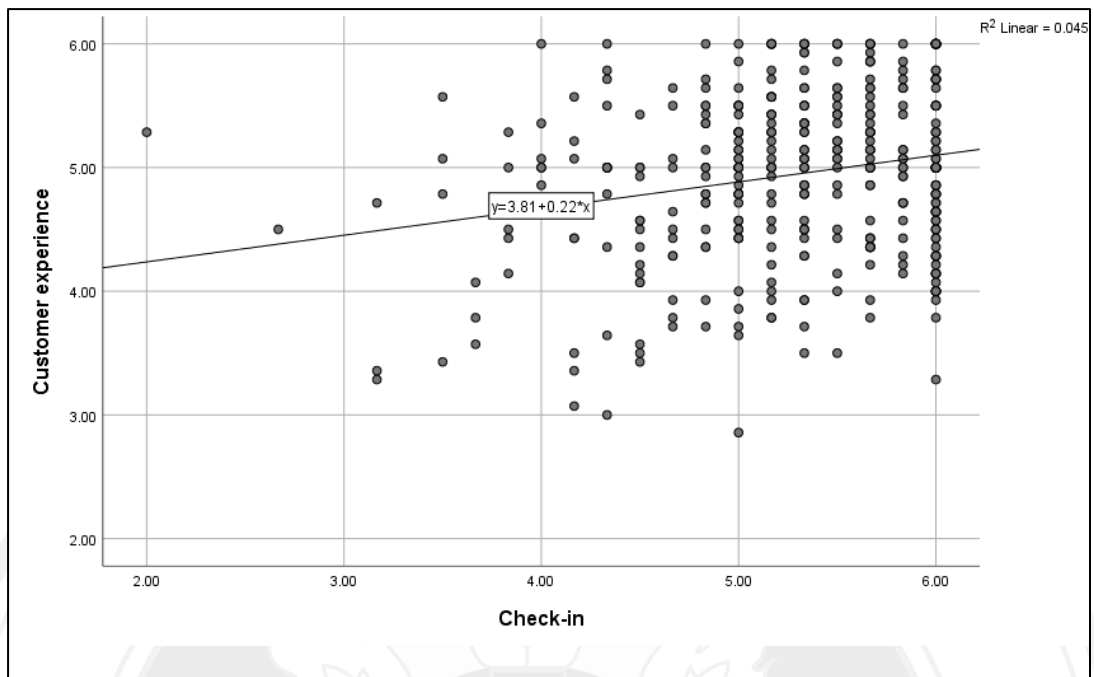


Figure 4.3 Partial Regression Plot: Check-in and Customer Experience

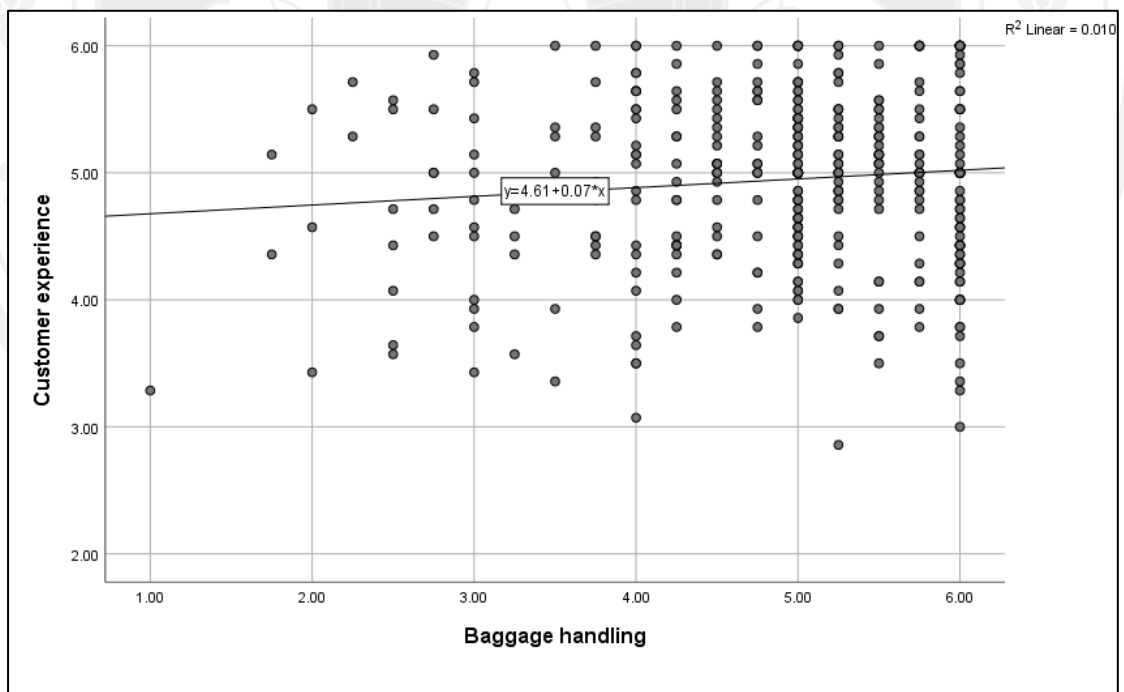


Figure 4.4 Partial Regression Plot: Baggage Handling and Customer Experience

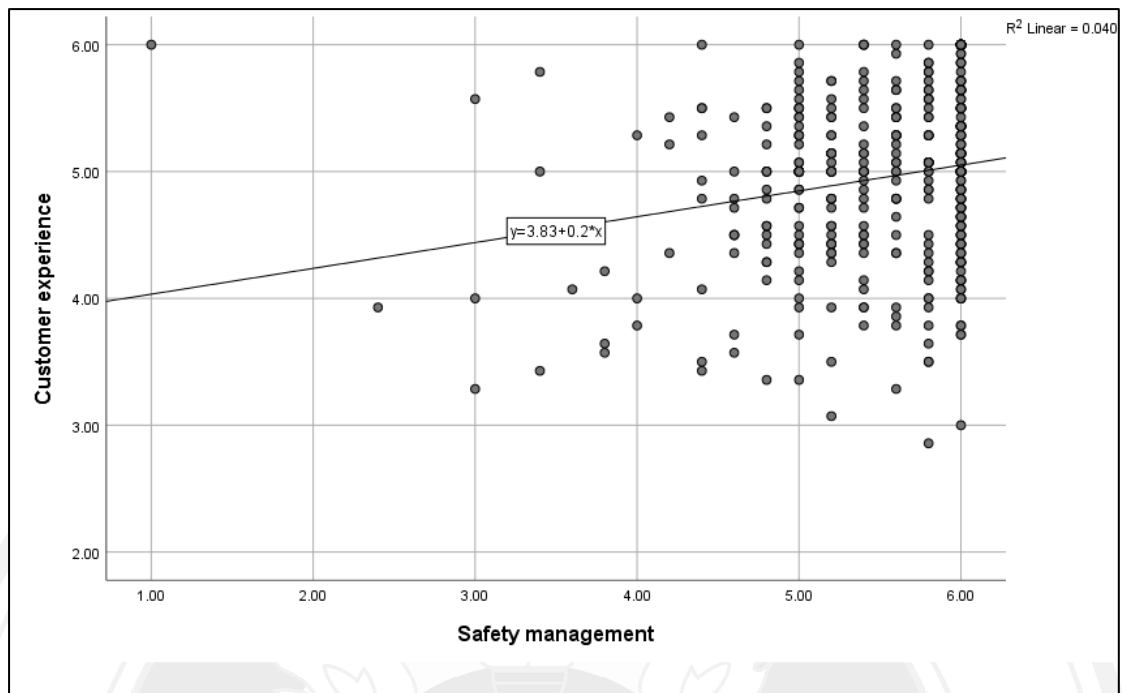


Figure 4.5 Partial Regression Plot: Safety Management and Customer Experience

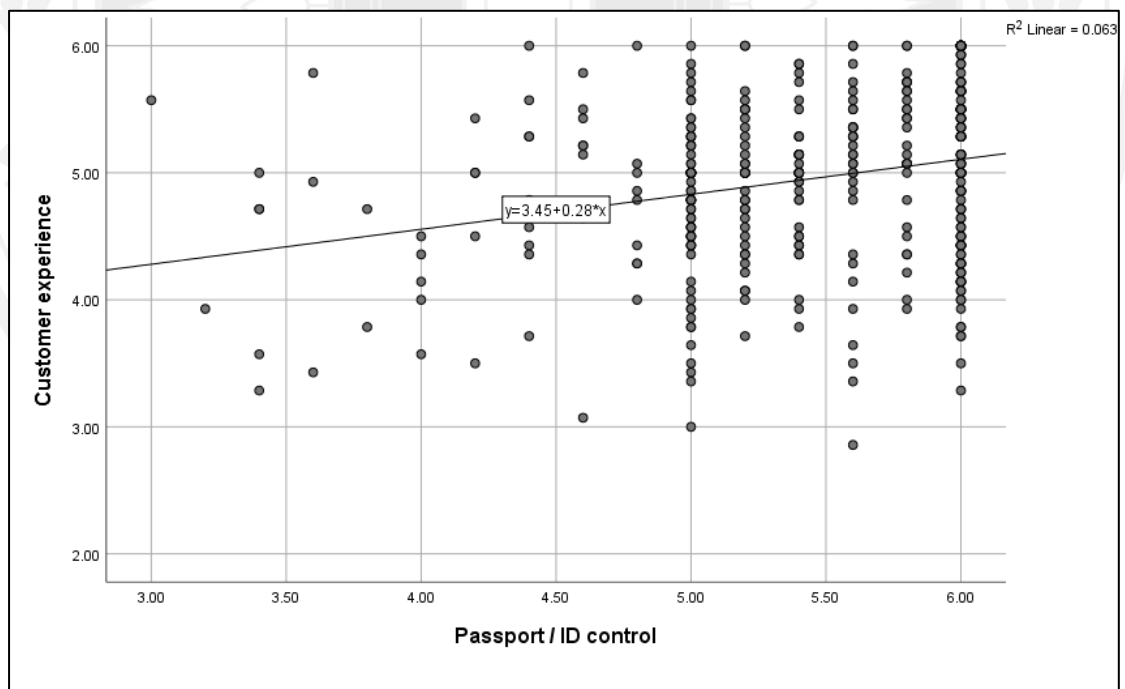


Figure 4.6 Partial Regression Plot: Passport/ID Control and Customer Experience

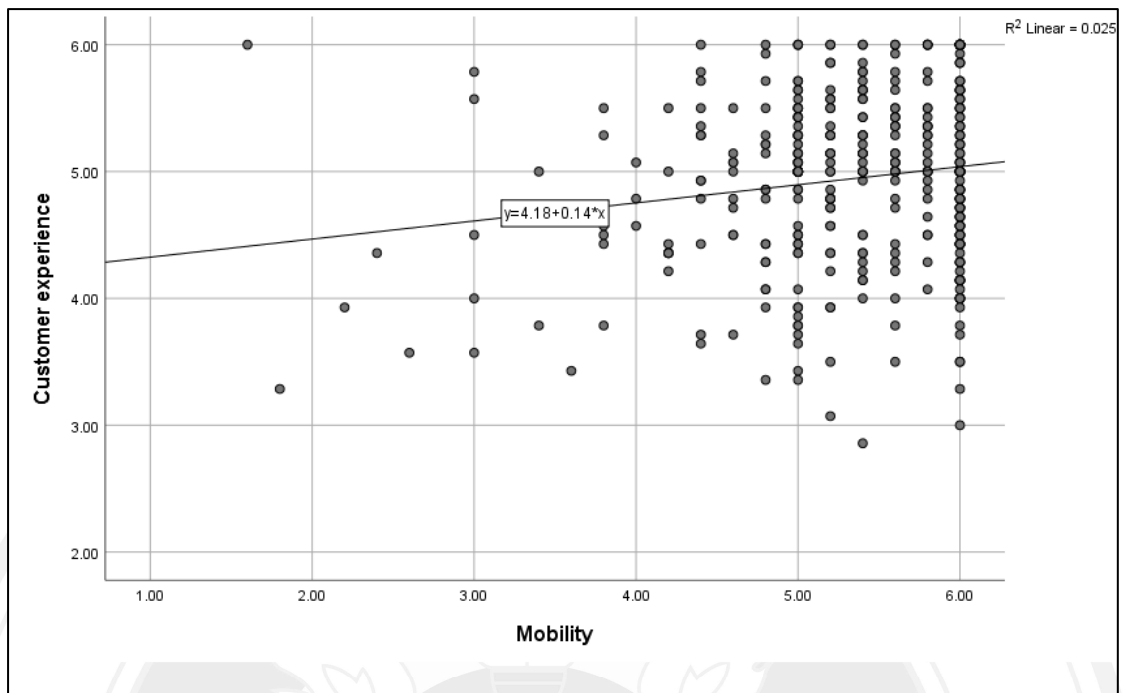


Figure 4.7 Partial Regression Plot: Mobility and Customer Experience

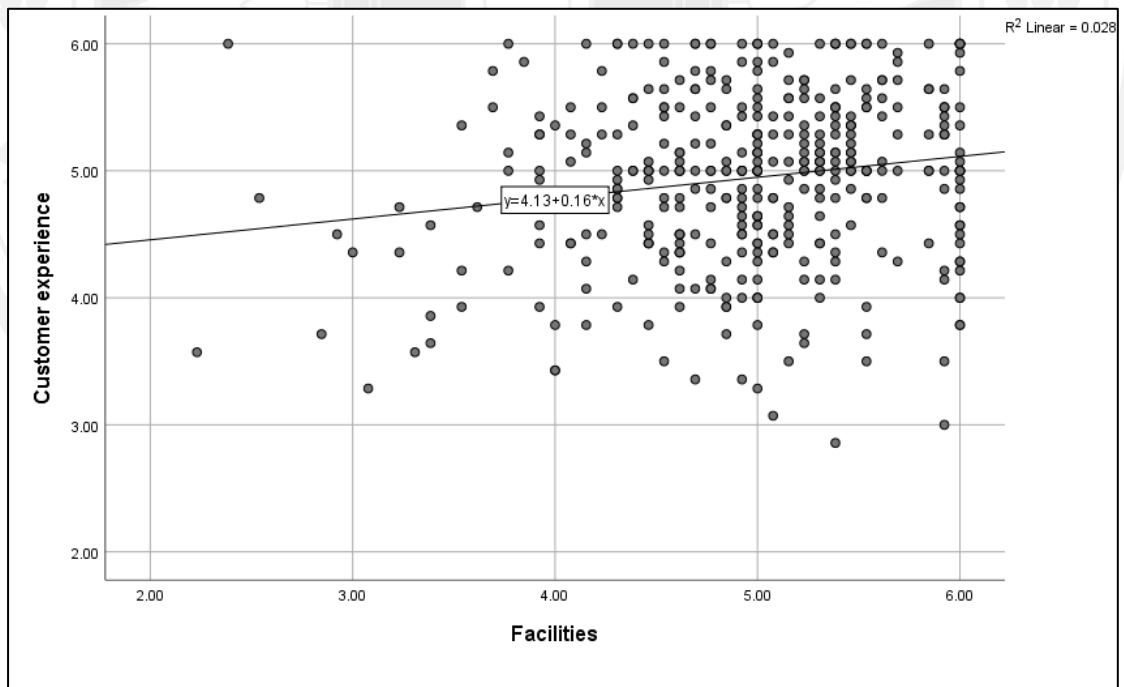


Figure 4.8 Partial Regression Plot: Facilities and Customer Experience

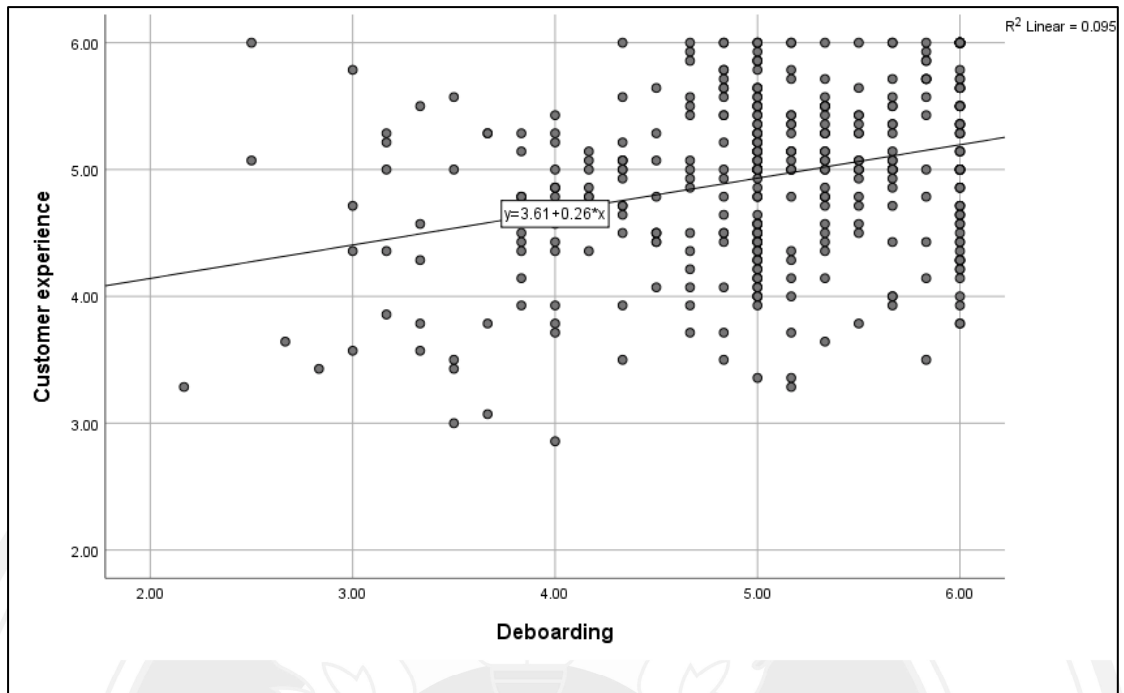


Figure 4.9 Partial Regression Plot: Deboarding and Customer Experience

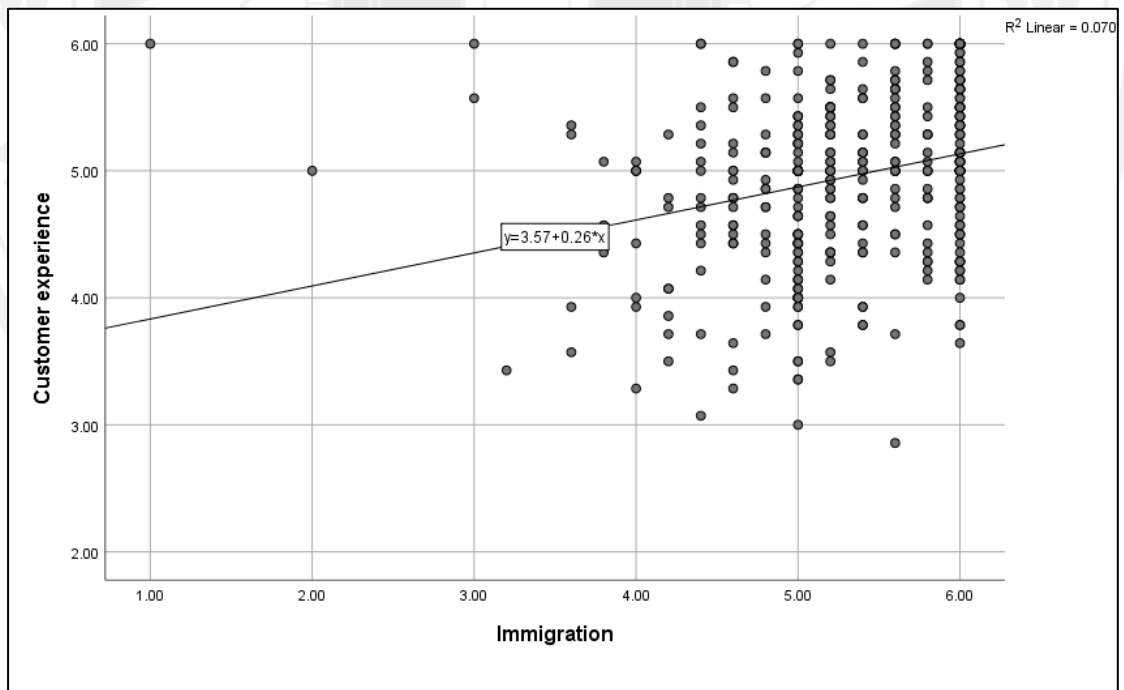


Figure 4.10 Partial Regression Plot: Immigration and Customer Experience

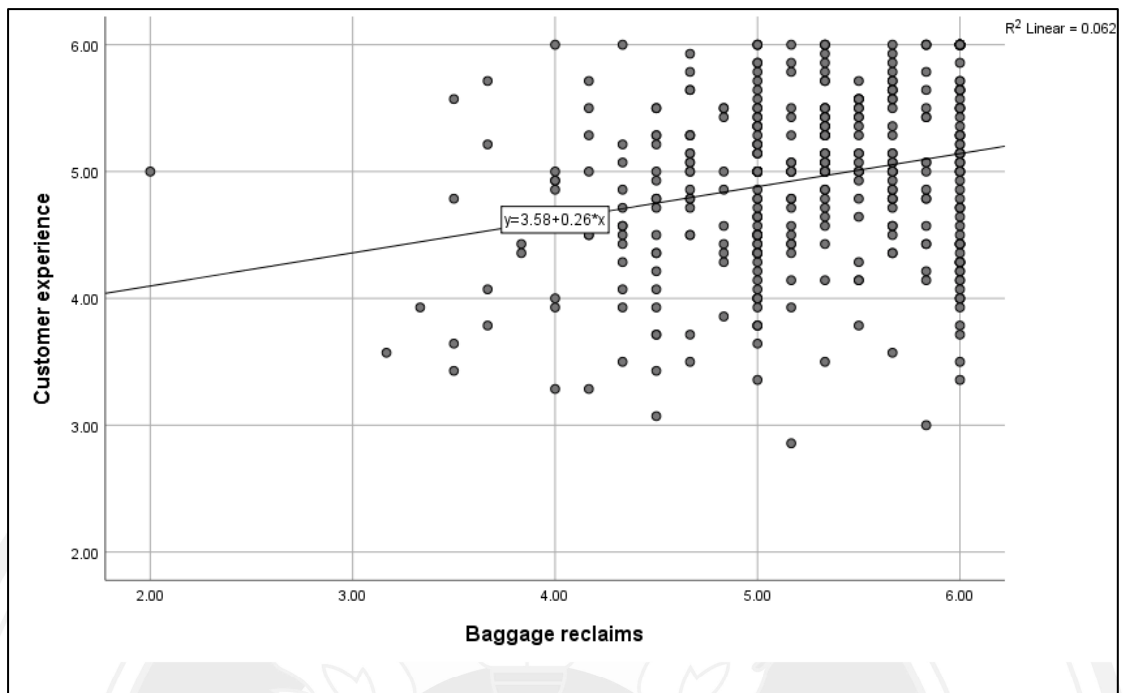


Figure 4.11 Partial Regression Plot: Baggage reclaims and Customer Experience

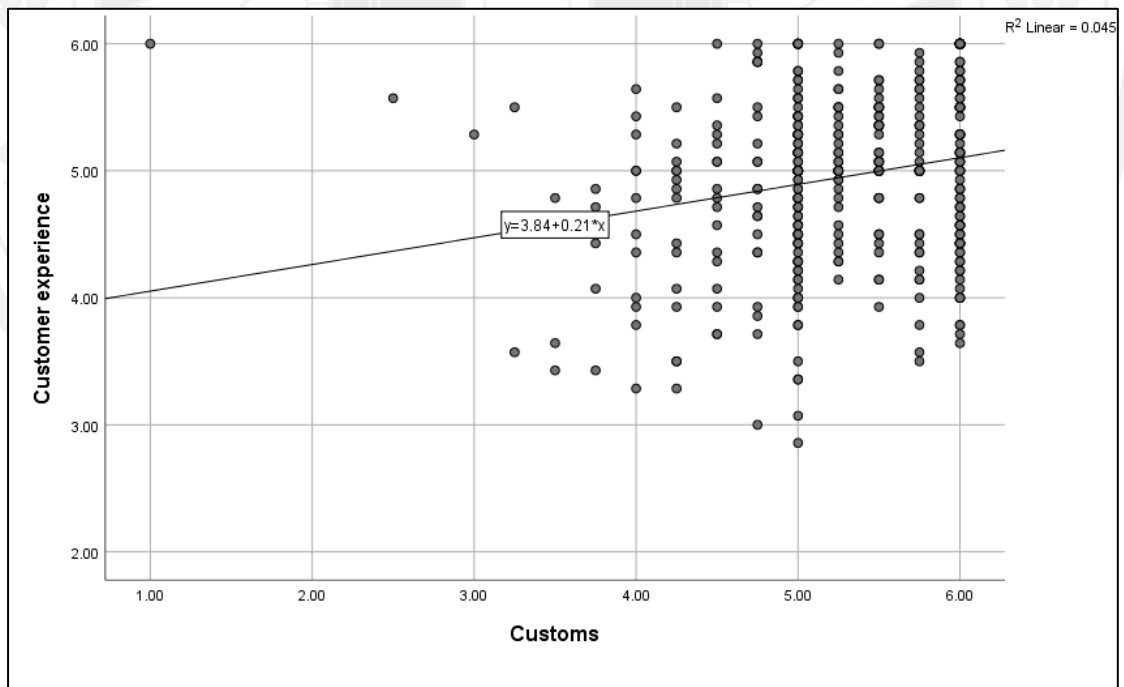


Figure 4.12 Partial Regression Plot: Customs and Customer Experience

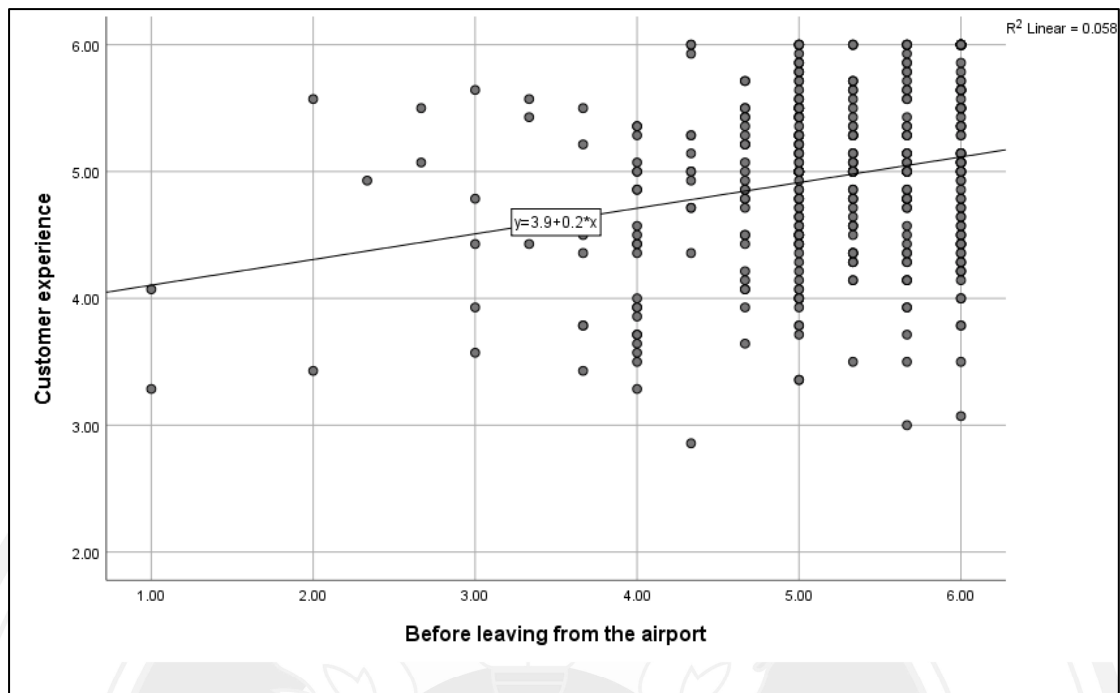


Figure 4.13 Partial Regression Plot: Before leaving from the airport and Customer Experience

The above figures, Figures 2 through 13, assessed the linearity of each individual independent variable with the dependent variable. Another component of this assumption is to assess the linearity of the independent variables collectively. This assumption was assessed by using a scatter plot of the studentized residual and unstandardized predicted value. The figure below, Figure 4.14, reflects this linearity assessment. Therefore, the linearity assumption has been met, both in the individual independent variable and the independent variables collectively.

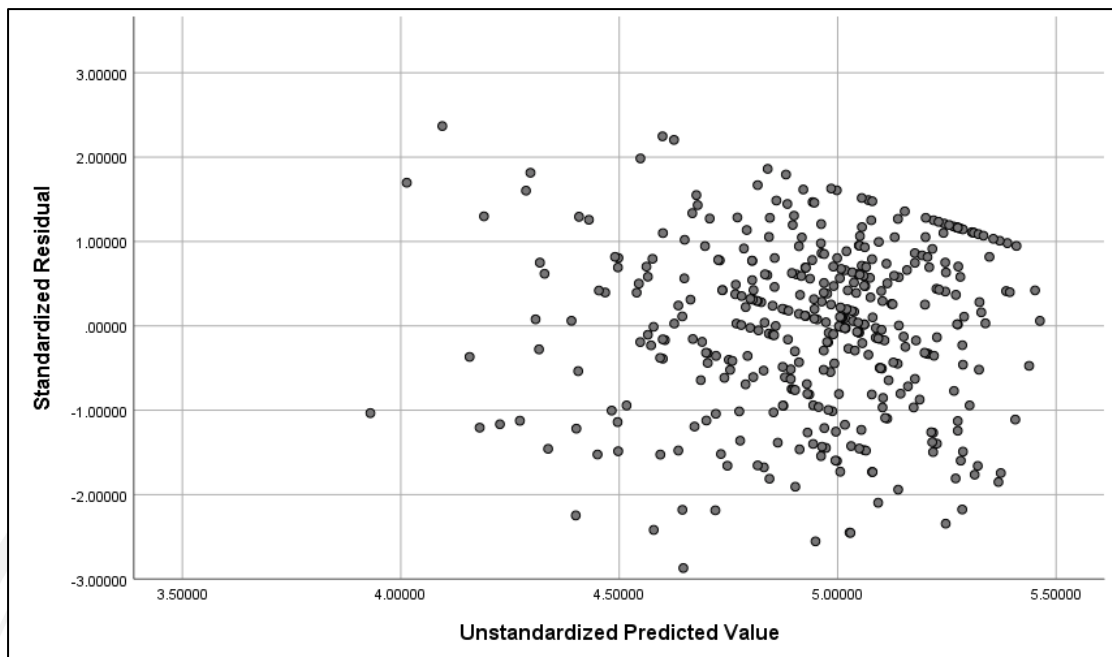


Figure 4.14 Scatter Plot of Studentized residuals by Unstandardized Predicted Value: Examining Linearity of Combined Independent Variables

5) Assumption 5: Homoscedasticity

The data in Figure 14 also visually revealed homoscedasticity, as standardized residuals versus unstandardized predicted values appeared mostly random and did not possess an appearance of an increase or decrease in the residuals (Testing for homoscedasticity, 2018). Therefore, this fifth assumption has been met.

6) Assumption 6: Multicollinearity

The sixth assumption states that the data must not show multicollinearity, as this would confuse which of the independent variables contributed to the variance observed (Multiple regression analysis, 2018). This assumption was examined using correlation coefficients and tolerance values. Table 4.15 revealed no correlation greater than 0.7 in the relationships between the independent variables and the dependent variable, and Table 4.16 if tolerance, under the collinearity statistics, is always greater than 0.1. Together, these data points indicate a strong likelihood that the dataset maintained no issues with collinearity, thus confirming that the sixth assumption is met.

Table 4.15 Correlations Chart for Multicollinearity Assumption

[illegible]

Table 4.16 Coefficients Chart for Multicollinearity Assumption

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.576	.357		7.206	.000		
Acces	.107	.050	.136	2.129	.034	.534	1.871
Check	.033	.063	.033	.531	.596	.565	1.769
Bagg	-.060	.041	-.087	-	.146	.601	1.663
				1.457			
Safe	.054	.073	.053	.733	.464	.418	2.392
Pass	.100	.071	.091	1.419	.157	.522	1.915
Mobi	-.112	.067	-.123	-	.094	.403	2.480
				1.681			
Faci	-.059	.062	-.061	-.961	.337	.543	1.842
Debo	.183	.058	.214	3.153	.002	.469	2.131
Immi	.090	.065	.092	1.392	.165	.499	2.005
BagRe	.148	.069	.141	2.149	.032	.502	1.992
Cust	-.095	.071	-.097	-	.183	.413	2.419
				1.335			
Before	.061	.052	.073	1.181	.238	.561	1.782

7) Assumption 7: Outliers, Leverage, and Influential Points

The seventh assumption involved is detecting outliers, high leverage points, and influential points. The first aspect, detecting outliers, was assessed through casewise diagnostics. Have two cases were identified as having a score greater than three or less than negative three within their respective studentized deleted residual scores (Multiple regression analysis, 2018).

Leverage points can be determined by reviewing the leverage value generated from the regression analysis conducted. According to Multiple regression analysis (2018, n.p.), “consider leverage values less than 0.2 as safe, 0.2 to less than 0.5 as risky, and values of 0.5 and above as dangerous (Huber, 1981).” As a result of examination, no leverage value was greater than 0.20 (safe).

The last component within this assumption is to assess for the Cook's Distance, the variable that seeks to determine the influence a case has in the analysis. As observed in Table 4.17, the most significant Cook's Distance variable seen was assessed to be 0.073, significantly less than the cases that would cause concern above the value of 1.

Collectively, two outliers were identified, and no have case to concern with the standard leverage point. Simply the outlier cases were removed for the complete multiple linear regression analysis, reducing the total cases from 400 to 398. By removing the outliers identified, the remaining 398 cases in the dataset allowed the dataset to now meet this seventh assumption.

Table 4.17 Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.9934	5.3082	4.9460	.25530	398
Std. Predicted Value	-3.731	1.419	.000	1.000	398
Standard Error of Predicted Value	.031	.181	.057	.022	398
Adjusted Predicted Value	3.9827	5.3198	4.9455	.25680	398
Residual	-1.56377	1.46874	.00000	.61055	398
Std. Residual	-2.552	2.397	.000	.996	398
Stud. Residual	-2.580	2.448	.000	1.003	398
Deleted Residual	-1.59844	1.53651	.00053	.61850	398
Stud. Deleted Residual	-2.598	2.464	.000	1.005	398
Mahal. Distance	.019	33.510	2.992	4.014	398
Cook's Distance	.000	.073	.003	.008	398
Centered Leverage Value	.000	.084	.008	.010	398

8) Assumption 8: Normality of Residual Errors

The final assumption required for the inferential analysis is in the assessment of distribution, where the residuals are required to have a normal distribution. This assumption was checked by examining a histogram of the regression standardized residual, as shown in Figure 4.15. Figure 4.16 shows that the distribution closely followed the expected line of normality. The P-P Plot of Regression Standardized Residual is another method of observing normality within the data. Figure 11 reflected a closely followed line of normality amongst the data points. Thus, the assumption of normality of distribution of residual errors was satisfied.

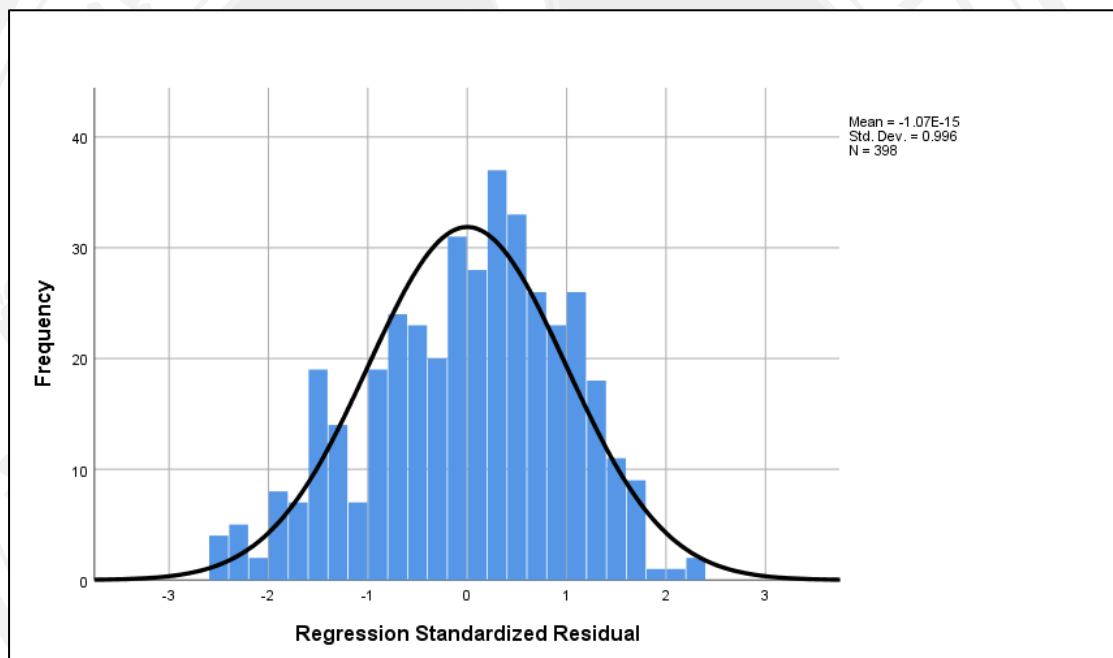


Figure 4.15 Histogram of Regression Standardized Residual—Outliers and High Leverage Removed

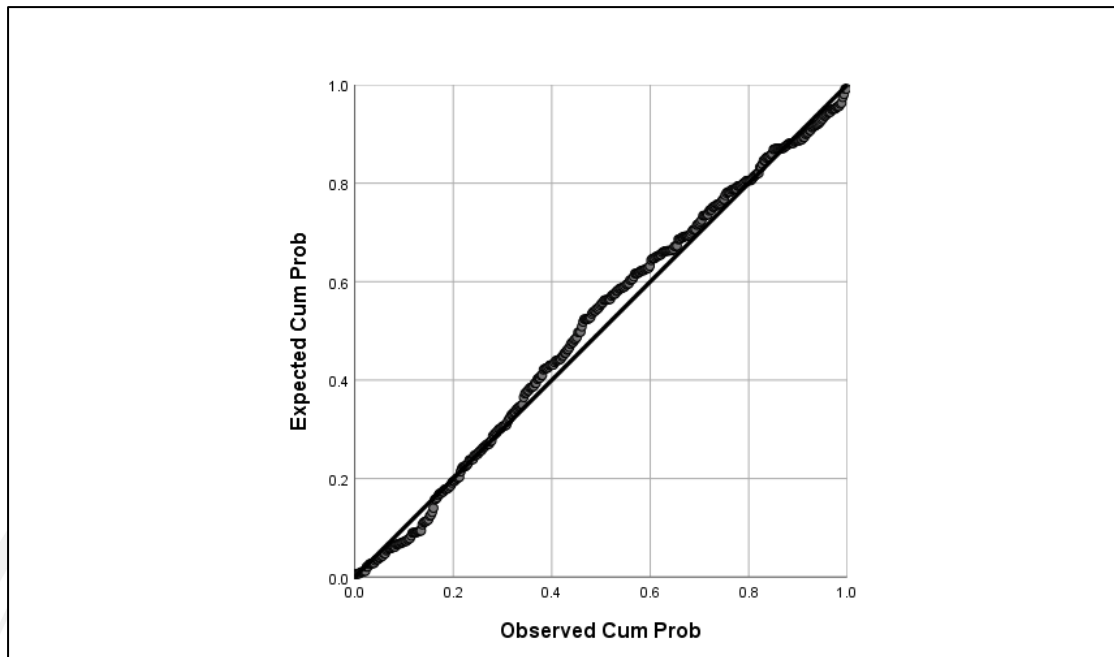


Figure 4.16 P-P Plot of Regression Standardized Residual–Outliers and High Leverage Removed

4.4.2 Applied Multiple Regression– Customer Journey Management of Phuket International Airport Influencing Customer Experience

With the previous eight assumptions met and two outlier cases removed the sample as reduced, $N = 398$. Table 4.18 reflects the descriptive statistics of the study's sample, which can be found below. The section will discuss the production of findings in the multiple linear regression analysis within the context of the seven-research hypothesis.

Table 4.18 Descriptive Statistics

Variable	Mean	Std. Deviation	N
Customer experience	4.9460	.66177	398
Accessibility	5.1587	.85354	398
Check-in process	5.2802	.66121	398
Baggage handling	4.8819	.97620	398
Safety management	5.4829	.62190	398

Variable	Mean	Std. Deviation	N
Passport/ID control	5.4116	.61186	398
Mobility	5.3427	.71609	398
Facilities	4.9712	.67332	398
Deboarding	5.0523	.77317	398
Immigration	5.2809	.64756	398
Baggage reclaims	5.2425	.63993	398
Customs	5.2519	.64773	398
Before leaving from the airport	5.1508	.80242	398

Once the reliability analysis certified that the survey instrument is reliable, multiple regressions were also needed to determine whether the independent variables are correlated with the dependent variable. From the output derived from SPSS analysis, the researchers obtained the results on regression output such as ANOVA, coefficients and R square that led to the hypothesis testing. The result shows regressing of three independents variables in model 3 against the customer experience. (Table 4.19)

Table 4.19 Multiple Regression–Summary of Hypothesis Testing

Model	ANOVA	SS	df	MS	F	p-value
1	Regression	17.813	1	17.813	45.201	.000
	Residual	156.052	396	.394		
	Total	173.864	397			
2	Regression	23.857	2	11.929	31.411	.000
	Residual	150.007	395	.380		
	Total	173.864	397			
3	Regression	25.876	3	8.625	22.963	.000
	Residual	147.989	394	.376		
	Total	173.864	397			
Model	Coefficients	B	SE	Beta	t	p-value
1	(Constant)	3.562	.208		17.102	.000
	Debo	.274	.041	.320	6.723	.000

Model	ANOVA	SS	df	MS	F	p-value
2	(Constant)	2.846	.272		10.466	.000
	Debo	.191	.045	.223	4.244	.000
	Immi	.215	.054	.210	3.990	.000
3	(Constant)	2.657	.282		9.408	.000
	Debo	.143	.049	.167	2.893	.004
	Immi	.202	.054	.198	3.757	.000
	Acces	.097	.042	.125	2.318	.021
Model	Model Summary	R	R Square	Adj.RS	Std. EE	Durbin-Watson
1	.320	.102	.100	.62775	.320	
2	.370	.137	.133	.61625	.370	
3	.386	.149	.142	.61287	.386	2.078

From Table 4.19 this regression output obtained has come with three relevant results. Based on the table above show the value of the R is equal to 15 per cent on the correlation of the three independents variables with the value of customer experience. Furthermore, in the model summary, R square is equal to 14 per cent which has explained the total variance of the deboarding, immigration and accessibility on the customer experience.

Besides P-Value, ANOVA which is Sig in the last column, F test is considered the testing for overall model in the analysis. From table above shows that the F Value of 22.963 is significant at the 0.000 level of significant. In the degree of freedom (df), the first number 2 represents the number of independent variables, and the second number is 395 represents the total of the complete responses for all the variable in the equation.

The results of F statistic which 22.963 is also known as F calculation when the mean square regression ($MSR=11.929$) is divided by mean square Error ($MSE=0.380$). Therefore, based on the decision rule, the researchers should reject Null Hypothesis if F value on the calculation is greater than F in the table with 5 per cent level of significant, the researchers should reject Null Hypothesis with 5 per cent level of significant and accept the Alternative hypothesis. In overall, all independent

variables, deboarding, immigration and accessibility can be used on the predicted customer experience.

Referring to the coefficient in the Table above, show the value to explain the significance of hypothesis testing. The coefficient of determination is to help to find which among the three independent variables influence on the Customer Experience. By looking at the Beta column under Unstandardized Coefficient, all the variables were significant which are deboarding, immigration and accessibility with p-value less than 0.05 level of significant. Hence, based on the coefficient and hypothesis testing above, the regression equation can be derived.

$$Y = 2.657 + 0.143X_1 + 0.202X_2 + .097X_3$$

Y = Customer Experience

X₁ = Deboarding

X₂ = Immigration

X₃ = Accessibility

As a result, in the coefficient lane, three variables were significant influence toward customer experience. Based on the predicted model above, we can conclude, for every increment change in the deboarding will influence the customer experience at Phuket International Airport about 0.143, while the other variable is constant. On the immigration significant, for every increment of the immigration will be influencing on the customer experience at Phuket International Airport about 0.202 while the other variable is constant, and accessibility for every increment of the accessibility will be influencing on the customer experience at Phuket International Airport about 0.097 while the other variable is constant. Since all independent variables, deboarding, immigration and accessibility are very important to the customer experience at Phuket International Airport, the management should consider improving the highest beta in the result above, followed with others variable with have a significant.

4.4.3 Applied Multiple Regression by Each Factor

Table 4.20 shows variables and their labels being used in the model in this study. The observed variables are accessibility (Acces), check-in processes (Check), baggage handling (Bagg), safety management (Safe), passport control (Pass), mobility (Mobi),

airport facilities (Faci), deboarding (Debo), Immigration (Immi), baggage reclaims (Bagre), customs (Cust), and before leaving from the airport (Before). Each observed variable is constructed and measured by its latent variables.

Table 4.20 Variables and the Labels

Labels	Observed Variables/Latent Variables
	Departure's zone
Acces	Accessibility to the airport
(X1)	Public transport to the airport is convenient. (Airport bus, limousine, etc.)
(X2)	Public transport prices to the airport are appropriate for each type of service.
(X3)	(Strictly screened for COVID-19 (Terminal Screening)
(X4)	Body temperature screening by non-contact infrared thermometer.
(X5)	Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal.
(X6)	Provide clearly defined zones and paths for entry and exit.
Check	Check-in process management
(X7)	Self-check-in via mobile phone or kiosk
(X8)	Fast and convenient check-in processes
(X9)	The check-in area is enough and convenient.
(X10)	Check-in staff provide service with politeness.
(X11)	Provide social distancing while waiting at check-in counters.
(X12)	Provide alcohol gel at the check-in counters.
Bagg	Baggage handling process
(X13)	Self-check-in baggage system is available.
(X14)	The sufficiency of the cart
(X15)	The quality of the cart
(X16)	Efficiency in baggage handling
Safe	Safety management
(X17)	Duration of security checks in each step.
(X18)	Courtesy and service willingness of security inspectors.
(X19)	The security inspectors are professional.

Labels	Observed Variables/Latent Variables
(X20)	The procedure for screening at the scanning point is simple.
(X21)	Sense of safety and security in this airport.
Pass	Passport/ID control
(X22)	Rapid passport check
(X23)	Courtesy and service willingness of the passport inspector.
(X24)	There is a simple screening process.
(X25)	Sense of security in the travel document inspection process.
(X26)	Provide social distancing while waiting at passport control area.
Mobi	Mobility
(X27)	Signs and symbols are easy to understand.
(X28)	The flight information display is visible.
(X29)	Shuttle service within the terminal
(X30)	Walking distance between terminals is execrable.
(X31)	Readiness to help people with disabilities.
Faci	Airport facilities
(X32)	Variety of shops, souvenirs / duty free (shopping) within the airport.
(X33)	Value for money of shopping at the airport.
(X34)	Variety of restaurants and beverages.
(X35)	Value for money of foods and beverage.
(X36)	Airport executive lounge is available.
(X37)	WIFI signal quality
(X38)	Availability of toilets
(X39)	The cleanliness of the toilet facilities.
(X40)	Charging battery station and seats at the boarding gate available.
(X41)	Children's area/playground.
(X42)	Drinking water point and quality of water.
(X43)	Availability of banks/ATM/exchange.
(X44)	Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.
Arrival's zone	

Labels	Observed Variables/Latent Variables
Debo	Deboarding
(45X)	The waiting time before deboarding the aircraft.
(X46)	Provide social distancing while deboarding the aircraft.
(X47)	The walking distance from the aircraft to the exit of the restricted area.
(X48)	Provide clearly defined zones from the aircraft to the exit of the restricted area.
(X49)	Provide alcohol gel between aisle to the exit of the restricted area.
(X50)	Body temperature screening by non-contact infrared thermometer at the exit of the restricted area.
Immi	Immigration
(X51)	Waiting time before accessing the immigration system.
(X52)	The ease of using the system.
(X53)	Courtesy and helpfulness of airport staff in managing queues.
(X54)	Courtesy and politeness of the immigration officer.
(X55)	Provide social distancing while waiting immigrant area.
Bagre	Baggage reclaims
(X56)	Walking distance to get to the baggage claim area
(X57)	Flight display on carrousel screens.
(X58)	Waiting time before retrieving baggage.
(X59)	Availability of toilets in the baggage claim area.
(X60)	The cleanliness of toilets at the baggage reclaims area.
(X61)	Availability of carts/trolleys
Cust	Customs
(X62)	Waiting time to go through customs.
(X63)	Setup/organization of queues
(X64)	Courtesy and politeness of the customs officer.
(X65)	Provide social distancing while waiting in the customs area.
Before	Before leaving from the airport
(X66)	Arrival tourist assistance center

Labels	Observed Variables/Latent Variables
(X67)	Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.)
(X68)	Public transport prices are appropriate for each type of service.

4.4.3.1 Accessibility

Has one outlier case removed the sample as reduced, N = 399. Table 4.21 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.21 Descriptive Statistical Analysis Result of the Accessibility

Accessibility			
Variables	Mean	Std. Deviation	N
CX	4.9481	.66465	399
(X1)	5.24	1.059	399
(X2)	5.14	1.074	399
(X3)	5.12	1.249	399
(X4)	4.92	1.383	399
(X5)	5.32	1.008	399
(X6)	5.18	1.109	399

The results of multiple regression analysis with a stepwise method (Stepwise) found that there were two out of six variables that entered the multiple regression equation with statistical significance at the 0.05 level., namely: provide clearly defined zones and paths for entry and exit (X6) and strictly screened for COVID-19 (terminal screening) (X3) with an Adjust R square of .085, implying that variable X6 and X3 together will result on passenger experience at Phuket International Airport at 8.5 percent, which can be written It is a model for multiple regression analysis as follows.

$$Y = 3.932 + .112 (X6) + .085 (X3)$$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X1), (X2), (X4), and (X5). (Table 4.22)

Table 4.22 Multiple Regression Analysis Results of Airport Accessibility Affecting Passenger Experience

Accessibility	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	3.932	.166		23.648	.000		
1. Provide clearly defined zones and paths for entry and exit. (X6)	.112	.033	.186	3.397	.001	.764	1.309
2. Strictly screened for COVID-19 (Terminal Screening) (X3)	.085	.029	.161	2.926	.004	.764	1.309
R = .299 SEE. = .63579 R Square = .090 Durbin-Watson = 2.141 Adjusted R Square = .085							
Excluded Variables: (X1), (X2), (X4), and (X5).							

4.4.3.2 Check-in Processes

Has one outlier case removed the sample as reduced, N = 399. Table 4.23 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.23 Descriptive Statistical Analysis Result of the Check-in Processes

Check-in Processes			
Variables	Mean	Std. Deviation	N
CX	4.9486	.66305	399
(X7)	5.05	1.171	399
(X8)	5.54	.755	399
(X9).	5.41	.761	399

4.4.3.3 Baggage Handling Process

Two outlier cases removed the sample as reduced, N = 398. Table 4.25 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.25 Descriptive Statistical Analysis Result of the Baggage Handling Process

Baggage Handling Process			
Variables	Mean	Std. Deviation	N
CX	4.9535	.65662	398
(X13) Self-check-in baggage system is available.	4.75	1.306	398
(X14) The sufficiency of the cart	4.79	1.195	398
(X15) The quality of the cart	4.81	1.208	398
(X16) Efficiency in baggage handling	5.15	1.013	398

The Adjusted R square for efficiency in baggage handling (X16) is .013, indicating that X16 contributes 1.3 percent to the passenger experience at Phuket International Airport. The multiple regression analysis model can be expressed as follows:

$$Y = 4.541 + .080 (X16)$$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X13), (X14), and (X15) (Table 4.26).

Table 4.26 Multiple Regression Analysis Results of Baggage Handling Process
Affecting Passenger Experience

Baggage Handling Process	B	SE	Beta	t	p- value	Tolerance	VIF
(Constant)	4.541	.170		26.760	.000		
1. Efficiency in baggage handling (X16)	.080	.032	.123	2.476	.014	1.000	1.000
R = .123 SEE = .65241 R Square = .015 Durbin-Watson = 2.107 Adjusted R Square = .013							
Excluded Variables: (X13), (X14), and (X15)							

4.4.3.4 Safety and Security

Two outlier cases removed the sample as reduced, N = 398. Table 4.27 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.27 Descriptive Statistical Analysis Result of the Safety and Security

Safety and Security			
Variables	Mean	Std. Deviation	N
CX	4.9535	.65662	398
(X17)	5.42	.760	398
(X18)	5.39	.890	398
(X19)	5.51	.815	398
(X20)	5.50	.740	398
(X21)	5.54	.882	398

The Adjusted R square for sense of safety and security in this airport. (X21) is .050, indicating that (X21) contributes 1.5 percent to the passenger experience at Phuket International Airport. The multiple regression analysis model can be expressed as follows: $Y = 4.010 + .171 (X21)$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X17), (X18), (X19), and (X20). (Table 4.28).

Table 4.28 Multiple Regression Analysis Results of Safety and Security Affecting Passenger Experience

Safety and Security	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	4.010	.204		19.651	.000		
1. Sense of safety and security in this airport. (X21)	.171	.036	.229	4.683	.000	1.00	1.00
R = .229 SEE = .63996 R Square = .052 Durbin-Watson = 2.108 Adjusted R Square = .050							
Excluded Variables: (X17), (X18), (X19), and (X20).							

4.4.3.5 Passport control

One outlier case was removed, reducing the sample size to N=399. Table 4.29 presents the descriptive statistics of the study's sample, as shown below.

Table 4.29 Descriptive Statistical Analysis Result of the Passport Control

Passport Control			
Variables	Mean	Std. Deviation	N
CX	4.9486	.66305	399
(X22)	5.52	.722	399
(X24)	5.41	.751	399
(X24)	5.42	.746	399
(X25)	5.40	.856	399
(X26)	5.30	.916	399

4.4.3.6 Mobility

Three outlier cases were removed, reducing the sample size to N=397. Table 4.31 presents the descriptive statistics of the study's sample, as shown below.

Table 4.31 Descriptive Statistical Analysis Result of the Mobility

Mobility			
Variables	Mean	Std. Deviation	N
CX	4.9583	.65059	397
(X27)	5.55	.814	397
(X28)	5.60	.703	397
(X29)	4.95	1.301	397
(X30)	5.20	1.007	397
(X31)	5.37	.982	397

The Adjusted R square for Readiness to help people with disabilities (X31) is .037, indicating that (X31) contributes 3.7 percent to the passenger experience at Phuket International Airport. The multiple regression analysis model can be expressed as follows: $Y = 4.249 + .132 (X31)$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X27), (X28), (X29), and (X30) (Table 4.32).

Table 4.32 Multiple Regression Analysis Results of Mobility Affecting Passenger Experience

Mobility	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	4.249	.178		23.856	.000		
1. Readiness to help people with disabilities (X31).	.132	.033	.199	4.046	.000	1.000	1.000

Mobility	B	SE	Beta	t	p-value	Tolerance	VIF
R = .199 SEE = .63832 R Square = .040 Durbin-Watson = 2.085 Adjusted R Square = .037							
Excluded Variables: (X27), (X28), (X29), and (X30).							

4.4.3.7 Airport Facilities

Two outlier cases removed the sample as reduced, N = 398. Table 4.33 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.33 Descriptive Statistical Analysis Result of the Airport Facilities

Airport Facilities			
Variables	Mean	Std. Deviation	N
CX	4.9535	.65662	398
(X32)	4.61	1.176	398
(X33)	4.73	1.133	398
(X34)	4.90	1.002	398
(X35)	4.92	1.018	398
(X36)	4.44	1.429	398
(X37)	5.32	.970	398
(X38)	5.60	.665	398
(X39)	5.61	.620	398
(X40)	5.17	.992	398
(X41)	4.32	1.491	398
(X42)	4.90	1.196	398
(X43)	4.77	1.185	398
(X44)	5.21	.984	398

The results of multiple regression analysis using a stepwise method found that two out of the analyzed variables entered the equation with statistical significance at the 0.05 level. These variables are providing handwashing facilities with soap,

alcohol gel, or disinfectant at various points in the terminal (X44) and the cleanliness of the toilet facilities (X39), with an Adjusted R square of .065. This implies that the combination of variables (X44) and (X39) will account for 6.5 percent of the variation in passenger experience at Phuket International Airport. The multiple regression model can be expressed as follows:

$$Y = 3.580 + .143(X44) + .111(X39)$$

The variables unrelated to accessibility factors that affected passenger experience at Phuket International Airport were (X32), (X33), (X34), (X35), (X36), (X37), (X38), (X40), (X41), (X42), and (X43) (Table 4.34).

Table 4.34 Multiple Regression Analysis Results of Airport Facilities Affecting Passenger Experience

Airport Facilities	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	3.580	.306		11.687	.000		
1. Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal (X44).	.143	.035	.209	4.063	.000	.884	1.132
2. The cleanliness of the toilet facilities (X39).	.111	.056	.102	1.983	.048	.884	1.132
R = .263 SEE = .63505 R Square = .069 Durbin-Watson = 2.103 Adjusted R Square = .065							
Excluded Variables: (X32), (X33), (X34), (X35), (X36), (X37), (X38), (X40), (X41), (X42), and (X43).							

4.4.3.8 Deboarding

One outlier case was removed, reducing the sample size to N=399. Table 4.35 presents the descriptive statistics of the study's sample, as shown below.

Table 4.35 Descriptive Statistical Analysis Result of the Deboarding

Deboarding			
Variables	Mean	Std. Deviation	N
CX	4.9475	.66609	399
(X45)	5.20	.875	399
(X46)	4.98	1.118	399
(X47)	5.07	.948	399
(X48)	5.17	.894	399
(X49)	4.92	1.159	399
(X50)	4.93	1.191	399

The results of multiple regression analysis using a stepwise method found that two out of the analyzed variables entered the equation with statistical significance at the 0.05 level. These variables are Body temperature screening by non-contact infrared thermometer at the exit of the restricted area (X50) and provide clearly defined zones from the aircraft to the exit of the restricted area (X48), with an Adjusted R square of .126. This implies that the combination of variables (X50) and (X48) will account for 12.6 percent of the variation in passenger experience at Phuket International Airport. The multiple regression model can be expressed as follows:

$$Y = 3.597 + .146 (X50) + .122 (X48)$$

The variables unrelated to accessibility factors that affected passenger experience at Phuket International Airport were (X45), (X46), (X47), and (X49) (Table 4.36).

Table 4.36 Multiple Regression Analysis Results of Deboarding Affecting Passenger Experience

Deboarding	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	3.597	.193		18.662	.000		

Deboarding	B	SE	Beta	t	p-value	Tolerance	VIF
1. Body temperature screening by non-contact infrared thermometer at the exit of the restricted area (X50).	.146	.029	.262	5.089	.000	.830	1.205
2. Provide clearly defined zones from the aircraft to the exit of the restricted area (X48).	.122	.038	.163	3.176	.002	.830	1.205
R = .361 SEE = .62266 R Square = .131 Durbin-Watson = 2.158 Adjusted R Square = .126							

Excluded Variables: (X45), (X46), (X47), and (X49).

4.4.3.9 Immigration

Two outlier cases removed the sample as reduced, N = 398. Table 4.37 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.37 Descriptive Statistical Analysis Result of the Immigration

Immigration			
Variables	Mean	Std. Deviation	N
CX	4.9460	.66177	398
(X51)	5.27	.822	398
(X52)	5.30	.803	398
(X53)	5.34	.790	398
(X54)	5.34	.802	398
(X55)	5.15	1.004	398

Provide social distancing while waiting immigrant area (X55) and the ease of using the system (X52) with an Adjust R square of .124, implying that variable (X55) and (X2) together will result on passenger experience at Phuket International Airport at 12.4 percent, which can be written It is a model for multiple regression analysis as follows.

$$Y = 3.395 + .195 (X55) + .103 (X52)$$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X51), (X53), and (X54) (Table 4.38).

Table 4.38 Multiple Regression Analysis Results of Immigration Affecting Passenger Experience

Immigration	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	3.395	.228		14.868	.000		
1. Provide social distancing while waiting immigrant area (X55).	.195	.033	.296	5.922	.000	.884	1.132
2. The ease of using the system (X52).	.103	.041	.125	2.505	.013	.884	1.132
R = .358 SEE = .61935 R Square = .129 Durbin-Watson = 2.044 Adjusted R Square = .124							
Excluded Variables: (X51), (X53), and (X54).							

4.4.3.10 Baggage Reclaims

Two outlier cases removed the sample as reduced, N = 398. Table 4.39 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.39 Descriptive Statistical Analysis Result of the Baggage Reclaims

Baggage Reclaims			
Variables	Mean	Std. Deviation	N
CX	4.9535	.65662	398
(X56)	5.08	.965	398
(X57)	5.29	.788	398
(X58)	5.31	.824	398
(X59)	5.31	.824	398
(X60)	5.38	.781	398
(X61)	5.05	1.069	398

Flight display on carrousel screens (X57) and Walking distance to get to the baggage claim area (X56) with an Adjust R square of .057, implying that variable (X57) and (X56) together will result on passenger experience at Phuket International Airport at 5.7 percent, which can be written It is a model for multiple regression analysis as follows.

$$Y = 3.796 + .144 (X57) + .077 (X56)$$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X58), (X59), (X60), and (X61) (Table 4.40).

Table 4.40 Multiple Regression Analysis Results of Immigration Affecting Passenger Experience

Baggage Reclaims	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	3.796	.230		16.538	.000		
1. Flight display on carrousel screens (X57).	.144	.046	.173	3.117	.002	.767	1.303

Baggage Reclaims	B	SE	Beta	t	p-value	Tolerance	VIF
2. Walking distance to get to the baggage claim area (X56).	.077	.038	.113	2.039	.042	.767	1.303
R = .249 SEE = .63758 R Square = .062 Durbin-Watson = 2.135 Adjusted R Square = .057							
Excluded Variables: (X58), (X59), (X60), and (X61).							

4.4.3.11 Customs

There were no outliers that resulted in a reduction of the sample, so N = 400. Table 4.41 presents the descriptive statistics of the study sample, which can be found below.

Table 4.41 Descriptive Statistical Analysis Result of the Customs

Customs			
Variables	Mean	Std. Deviation	N
CX	4.9434	.67042	400
(X62)	5.26	.838	400
(X63)	5.26	.808	400
(X64)	5.32	.764	400
(X65)	5.13	1.010	400

The Adjusted R square for providing social distancing while waiting in the customs area (X65) is .060, indicating that (X65) contributes 6.0 percent to the passenger experience at Phuket International Airport. The multiple regression analysis model can be expressed as follows: $Y = 4.093 + .166 (X65)$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport were: (X58), (X59), (X60), and (X61) (Table 4.42).

Table 4.42 Multiple Regression Analysis Results of Customs Affecting Passenger Experience

Customs	B	SE	Beta	t	p-value	Tolerance	VIF
(Constant)	4.093	.168		24.305	.000		
1. Provide social distancing while waiting in the customs area (X65).	.166	.032	.250	5.147	.000	1.000	1.000
R = .250 SEE = .64998 R Square = .062 Durbin-Watson = 2.120 Adjusted R Square = .060							
Excluded Variables: (X58), (X59), (X60), and (X61).							

4.4.3.12 Before Leaving the Airport

Two outlier cases removed the sample as reduced, N = 398. Table 4.43 reflects the descriptive statistics of the study's sample, which can be found below.

Table 4.43 Descriptive Statistical Analysis Result of the Before Leaving from the Airport

Before Leaving from the Airport			
Variables	Mean	Std. Deviation	N
CX	4.9530	.65825	398
(X66)	4.98	1.030	398
(X67)	5.21	.894	398
(X68)	5.26	.914	398

Public transport prices are appropriate for each type of service (X68) and arrival tourist assistance center (X66) with an Adjust R square of .070, implying that variable (X68) and (X66) together will result on passenger experience at Phuket

International Airport at 7.0 percent, which can be written It is a model for multiple regression analysis as follows.

$$Y = 3.847 + .122 (X68) + .094 (X66)$$

The variables unrelated to accessibility factors that affected the passenger experience at Phuket International Airport was: (X67) (Table 4.44).

Table 4.44 Multiple Regression Analysis Results of Before Leaving from the Airport Affecting Passenger Experience

Before Leaving from the Airport	B	SE	Beta	t	p- value	Tolerance	VIF
(Constant)	3.847	.199		19.334	.000		
68. Public transport prices are appropriate for each type of service (X68).	.122	.040	.169	3.016	.003	.743	1.345
66. Arrival tourist assistance center (X66)	.094	.036	.146	2.607	.009	.743	1.345
R = .274 SEE = .63463 R Square = .075 Durbin-Watson = 2.125 Adjusted R Square = .070							
Excluded Variables: (X67)							

4.4.4 Hypothesis Testing of Factors Influencing Passenger Experiences

Regarding the explained the significance of hypothesis testing are analyzed from regression analysis and other statistics. There are 12 hypotheses, can be summarized as follows. (Table 4.45)

H1: Accessibility has influence on passenger experiences at Phuket International Airport.

The following was identified as being statistically significant and was influencing customer experience at Phuket International Airport: accessibility, $t = 2.318$, $p\text{-value} = .021$. Thus, the null hypothesis for this variable was rejected.

H2: Check-in process has influence on passenger experiences at Phuket International Airport.

This variable did not reflect a unique ability with p-value greater than .05. The variable statistically insignificant finding: check-in process, $t = .688$, $p\text{-value} = .492$. Thus, the null hypothesis for this variable was accepted.

H3: Baggage handling has influence on passenger experiences at Phuket International Airport.

The p-value of baggage handling is greater than .05: ($t = -.629$), ($p\text{-value} = .530$). Thus, the null hypothesis for this variable was accepted.

H4: Safety management has influence on passenger experiences at Phuket International Airport.

The p-value of safety management greater than .05: ($t = .358$), ($p\text{-value} = .721$). Thus, the null hypothesis for this variable was accepted.

H5: Passport/ID control has influence on passenger experiences at Phuket International Airport.

The subsequent was identified as being statistically significant was influencing on customer experience at Phuket International Airport: passport/ID control, $t = 3.540$, $p = .000$. Thus, the null hypothesis for this variable was accepted.

H6: Mobility has influence on passenger experiences at Phuket International Airport.

The p-value of mobility greater than .05: ($t = -.485$), ($p\text{-value} = .628$). Thus, the null hypothesis for this variable was accepted.

H7: Facilities have influence on passenger experiences at Phuket International Airport.

The p-value of facilities greater than .05: ($t = .660$), ($p\text{-value} = .509$). Thus, the null hypothesis for this variable was accepted.

H8: Deboarding has influence on passenger experiences at Phuket International Airport.

The subsequent was identified as being statistically significant was influencing on customer experience at Phuket International Airport: deboarding, $t = 2.893$, $p = .004$. Thus, the null hypothesis for this variable was rejected.

H9: Immigration has influence on passenger experiences at Phuket International Airport.

And the last factor identified as being statistically significant was influencing customer experience at Phuket International Airport: immigration, $t = 3.757$, $p = .000$. Thus, the null hypothesis for this variable was rejected.

H10: Baggage reclaims has influence on passenger experiences at Phuket International Airport.

H11: Customs has influence on passenger experiences at Phuket International Airport.

H12: Before leaving the airport has influence on passenger experiences at Phuket International Airport.

Table 4.45 Factors Influencing Passenger Experiences at Phuket International Airport

Hypothesis	Description	Result
H1	Accessibility has influence on passenger experiences at Phuket International Airport	Rejected
H2	Check-in process has influence on passenger experiences at Phuket International Airport.	Accepted
H3	Baggage handling has influence on passenger experiences at Phuket International Airport.	Accepted
H4	Safety management has influence on passenger experiences at Phuket International Airport.	Accepted
H5	Passport/ID control has influence on passenger experiences at Phuket International Airport.	Accepted
H6	Mobility has influence on passenger experiences at Phuket International Airport.	Accepted
H7	Facilities has influence on passenger experiences at Phuket International Airport.	Accepted
H8	Deboarding has influence on passenger experiences at Phuket International Airport.	Rejected

Hypothesis	Description	Result
H9	Immigration has influence on passenger experiences at Phuket International Airport.	Rejected
H10	Baggage reclaims has influence on passenger experiences at Phuket International Airport.	Accepted
H11	Customs has influence on passenger experiences at Phuket International Airport.	Accepted
H12	Before leaving from the airport has influence on passenger experiences at Phuket International Airport.	Accepted

4.4.5 Summary of Customer Journey Management Factors of Phuket International Airport Influencing Customer Experience

From the study results on the factors of Customer Journey Management influencing the customer experience at Phuket International Airport, an overall summary can be compiled based on each variable, as presented in Table 4.46, and summarized in Figure 4.17.

Table 4.46 Overall Statistical Testing Results of Customer Journey Management Factors at Phuket International Airport Influencing Customer Experience

Factors	R	R Square	Ad R Square
Departure's zone			
Accessibility to the airport (Acces)	.299	.090	.085
(X6) Provide clearly defined zones and paths for entry and exit.			
(X3) Strictly screened for COVID-19 (Terminal Screening)			
Check-in process management (Check)	.235	.055	.050
(X11) Provide social distancing while waiting at check-in counters.			
(X9) The check-in area is enough and convenient.			
Baggage handling process (Bagg)	.123	.015	.013

Factors	R	R Square	Ad R Square
(X16) Efficiency in baggage handling			
Safety management (Safe)	.229	.052	.050
(X21) Sense of safety and security in this airport.			
Passport/ID control (Pass)	.294	.086	.082
(X25) Sense of security in the travel document inspection process.			
(X26) Provide social distancing while waiting at passport control area.			
Mobility (Mobi)	.199	.040	.037
(X31) Readiness to help people with disabilities.			
Airport facilities (Faci)	.263	.069	.065
(X44) Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.			
(X39) The cleanliness of the toilet facilities.			
Arrival's zone			
Deboarding (Debo)	.361	.131	.126
(X50) Body temperature screening by non-contact infrared thermometer at the exit of the restricted area.			
(X48) Provide clearly defined zones from the aircraft to the exit of the restricted area.			
Immigration (Immi)	.358	.129	.124
(X55) Provide social distancing while waiting immigrant area.			
(X52) The ease of using the system.			
Baggage reclaims (Bagre)	.249	.062	.057
(X57) Flight display on carousel screens.			
(X56) Walking distance to get to the baggage claim area			
Customs (Cust)	.250	.062	.060
(X65) Provide social distancing while waiting in the customs area.			
Before leaving from the airport (Before)	.274	.075	.070
(X68) Public transport prices are appropriate for each type of service.			

Factors	R	R Square	Ad R Square
(X66) Arrival tourist assistance center			



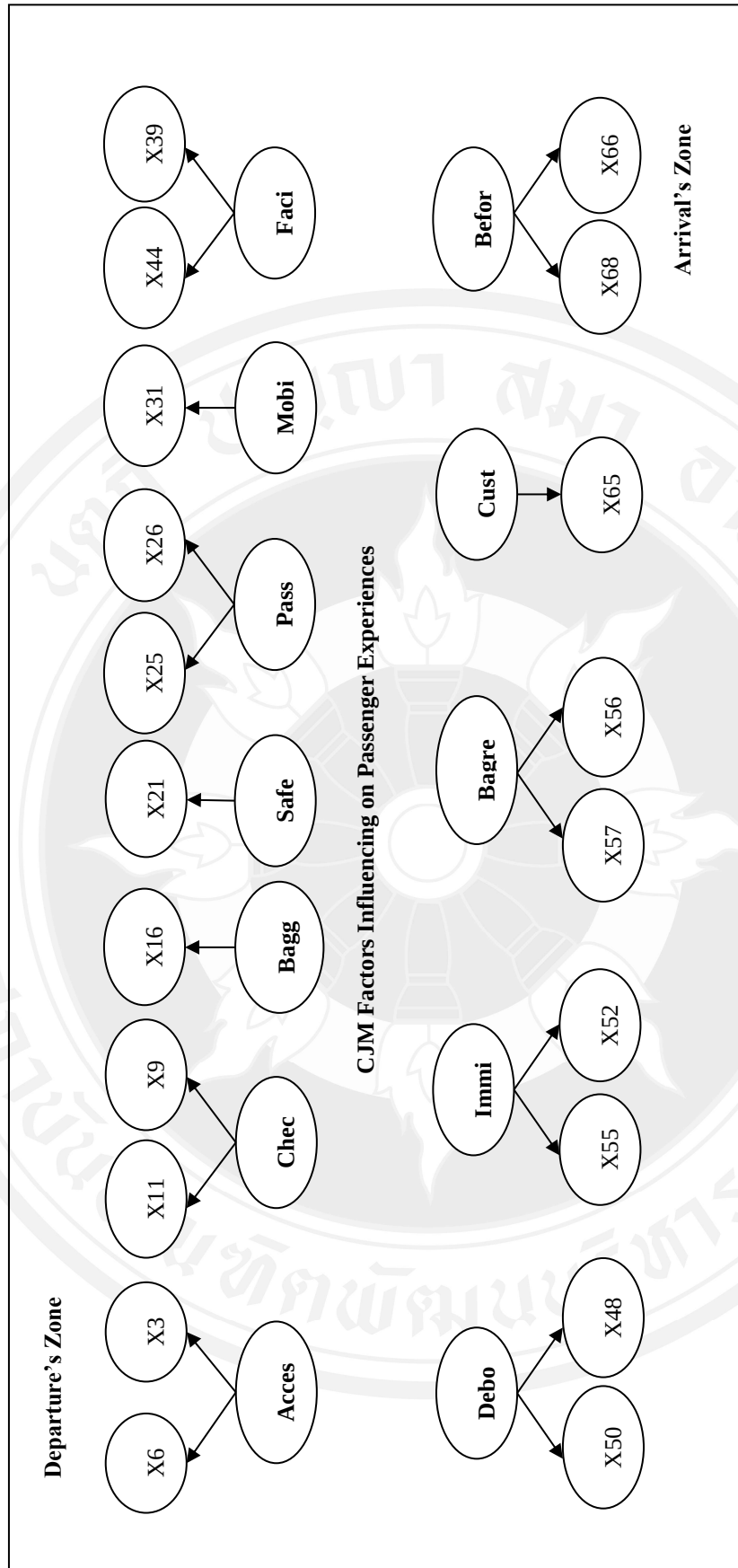


Figure 4.17 Customer Journey Management Factors of Phuket International Airport Influencing Customer Experience

4.5 Efficiency of Customer Journey Management at Phuket International Airport (Research Objective 3)

In relation to research objective 3, efficiency of customer journey management at Phuket International Airport are investigated. Beneath the main research question ‘how the efficiency of customer journey management at Phuket International Airport?’.

To analyze airport passengers’ opinions toward Phuket International Airport, the differences between importance levels and efficiency levels of both attributes were tested. Also, gap analysis was employed in this research.

4.5.1 Descriptives Statistic Results of the Levels of Importance and Efficiency toward Airport Management Attributes

Both importance and efficiency levels were evaluated by airport passengers using six-level evaluation. Level 6 is the maximum score referred to ‘Strongly important’ or ‘Strongly efficient’ whereas level 1 reflects ‘Strongly unimportant’ and ‘Strongly inefficient’.

4.5.1.1 Description on Importance Levels of Departure Zone

From data collection, the importance level of departure zone started from “accessibility to the airport” is at strongly important level (51.1%, M=5.16) (Table 4.45). When considering into each variable, it is found that the levels of importance of all variables are positive and can be sorted as follows; “IA5” with the highest mean score (57.5%, M=5.31), “IA1” (51.8%, M=5.24), “IA6” (50.5%, M=5.19), “IA2” (47.3%, M=5.15), “IA3” (52.5%, M=5.12), and “IA4” (47.0%, M=4.92) respectively (Table 4.46). Next was the “check-in process management” is strongly important level the sum was 54.1%, M=5.28, can be sorted as follows “ICh2” (66.5%, M=5.54), “ICh4” (63.5%, M=5.50), “ICh3” (54.5%, M=5.41), “ICh5” (47.5%, M=5.12), “ICh1” (46.0%, M=5.05), and “ICh6” (46.5%, M=5.04) (Table 4.47-4.50).

And the last one for this paragraph the important levels of “baggage handling process” is at the important level (37.2%, M=4.88). When considering each variable; “IB1” (35.0%, M=4.76) and “IB4” (44.3%, M=5.16) are equal at strongly important, with the highest mean score while “IB2” (30.8%, M=4.80) and “IB3” (31.5%, M=4.82) are at the important level (Table 4.51 - 4.52).

Table 4.47 Frequency and Percentage on Levels of Importance toward Accessibility to the Airport

N=400

Accessibility to the Airport	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Public transport to the airport is convenient. (Airport bus, limousine, etc.) (IA1)	207	130	33	18	5	7	5.24	1.058
(%)	51.8	32.5	8.3	4.5	1.3	1.8		
2. Public transport prices to the airport are appropriate for each type of service. (IA2)	189	131	47	20	8	5	5.14	1.073
(%)	47.3	32.8	11.8	5.0	2.0	1.3		
3. Strictly screened for COVID-19 (Terminal Screening) (IA3)	210	110	35	24	7	14	5.12	1.248
(%)	52.5	27.5	8.8	6.0	1.8	3.5		
4. Body temperature screening by non-contact infrared thermometer. (IA4)	188	107	43	30	14	18	4.92	1.383
(%)	47.0	26.8	10.8	7.5	3.5	4.5		
5. Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal. (IA5)	230	103	46	11	5	5	5.32	1.007
(%)	57.5	25.8	11.5	2.8	1.3	1.3		
6. Provide clearly defined zones and paths for entry and exit. (IA6)	202	125	41	18	5	9	5.18	1.109
(%)	50.5	31.3	10.1	4.5	1.3	2.3		
Total important: Accessibility to the airport	1226	706	245	121	44	58	5.15	.852
(%)	51.1	29.5	10.2	5.1	1.9	2.5		

Table 4.48 Importance Mean Ranking of Accessibility to the Airport

N=400

Rank	Accessibility to the Airport	M	S.D.	Importance Levels*	% Counts
1	5. Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal. (IA5)	5.31	1.007	6: Strongly important	57.5
2	1. Public transport to the airport is convenient. (Airport bus, limousine, etc.) (IA1)	5.24	1.058	6: Strongly important	51.8
3	6. Provide clearly defined zones and paths for entry and exit. (IA6)	5.19	1.109	6: Strongly important	50.5
4	2. Public transport prices to the airport are appropriate for each type of service. (IA2)	5.15	1.073	6: Strongly important	47.3
5	3. Strictly screened for COVID-19 (Terminal Screening) (IA3)	5.12	1.248	6: Strongly important	52.5
6	4. Body temperature screening by non-contact infrared thermometer. (IA4)	4.92	1.383	6: Strongly important	47.0
Total important: Accessibility to the airport		5.16	.852	6: Strongly important	51.10

Table 4.49 Frequency and Percentage on Levels of Importance toward Check-in Process Management

N=400

Check-in Process Management	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	X	S.D.
1. Self-check-in via mobile phone or kiosk (ICh1)	184	118	60	19	11	8	5.05	1.170
	(%) 46.0	29.5	15.0	4.8	2.8	2.0		

Check-in Process Management		Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	X	S.D.
2. Fast and convenient check-in processes (ICh2)		262	105	26	4	1	2	5.54	.755
	(%)	66.5	26.3	6.5	1.0	.3	.5		
3. The check-in area is enough and convenient. (ICh3)		218	134	42	3	1	1	5.41	.760
	(%)	54.5	33.8	10.5	.8	.3	.3		
4. Check-in staff provide service with politeness. (ICh4)		254	105	32	6	2	1	5.50	.782
	(%)	63.5	26.3	8.0	1.5	.5	.3		
5. Provide social distancing while waiting at check-in counters. (ICh5)		190	124	51	17	14	4	5.12	1.112
	(%)	47.5	31.0	12.8	4.3	3.5	1.0		
6. Provide alcohol gel at the check-in counters. (ICh6)		186	117	55	22	8	12	5.04	1.219
	(%)	46.5	29.3	13.8	5.5	2.0	3.0		
Total important: Check-in process management		1294	703	266	71	37	28	5.28	.663
	(%)	54.1	29.4	11.1	3.0	1.6	1.2		

Table 4.50 Importance Mean Ranking of Check-in Process Management

					N=400
Rank	Check-in Process Management	M	S.D.	Importance Levels*	% Counts
1	2. Fast and convenient check-in processes (ICh2)	5.54	.755	6: Strongly important	66.5
2	4. Check-in staff provide service with politeness. (ICh4)	5.50	.782	6: Strongly important	63.5
3	3. The check-in area is enough and convenient. (ICh3)	5.41	.760	6: Strongly important	54.5

Rank	Check-in Process Management	M	S.D.	Importance Levels*	% Counts
4	5. Provide social distancing while waiting at check-in counters. (ICh5)	5.12	1.112	6: Strongly important	47.5
5	1. Self-check-in via mobile phone or kiosk (ICh1)	5.05	1.17	6: Strongly important	46.0
6	6. Provide alcohol gel at the check-in counters. (ICh6)	5.04	1.219	6: Strongly important	46.5
Total important: Check-in process management		5.28	.663	6: Strongly important	54.1

Table 4.51 Frequency and Percentage on Levels of Importance toward Baggage Handling Process

N=400

Baggage Handling Process		Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Self-check-in baggage system is available. (IB1)		140	130	65	34	19	12	4.76	1.305
	(%)	35.0	32.5	16.3	8.5	4.8	3.0		
2. The sufficiency of the cart (IB2)		123	156	72	24	15	10	4.80	1.194
	(%)	30.8	39.0	18.0	6.0	3.8	2.5		
3. The quality of the cart (IB3)		126	160	65	23	15	11	4.82	1.206
	(%)	31.5	40.0	16.3	5.8	3.8	2.8		
4. Efficiency in baggage handling (IB4)		177	149	52	10	6	6	5.16	1.013
	(%)	44.3	37.3	13.0	2.5	1.5	1.5		
Total important: Baggage handling process (IB)		566	595	254	91	55	39	4.88	.974
	(%)	35.4	37.2	15.9	5.7	3.5	2.5		

Table 4.52 Importance Mean Ranking of Baggage Handling Process

N=400

Rank	Baggage Handling Process	M	S.D.	Importance Levels*	% Counts
1	4. Efficiency in baggage handling (IB4)	5.16	1.013	6: Strongly important	44.3
2	3. The quality of the cart (IB3)	4.82	1.206	5: Important	31.5
3	2. The sufficiency of the cart (IB2)	4.80	1.194	5: Important	30.8
4	1. Self-check-in baggage system is available. (IB1)	4.76	1.305	6: Strongly important	35.0
Total important: Baggage handling process (IB)		4.88	.974	5: Important	37.2

Results also indicated that “safety management” is at the strongly important levels (61.2%, M=5.47). When considering each variable, the importance of all variables is at strongly important levels; “IS5”, with the highest mean score (67.8%, M=5.54) followed by “IS3” (63.5%, M=5.51), “IS4” (61.5%, M=5.50), “IS1” (55.5%, M=5.43), and “IS2” (57.5%, M=5.39). The importance levels of “passport/ID control,” is at the strongly important level (55.3%, M=5.41). When considering each variable, the importance levels of all variables are also strongly important level; “IP1” (61.0%, M=5.52), “IP3” (54.30%, M=5.43), “IP2” (53.5%, M=5.41), “IP4” (56.3%, M=5.40) and “IP5” (51.5%, M=5.30).

According to “mobility”, the findings reveal that the important level of mobility is at the strongly important level (57.5%, M=5.33). When considering each variable, it is found that the importance levels of all variables are also at strongly important level sorts by “IM2” (5.60%, M=68.8) while “IM1” (67.0%, M=5.56), “IM5” (58.8%, M=5.37), “IM4” (47.8%, M=5.20) and “IM3” (45.0%, M=4.95) with the lowest mean score (Table 4.53-4.58).

Table 4.53 Frequency and Percentage on Levels of Importance toward Safety Management

N=400

Safety Management	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Duration of security checks in each step. (IS1)	222	136	35	5	1	1	5.43	.759
(%)	55.5	34.0	8.8	1.3	.3	.3		
2. Courtesy and service willingness of security inspectors. (IS2)	230	122	23	10	3	3	5.39	.889
(%)	57.5	30.3	8.0	2.5	.8	.8		
3. The security inspectors are professional. (IS3)	254	113	24	4	1	4	5.51	.813
(%)	63.5	28.3	6.0	1.0	.3	1.0		
4. The procedure for screening at the scanning point is simple. (IS4)	242	129	19	8	1	1	5.50	.739
(%)	61.5	32.3	4.8	2.0	.3	.3		
5. Sense of safety and security in this airport. (IS5)	271	101	15	4	3	6	5.54	.881
(%)	67.8	25.3	3.8	1.0	.8	1.5		
Total important: Safety management (IS)	1219	601	116	31	9	15	5.47	.660
(%)	61.2	30.0	6.3	1.6	0.5	0.8		

Table 4.54 Importance Mean Ranking of Safety Management

N=400

Rank	Safety management	M	S.D.	Importance Levels*	% Counts
1	5. Sense of safety and security in this airport. (IS5)	5.54	.881	6: Strongly important	67.8
2	3. The security inspectors are professional. (IS3)	5.51	.813	6: Strongly important	63.5
3	4. The procedure for screening at the scanning point is simple. (IS4)	5.50	.739	6: Strongly important	61.5
4	1. Duration of security checks in each step. (IS1)	5.43	.759	6: Strongly important	55.5
5	2. Courtesy and service willingness of security inspectors. (IS2)	5.39	.889	6: Strongly important	57.5
Total important: Safety management (IS)		5.47	.660	6: Strongly important	61.2

Table 4.55 Frequency and Percentage on Levels of Importance toward Passport/ID Control

N=400

Passport/ID Control	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Rapid passport check (IP1)	244	130	19	5	-	2	5.52	.722
(%)	61.0	32.5	4.8	1.3	-	.5		
2. Courtesy and service willingness of the passport inspector. (IP2)	214	146	31	7	2	-	5.41	.750
(%)	53.5	36.5	7.8	1.8	.5	-		
3. There is a simple screening process. (IP3)	217	149	23	9	2	-	5.43	.745
(%)	54.3	37.3	5.8	2.3	.5	-		

Passport/ID Control	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
4. Sense of security in the travel document inspection process. (IP4)	225	132	29	9	2	3	5.40	.855
(%)	56.3	33.0	7.3	2.3	.5	.8		
5. Provide social distancing while waiting at the passport control area. (IP5)	206	132	48	6	5	3	5.30	.917
(%)	51.5	33.0	12.0	1.5	1.3	.8		
Total important: Passport/ID control (IP)	1106	689	150	36	11	8	5.41	.612
(%)	55.3	34.5	7.5	1.8	0.7	0.7		

Table 4.56 Importance Mean Ranking of Passport/ID Control

N=400					
Rank	Passport/ID control	M	S.D.	Importance Levels*	% Counts
1	1.Rapid passport check (IP1)	5.52	.722	6: Strongly important	61.0
2	3. There is a simple screening process. (IP3)	5.43	.745	6: Strongly important	54.3
3	2. Courtesy and service willingness of the passport inspector. (IP2)	5.41	.750	6: Strongly important	53.5
4	4. Sense of security in the travel document inspection process. (IP4)	5.40	.855	6: Strongly important	56.3
5	5. Provide social distancing while waiting at the passport control area. (IP5)	5.30	.917	6: Strongly important	51.5
Total important: Passport/ID control (IP)		5.41	.612	6: Strongly important	55.3

Table 4.57 Frequency and Percentage on Levels of Importance toward Mobility

N=400

Mobility							X	S.D.
	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)		
1. Signs and symbols are easy to understand. (IM1)	268	107	14	6		5	5.56	.812
(%)	67.0	26.8	3.5	1.5		1.3		
2. The flight information display is visible. (IM2)	275	101	16	6	1	1	5.60	.701
(%)	68.8	25.3	4.0	1.5	.3	.3		
3. Shuttle service within the terminal (IM3)	180	116	46	29	19	10	4.95	1.298
(%)	45.0	29.0	11.5	7.3	4.8	2.5		
4. Walking distance between terminals is execrable. (IM4)	191	134	52	13	5	5	5.20	1.007
(%)	47.8	33.5	13.0	3.3	1.3	1.3		
5. Readiness to help people with disabilities. (IM5)	235	112	31	10	4	6	5.37	.980
(%)	58.8	28.5	7.8	2.5	1.0	1.5		
Total important: Mobility (IM)	1149	570	159	64	29	27	5.33	.739
(%)	57.5	28.6	8.0	3.2	1.9	1.4		

Table 4.58 Importance Mean Ranking of Mobility

N=400

Rank	Mobility	M	S.D.	Importance Levels*	% Counts
1	2. The flight information display is visible. (IM2)	5.60	.701	6: Strongly important	68.8
2	1. Signs and symbols are easy to understand. (IM1)	5.56	.812	6: Strongly important	67.0

Rank	Mobility	M	S.D.	Importance Levels*	% Counts
3	5. Readiness to help people with disabilities. (IM5)	5.37	.980	6: Strongly important	58.8
4	4. Walking distance between terminals is execrable. (IM4)	5.20	1.007	6: Strongly important	47.8
5	3. Shuttle service within the terminal (IM3)	4.95	1.298	6: Strongly important	45.0
Total important: Mobility (IM)		5.33	.739	6: Strongly important	57.5

And the last section of the departure zone “airport facilities” is at “strongly important” level (39.4%, M=4.97) (Table 4.59). Six attributes were rated as ‘Strongly important’ or the 6th level. Those six attributes comprised of 1) “IF6” (54.8%, M=5.33), 2) “IF7” (67.8%, M=5.60), 3) “IF8” (68.0%, M=5.62), 4) “IF9” (44.8%, M=5.17), 5) “IF11” (37.3%, M=4.90), and 6) “IF13” (48.0%, M=5.21). The rest seven operation attributes were mainly evaluated at level 5 which was the “Important” level. Seven attributes were compounded with 1) “IF1” (37.8%, M=4.62), 2) “IF2” (41.3%, M=4.74), 3) “IF3” (42.5%, M=4.91), 4) “IF4” (43.5%, M=4.92), 5) “IF5” (33.5%, M=4.44), 6) “IF10” (31.5%, M=4.33), and 7) “IF12” (34.3%, M=4.77) can be ranking by Table 4.60.

Table 4.59 Frequency and Percentage on Levels of Importance toward Airport Facilities

N=400

Airport Facilities	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Variety of shops, souvenirs / duty free (shopping) within the airport. (IF1)	95	151	93	35	19	7	4.62	1.178
	(%) 23.8	37.8	23.3	8.8	4.8	1.8		

Airport Facilities							M	S.D.
	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)		
2. Value for money of shopping at the airport. (IF2)	105	165	79	29	16	6	4.74	1.134
(%)	26.3	41.3	19.8	7.3	4.0	1.5		
3. Variety of restaurants and beverages. (IF3)	119	170	83	17	6	5	4.91	1.002
(%)	29.8	42.5	20.8	4.3	1.5	1.3		
4. Value for money of foods and beverage. (IF4)	121	174	78	15	5	7	4.92	1.018
(%)	30.3	43.5	19.5	3.8	1.3	1.8		
5. Airport executive lounge is available. (IF5)	104	134	71	37	36	18	4.44	1.427
(%)	26.0	33.5	17.8	9.3	9.0	4.5		
6. WIFI signal quality (IF6)	219	128	33	10	5	5	5.33	.968
(%)	54.8	32.0	8.3	2.5	1.3	1.3		
7. Availability of toilets (IF7)	271	106	16	6	1	-	5.60	.664
(%)	67.8	26.5	4.0	1.5	.3	-		
8. The cleanliness of the toilet facilities. (IF8)	272	105	20	3	-	-	5.62	.619
(%)	68.0	26.3	5.0	.8	-	-		
9. Charging battery station and seats at the boarding gate available. (IF9)	179	145	55	11	5	5	5.17	.991
(%)	44.8	36.3	13.8	2.8	1.3	1.3		
10. Children's area/playground. (IF10)	93	126	92	27	31	31	4.33	1.490
(%)	23.3	31.5	23.0	6.8	7.8	7.8		
11. Drinking water point and quality of water. (IF11)	149	137	71	22	10	11	4.90	1.195
(%)	37.3	34.3	17.8	5.5	2.5	2.8		
12. Availability of banks/ ATM/exchange. (IF12)	126	137	87	29	12	9	4.77	1.185

Airport Facilities		Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
	(%)	31.5	34.3	21.8	7.3	3.0	2.3		
13. Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal. (IF13)	(%)	192	133	54	12	5	4	5.21	.983
	(%)	48.0	33.3	13.5	3.0	1.3	1.0		
Total important: Accessibility to the airport (IF)		2045	1811	832	253	151	108	4.97	.684
	(%)	39.4	34.9	16.0	4.9	3.2	2.5		

Table 4.60 Importance Mean Ranking of Airport Facilities

N=400

Rank	Airport facilities	M	S.D.	Importance Levels*	% Counts
1	8. The cleanliness of the toilet facilities. (IF8)	5.62	.619	6: Strongly important	68.0
2	7. Availability of toilets (IF7)	5.60	.664	6: Strongly important	67.8
3	6. WIFI signal quality (IF6)	5.33	.968	6: Strongly important	54.8
4	13. Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal. (IF13)	5.21	.983	6: Strongly important	48.0
5	9. Charging battery station and seats at the boarding gate available. (IF9)	5.17	.991	6: Strongly important	44.8
6	4. Value for money of foods and beverage. (IF4)	4.92	1.018	5: Important	43.5
7	3. Variety of restaurants and beverages. (IF3)	4.91	1.002	5: Important	42.5
8	11. Drinking water point and quality of water. (IF11)	4.90	1.195	6: Strongly important	37.3

Rank	Airport facilities	M	S.D.	Importance Levels*	% Counts
9	12. Availability of banks/ATM/exchange. (IF12)	4.77	1.185	5: Important	34.3
10	2. Value for money of shopping at the airport. (IF2)	4.74	1.134	5: Important	41.3
11	1. Variety of shops, souvenirs / duty free (shopping) within the airport. (IF1)	4.62	1.178	5: Important	37.8
12	5. Airport executive lounge is available. (IF5)	4.44	1.427	5: Important	33.5
13	10. Children's area/playground. (IF10)	4.33	1.490	5: Important	31.5
Total important: Airport facilities (IF)		4.97	.684	6: Strongly important	39.4

4.5.1.2 Description on Importance Levels of Arrival Zone

From data collection of arrival zone, the importance levels of “deboarding” are at the important level (39.4%, M=5.04). When considering each variable; “ID2” (38.3%, M=4.97) and “ID5” (36.8%, M=4.92) are equal at strongly important, while “ID1” (41.5%, M=5.20), “ID4” (40.5%, M=5.17), “ID3” (37.3%, M=5.07) and “ID6” (37.0%, M=4.93) are at the important level (Table 4.61-4.62). Next was the “immigration” is strongly important level the sum was 47.0%, M=5.27, can be sorted as follows “II3” (49.8%, M=5.34), “II4” (50.3%, M=5.33), “II2” (45.8%, M=5.29), “II1” (44.8%, M=5.26) and “II5” (44.5%, M=5.14) (Table 4.63-4.64).

In terms of the importance levels of “baggage reclaims” is at the strongly important (45.9%, M=5.24). When considering each variable; “IBr5” (38.3%, M=5.39), “IBr3” (48.5%, M=5.32), “IBr4” (5.31%, M=49.5) and “IBr2” (46.3%, M=5.30) are equal at strongly important level, with the highest mean score while “IBr1” (38.3%, M=5.08) and “IBr6” (38.8%, M=5.05) are at the important level (Table 4.65 - 4.66).

Table 4.61 Frequency and Percentage on Levels of Importance toward Deboarding

N=400

Deboarding	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. The waiting time before deboarding the aircraft. (ID1)	166	169	51	10	-	4	5.20	.875
(%)	41.5	42.3	12.8	2.5	-	1.0		
2. Provide social distancing while deboarding the aircraft. (ID2)	153	146	62	23	7	9	4.97	1.135
(%)	38.3	36.5	15.5	5.8	1.8	2.3		
3. The walking distance from the aircraft to the exit of the restricted area. (ID3)	149	166	58	22	2	3	5.07	.948
(%)	37.3	41.5	14.5	5.5	.5	.8		
4. Provide clearly defined zones from the aircraft to the exit of the restricted area. (ID4)	162	169	53	10	3	3	5.17	.893
(%)	40.5	42.3	13.3	2.5	.8	.8		
5. Provide alcohol gel between aisle to the exit of the restricted area. (ID5)	147	142	72	19	11	9	4.92	1.158
(%)	36.8	35.5	18.0	4.8	2.8	2.3		
6. Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. (ID6)	148	154	52	26	8	12	4.93	1.191
(%)	37.0	38.5	13.0	6.5	2.0	3.0		
Total important: Deboarding (ID)	925	946	348	110	31	40	5.04	.783
(%)	38.6	39.4	14.5	4.6	1.6	1.7		

Table 4.62 Importance Mean Ranking of Deboarding

N=400

Rank	Deboarding	M	S.D.	Importance Levels*	% Counts
1	1. The waiting time before deboarding the aircraft. (ID1)	5.20	.875	5: Important	41.5
2	4. Provide clearly defined zones from the aircraft to the exit of the restricted area. (ID4)	5.17	.893	5: Important	40.5
3	3. The walking distance from the aircraft to the exit of the restricted area. (ID3)	5.07	.948	5: Important	37.3
4	2. Provide social distancing while deboarding the aircraft. (ID2)	4.97	1.135	5: Important	38.3
5	6. Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. (ID6)	4.93	1.191	5: Important	37.0
6	5. Provide alcohol gel between aisle to the exit of the restricted area. (ID5)	4.92	1.158	5: Important	36.8
Total important: Deboarding		5.04	.783	5: Important	39.4

Table 4.63 Frequency and Percentage on Levels of Importance toward Immigration

N=400

Immigration	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Waiting time before accessing the immigration system. (II1)	179	168	38	9	5	1	5.26	.848
(%)	44.8	42.0	9.5	2.3	1.3	.3		
2. The ease of using the system. (II2)	183	171	34	6	4	2	5.29	.830
(%)	45.8	42.8	8.5	1.5	1.0	.5		
3. Courtesy and helpfulness of airport staff in managing queues. (II3)	199	153	37	6	4	1	5.34	.818

Immigration	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
	(%)	49.8	38.3	9.3	1.5	1.0	.3	
4. Courtesy and politeness of the immigration officer. (II4)	201	150	35	10	3	1	5.33	.830
	(%)	50.3	37.5	8.8	2.5	.8	.3	
5. Provide social distancing while waiting immigrant area. (II5)	178	138	60	14	4	6	5.14	1.024
	(%)	44.5	34.5	15.0	3.5	1.0	1.5	
Total important: Immigration	940	780	204	45	20	11	5.27	.680
	(%)	47.0	39.0	10.2	2.3	1.0	0.6	47.2

Table 4.64 Importance Mean Ranking of Immigration

N=400						
Rank	Immigration	M	S.D.	Importance Levels*	% Counts	
1	3. Courtesy and helpfulness of airport staff in managing queues. (II3)	5.34	.818	6: Strongly important	49.8	
2	4. Courtesy and politeness of the immigration officer. (II4)	5.33	.830	6: Strongly important	50.3	
3	2. The ease of using the system. (II2)	5.29	.830	6: Strongly important	45.8	
4	1. Waiting time before accessing the immigration system. (II1)	5.26	.848	6: Strongly important	44.8	
5	5. Provide social distancing while waiting immigrant area. (II2)	5.14	1.024	6: Strongly important	44.5	
Total important: Immigration		5.27	.680	6: Strongly important	47.0	

Table 4.65 Frequency and Percentage on Levels of Importance toward Baggage Reclaims

N=400

Baggage Reclaims	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Walking distance to get to the baggage claim area. (IBr1)	153	164	55	20	6	2	5.08	.965
(%)	38.3	41.0	13.8	5.0	1.5	.5		
2. Flight display on carrousel screens. (IBr2)	185	163	40	10	2	-	5.30	.788
(%)	46.3	40.8	10.0	2.5	.5	-		
3. Waiting time before retrieving baggage. (IBr3)	194	157	34	12	2	1	5.32	.823
(%)	48.5	38.3	8.5	3.0	.5	.3		
4. Availability of toilets in the baggage claim area. (IBr4)	198	144	47	7	4	-	5.31	.823
(%)	49.5	36.0	11.8	1.8	1.0	-		
5. The cleanliness of toilets at the baggage reclaims area. (IBr5)	215	135	41	7	2	-	5.39	.780
(%)	53.8	33.8	10.3	1.8	.5	-		
6. Availability of carts/trolleys (IBr6)	155	162	54	14	7	8	5.05	1.068
(%)	38.8	40.5	13.5	3.5	1.8	2.0		
Total important: Baggage reclaims (IBr)	1100	925	271	70	23	11	5.24	.640
(%)	45.9	38.4	11.3	2.9	1.0	0.9		

Table 4.66 Importance Mean Ranking of Baggage Reclaims

N=400

Rank	Baggage reclaims	M	S.D.	Importance Levels*	% Counts
1	5. The cleanliness of toilets at the baggage reclaims area. (IBr5)	5.39	.780	6: Strongly important	53.8
2	3. Waiting time before retrieving baggage. (IBr3)	5.32	.823	6: Strongly important	48.5
3	4. Availability of toilets in the baggage claim area. (IBr4)	5.31	.823	6: Strongly important	49.5
4	2. Flight display on carousel screens. (IBr2)	5.30	.788	6: Strongly important	46.3
5	1. Walking distance to get to the baggage claim area. (IBr1)	5.08	.965	5: Important	38.3
6	6. Availability of carts/trolleys (IBr6)	5.05	1.068	5: Important	38.8
Total important: Baggage reclaims		5.24	.640	6: Strongly important	45.9

The importance levels of “customs” are at the strongly important level (44.1%, M=5.24). When considering each variable, the importance levels of all variables are also strongly important level; “IC3” (46.5%, M=5.32), “IC2” (43.5%, M=5.26), “IC1” (44.3%, M=5.26), and “IC4” (42.0%, M=5.13). And the last section of the important levels “before leaving from the airport” is at “important” level (39.4%, M=4.97). When considering each variable; “IBl3” is a strongly important level, with the highest mean score (47.3%, M=5.26) while “Ila2” (44.3%, M=5.21) and “IBl1” (43.6%, M=4.98) are important, with the lowest mean score (Table 4.67- 4.71).

Table 4.67 Frequency and Percentage on Levels of Importance Toward Customs

N=400

Customs	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Waiting time to go through customs. (IC1)	177	167	45	7	1	3	5.26	.838
(%)	44.3	41.8	11.3	1.8	.3	.8		
2. Setup/organization of queues (IC2)	174	171	43	9	2	1	5.26	.808
(%)	43.5	42.8	10.8	2.3	.5	.3		
3. Courtesy and politeness of the customs officer. (IC3)	186	165	42	5	1	1	5.32	.764
(%)	46.5	41.3	10.5	1.5	.3	.3		
4. Provide social distancing while waiting in the customs area. (IC4)	168	158	49	14	5	6	5.13	1.010
(%)	42.0	39.5	12.3	3.5	1.3	1.5		
Total important: Customs	705	661	179	35	9	11	5.24	.680
(%)	44.1	41.4	11.2	2.3	0.6	0.7		

Table 4.68 Importance Mean Ranking of Customs

N=400

Rank	Customs	M	S.D.	Importance Levels*	% Counts
1	3. Courtesy and politeness of the customs officer. (IC3)	5.32	.764	6: Strongly important	46.5
2	2. Setup/organization of queues (IC2)	5.26	.838	6: Strongly important	43.5
3	1. Waiting time to go through customs. (IC1)	5.26	.808	6: Strongly important	44.3

Rank	Customs	M	S.D.	Importance Levels*	% Counts
4	4. Provide social distancing while waiting in the customs area. (IC4)	5.13	1.010	6: Strongly important	42.0
Total important: Baggage reclaims		5.24	.680	6: Strongly important	44.1

Table 4.69 Frequency and Percentage on Levels of Importance toward Before Leaving from the Airport

N=400

Before Leaving from the Airport	Strongly important (6)	Important (5)	Somewhat important (4)	Somewhat Unimportant (3)	Unimportant (2)	Strongly Unimportant (1)	M	S.D.
1. Arrival tourist assistance center. (IB11)	134	175	58	19	10	4	4.98	1.028
(%)	33.8	43.6	14.4	4.8	2.5	1.0		
2. Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.) (IB12)	167	177	40	10	1	5	5.21	.893
(%)	41.8	44.3	10.0	2.5	.3	1.3		
3. Public transport prices are appropriate for each type of service. (IB13)	189	156	35	13	4	3	5.26	.914
(%)	47.3	39.0	8.8	3.3	1.0	.8		
Total important: Before leaving from the airport	490	508	133	42	15	12	5.15	.802
(%)	41.0	42.3	11.1	3.5	1.3	1.0		

Table 4.70 Importance Mean Ranking of Before Leaving from the Airport

N=400					
Rank	Before Leaving from the Airport	M	S.D.	Importance Levels*	% Counts
1	3. Public transport prices are appropriate for each type of service. (IBI3)	5.26	.914	6: Strongly important	47.3
2	2. Public transport from the airport to the city is convenient and varieties. (Airport bus, limousine, etc.) (IBI2)	5.21	.893	5: Important	44.3
3	1. Arrival tourist assistance center (IBI1)	4.98	1.028	5: Important	43.6
Total important: Before leaving from the airport		5.15	.802	5: Important	42.3

Table 4.71 Importance Mean Score Ranking on Airport Management Attributes

N=400					
Rank	Attributes		Mean	S.D.	Importance Levels*
Departure					
5	1	Accessibility to the airport	5.16	.852	5: Important
4	2	Check-in process management	5.28	.663	5: Important
7	3	Baggage handling process	4.88	.975	5: Important
1	4	Safety management	5.47	.660	5: Important
2	5	Passport/ID control	5.41	.612	5: Important
3	6	Mobility	5.33	.738	5: Important
6	7	Airport facilities	4.97	.684	5: Important
Total Departure			5.18	.536	5: Important
Arrival					
5	8	Deboarding	5.04	.783	5: Important
1	9	Immigration	5.27	.681	5: Important
3	10	Baggage reclaims	5.24	.640	5: Important
2	11	Customs	5.24	.680	5: Important
4	12	Before leaving from the airport	5.15	.802	5: Important
Total Arrival			5.19	.563	5: Important

4.5.1.3 Description on Efficiency Levels of Departure Zone

From data collection, the efficiency level of departure zone also started from “accessibility to the airport” is at efficient level (36.4%, M=4.78) (Table 4.72).

When considering into each variable, it is found that the levels of efficiency of all variables are positive and can be sorted as follows; “(EA5)” with the highest mean score (38.9%, M=4.95), “EA3” (32.8%, M=4.91), “EA4” (34.0%, M=4.91), “EA6” (29.0%, M=4.87), “EA1” (20.3%, M=4.61), and “EA2” (33.2%, M=4.44) respectively (Table 4.73). Next was the “check-in process management” is strongly efficient level the sum was 54.1%, M=5.28, can be sorted as follows “ECh2” (66.5%, M=5.54), “ECh4” (63.5%, M=5.50), “ECh3” (54.5%, M=5.41), “ECh5” (47.5%, M=5.12), “ECh1” (46.0%, M=5.05), and “ECh6” (46.5%, M=5.04) (Table 4.74 - 4.75).

And the last one for this paragraph the efficiency levels of “baggage handling process” is at the efficient level (42.2%, M=4.79). When considering each variable, the efficient levels of all variables are also efficient level; “EB4” (46.1%, M=4.97), “EB3” (43.0%, M=4.82), “EB2” (46.1%, M=4.78), and “EB1” (38.1%, M=4.60) (Table 4.76 - 4.77).

Table 4.72 Frequency and Percentage on Levels of Efficiency toward Accessibility to the Airport

Accessibility to the Airport	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Public transport to the airport is convenient. (Airport bus, limousine, etc.) (EA1)	325	66	119	103	23	11	3	4.61	1.051
(%)		20.3	36.6	31.7	7.1	3.4	.9		
2. Public transport prices to the airport are appropriate for each type of service. (EA2)	325	52	108	113	38	10	4	4.44	1.066
(%)		16.0	33.2	34.8	11.7	3.1	1.2		
3. Strictly screened for COVID-19 (Terminal Screening) (EA3)	400	131	137	107	18	5	2	4.91	.981
(%)		32.8	34.3	26.8	4.5	1.3	.5		

Accessibility to the Airport	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
4. Body temperature screening by non-contact infrared thermometer. (EA4)	400	136	139	92	22	7	7	4.91	1.050
(%)		34.0	34.8	23.0	5.5	1.8	1.0		
5. Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal. (EA5)	386	123	150	90	18	4	1	4.95	.934
(%)		31.9	38.9	23.3	4.7	1.0	.3		
6. Provide clearly defined zones and paths for entry and exit. (EA6)	400	116	162	87	27	6	2	4.87	.989
(%)		29.0	40.5	21.8	6.8	1.5	.5		
Total Efficiency: Accessibility to the airport (EA)	2236	624	815	592	146	43	19	4.78	.756
(%)		27.3	36.4	26.9	6.7	2.0	0.7		

Table 4.73 Efficiency Mean Ranking of Accessibility to the Airport

Rank	Accessibility to the Airport	N	Mean	S.D.	Efficiency Levels*	% Counts
1	5. Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal. (EA5)	386	4.95	0.934	5: Efficient	38.9
2	3. Strictly screened for COVID-19 (Terminal Screening) (EA3)	400	4.91	0.981	5: Efficient	32.8
3	4. Body temperature screening by non-contact infrared thermometer. (EA4)	400	4.91	1.05	5: Efficient	34.0
4	6. Provide clearly defined zones and paths for entry and exit. (EA6)	400	4.87	0.989	5: Efficient	29.0

Rank	Accessibility to the Airport	N	Mean	S.D.	Efficiency Levels*	% Counts
5	1. Public transport to the airport is convenient. (Airport bus, limousine, etc.) (EA1)	325	4.61	1.051	5: Efficient	20.3
6	2. Public transport prices to the airport are appropriate for each type of service. (EA2)	325	4.44	1.066	5: Efficient	33.2
Total Efficiency: Accessibility to the airport (EA)		2236	4.78	.756	5: Efficient	36.4

Table 4.74 Frequency and Percentage on Levels of Efficiency toward Check-in Process Management

Check-in Process Management	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Self-check-in via mobile phone or kiosk (ECh1)	290	90	93	53	31	13	10	4.64	1.324
(%)		31.0	32.1	18.3	10.7	4.5	3.4		
2. Fast and convenient check-in processes (ECh2)	400	128	142	101	23	3	3	4.90	.991
(%)		32.0	35.4	25.3	5.7	.8	.8		
3. The check-in area is enough and convenient. (ECh3)	400	133	141	105	18	2	1	4.96	.927
(%)		33.3	35.3	26.3	4.5	.5	.3		
4. Check-in staff provide service with politeness. (ECh4)	400	172	123	93	12	-	-	5.14	.875
(%)		43.0	30.8	23.3	3.0	-	-		
5. Provide social distancing while waiting at check-in counters. (ECh5)	400	98	145	102	36	16	3	4.66	1.108
(%)		24.5	36.3	25.5	9.0	4.0	.8		

Check-in Process Management	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
6. Provide alcohol gel at the check-in counters. (ECh6)	377	128	127	93	21	5	3	4.91	1.025
(%)		34.0	33.7	24.7	5.6	1.3	.8		
Total Efficiency: Check-in process management	2267	749	771	547	141	39	20	4.87	.782
(%)		31.6	32.5	23.1	6.0	2.0	1.0		

Table 4.75 Efficiency Mean Ranking of Check-in Process Management

Rank	Check-in Process Management	N	Mean	S.D.	Efficiency Levels*	% Counts
1	4. Check-in staff provide service with politeness. (ECh4)	400	5.14	.875	Strongly efficient	43.0
2	3. The check-in area is enough and convenient. (ECh3)	400	4.96	.927	Efficient	35.3
3	6. Provide alcohol gel at the check-in counters. (ECh6)	377	4.91	1.025	Strongly efficient	34.0
4	2. Fast and convenient check-in processes (ECh2)	400	4.90	.991	Efficient	35.4
5	5. Provide social distancing while waiting at check-in counters. (ECh5)	400	4.66	1.108	Efficient	36.3
6	1. Self-check-in via mobile phone or kiosk (ECh1)	290	4.64	1.324	Efficient	32.1
Total	Efficiency: Check-in process management	2267	4.87	.782	Efficient	32.5

Table 4.76 Frequency and Percentage on Levels of Efficiency toward Baggage Handling Process

Baggage Handling Process	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Self-check-in baggage system is available. (EB1)	265	54	101	81	16	4	9	4.60	1.128
(%)		20.4	38.1	30.6	6.0	1.5	3.4		
2. The sufficiency of the cart (EB2)	291	63	121	90	13	4		4.78	.884
(%)		21.6	41.6	30.9	4.5	1.4			
3. The quality of the cart (EB3)	291	69	125	78	15	2	2	4.82	.924
(%)		23.7	43.0	26.8	5.2	.7	.7		
4. Efficiency in baggage handling (EB4)		96	155	68	14	2	1	4.97	.870
(%)	336	28.6	46.1	20.2	4.2	.6	.3		
Total Efficiency: Baggage handling process	1,183	282	502	317	58	12	12	4.79	.823
(%)		23.6	42.2	27.1	5.0	1.1	1.5		

Table 4.77 Efficiency Mean Ranking of Baggage Handling Process

Rank	Baggage Handling Process	N	Mean	S.D.	Efficiency Levels*	% Counts
1	4. Efficiency in baggage handling (EB4)	336	4.97	.870	Efficient	46.1
2	3. The quality of the cart (EB3)	291	4.82	.924	Efficient	43.0
3	2. The sufficiency of the cart (EB2)	291	4.78	.884	Efficient	46.1
4	1. Self-check-in baggage system is available. (EB1)	265	4.60	1.128	Efficient	38.1
Total Efficiency: Baggage handling process		1183	4.79	.823	Efficient	42.2

Results also indicated that “safety management” is at the efficient levels (44.6%, M=5.16). When considering each variable, the efficiency of all variables is at efficient levels; “ES5”, with the highest mean score (45.5%, M=5.23) followed by “ES3” (42.5%, M=5.18), “ES1” (45.0%, M=5.15), “ES4” (45.3%, M=5.15), and “ES2” (44.5%, M=5.11). The efficiency levels of “passport/ID control,” are at the efficient levels (38.9%, M=5.08). When considering each variable; “EP1” (41.3%, M=5.18) and “EP2” (38.3%, M=5.08) are the same at strongly efficient levels, while “EP4” 38.5%, M=5.12), “EP3” (41.0%, M=5.07) and “EP5” (40.2%, M=4.97) are at the efficient level (Table 4.78 - 4.81).

According to “mobility”, the findings reveal that the efficiency levels of mobility are at the efficient level (42.2%, M=4.96). When considering each variable; “EM1” (44.3%, M=5.19) and “EM2” (39.3%, M=5.04) are the same at strongly efficient levels, whilst “EM4” 45.2%, M=4.98), “EM5” (50.4%, M=4.92) and “EM3” (42.3%, M=4.68) are at the efficient level respectively (Table 4.82 - 4.83).

Table 4.78 Frequency and Percentage on Levels of Efficiency toward Safety Management

Safety Management	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Duration of security checks in each step. (ES1)	400	149	180	53	17	1		5.15	.823
(%)		37.3	45.0	13.3	4.3	.3			
2. Courtesy and service willingness of security inspectors. (ES2)	400	143	178	59	18	2		5.11	.849
(%)		35.8	44.5	14.8	4.5	.5			
3. The security inspectors are professional. (ES3)	400	160	170	57	11		2	5.18	.837
(%)		40.0	42.5	14.3	2.8		.5		

Safety Management	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
4. The procedure for screening at the scanning point is simple. (ES4)	400	151	181	49	15	2	2	5.15	.869
(%)		37.8	45.3	12.3	3.8	.5	.5		
5. Sense of safety and security in this airport. (ES5)	400	162	182	44	11	1		5.23	.771
(%)		40.5	45.5	11.0	2.8	.3			
Total efficient: Safety management	2,000	765	891	262	72	6	4	5.16	.699
(%)		38.3	44.6	13.1	3.6	0.4	.5		

Table 4.79 Efficiency Mean Ranking of Safety Management

Rank	Safety management	N	Mean	S.D.	Efficiency Levels*	% Counts
1	5. Sense of safety and security in this airport. (ES5)	400	5.23	.771	Efficient	45.5
2	3. The security inspectors are professional. (ES3)	400	5.18	.837	Efficient	42.5
3	1. Duration of security checks in each step. (ES1)	400	5.15	.823	Efficient	45.0
4	4. The procedure for screening at the scanning point is simple. (Sa4)	400	5.15	.869	Efficient	45.3
5	2. Courtesy and service willingness of security inspectors. (ES2)	400	5.11	.849	Efficient	44.5
Total Efficiency: Safety management		2000	5.16	.699	Efficient	44.6

Table 4.80 Frequency and Percentage on Levels of Efficiency toward Passport/ID Control

Passport/ID Control	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Rapid passport check (EP1)	400	165	157	67	6	4	1	5.18	.861
(%)		41.3	39.3	16.8	1.5	1.0	.3		
2. Courtesy and service willingness of the passport inspector. (EP2)	400	153	141	92	13	1	-	5.08	.872
(%)		38.3	35.3	23.0	3.3	.3	-		
3. There is a simple screening process. (EP3)	400	144	164	75	15	3	1	5.07	.893
(%)		36.0	41.0	18.3	3.8	.8	.3		
4. Sense of security in the travel document inspection process. (EP4)	400	153	154	80	12	1	-	5.12	.845
(%)		38.3	38.5	20.0	3.0	.3	-		
5. Provide social distancing while waiting at the passport control area. (EP5)	391	122	157	94	13	5	-	4.97	.895
(%)		31.2	40.2	24.0	3.3	1.3	-		
Total Efficiency: Passport/ID control	1,991	736	773	408	59	14	2	5.08	.736
(%)		37.0	38.9	20.4	3.0	0.7	0.3		

Table 4.81 Efficiency Mean Ranking of Passport/ID Control

Rank	Passport/ID control	N	Mean	S.D.	Efficiency Levels*	% Counts
1	1.Rapid passport check (EP1)		5.18	.861	Strongly efficient	41.3
2	4. Sense of security in the travel document inspection process. (EP4)		5.12	.845	Efficient	38.5
3	2. Courtesy and service willingness of the passport inspector. (EP2)		5.08	.872	Strongly efficient	38.3
4	3. There is a simple screening process. (EP3)		5.07	.893	Efficient	41.0
5	5. Provide social distancing while waiting at the passport control area. (EP5)		4.97	.895	Efficient	40.2
Total Efficiency: Passport/ID control			5.08	.736	Efficient	38.9

Table 4.82 Frequency and Percentage on Levels of Efficiency toward Mobility

Mobility	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Signs and symbols are easy to understand. (EM1)	397	176	145	57	15	2	2	5.19	.911
(%)		44.3	36.5	14.4	3.8	.5	.5		
2. The flight information display is visible. (EM2)	397	156	145	59	31	4	2	5.04	1.013
(%)		39.3	36.5	14.8	7.8	1.0	.5		
3. Shuttle service within the terminal (EM3)	234	53	99	51	22	3	6	4.68	1.117
(%)		22.6	42.3	21.8	9.4	1.3	2.6		
4. Walking distance between terminals is execrable. (EM4)	336	98	152	71	12	3	-	4.98	.853
(%)		29.2	45.2	21.1	3.6	.9	-		

Mobility	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
5. Readiness to help people with disabilities. (EM5)	278	66	140	60	9	1	2	4.92	.852
(%)		23.7	50.4	21.6	3.2	.4	.7		
Total Efficiency: Mobility	1,642	549	681	298	89	13	12	4.96	.743
(%)		31.8	42.2	18.7	5.6	0.8	1.1		

Table 4.83 Efficiency Mean Ranking of Mobility

Rank	Mobility	N	Mean	S.D.	Efficiency Levels*	% Counts
1	1. Signs and symbols are easy to understand. (EM1)	397	5.19	.911	Strongly efficient	44.3
2	2. The flight information display is visible. (EM2)	397	5.04	1.013	Strongly efficient	39.3
3	4. Walking distance between terminals is execrable. (EM4)	336	4.98	.853	Efficient	45.2
4	5. Readiness to help people with disabilities. (EM5)	278	4.92	.852	Efficient	50.4
5	3. Shuttle service within the terminal (EM3)	234	4.68	1.117	Efficient	42.3
Total Efficiency: Mobility		1642	4.96	.743	Efficient	42.2

And the last section of the departure zone of the efficiency levels, “airport facilities” is at “efficient” level (31.2%, M=4.38) (Table 4.84). When considering each variable, it was found that only one attribute was rated at strongly efficient levels, EF7 (42.0%, M=5.20). There were 7 attributes that were mainly evaluated at level 5 which was the efficiency level. Seven attributes were compounded with 1) “EF8” (41.2%, M=5.14), 2) “EF13” (39.9%, M=4.89), 3) “EF9” (42.1%, M=4.84), 4) “EF11” (30.5%,

M=4.39), 5) “EF12” (29.5%, M=4.38), 6) “EF6” (29.5%, M=4.20), and 7) “EF5” (30.3%, M=4.18).

The rest five attributes were mainly evaluated at level 4, which were the “somewhat efficient” level. Five attributes were compounded with 1) “EF10” (30.0%, M=4.04), 2) “EF1” (33.1%, M=4.03), 3) “EF2” (31.2%, M=3.97) 4) “EF4” (32.2%, M=3.93) and 5) “EF3” (31.0%, M=3.81) can be ranking by Table 4.85.

Table 4.84 Frequency and Percentage on Levels of Efficiency toward Airport Facilities

Airport Facilities	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Variety of shops, souvenirs / duty free (shopping) within the airport. (EF1)	363	40	90	120	79	23	11	4.03	1.198
(%)		11.0	24.8	33.1	21.8	6.3	3.0		
2. Value for money of shopping at the airport. (EF2)	353	34	90	110	80	29	10	3.97	1.206
(%)		9.6	25.5	31.2	22.7	8.2	2.8		
3. Variety of restaurants and beverages. (EF3)	381	42	69	118	95	39	18	3.81	1.293
(%)		11.0	18.1	31.0	24.9	10.2	4.7		
4. Value for money of foods and beverage. (EF4)	373	46	77	120	82	31	17	3.93	1.289
(%)		12.3	20.6	32.2	22.0	8.3	4.6		
5. Airport executive lounge is available. (EF5)	228	36	69	61	32	21	9	4.18	1.332
(%)		15.8	30.3	26.8	14.0	9.2	3.9		
6. WIFI signal quality (EF6)	346	73	102	67	48	36	20	4.20	1.477
(%)		21.1	29.5	19.4	13.9	10.4	5.8		
7. Availability of toilets (EF7)	388	163	156	56	9	3	1	5.20	.855

Airport Facilities	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
(%)		42.0	40.2	14.4	2.3	.8	.3		
8. The cleanliness of the toilet facilities. (EF8)	388	150	160	63	12	2	1	5.14	.862
(%)		38.7	41.2	16.2	3.1	.5	.3		
9. Charging battery station and seats at the boarding gate available. (EF9)	347	93	146	81	18	4	5	4.84	1.010
(%)		26.8	42.1	23.3	5.2	1.2	1.4		
10. Children's area/playground. (EF10)	207	30	57	62	24	18	16	4.04	1.422
(%)		14.5	27.5	30.0	11.6	8.7	7.7		
11. Drinking water point and quality of water. (EF11)	272	56	83	74	35	19	5	4.39	1.246
(%)		20.6	30.5	27.2	12.9	7.0	1.8		
12. Availability of banks/ATM/exchange. (EF12)	274	49	98	75	23	17	12	4.38	1.290
(%)		17.9	35.8	27.4	8.4	6.2	4.4		
13. Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal. (EF13)	348	102	139	82	18	4	3	4.89	.983
(%)		29.3	39.9	23.6	5.2	1.1	.9		
Total Efficiency: Accessibility to the airport	4268	914	1336	1089	555	246	128	4.38	.816
(%)		20.8	31.2	25.8	12.9	6.0	3.2		

Table 4.85 Efficiency Mean Ranking of Airport Facilities

Rank	Airport Facilities	N	Mean	S.D.	Efficiency Levels*	% Counts
1	7. Availability of toilets (EF7)	388	5.20	.855	Strongly efficient	42.0
2	8. The cleanliness of the toilet facilities. (EF8)	388	5.14	.862	Efficient	41.2
3	13. Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal. (EF13)	348	4.89	.983	Efficient	39.9
4	9. Charging battery station and seats at the boarding gate available. (EF9)	347	4.84	1.01	Efficient	42.1
5	11. Drinking water point and quality of water. (EF11)	272	4.39	1.246	Efficient	30.5
6	12. Availability of banks/ATM/exchange. (EF12)	274	4.38	1.290	Efficient	29.5
7	6. WIFI signal quality (EF6)	346	4.2	1.477	Efficient	29.5
8	5. Airport executive lounge is available. (EF5)	228	4.18	1.332	Efficient	30.3
9	10. Children's area/playground. (EF10)	207	4.04	1.422	Somewhat efficient	30.0
10	1. Variety of shops, souvenirs / duty free (shopping) within the airport. (EF1)	363	4.03	1.198	Somewhat efficient	33.1
11	2. Value for money of shopping at the airport. (EF2)	353	3.97	1.206	Somewhat efficient	31.2
12	4. Value for money of foods and beverage. (EF4)	373	3.93	1.289	Somewhat efficient	32.2
13	3. Variety of restaurants and beverages. (EF3)	381	3.81	1.293	Somewhat efficient	31.0
Total Efficiency: Airport facilities		4268	4.38	.816	Efficient	31.2

4.5.1.4 Description on Efficiency Levels of Arrival Zone

The efficiency levels of “deboarding” are at the efficient level 43.1%, M=4.79). When considering each variable, the efficiency of all variables is at efficient levels; “ED6”, with the highest mean score (41.0%, M=4.88) followed by “ED4” (44.3%, M=4.86), “ED5” (40.7%, M=4.83), “ED1” (48.0%, M=4.83), “ED3” (47.0%,

M=4.83) and “ED2” (37.3%, M=4.52). (Table 4.86-4.87). Next was the “immigration” is efficient level the sum was 35.7%, M=4.78, can be sorted as follows “EI3” (34.0%, M=4.86), “EI1” (37.3%, M=4.79), “EI4” (35.8%, M=4.79), “EI2” (35.5%, M=4.75) and “EI5” (35.8%, M=4.70) (Table 4.88 - 4.89).

In terms of the efficiency levels of “baggage reclaims” is at the efficient levels (44.2%, M=5.01). When classified by variables, it was found that all variables were also at the efficient level. and can be arranged as follows: “EBr2”, with the highest mean (35.5%, M=5.08) followed by “EBr1” (45.3%, M=5.03), “EBr5” (45.0%, M=4.99), “EBr6” (50.9%, M=4.99), “EBr4” (41.0%, M=4.99) and “EBr3” (42.1%, M=4.97) correspondingly (Table 4.90- 4.91).

Table 4.86 Frequency and Percentage on Levels of Efficiency toward Deboarding

Deboarding	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. The waiting time before deboarding the aircraft. (ED1)	400	84	192	102	17	5		4.83	.849
(%)		21.0	48.0	25.5	4.3	1.3			
2. Provide social distancing while deboarding the aircraft. (ED2)	400	75	149	116	39	12	9	4.52	1.128
(%)		18.8	37.3	29.0	9.8	3.0	2.3		
3. The walking distance from the aircraft to the exit of the restricted area. (ED3)	400	86	188	102	21	2	1	4.83	.859
(%)		21.5	47.0	25.5	5.3	.5	.3		
4. Provide clearly defined zones from the aircraft to the exit of the restricted area. (ED4)	400	90	177	121	12	-	-	4.86	.794
(%)		22.5	44.3	30.3	3.0	-	-		

Deboarding	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
5. Provide alcohol gel between aisle to the exit of the restricted area. (ED5)	359	87	146	106	19	1	-	4.83	.865
(%)		24.2	40.7	29.5	5.3	.3	-		
6. Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. (ED6)	373	104	153	91	19	4	2	4.88	.947
(%)		27.9	41.0	24.4	5.1	1.1	.5		
Total efficiency: Deboarding	2332	526	1005	638	127	24	12	4.79	.704
(%)		22.7	43.1	27.4	5.5	1.2	1.0		

Table 4.87 Efficiency Mean Ranking of Deboarding

Rank	Deboarding	N	Mean	S.D.	Efficiency Levels*	% Counts
1	6. Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. (ED6)	373	4.88	.947	Efficient	41.0
2	4. Provide clearly defined zones from the aircraft to the exit of the restricted area. (ED4)	400	4.86	.794	Efficient	44.3
3	5. Provide alcohol gel between aisle to the exit of the restricted area. (ED5)	359	4.83	.865	Efficient	40.7
4	1. The waiting time before deboarding the aircraft. (ED1)	400	4.83	.849	Efficient	48.0
5	3. The walking distance from the aircraft to the exit of the restricted area. (ED3)	400	4.83	.859	Efficient	47.0
6	2. Provide social distancing while deboarding the aircraft. (ED2)	400	4.52	1.128	Efficient	37.3

Rank	Deboarding	N	Mean	S.D.	Efficiency Levels*	% Counts
Total Efficiency: Deboarding		2332	4.79	.704	Efficient	43.1

Table 4.88 Frequency and Percentage on Levels of Efficiency toward Immigration

Immigration	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Waiting time before accessing the immigration system. (EI1)	400	100	149	128	16	5	2	4.79	.939
(%)		25.0	37.3	32.0	4.0	1.3	.5		
2. The ease of using the system. (EI2)	400	96	142	136	20	5	1	4.75	.935
(%)		24.0	35.5	34.0	5.0	1.3	.3		
3. Courtesy and helpfulness of airport staff in managing queues. (EI3)	385	118	131	109	20	6	1	4.86	.981
(%)		30.6	34.0	28.3	5.2	1.6	.3		
4. Courtesy and politeness of the immigration officer. (EI4)	400	110	143	112	26	7	2	4.79	1.006
(%)		27.5	35.8	28.0	6.5	1.8	.5		
5. Provide social distancing while waiting immigrant area. (EI5)	385	92	138	115	30	6	4	4.70	1.033
(%)		23.9	35.8	29.9	7.8	1.6	1.0		
Total Efficiency: Immigration	1970	516	703	600	112	29	10	4.78	.822
(%)		26.2	35.7	30.4	5.7	1.5	0.5		

Table 4.89 Efficiency Mean Ranking of Immigration

Rank	Immigration	N	Mean	S.D.	Efficiency Levels*	% Counts
1	3. Courtesy and helpfulness of airport staff in managing queues. (EI3)	385	4.86	.981	Efficient	34.0
2	1. Waiting time before accessing the immigration system. (EI1)	400	4.79	.939	Efficient	37.3
3	4. Courtesy and politeness of the immigration officer. (EI4)	400	4.79	1.006	Efficient	35.8
4	2. The ease of using the system. (EI2)	400	4.75	.935	Efficient	35.5
5	5. Provide social distancing while waiting immigrant area. (EI5)	385	4.7	1.033	Efficient	35.8
Total Efficiency: Immigration		1970	4.78	.822	Efficient	35.7

Table 4.90 Frequency and Percentage on Levels of Efficiency toward Baggage Reclaims

Baggage reclaims	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Walking distance to get to the baggage claim area. (Ebr1)	400	121	181	87	11			5.03	.794
(%)		30.3	45.3	21.8	2.8				
2. Flight display on carousel screens. (Ebr2)	380	134	156	78	12			5.08	.824
(%)		35.5	41.1	20.5	3.2				
3. Waiting time before retrieving baggage. (Ebr3)	380	112	160	94	13	1		4.97	.839
(%)		29.5	42.1	24.7	3.4	.3			
4. Availability of toilets in the baggage claim area. (Ebr4)	327	103	134	77	10	3		4.99	.870
(%)		31.5	41.0	23.5	3.1	.9			

Baggage reclaims	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
5. The cleanliness of toilets at the baggage reclaims area. (Ebr5)	327	102	147	58	15	4	1	4.99	.913
(%)		31.2	45.0	17.7	4.6	1.2	.3		
6. Availability of carts/trolleys (Ebr6)	334	88	170	64	9	3		4.99	.803
(%)		26.3	50.9	19.2	2.7	.9			
Total efficiency: Baggage reclaims	2148	660	947	458	70	11	1	5.01	.677
(%)		30.7	44.2	21.2	3.3	0.8	0.3		

Table 4.91 Efficiency Mean Ranking of Baggage Reclaims

Rank	Baggage reclaims	N	Mean	S.D.	Efficiency Levels*	% Counts
1	2. Flight display on carousel screens. (Ebr2)	380	5.08	.824	Efficient	35.5
2	1. Walking distance to get to the baggage claim area. (Ebr1)	400	5.03	.794	Efficient	45.3
3	5. The cleanliness of toilets at the baggage reclaims area. (Ebr5)	327	4.99	.913	Efficient	45.0
4	6. Availability of carts/trolleys (Ebr6)	334	4.99	.803	Efficient	50.9
5	4. Availability of toilets in the baggage claim area. (Ebr4)	327	4.99	.870	Efficient	41.0
6	3. Waiting time before retrieving baggage. (Ebr3)	380	4.97	.839	Efficient	42.1
Total Efficiency: Baggage reclaims		2148	5.01	.677	Efficient	44.2

The efficiency levels of “customs” are at the efficient level (45.5%, M=4.94). When considering each variable, the efficiency levels of all variables are also efficient level; “EC1” (44.5%, M=4.98), “EC3” (48.8%, M=4.97), “EC2” (43.8%,

M=4.96), and “EC4” (44.7%, M=4.85). And the last section of the efficiency levels “before leaving from the airport” is at “efficient” level 39.8%, M=4.68). When considering each variable; “EB1” is efficient level, with the highest mean score (42.0%, M=4.80) while “EB12” (38.1%, M=4.70) and “EB13” (39.2%, M=4.55) are efficient, with the lowest mean score (Table 4.92- 4.96).

Table 4.92 Frequency and Percentage on Levels of Efficiency toward Customs

Customs	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Waiting time to go through customs. (EC1)	384	112	171	86	11	3	1	4.98	.862
(%)		29.2	44.5	22.4	2.9	.8	.3		
2. Setup/organization of queues (EC2)	384	114	168	79	19	3	1	4.96	.902
(%)		29.7	43.8	20.6	4.9	.8	.3		
3. Courtesy and politeness of the customs officer. (EC3)	377	101	184	74	16	2		4.97	.826
(%)		26.8	48.8	19.6	4.2	.5			
4. Provide social distancing while waiting in the customs area. (EC4)	376	91	168	93	19	2	3	4.85	.919
(%)		24.2	44.7	24.7	5.1	.5	.8		
Total efficiency: Customs	1521	418	691	332	65	10	5	4.94	.752
(%)		27.5	45.5	21.8	4.3	0.7	0.5		

Table 4.93 Efficiency Mean Ranking of Customs

Rank	Customs	N	Mean	S.D.	Efficiency Levels*	% Counts
1	1. Waiting time to go through customs. (EC1)	384	4.98	.862	Efficient	44.5
2	3. Courtesy and politeness of the customs officer. (EC3)	377	4.97	.826	Efficient	48.8
3	2. Setup/organization of queues (EC2)	384	4.96	.902	Efficient	43.8
4	4. Provide social distancing while waiting in the customs area. (EC4)	376	4.85	.919	Efficient	44.7
Total Efficiency: Customs		1521	4.94	.752	Efficient	45.5

Table 4.94 Frequency and Percentage on Levels of Efficiency toward Before Leaving from the Airport

Before Leaving from the Airport	N	Strongly efficient (6)	Efficient (5)	Somewhat efficient (4)	Somewhat inefficient (3)	Inefficient (2)	Strongly inefficient (1)	X	S.D.
1. Arrival tourist assistance center (EB11)	305	71	128	87	14	3	2	4.80	.926
(%)		23.3	42.0	28.5	4.6	1.0	.7		
2. Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.) (EB12)	320	72	122	98	19	5	4	4.70	1.012
(%)		22.5	38.1	30.6	5.9	1.6	1.3		
3. Public transport prices are appropriate for each type of service (EB13).	314	50	123	103	29	5	4	4.55	1.001
(%)		15.9	39.2	32.8	9.2	1.6	1.3		
Total efficiency: Before leaving from the airport	939	193	373	288	62	13	10	4.68	.880
(%)		20.6	39.8	30.6	6.6	1.4	1.1		

Table 4.95 Efficiency Mean Ranking of Before Leaving from the Airport

Rank	Before Leaving from the Airport	N	Mean	S.D.	Efficiency Levels*	% Counts
1	1. Arrival tourist assistance center (EB11)	305	4.80	.926	Efficient	42.0
2	2. Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.) (EB12)	320	4.70	1.012	Efficient	38.1
3	3. Public transport prices are appropriate for each type of service. (EB13)	314	4.55	1.001	Efficient	39.2
Total Efficiency: Before leaving from the airport		939	4.68	.880	Efficient	39.8

Table 4.96 Efficiency Mean Score Ranking of Airport Management Attributes

	Attributes	Mean	S.D.	Efficiency Levels*
Departure				
1	Accessibility to the airport	4.78	.756	5: Efficient
2	Check-in process management	4.87	.782	5: Efficient
3	Baggage handling process	4.79	.823	5: Efficient
4	Safety management	5.16	.699	5: Efficient
5	Passport/ID control	5.08	.736	5: Efficient
6	Mobility	4.96	.743	5: Efficient
7	Airport facilities	4.38	.816	5: Efficient
Total Departure		4.86	.566	5: Efficient
Arrival				
8	Deboarding	4.79	.704	5: Efficient
9	Immigration	4.78	.822	5: Efficient
10	Baggage reclaims	5.01	.677	5: Efficient
11	Customs	4.94	.752	5: Efficient
12	Before leaving from the airport	4.68	.880	5: Efficient
Total Arrival		4.84	.603	5: Efficient

Note: Efficiency levels derived from frequency counts at each efficiency level, not the mean scores.

4.5.2 Hypothesis Testing of Passenger's Socio-Demographic Profiles

Passenger's socio-demographic profiles have affected the evaluation of customer journey management efficiency of Phuket international airport.

The socio-demographics profile of interest in the analysis namely 1) gender, 2) age, 3) education, 4) occupation, 5) income, 6) resident, 7) marital status, 8) religion, 9) number of visits, 10) times at the airport, 11) number of companions, and 12) estimate spending in the airport. At 0.05 significant, can be formulated as Hypothesis 13 as follows.

H13.1: Passenger's socio-demographic profiles of the international departure zone has affected the evaluation of customer journey management efficiency of Phuket International Airport.

1) Gender

T-test statistics investigated this hypothesis, and the result of the p-value of 0.004 is below the significance level (.05). It can be interpreted that the respondents with different genders have different evaluations of overall efficiency toward "factors affecting customer journey management efficiency of Phuket International Airport".

Regarding individual factors, the findings reveal that airport passengers with different genders do not have different evaluations of efficiency toward "baggage handling process", "safety management", "mobility", or "airport facilities" with p-value at 0.114, 0.188, and 0.652 respectively. However, the results indicate that different genders have different evaluation levels toward "accessibility to the airport", "check-in process", "mobility", and "airport facilities" with a p-value of 0.008, 0.009, 0.001 and 0.030 respectively (Table 4.97).

Table 4.97 Gender Comparison on Efficiency Levels of Attributes

Attributes	Gender				t	df	Sig
	Male		Female				
	M	S.D.	M	S.D.			
Accessibility to the airport	4.74	.775	4.94	.711	-2.670	398	.008*
Check-in process management	4.80	.807	5.00	.728	-2.608	398	.009*
Baggage handling process	4.81	4.80	4.94	.788	-1.584	349	.114
Safety management	5.12	.682	5.22	.723	-1.319	398	.188

Attributes	Gender				t	df	Sig
	Male		Female				
	M	S.D.	M	S.D.			
Passport/ID control	4.99	.731	5.23	.721	-3.222	398	.001*
Mobility	5.02	.738	5.05	.753	-.451	396	.652
Airport facilities	4.34	.807	4.52	.820	-2.173	393	.030*
Average Scores	4.83	.556	4.99	.567	-2.858	398	.004*

2) Age (Generations)

The findings presented in Table 4.98 reveal a p-value of 0.245 which is more than 0.05. It can be interpreted that airport passengers with different 'age' don't evaluate the overall efficiency of customer journey management of Phuket international airport differently.

Table 4.98 Analysis of Variance between Age and Efficiency Levels on Airport

Attributes-Age	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	1.709	4	.427	.746	.561
Within Groups	226.266	395	.573		
Total	227.975	399			
Check-in process management					
Between Groups	3.079	4	.770	1.263	.284
Within Groups	240.818	395	.610		
Total	243.898	399			
Baggage handling process					
Between Groups	3.958	4	.990	1.468	.212
Within Groups	233.252	346	.674		
Total	237.210	350			
Safety management					
Between Groups	3.068	4	.767	1.577	.180
Within Groups	192.090	395	.486		
Total	195.157	399			
Passport/ID control					
Between Groups	4.847	4	1.212	2.268	.061
Within Groups	211.031	395	.534		

Attributes-Age	SS	df	Mean Square	F	Sig.
Total	215.878	399			
Mobility					
Between Groups	1.223	4	.306	.551	.698
Within Groups	218.178	393	.555		
Total	219.402	397			
Airport facilities					
Between Groups	1.279	4	.320	.477	.752
Within Groups	261.130	390	.670		
Total	262.408	394			
All Departure					
Between Groups	1.741	4	.435	1.366	.245
Within Groups	125.862	395	.319		
Total	127.604	399			

Note: F-test (mean differences) at 0.05 significant level

3) Education

A one-way ANOVA test yields a p-value of 0.167, which is more than 0.05. It is interpreted that airport passengers with different education don't evaluate the efficiency of customer journey management of Phuket international airport differently. However, the findings show that there is one p-value lower than 0.05, which is "safety management" (.038). It can be interpreted that airport passengers with different education evaluate the efficiency toward "safety management" differently. (Table 4.99).

Further, a post-hoc test was performed to find the difference of airport passengers' evaluation of efficiency toward "safety management" with different education. The findings reveal no differences in the evaluations of efficiency toward "safety management" of airport passengers with different education.

Table 4.99 Analysis of Variance between Education and Efficiency Levels on Airport Attributes

Attributes-Education	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	1.845	2	.922	1.619	.199
Within Groups	226.130	397	.570		
Total	227.975	399			
Check-in process management					
Between Groups	1.317	2	.658	1.077	.341
Within Groups	242.581	397	.611		
Total	243.898	399			
Baggage handling process					
Between Groups	3.107	2	1.553	2.309	.101
Within Groups	234.103	348	.673		
Total	237.210	350			
Safety management					
Between Groups	3.198	2	1.599	3.307	.038*
Within Groups	191.960	397	.484		
Total	195.157	399			
Passport/ID control					
Between Groups	1.658	2	.829	1.537	.216
Within Groups	214.219	397	.540		
Total	215.878	399			
Mobility					
Between Groups	1.721	2	.860	1.561	.211
Within Groups	217.681	395	.551		
Total	219.402	397			
Airport facilities					
Between Groups	.554	2	.277	.415	.661
Within Groups	261.854	392	.668		
Total	262.408	394			
All Departure					
Between Groups	1.146	2	.573	1.799	.167
Within Groups	126.458	397	.319		
Total	127.604	399			

4) Occupation

The findings presented in Table 4.100 reveal that the p-value for overall efficiency levels of customer journey management of Phuket international airport is at 0.001, which is less than 0.05. It can be interpreted that the airport passengers with different occupations evaluate the efficiency levels of overall customer journey management of Phuket international airport differently.

When considering each factor of customer journey management, the p-value from testing “check-in process management”, “baggage handling process”, “safety management”, “Passport/ID control”, and “airport facilities” are 0.005, 0.035, 0.001, .000, and 0.033, respectively. This means that the airport passengers with different occupations evaluate the efficiency levels of each factor affecting customer journey management of Phuket international airport differently.

Table 4.100 Analysis of Variance between Occupation and Efficiency Levels on Airport Attributes

Attributes-Occupation	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	6.120	8	.765	1.348	.218
Within Groups	221.855	391	.567		
Total	227.975	399			
Check-in process management					
Between Groups	13.209	8	1.651	2.799	.005**
Within Groups	230.689	391	.590		
Total	243.898	399			
Baggage handling process					
Between Groups	11.140	8	1.392	2.106	.035*
Within Groups	226.070	342	.661		
Total	237.210	350			
Safety management					
Between Groups	12.403	8	1.550	3.317	.001**
Within Groups	182.754	391	.467		
Total	195.157	399			
Passport/ID control					
Between Groups	15.949	8	1.994	3.899	.000**

Attributes-Occupation	SS	df	Mean Square	F	Sig.
Within Groups	199.929	391	.511		
Total	215.878	399			
Mobility					
Between Groups	5.427	8	.678	1.233	.278
Within Groups	213.975	389	.550		
Total	219.402	397			
Airport facilities					
Between Groups	11.035	8	1.379	2.118	.033*
Within Groups	251.373	386	.651		
Total	262.408	394			
All Departure					
Between Groups	8.616	8	1.077	3.539	.001**
Within Groups	118.988	391	.304		
Total	127.604	399			

Further, a post-hoc was performed to find the pair of the airport passengers with different occupation who gave different evaluations of the efficiency of customer journey management of Phuket international airport. The findings are presented in Table 4.101.

The post-hoc test in Table 4.101 indicates a pair of different occupation of airport passengers with significantly different evaluations of the efficiency of “check-in process management” as follows: temporary worker / freelance and private business employee (M=4.54, 5.04).

The post-hoc test as presented in Table 4.101 indicates a pair of different occupation of airport passengers with significantly different evaluations of the efficiency of “safety management” as follows: temporary worker / freelance and private business employee (M= 4.83, 5.36).

The post-hoc test in Table 4.101 indicates two pairs of different occupation of airport passengers with significantly different evaluations of the efficiency of “passport/ID control” as follows: government / civil servant and temporary worker / freelance (M=5.18, 4.70), and temporary worker / freelance and private business employee (M=4.70, 5.26).

Attributes	Occupation Groups									
	X	1	2	3	4	5	6	7	8	9
7. Private business employee	5.26	-	-	-	-	-	-	-	-	-
8. Unemployed	5.29	-	-	-	-	-	-	-	-	-
9. Others (Please specify)	5.11	-	-	-	-	-	-	-	-	-
8. All Departure	X	1	2	3	4	5	6	7	8	9
1. Government / Civil servant	4.92	-	-	-	-	-	-	-	-	-
2. Business owner	4.96	-	-	-	-	-	-	-	-	-
3. Housewife	4.65	-	-	-	-	-	-	-	-	-
4.. Temporary worker / Freelance	4.61	-	-	-	-	-	-	.420*	-	-
5. Student	4.95	-	-	-	-	-	-	-	-	-
6. Retired	4.96	-	-	-	-	-	-	-	-	-
7. Private business employee	5.03	-	-	-	-	-	-	-	-	-
8. Unemployed	4.90	-	-	-	-	-	-	-	-	-
9. Others (Please specify)	4.98	-	-	-	-	-	-	-	-	-

5) Income

The findings presented in Table 4.102 reveal a p-value of 0.591 which is more than 0.05. It can be interpreted that airport passengers with different Income don't evaluate the overall efficiency of customer journey management of Phuket international airport differently.

Table 4.102 Analysis of Variance between Income and Efficiency Levels on Airport Attributes

Attributes-Income	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	1.703	5	.341	.584	.712
Within Groups	189.522	325	.583		
Total	191.225	330			
Check-in process management					
Between Groups	2.083	5	.417	.695	.628
Within Groups	194.823	325	.599		
Total	196.906	330			
Baggage handling process					
Between Groups	3.714	5	.743	1.126	.347

Attributes-Income	SS	df	Mean Square	F	Sig.
Within Groups	185.439	281	.660		
Total	189.154	286			
Safety management					
Between Groups	3.798	5	.760	1.652	.146
Within Groups	149.449	325	.460		
Total	153.247	330			
Passport/ID control					
Between Groups	2.838	5	.568	1.041	.394
Within Groups	177.263	325	.545		
Total	180.101	330			
Mobility					
Between Groups	1.208	5	.242	.430	.828
Within Groups	181.490	323	.562		
Total	182.698	328			
Airport facilities					
Between Groups	1.057	5	.211	.318	.902
Within Groups	213.875	322	.664		
Total	214.932	327			
All Departure					
Between Groups	1.155	5	.231	.744	.591
Within Groups	100.891	325	.310		
Total	102.046	330			

6) Resident

The findings presented in Table 4.103 reveal a p-value of 0.179 which is more than 0.05. It can be interpreted that airport passengers with different residents don't evaluate the overall efficiency of customer journey management of Phuket international airport differently.

Table 4.103 Analysis of Variance between Resident and Efficiency Levels on Airport Attributes

Attributes-Resident	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	11.317	16	.707	1.250	.227
Within Groups	216.657	383	.566		
Total	227.975	399			
Check-in process management					
Between Groups	12.360	16	.773	1.278	.208
Within Groups	231.537	383	.605		
Total	243.898	399			
Baggage handling process					
Between Groups	15.049	16	.941	1.414	.132
Within Groups	222.160	334	.665		
Total	237.210	350			
Safety management					
Between Groups	10.145	16	.634	1.313	.186
Within Groups	185.012	383	.483		
Total	195.158	399			
Passport/ID control					
Between Groups	7.121	16	.445	.817	.667
Within Groups	208.757	383	.545		
Total	215.878	399			
Mobility					
Between Groups	14.076	16	.880	1.632	.058
Within Groups	205.326	381	.539		
Total	219.402	397			
Airport facilities					
Between Groups	12.583	16	.786	1.190	.273
Within Groups	249.825	378	.661		
Total	262.408	394			
All Departure					
Between Groups	6.686	16	.418	1.324	.179
Within Groups	120.917	383	.316		
Total	127.604	399			

7) Marital status

The one-way ANOVA test yields a p-value of 0.180, which is more than 0.05. It is interpreted that airport passengers with different marital status don't evaluate the efficiency of customer journey management of Phuket international airport differently.

However, the findings show that there is one p-value lower than 0.05, which is "baggage handling process" (.021). It can be interpreted that airport passengers with different marital status evaluate the efficiency toward "baggage handling process" differently. (Table 4.104).

Additionally, a post-hoc was performed to find the pair of the airport passengers with different marital status who gave different evaluations of the efficiency of customer journey management of Phuket international airport. The findings are presented in Table 4.105

The post-hoc test in Table 4.105 indicates two pairs of different marital status of airport passengers with significantly different evaluations of the efficiency of "baggage handling process" as follows: single and widowed / divorced ($M=4.81, 5.38$), and married and widowed / divorced employee ($M=4.84, 5.38$).

Table 4.104 Analysis of Variance between Marital Status and Efficiency Levels on Airport Attributes

Attributes-Marital Status	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	.772	2	.386	.675	.510
Within Groups	227.202	397	.572		
Total	227.975	399			
Check-in process management					
Between Groups	.019	2	.009	.015	.985
Within Groups	243.879	397	.614		
Total	243.898	399			
Baggage handling process					
Between Groups	5.181	2	2.590	3.885	.021*
Within Groups	232.029	348	.667		
Total	237.210	350			

Attributes-Marital Status	SS	df	Mean Square	F	Sig.
Safety management					
Between Groups	1.342	2	.671	1.375	.254
Within Groups	193.815	397	.488		
Total	195.157	399			
Passport/ID control					
Between Groups	1.591	2	.796	1.474	.230
Within Groups	214.286	397	.540		
Total	215.878	399			
Mobility					
Between Groups	1.532	2	.766	1.389	.251
Within Groups	217.870	395	.552		
Total	219.402	397			
Airport facilities					
Between Groups	2.021	2	1.011	1.522	.220
Within Groups	260.387	392	.664		
Total	262.408	394			
All Departure					
Between Groups	1.096	2	.548	1.720	.180
Within Groups	126.507	397	.319		
Total	127.604	399			

Table 4.105 Multiple Comparison between Different Marital Status on Efficiency Scores

Attributes	Marital Status Groups			
	X	1	2	3
3. Bagg				
1. Single	4.81	-		.563*
2. Married	4.84	-	-	.532*
3. Widowed / Divorced	5.38	-	-	-

8) Religion

Overall, religion does not influence the efficiency scoring of airport operation attributes (P-value = .205). However, individual attribute analysis indicates that religion impacted scoring of the passport/ID control (0.004) It can be interpreted that airport passengers with different religion evaluate the efficiency toward

“passport/ID control” differently (Table 4.106). The post-hoc test in Table 4.107 indicates one pairs of different religion of airport passengers with significantly different evaluations of the efficiency of “passport/ID control” as follows: Christianity and other religion (M=5.15, 5.32).

Table 4.106 Analysis of Variance between Religion and Efficiency Levels on Airport Attributes

Attributes-Religion	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	2.061	3	.687	1.204	.308
Within Groups	225.913	396	.570		
Total	227.975	399			
Check-in process management					
Between Groups	1.568	3	.523	.854	.465
Within Groups	242.330	396	.612		
Total	243.898	399			
Baggage handling process					
Between Groups	.475	3	.158	.232	.874
Within Groups	236.735	347	.682		
Total	237.210	350			
Safety management					
Between Groups	1.701	3	.567	1.160	.325
Within Groups	193.457	396	.489		
Total	195.158	399			
Passport/ID control					
Between Groups	7.233	3	2.411	4.576	.004*
Within Groups	208.644	396	.527		
Total	215.878	399			
Mobility					
Between Groups	2.672	3	.891	1.619	.184
Within Groups	216.730	394	.550		
Total	219.402	397			
Airport facilities					
Between Groups	.253	3	.084	.126	.945
Within Groups	262.155	391	.670		

Attributes-Religion	SS	df	Mean Square	F	Sig.
Total	262.408	394			
All Departure					
Between Groups	1.467	3	.489	1.535	.205
Within Groups	126.137	396	.319		
Total	127.604	399			

Table 4.107 Multiple Comparison between Different Religion Status on Efficiency Scores

Attributes	Religion Groups				
5. Pass	X	1	2	3	4
1. Christianity	5.04	-	-	-	.389*
2. Buddhism	4.99	-	-	-	-
3. Islam	5.03	-	-	-	-
4. Other	5.43	-	-	-	-

9) Number of visits

The findings presented in Table 4.108 reveal a p-value at 0.045, which is less than 0.05. This means that airport passengers with different number of visits have different attitudes toward the efficiency of factors affecting airport management. Accessibility factor, the findings reveal that the p-value of “accessibility to the airport”, “check-in process management”, “baggage handling process”, and “passport/ID control” are lower than the significance level of 0.05 (.039, .026, .034, and 0.006) which shows that airport passengers with different number of visits have different attitudes toward the efficiency of each factor affecting customer journey management.

Further, a Post-hoc test was performed to find pairs of the airport passenger groups with different number of visits which have different attitudes toward the efficiency levels of “passport/ID control”, of customer journey management of Phuket international airport. The findings are presented in Table 4.109. The findings show that there is one pair of airport passenger groups that have different number of visits and have different attitudes of the efficiency levels toward “Passport/ID control”. These are the airport passengers who have visited 1-2 time (s) and the airport passengers who have visited 3-5 times (M= 5.16, 4.89).

Table 4.108 Analysis of Variance between Number of Visits and Efficiency Levels
on Airport Attributes

Attributes-Number of Visits	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	3.697	2	1.848	3.272	.039*
Within Groups	224.278	397	.565		
Total	227.975	399			
Check-in process management					
Between Groups	4.432	2	2.216	3.674	.026*
Within Groups	239.465	397	.603		
Total	243.898	399			
Baggage handling process					
Between Groups	4.560	2	2.280	3.410	.034*
Within Groups	232.650	348	.669		
Total	237.210	350			
Safety management					
Between Groups	1.548	2	.774	1.587	.206
Within Groups	193.610	397	.488		
Total	195.157	399			
Passport/ID control					
Between Groups	5.449	2	2.725	5.140	.006*
Within Groups	210.428	397	.530		
Total	215.878	399			
Mobility					
Between Groups	.010	2	.005	.009	.991
Within Groups	219.391	395	.555		
Total	219.402	397			
Airport facilities					
Between Groups	.102	2	.051	.076	.927
Within Groups	262.306	392	.669		
Total	262.408	394			
All Departure					
Between Groups	1.983	2	.992	3.134	.045*
Within Groups	125.620	397	.316		
Total	127.604	399			

Table 4.109 Multiple Comparison between Different Number of Visits Status on Efficiency Scores

Attributes	Number of Visits Groups			
	X	1	2	3
5. Pass				
1. 1-2 time (s)	5.16	-	.269*	-
2. 3-5 times	4.89	-	-	-
3. More than 5 times	5.13	-	-	-

10) Estimate spending time at the airport

The one-way ANOVA test yields a p-value of 0.101, which is more than 0.05. It can be interpreted that airport passengers with different spending time at the airport do not evaluate the efficiency of customer journey management differently.

However, when considering individual factor, the p-values from testing “check-in process management”, and “safety management” are 0.030, and 0.006, respectively, which are less than the significant level of 0.05. It can be interpreted that airport passengers with different spending time at the airport evaluate the efficiency of those mentioned factors differently. (Tabel 4.110 - 4.111)

Table 4.110 Analysis of Variance between Times at the Airport and Efficiency Levels on Airport Attributes

Attributes-Times at the Airport	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	.834	2	.417	.729	.483
Within Groups	227.141	397	.572		
Total	227.975	399			
Check-in process management					
Between Groups	4.287	2	2.143	3.551	.030*
Within Groups	239.611	397	.604		
Total	243.898	399			
Baggage handling process					
Between Groups	3.227	2	1.613	2.400	.092
Within Groups	233.983	348	.672		
Total	237.210	350			

Attributes-Times at the Airport	SS	df	Mean Square	F	Sig.
Safety management					
Between Groups	4.894	2	2.447	5.106	.006*
Within Groups	190.264	397	.479		
Total	195.157	399			
Passport/ID control					
Between Groups	3.055	2	1.527	2.849	.059
Within Groups	212.823	397	.536		
Total	215.878	399			
Mobility					
Between Groups	1.357	2	.679	1.230	.294
Within Groups	218.044	395	.552		
Total	219.402	397			
Airport facilities					
Between Groups	.964	2	.482	.723	.486
Within Groups	261.444	392	.667		
Total	262.408	394			
All Departure					
Between Groups	1.464	2	.732	2.304	.101
Within Groups	126.140	397	.318		
Total	127.604	399			

Table 4.111 Multiple Comparison between Different Times at the Airport Status on Efficiency Scores

Attributes	Times at the Airport			
2. Check	X	1	2	3
1. 1-2 hour (s)	4.75	-	.216*	-
2. 3-4 hours	4.97	-	-	-
3. More than 4 hours	4.81	-	-	-
4. Safe	X	1	2	3
1. 1-2 hour (s)	5.03	-	.186*	.376*
2. 3-4 hours	5.22	-	-	-
3. More than 4 hours	5.41	-	-	-

11) Number of companions

Using One-way ANOVA yields a p-value at 0.001 which is less than 0.05. It is interpreted that the airport passengers with different number of companions have different attitudes toward the efficiency levels of the factors affecting customer journey management at the 0.05 significance level.

The findings show that the p-value of all factors are lower than the significance level of 0.05 excepted “mobility” (.007, .002, .022, .001, .004, .038) which shows that airport passengers with different number of companions have different attitudes toward the importance of each factor affecting customer journey management (Table 4.112).

Table 4.112 Analysis of Variance between Number of Companions and Efficiency Levels on Airport Attributes

Attributes-Number of Companions	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	6.887	3	2.296	4.112	.007*
Within Groups	221.088	396	.558		
Total	227.975	399			
Check-in process management					
Between Groups	8.720	3	2.907	4.895	.002*
Within Groups	235.177	396	.594		
Total	243.898	399			
Baggage handling process					
Between Groups	6.467	3	2.156	3.242	.022*
Within Groups	230.742	347	.665		
Total	237.210	350			
Safety management					
Between Groups	8.050	3	2.683	5.679	.001*
Within Groups	187.107	396	.472		
Total	195.157	399			
Passport/ID control					
Between Groups	7.164	3	2.388	4.531	.004*
Within Groups	208.713	396	.527		
Total	215.878	399			

Attributes-Number of Companions	SS	df	Mean Square	F	Sig.
Mobility					
Between Groups	3.348	3	1.116	2.035	.108
Within Groups	216.053	394	.548		
Total	219.402	397			
Airport facilities					
Between Groups	5.577	3	1.859	2.830	.038*
Within Groups	256.831	391	.657		
Total	262.408	394			
All Departure					
Between Groups	5.414	3	1.805	5.848	.001*
Within Groups	122.190	396	.309		
Total	127.604	399			

A further post-hoc test was performed to find pairs of sample groups with different number of companions that have different attitudes toward the efficiency of “check-in process management” “baggage handling process” “safety management” and “all Departure”. The findings are as presented in Table 4.113.

As observed in Table 4.113, airport passengers travelling alone and traveling 4-5 people the efficiency of “check-in process management” differently. (M=5.05, 4.67).

As evident from Table 4.113, there are two pairs of the airport passengers and have different attitudes toward the level of efficiency of “baggage handling process” which are the airport passengers who travelling alone and more than 6 people (M=4.94, 4.21). The second pair is the airport passengers who are traveling 2-3 people versus more than 6 people (M=4.89, 4.21).

The findings in Table 4.113 indicate, there are two pairs of the airport passengers and have different attitudes toward the level of efficiency of “safety management” which are the airport passengers who travelling alone and more than 6 people (M=5.20, 4.59). The second pair is the airport passengers who traveling 2-3 people versus more than 6 people (M=5.24, 4.59)

The findings presented in Table 4.113 indicate two pair significantly different attitudes toward the efficiency of overall factors affecting customer journey management as follows; airport passengers who travelling alone and more than 6 people

(M=4.97, 4.49) and the second pair is the airport passengers who traveling 2-3 people versus more than 6 people (M=4.95, 4.49).

Table 4.113 Multiple Comparison between Different Number of Companions Status on Efficiency Scores

Attributes	Number of Companions Groups				
2. Check	X	1	2	3	4
1. Travel alone	5.05	-	-	.384*	-
2. 2-3	4.93	-	-	-	-
3. 4-5	4.67	-	-	-	-
4. More than 6	4.50	-	-	-	-
3. Bagg	X	1	2	3	4
1. Travel alone	4.94	-	-	-	.730*
2. 2-3	4.89	-	-	-	.682*
3. 4-5	4.79	-	-	-	-
4. More than 6	4.21	-	-	-	-
4. Safe	X	1	2	3	4
1. Travel alone	5.20	-	-	-	.609*
2. 2-3	5.24	-	-	-	.647*
3. 4-5	5.04	-	-	-	-
4. More than 6	4.59	-	-	-	-
8. All Departure	X	1	2	3	4
1. Travel alone	4.97	-	-	-	.479*
2. 2-3	4.95	-	-	-	.467*
3. 4-5	4.76	-	-	-	-
4. More than 6	4.49	-	-	-	-

12) Estimate spending in the airport.

The One-way ANOVA of customer journey management of Phuket international airport, all the p-values are above 0.05 (.636). Therefore, the airport passengers with different spending at the airport don't evaluate the overall efficiency of customer journey management of Phuket international airport differently. (Table 4.114).

Table 4.114 Analysis of Variance between Estimate Spending in the Airport and Efficiency Levels on Airport Attributes

Attributes-Estimate Spending in the Airport	SS	df	Mean Square	F	Sig.
Accessibility to the airport					
Between Groups	2.306	7	.329	.572	.778
Within Groups	225.668	392	.576		
Total	227.975	399			
Check-in process management					
Between Groups	4.878	7	.697	1.143	.335
Within Groups	239.019	392	.610		
Total	243.898	399			
Baggage handling process					
Between Groups	3.871	7	.553	.813	.577
Within Groups	233.338	343	.680		
Total	237.210	350			
Safety management					
Between Groups	.958	7	.137	.276	.963
Within Groups	194.199	392	.495		
Total	195.157	399			
Passport/ID control					
Between Groups	2.776	7	.397	.730	.647
Within Groups	213.101	392	.544		
Total	215.878	399			
Mobility					
Between Groups	3.476	7	.497	.897	.509
Within Groups	215.926	390	.554		
Total	219.402	397			
Airport facilities					
Between Groups	5.091	7	.727	1.094	.366
Within Groups	257.317	387	.665		
Total	262.408	394			
All Departure					
Between Groups	1.670	7	.239	.742	.636
Within Groups	125.934	392	.321		
Total	127.604	399			

Hypotheses 13.2: Passenger's socio-demographic profiles of the international arrival zone has affected the evaluation of customer journey management efficiency of Phuket international airport.

1) Gender

T-test statistics investigated this hypothesis, and the result of the p-value of 0.016 is below the significance level (.05). It can be interpreted that the respondents with different genders have different evaluations of overall efficiency toward "factors affecting customer journey management efficiency of international arrival zone of Phuket International Airport".

Regarding individual factors, the findings reveal that airport passengers with different genders do not have different evaluations of efficiency toward "deboarding", "immigration", or "customs" with p-values at 0.071, 0.173, and 0.109 respectively. However, the results indicate that different genders have different evaluation levels toward "baggage reclaims", and "before leaving from the airport" with a p-value of 0.010 and 0.015 respectively (Table 4.115).

Table 4.115 Gender Comparison on Efficiency Levels of Arrival Zone

Attributes	Gender				t	df	P-value
	Male		Female				
	M	S.D.	M	S.D.			
Deboarding	4.74	.688	4.87	.722	-1.810	398	.071
Immigration	4.73	.847	4.85	.781	-1.364	398	.173
Baggage reclaims	4.95	.664	5.13	.685	-2.599	398	.010*
Customs	4.89	.756	5.02	.744	-1.607	386	.109
Before leaving from the airport	4.63	.874	4.86	.874	-2.452	350	.015*
Average Scores	4.80	.596	4.95	.605	-2.412	398	.016*

2) Age (Generations)

One-way ANOVA found that in respect to the efficiency levels of overall factors affecting customer journey management of international arrival zone at Phuket international airport, the p-value is at 0.462 which is over 0.05. It can be interpreted

that airport passengers with different age backgrounds don't have different evaluations on the efficiency toward overall factors affecting customer journey management of international arrival zone of Phuket international airport. (Table 4.116)

Table 4.116 Analysis of Variance between Age and Efficiency Levels on Arrival Zone

Attributes-Age	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	.629	4	.157	.315	.868
Within Groups	197.070	395	.499		
Total	197.699	399			
2. Immigration					
Between Groups	2.900	4	.725	1.074	.369
Within Groups	266.742	395	.675		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	4.234	4	1.059	2.338	.055
Within Groups	178.862	395	.453		
Total	183.097	399			
4. Customs					
Between Groups	.924	4	.231	.406	.805
Within Groups	218.222	383	.570		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	2.141	4	.535	.689	.600
Within Groups	269.815	347	.778		
Total	271.957	351			
6. All Arrival's					
Between Groups	1.315	4	.329	.903	.462
Within Groups	143.764	395	.364		
Total	145.079	399			

Note: F-test (mean differences) at 0.05 significant level

3) Education

A one-way ANOVA test yields a p-value of 0.481, which is more than 0.05. It is interpreted that airport passengers with different education don't evaluate the efficiency of customer journey management of international arrival zone of Phuket international airport differently. However, the findings show that there is a p-value lower than 0.05, which is "baggage reclaims" (.040). It can be interpreted that airport passengers with different education evaluate the efficiency toward "baggage reclaims" differently (Table 4.117).

Further, a post-hoc test was performed to find the difference of airport passengers' evaluation of efficiency toward "baggage reclaims" with different education. The findings reveal no differences in the evaluations of efficiency toward "baggage reclaims" of airport passengers with different education.

Table 4.117 Analysis of Variance between Education and Efficiency Levels on Arrival Zone

Attributes-Education	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	2.316	2	1.158	2.353	.096
Within Groups	195.383	397	.492		
Total	197.699	399			
2. Immigration					
Between Groups	.568	2	.284	.419	.658
Within Groups	269.074	397	.678		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	2.940	2	1.470	3.239	.040*
Within Groups	180.157	397	.454		
Total	183.097	399			
4. Customs					
Between Groups	.006	2	.003	.005	.995
Within Groups	219.141	385	.569		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	.109	2	.055	.070	.932

Attributes-Education	SS	df	Mean Square	F	Sig.
Within Groups	271.848	349	.779		
Total	271.957	351			
6. All Arrival's					
Between Groups	.534	2	.267	.733	.481
Within Groups	144.545	397	.364		
Total	145.079	399			

4) Occupation

The findings presented in Table 4.118 reveal that the p-value for overall efficiency levels of customer journey management of Phuket international airport is at 0.039, which is less than 0.05. It can be interpreted that the airport passengers with different occupations evaluate the efficiency levels of overall customer journey management of Phuket international airport differently.

When considering each factor of occupation, the p-value from testing “Immigration”, “Baggage reclaims”, and “Customs” are 0.020, 0.006, and 0.010, respectively. This means that the airport passengers with different occupations evaluate the efficiency levels of each factor affecting customer journey management of Phuket international airport differently.

Further, a post-hoc test was performed to find the difference between airport passengers’ evaluation of efficiency toward “immigration”, “baggage reclaims”, and “customs” with different education. The findings reveal no differences in all of efficiency toward of airport passengers with different occupation.

Table 4.118 Analysis of Variance between Occupation and Efficiency Levels on Arrival Zone

Attributes-Occupation	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	5.013	8	.627	1.272	.257
Within Groups	192.686	391	.493		
Total	197.699	399			
2. Immigration					
Between Groups	12.161	8	1.520	2.308	.020*

Attributes-Occupation	SS	df	Mean Square	F	Sig.
Within Groups	257.481	391	.659		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	9.694	8	1.212	2.732	.006*
Within Groups	173.403	391	.443		
Total	183.097	399			
4. Customs					
Between Groups	11.168	8	1.396	2.544	.010*
Within Groups	207.979	379	.549		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	7.427	8	.928	1.204	.296
Within Groups	264.530	343	.771		
Total	271.957	351			
6. All Arrival's					
Between Groups	5.860	8	.732	2.057	.039*
Within Groups	139.219	391	.356		
Total	145.079	399			

5) Income

The findings presented in Table 4.119 reveal a p-value of 0.612 which is more than 0.05. It can be interpreted that airport passengers with different income don't evaluate the overall efficiency of customer journey management of Phuket international airport differently.

Table 4.119 Analysis of Variance between Income and Efficiency Levels on Arrival Zone

Attributes-Income	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	3.246	5	.649	1.353	.242
Within Groups	155.892	325	.480		
Total	159.139	330			
2. Immigration					
Between Groups	1.480	5	.296	.419	.836

Attributes-Income	SS	df	Mean Square	F	Sig.
Within Groups	229.752	325	.707		
Total	231.231	330			
3. Baggage reclaims					
Between Groups	1.608	5	.322	.686	.635
Within Groups	152.456	325	.469		
Total	154.064	330			
4. Customs					
Between Groups	1.542	5	.308	.521	.760
Within Groups	185.211	313	.592		
Total	186.753	318			
5. Before leaving from the airport					
Between Groups	1.782	5	.356	.452	.812
Within Groups	223.193	283	.789		
Total	224.975	288			
6. All Arrival's					
Between Groups	1.332	5	.266	.716	.612
Within Groups	120.930	325	.372		
Total	122.263	330			

6) Resident

The findings presented in Table 4.120 reveal a p-value of 0.109 which is more than 0.05. It can be interpreted that airport passengers with different residents don't evaluate the overall efficiency of customer journey management of Phuket international airport differently.

However, when considering each factor of resident, the p-value from testing "deboarding", is 0.033 This means that the airport passengers with different resident evaluate the efficiency levels of "deboarding" affecting customer journey management of Phuket international airport differently.

Further, a post-hoc test was performed to find the difference of airport passengers' evaluation of efficiency toward "deboarding". The findings reveal no differences in efficiency toward airport passengers with different residents.

Table 4.120 Analysis of Variance between Resident and Efficiency Levels on Arrival Zone

Attributes-Resident	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	13.632	16	.852	1.773	.033*
Within Groups	184.067	383	.481		
Total	197.699	399			
2. Immigration					
Between Groups	12.376	16	.773	1.152	.305
Within Groups	257.266	383	.672		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	8.254	16	.516	1.130	.325
Within Groups	174.842	383	.457		
Total	183.097	399			
4. Customs					
Between Groups	14.471	16	.904	1.639	.057
Within Groups	204.676	371	.552		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	14.211	16	.888	1.154	.304
Within Groups	257.746	335	.769		
Total	271.957	351			
6. All Arrival's					
Between Groups	8.377	16	.524	1.467	.109
Within Groups	136.702	383	.357		
Total	145.079	399			

7) Marital status

The one-way ANOVA test yields a p-value of 0.390, which is more than 0.05. It is interpreted that airport passengers with different marital status don't evaluate the efficiency of customer journey management of Phuket international airport differently. (Table 4.121).

Table 4.121 Analysis of Variance between Marital status and Efficiency Levels on Arrival Zone

Attributes-Marital Status	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	.617	2	.309	.622	.538
Within Groups	197.082	397	.496		
Total	197.699	399			
2. Immigration					
Between Groups	1.301	2	.650	.962	.383
Within Groups	268.341	397	.676		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	1.962	2	.981	2.150	.118
Within Groups	181.135	397	.456		
Total	183.097	399			
4. Customs					
Between Groups	2.199	2	1.099	1.951	.144
Within Groups	216.947	385	.563		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	.948	2	.474	.610	.544
Within Groups	271.009	349	.777		
Total	271.957	351			
6. All Arrival's					
Between Groups	.687	2	.344	.945	.390
Within Groups	144.391	397	.364		
Total	145.079	399			

8) Religion

The findings presented in Table 4.122 reveal that the p-value for overall efficiency levels of religion is at 0.042, which is less than 0.05. It can be interpreted that the airport passengers with different religion evaluate the efficiency levels of overall customer journey management of international arrival zone of Phuket international airport differently.

When considering each factor of religion, the p-value from testing “Immigration”, and “Baggage reclaims” are 0.048, and 0.018, respectively. This means that the airport passengers with different religion evaluate the efficiency levels of each factor affecting customer journey management of Phuket international airport differently. The post-hoc test in Table 4.123 indicates one pairs of different religion of airport passengers with significantly different evaluations of the efficiency of “Baggage reclaims” as follows: Christianity and other religion (M=4.97, 5.29).

Table 4.122 Analysis of Variance between Religion and Efficiency Levels on Arrival Zone

Attributes-Religion	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	2.230	3	.743	1.506	.212
Within Groups	195.469	396	.494		
Total	197.699	399			
2. Immigration					
Between Groups	5.314	3	1.771	2.654	.048*
Within Groups	264.328	396	.667		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	4.603	3	1.534	3.404	.018*
Within Groups	178.494	396	.451		
Total	183.097	399			
4. Customs					
Between Groups	3.244	3	1.081	1.923	.125
Within Groups	215.903	384	.562		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	3.197	3	1.066	1.380	.249
Within Groups	268.760	348	.772		
Total	271.957	351			
6. All Arrival's					
Between Groups	2.975	3	.992	2.764	.042*
Within Groups	142.103	396	.359		
Total	145.079	399			

Table 4.123 Multiple Comparison between Different Religion on Efficiency Scores

Attributes	Number of Companions Groups				
	X	1	2	3	4
3. Baggage reclaims					
1. Christianity	4.97				-.320*
2. Buddhism	5.02				
3. Islam	4.99				
4. Other	5.29				

9) Number of visits

The results are presented in Table 4.124. It was found that the airport passengers with different number of visits don't evaluate the efficiency of customer journey management of Phuket international airport differently. The one-way ANOVA test yields a p-value of 0.051, which is more than 0.05.

Table 4.124 Analysis of Variance between Number of Visits and Efficiency Levels on Arrival Zone

Attributes-Number of Visits	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	1.096	2	.548	1.106	.332
Within Groups	196.603	397	.495		
Total	197.699	399			
2. Immigration					
Between Groups	2.392	2	1.196	1.777	.171
Within Groups	267.250	397	.673		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	2.552	2	1.276	2.805	.062
Within Groups	180.545	397	.455		
Total	183.097	399			
4. Customs					
Between Groups	2.863	2	1.432	2.548	.080
Within Groups	216.283	385	.562		
Total	219.146	387			
5. Before leaving from the airport					

Attributes-Number of Visits	SS	df	Mean Square	F	Sig.
Between Groups	1.683	2	.841	1.086	.339
Within Groups	270.274	349	.774		
Total	271.957	351			
6. All Arrival's					
Between Groups	2.174	2	1.087	3.019	.051
Within Groups	142.905	397	.360		
Total	145.079	399			

10) Estimate spending time at the airport

The findings presented in Table 4.125 reveal that the p-value for overall efficiency levels of customer journey management of Phuket international airport is at 0.005, which is less than 0.05. It can be interpreted that the airport passengers with different times at the airport evaluate the efficiency levels of overall customer journey management of Phuket international airport differently.

When considering each factor, the p-value from testing “Baggage reclaims” is .000. This means that the airport passengers with different times at the airport evaluate the efficiency levels of each factor affecting customer journey management of Phuket international airport differently.

Table 4.125 Analysis of Variance between Times at the Airport and Efficiency Levels on Arrival Zone

Attributes-Times at the Airport	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	2.934	2	1.467	2.991	.051
Within Groups	194.765	397	.491		
Total	197.699	399			
2. Immigration					
Between Groups	3.412	2	1.706	2.544	.080
Within Groups	266.230	397	.671		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	7.010	2	3.505	7.902	.000*
Within Groups	176.087	397	.444		

Attributes-Times at the Airport	SS	df	Mean Square	F	Sig.
Total	183.097	399			
4. Customs					
Between Groups	3.390	2	1.695	3.024	.050
Within Groups	215.757	385	.560		
Total	219.146	387			
5. Before leaving from the airport					
Between Groups	4.344	2	2.172	2.833	.060
Within Groups	267.613	349	.767		
Total	271.957	351			
6. All Arrival's					
Between Groups	3.828	2	1.914	5.380	.005*
Within Groups	141.250	397	.356		
Total	145.079	399			

Further, a Post-hoc was performed to find the pair of the airport passengers with different times at the airport who different evaluations of the efficiency of customer journey management of Phuket international airport. The findings are presented in Table 4.126.

The post-hoc test in Table 4.126 indicates two pairs of different spending time at the airport of airport passengers with significantly different evaluations of the efficiency of “baggage reclaims” as follows: airport passengers who spending time 1-2 hour (s) and 3-4 hours (M=4.86, 5.14).

The post-hoc test as presented in Table 4.126 indicates a pair of different spending time at the airport of airport passengers with significantly different evaluations of the efficiency of “overall management” as follows: airport passengers who spending time 1-2 hour (s) and 3-4 hours (M=4.75, 4.95).

Table 4.126 Multiple Comparison between Different Times at the Airport on Efficiency Scores

Attributes	Times at the Airport Groups			
3. Baggage reclaims	X	1	2	3
1. 1-2 hour (s)	4.86		-.276*	

Attributes	Times at the Airport Groups
2. 3-4 hours	5.14
3. More than 4 hours	4.93
5. All Arrival's	X 1 2 3
1. 1-2 hour (s)	4.75 -.196*
2. 3-4 hours	4.95
3. More than 4 hours	4.74

11) Number of companions

The results are presented in Table 4.127. It was found that the airport passengers with different Number of Companions don't evaluate the efficiency of customer journey management of Phuket international airport differently. The one-way ANOVA test yields a p-value of 0.354, which is more than 0.05.

Table 4.127 Analysis of Variance between Number of Companions and Efficiency Levels on Arrival Zone

Attributes-Number of Companions	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	.573	3	.191	.383	.765
Within Groups	197.126	396	.498		
Total	197.699	399			
2. Immigration					
Between Groups	2.975	3	.992	1.473	.221
Within Groups	266.667	396	.673		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	1.485	3	.495	1.079	.358
Within Groups	181.612	396	.459		
Total	183.097	399			
4. Customs					
Between Groups	1.506	3	.502	.886	.449
Within Groups	217.641	384	.567		
Total	219.146	387			
5. Before leaving from the airport					

Attributes-Number of Companions	SS	df	Mean Square	F	Sig.
Between Groups	2.745	3	.915	1.183	.316
Within Groups	269.212	348	.774		
Total	271.957	351			
6. All Arrival's					
Between Groups	1.186	3	.395	1.088	.354
Within Groups	143.892	396	.363		
Total	145.079	399			

12) Estimated spending.

The One-way ANOVA of customer journey management of Phuket international airport, all the p-values are above 0.05 (.725). Therefore, it is concluded that airport passengers with different spending in the airport don't have different evaluations of efficiency toward each factor which affects customer journey management of Phuket International Airport differently. (Table 4.128).

Table 4.128 Analysis of Variance between Estimated spending and Efficiency Levels on Arrival Zone

Attributes-Estimated Spending	SS	df	Mean Square	F	Sig.
1. Deboarding					
Between Groups	1.729	7	.247	.494	.839
Within Groups	195.970	392	.500		
Total	197.699	399			
2. Immigration					
Between Groups	2.823	7	.403	.592	.762
Within Groups	266.819	392	.681		
Total	269.642	399			
3. Baggage reclaims					
Between Groups	3.011	7	.430	.936	.478
Within Groups	180.086	392	.459		
Total	183.097	399			
4. Customs					
Between Groups	5.482	7	.783	1.393	.207
Within Groups	213.664	380	.562		
Total	219.146	387			

Attributes-Estimated Spending	SS	df	Mean Square	F	Sig.
5. Before leaving from the airport					
Between Groups	6.294	7	.899	1.164	.323
Within Groups	265.663	344	.772		
Total	271.957	351			
6. All Arrival's					
Between Groups	1.633	7	.233	.637	.725
Within Groups	143.446	392	.366		
Total	145.079	399			

Based on the results of the hypothesis testing, the overall summary is as follows: factors such as Accessibility, Deboarding, and Immigration were identified as influencing passenger experience. The test results of passengers' socio-demographic profiles affecting the evaluation of Phuket International Airport's performance revealed that, in the outbound passenger zone, the influencing factors are Gender, Occupation, Number of visits, and Number of companions. In the arrival zone, the influencing factors include Gender, Occupation, Religion, and Times at the airport, as shown in the Table 4.129.

Table 4.129 Hypothesis Testing of Passenger's Socio-demographic Profiles

Hypothesis	Description	Result	
H13	Passenger's socio-demographic profiles has affected the evaluation of customer journey management efficiency of Phuket International Airport	H13.1 Departure	H13.2 Arrival
1)	Gender	Rejected	Rejected
2)	Age	Accepted	Accepted
3)	Education	Accepted	Accepted
4)	Occupation	Rejected	Rejected
5)	Income	Accepted	Accepted
6)	Resident	Accepted	Accepted
7)	Marital status	Accepted	Accepted
8)	Religion	Accepted	Rejected

Hypothesis	Description	Result	
9)	Number of visits	Rejected	Accepted
10)	Times at the airport	Accepted	Rejected
11)	Number of companions	Rejected	Accepted
12)	Estimate spending in the airport	Accepted	Accepted

4.5.3 Importance-Performance Analysis on Airport Operations

From the statistical results presented in Section 4.5.1 regarding the importance and efficiency of Phuket International Airport, researchers have used IPA as a tool to analyze a holistic view of airport priority and performance levels. The data was collected from foreign passengers who use the service both inbound and outbound from Phuket Airport only. IPA can facilitate a researcher identifying proper areas for development. The results were applied to a scatter plot graph, with a vertical axis representing importance and a horizontal axis standing for efficiency.

Each variable has a meaning for importance and efficiency levels. Each point is placed in one of the quadrants in the matrix. The quadrants represent “keep up the good work”, “concentrate here”, “low priority” and “possible overkill”. Eventually, the results are used when proposing a new model for Phuket International Airport.

4.5.3.1 IPA results on operational of passenger departure zone

In order to demonstrate the IPA results on importance & efficiency, the 44 airport operational attributes of departure zone were summarized into four quadrants. That are, 1) ‘Keep Up the Good Work’ (high importance & high efficiency), 2) ‘Concentrate Here’ (high importance & low efficiency), 3) ‘Low Priority’ (low importance & low efficiency), and 4) ‘Possible Overkill’ (low importance & high efficiency). The mean scores of both importance ($M = 5.18$) and efficiency ($M = 4.78$) were calculated as criteria to define the proper quadrant of each attribute. Attributes which had importance mean scores equal or higher than grand mean or had efficiency mean scores higher the efficiency grand mean referred to the ‘High’ quadrants. If the importance mean scores were lower than the importance grand mean or the efficiency mean scores were equal or lower than the efficiency grand mean, they implied the ‘Low’ quadrants.

The mean scores of 44 operational attributes from passenger departure zone in relation to importance and efficiency was presented in Table 4.130. There were 22 attributes captured in the 1st quadrant Keep Up the Good Work, 2 attributes in the 2nd quadrant Concentrate Here, 13 attributes in the 3rd quadrant Low Priority and 7 attributes in Possible Overkill quadrant (Figure 4.18).

Table 4.130 Low & High Mean Results on Attributes Employed into the IPA

Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
Accessibility to the airport						
1	Public transport to the airport is convenient. (Airport bus, limousine, etc.)	5.24	High Importance	4.61	Low Efficiency	2
2	Public transport prices to the airport are appropriate for each type of service.	5.15	Low Importance	4.44	Low Efficiency	3
3	Strictly screened for COVID-19 (Terminal Screening)	5.12	Low Importance	4.91	High Efficiency	4
4	Body temperature screening by non-contact infrared thermometer.	4.92	Low Importance	4.91	High Efficiency	4
5	Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal.	5.31	High Importance	4.95	High Efficiency	1
6	Provide clearly defined zones and paths for entry and exit.	5.19	High Importance	4.87	High Efficiency	1
Check-in process management						
7	Self-check-in via mobile phone or kiosk	5.05	Low Importance	4.64	Low Efficiency	3
8	Fast and convenient check-in processes	5.54	High Importance	4.90	High Efficiency	1
9	The check-in area is enough and convenient.	5.41	High Importance	4.96	High Efficiency	1
10	Check-in staff provide service with politeness.	5.50	High Importance	5.14	High Efficiency	1

Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
11	Provide social distancing while waiting at check-in counters.	5.12	Low Importance	4.66	Low Efficiency	3
12	Provide alcohol gel at the check-in counters.	5.04	Low Importance	4.91	High Efficiency	4
Baggage handling process						
13	Self-check-in baggage system is available.	4.76	Low Importance	4.60	Low Efficiency	3
14	The sufficiency of the cart	4.80	Low Importance	4.78	High Efficiency	4
15	The quality of the cart	4.82	Low Importance	4.82	High Efficiency	4
16	Efficiency in baggage handling	5.16	Low Importance	4.97	High Efficiency	4
Safety management						
17	Duration of security checks in each step.	5.43	High Importance	5.15	High Efficiency	1
18	Courtesy and service willingness of security inspectors.	5.39	High Importance	5.11	High Efficiency	1
19	The security inspectors are professional.	5.51	High Importance	5.18	High Efficiency	1
20	The procedure for screening at the scanning point is simple.	5.50	High Importance	5.15	High Efficiency	1
21	Sense of safety and security in this airport.	5.54	High Importance	5.23	High Efficiency	1
Passport/ID control						
22	Rapid passport check	5.52	High Importance	5.18	High Efficiency	1
23	Courtesy and service willingness of the passport inspector.	5.41	High Importance	5.08	High Efficiency	1
24	There is a simple screening process.	5.43	High Importance	5.07	High Efficiency	1
25	Sense of security in the travel document inspection process.	5.40	High Importance	5.12	High Efficiency	1
26	Provide social distancing while waiting at passport control area.	5.30	High Importance	4.97	High Efficiency	1

Mobility

Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
27	Signs and symbols are easy to understand.	5.56	High Importance	5.19	High Efficiency	1
28	The flight information display is visible.	5.60	High Importance	5.04	High Efficiency	1
29	Shuttle service within the terminal	4.95	Low Importance	4.68	Low Efficiency	3
30	Walking distance between terminals is execrable.	5.20	High Importance	4.98	High Efficiency	1
31	Readiness to help people with disabilities.	5.37	High Importance	4.92	High Efficiency	1
Airport facilities						
32	Variety of shops, souvenirs / duty free (shopping) within the airport.	4.62	Low Importance	4.03	Low Efficiency	3
33	Value for money of shopping at the airport.	4.74	Low Importance	3.97	Low Efficiency	3
34	Variety of restaurants and beverages.	4.91	Low Importance	3.81	Low Efficiency	3
35	Value for money of foods and beverage.	4.92	Low Importance	3.93	Low Efficiency	3
36	Airport executive lounge is available.	4.44	Low Importance	4.18	Low Efficiency	3
37	WIFI signal quality	5.33	High Importance	4.20	Low Efficiency	2
38	Availability of toilets	5.60	High Importance	5.20	High Efficiency	1
39	The cleanliness of the toilet facilities.	5.62	High Importance	5.14	High Efficiency	1
40	Charging battery station and seats at the boarding gate available.	5.17	Low Importance	4.84	High Efficiency	4
41	Children's area/playground	4.33	Low Importance	4.04	Low Efficiency	3
42	Drinking water point and quality of water.	4.90	Low Importance	4.39	Low Efficiency	3

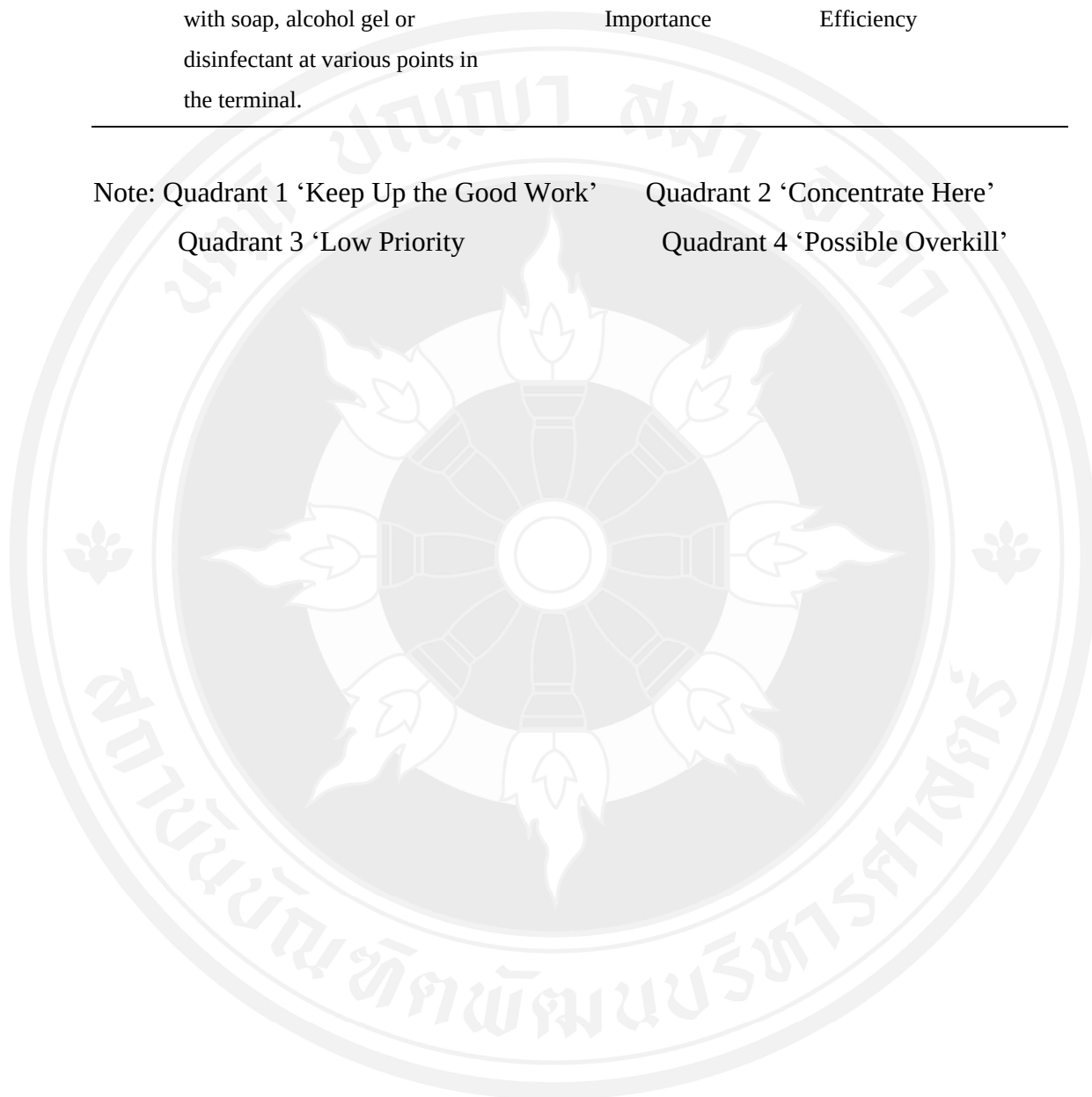
Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
43	Availability of banks/ATM/exchange.	4.77	Low	4.38	Low	3
			Importance		Efficiency	
44	Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.	5.21	High	4.89	High	1
			Importance		Efficiency	

Note: Quadrant 1 ‘Keep Up the Good Work’

Quadrant 2 ‘Concentrate Here’

Quadrant 3 ‘Low Priority

Quadrant 4 ‘Possible Overkill’



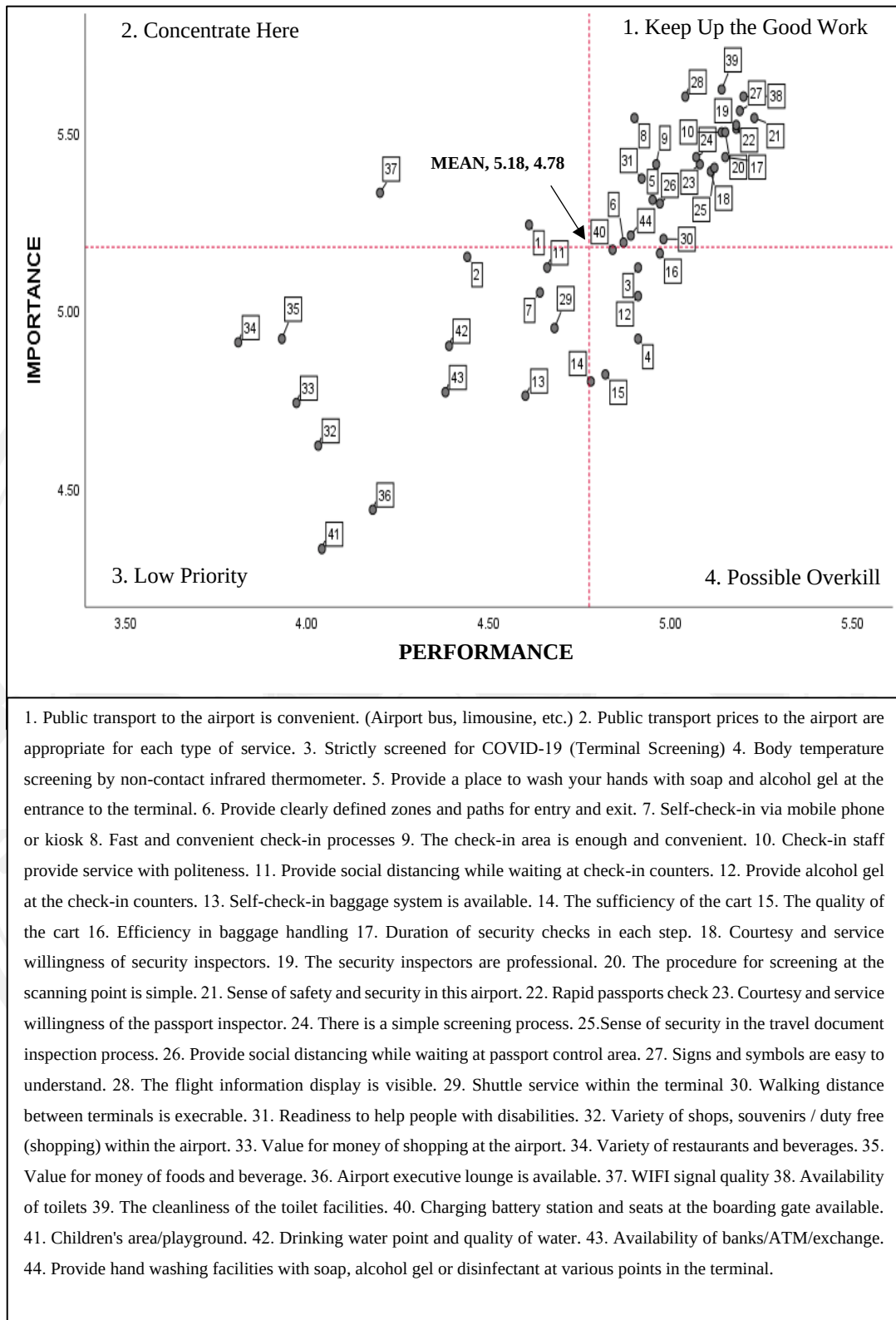


Figure 4.18 IPA Grid Illustrated Airport Operational Efficiency of Operational Attribute

1) Keep Up the Good Work Quadrant

22 (50%) attributes were identified in the Keep Up the Good Work quadrant. These were code 5) provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal, 6) provide clearly defined zones and paths for entry and exit, 8) fast and convenient check-in processes, 9) the check-in area is enough and convenient, 10) check-in staff provide service with politeness, 17) duration of security checks in each step, 18) courtesy and service willingness of security inspectors, 19) the security inspectors are professional, 20) the procedure for screening at the scanning point is simple, 21) sense of safety and security in this airport, 22) rapid passport check, 23) courtesy and service willingness of the passport inspector, 24) there is a simple screening process, 25) sense of security in the travel document inspection process, 26) provide social distancing while waiting at passport control area, 27) signs and symbols are easy to understand, 28) the flight information display is visible, 30) walking distance between terminals is execrable, 31) readiness to help people with disabilities, 38) availability of toilets, 39) the cleanliness of the toilet facilities, and 44) Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.

All attributes in this quadrant were rated with above average importance and efficiency levels. Noticeably, 2 out of 22 attributes are under the “accessibility to the airport” factor, 3 out of 22 attributes are under “check-in process management” factor, 5 out of 22 attributes are under the “safety management” factor (all of sub variables), 5 out of 22 attributes are under the “passport/ID control” factor (all of sub variables), 4 out of 22 attributes are under the “mobility” factor, and 3 out of 22 attributes are under the factor of “airport facilities”. In conclusion, these are the strengths of customer journey management of Phuket international airport.

2) Concentrate Here quadrant

The Concentrate Here quadrant identified 2 operational attributes of which their mean scores came up above the average for importance but below the efficiency average. Two attributes (4.0%) comprised of code 1) public transport to the airport is convenient. (Airport bus, limousine, etc.), and code 37) WIFI signal quality. Also, ranks of importance on those attributes were rated higher than efficiency ranks. (Public transport to the airport is convenient came up with the 21st

importance and the 33rd efficiency whereas WIFI signal quality were at the 18th importance with the 13th efficiency).

3) Low Priority quadrant

The thirteen attributes (30.0%) allocated to the Low Priority quadrant were code 2) public transport prices to the airport are appropriate for each type of service, 7) self-check-in via mobile phone or kiosk, 11) provide social distancing while waiting at check-in counters, 13) self-check-in baggage system is available, 29) shuttle service within the terminal, 32) variety of shops, souvenirs / duty free (shopping) within the airport, 33) value for money of shopping at the airport, 24) variety of restaurants and beverages, 35) value for money of foods and beverage, 36) airport executive lounge is available, 41) children's area/playground, 42) drinking water point and quality of water, and code 43) availability of banks/ATM/exchange. They were rated below the average for both importance and efficiency. Simply, these all attributes are less important than other attributes in the view of airport passengers and in the meantime, they are considered less efficient when compared with other attributes. The implication is to not allocate resources here. As these variables affect airport passengers less than other attributes, the levels of importance are, therefore, rated lower.

4) Possible Overkill Quadrant

Seven out of 22 variables (16.0%) identified in the possible overkill quadrant are code 3) strictly screened for COVID-19 (terminal Screening), 4) body temperature screening by non-contact infrared thermometer, 12) provide alcohol gel at the check-in counters, 14) the sufficiency of the cart, 15) the quality of the cart, 16) efficiency in baggage handling, and code 40) charging battery station and seats at the boarding gate available. The indication of this quadrant is that the variables rated are lower than average importance, but they are more efficient than average. The implication is that the performance of these variables is efficient while the importance levels are not regarded as very high. Even if they are not urgently required to improve, they should be developed as extra values to satisfy airport passengers.

4.5.3.2 IPA results on operational of passenger arrival zone

Besides IPA on operational attributes of departure zone, operational attributes of arrival zone results of Phuket International Airport were also analyzed in the IPA. Among 24 attributes, there were eight attributes dropped into 'Keep Up the

Good Work’ quadrant, 6 attributes in ‘Concentrate Here’ quadrant, 6 attributes in ‘Low Priority’ quadrant, and 4 attributes in ‘Possible Overkill’ quadrant (Table 4.131). On IPA grid, X-axis showed the importance mean scores whereas the Y-axis showed the efficiency mean scores of each operational attribute (Figure 4.19).

Table 4.131 Low & High Mean Results on Attributes Employed into the IPA

Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
Deboarding						
1	The waiting time before deboarding the aircraft. 45	5.20	High Importance	4.83	Low Efficiency	2
2	Provide social distancing while deboarding the aircraft. 46	4.97	Low Importance	4.52	High Efficiency	3
3	The walking distance from the aircraft to the exit of the restricted area. 47	5.07	Low Importance	4.83	Low Efficiency	3
4	Provide clearly defined zones from the aircraft to the exit of the restricted area. 48	5.17	Low Importance	4.86	High Efficiency	4
5	Provide alcohol gel between aisle to the exit of the restricted area. 49	4.92	Low Importance	4.83	Low Efficiency	3
6	Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. 50	4.93	Low Importance	4.88	High Efficiency	4
Immigration						
7	Waiting time before accessing the immigration system. 51	5.26	High Importance	4.79	Low Efficiency	2
8	The ease of using the system. 52	5.29	High Importance	4.75	Low Efficiency	2
9	Courtesy and helpfulness of airport staff in managing queues. 53	5.34	High Importance	4.86	High Efficiency	1
10	Courtesy and politeness of the immigration officer. 54	5.33	High Importance	4.79	Low Efficiency	2

Code	Attributes	Importance Levels		Efficiency Levels		Quadrants
		Mean	Results	Mean	Results	
11	Provide social distancing while waiting immigrant area. 55	5.14	Low Importance	4.70	Low Efficiency	3
Baggage reclaims						
12	Walking distance to get to the baggage claim area. 56	5.08	Low Importance	5.03	High Efficiency	4
13	Flight display on carrousel screens. 57	5.30	High Importance	5.08	High Efficiency	1
14	Waiting time before retrieving baggage. 58	5.32	High Importance	4.97	High Efficiency	1
15	Availability of toilets in the baggage claim area. 59	5.31	High Importance	4.99	High Efficiency	1
16	The cleanliness of toilets at the baggage reclaims area. 60	5.39	High Importance	4.99	High Efficiency	1
17	Availability of carts/trolleys 61	5.05	Low Importance	4.99	High Efficiency	4
Customs						
18	Waiting time to go through customs. 62	5.26	High Importance	4.98	High Efficiency	1
19	Setup/organization of queues 63	5.26	High Importance	4.96	High Efficiency	1
20	Courtesy and politeness of the customs officer. 64	5.32	High Importance	4.97	High Efficiency	1
21	Provide social distancing while waiting in the customs area. 65	5.13	Low Importance	4.85	Low Efficiency	3
Before leaving from the airport						
22	Arrival tourist assistance center 66	4.98	Low Importance	4.80	Low Efficiency	3
23	Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.) 67	5.21	High Importance	4.70	Low Efficiency	2
24	Public transport prices are appropriate for each type of service. 68	5.26	High Importance	4.55	Low Efficiency	2

Note: Quadrant 1 'Keep Up the Good Work' Quadrant 2 'Concentrate Here'
 Quadrant 3 'Low Priority' Quadrant 4 'Possible Overkill'

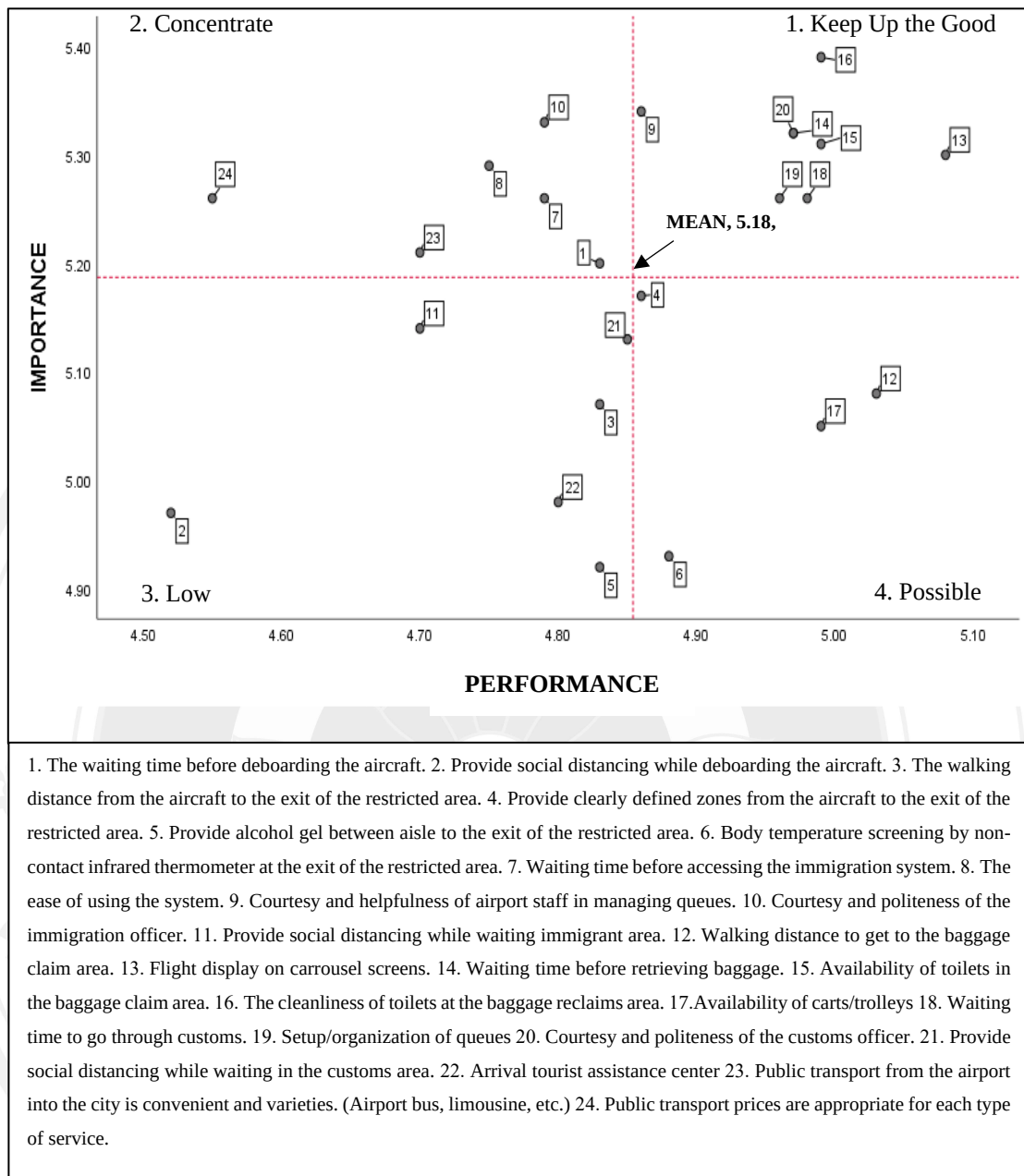


Figure 4.19 IPA Grid Illustrated Airport Operational Efficiency of Operational

4.6 Customer Journey Management Model for Phuket International Airport (Research Objective 4)

In order to create a proper model on customer journey management for Phuket International Airport, various views of research results were mutually analyzed. First, the data were collected by means of in-depth interviews with 20 key informants. There are three groups of respondents associated to the interviews as a tool in qualitative research method, comprised of 1) executives or representative from the airport, 2) representatives from airlines, and 3) airport passengers. Also, quantitative based results retrieved from 400 respondents were integrated analyzed. Last, all research results from three research objectives were illustrated.

Another beneficial view of result illustration was a holistic view of all related results to each attribute. Quantitative based results were mutually analyzed and rated the priority of improvement. Variables and their labels being used in the model, Importance mean & levels, efficiency mean & levels, gap analysis results, as well as specified quadrant from IPA were mutual considered in identifying levels of urgency in terms of improvements or concerns needed. (Table 4.132)

Table 4.132 Holistic View of All Results

Labels	Factors	Importance (X)		Efficiency (Y)		IPA Quadrants	Gab (X-Y)	p-value
		Mean	Level	Mean	Level			
Departure								
	Accessibility to the airport	5.15	6	4.78	5		0.37	
X1	Public transport to the airport is convenient. (Airport bus, limousine, etc.)	5.24	6	4.61	5	Concentrate Here	0.63	
X2	Public transport prices to the airport are appropriate for each type of service.	5.14	6	4.44	5	Low Priority	0.70	
X3	Strictly screened for COVID-19 (Terminal Screening)	5.12	6	4.91	5	Possible Overkill	0.21	*
X4	Body temperature screening by non-contact infrared thermometer.	4.92	6	4.91	5	Possible Overkill	0.01	
X5	Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal.	5.32	6	4.95	5	Good Work	0.37	
X6	Provide clearly defined zones and paths for entry and exit.	5.18	6	4.87	5	Good Work	0.31	*
	Check-in process management	5.28	6	4.87	5		0.41	
X7	Self-check-in via mobile phone or kiosk	5.05	6	4.64	5	Low Priority	0.41	
X8	Fast and convenient check-in processes	5.54	6	4.90	5	Good Work	0.64	
X9	The check-in area is enough and convenient.	5.41	6	4.96	5	Good Work	0.45	*
X10	Check-in staff provide service with politeness.	5.50	6	5.14	6	Good Work	0.36	
X11	Provide social distancing while waiting at check-in counters.	5.12	6	4.66	5	Low Priority	0.46	*
X12	Provide alcohol gel at the check-in counters.	5.04	6	4.91	5	Possible Overkill	0.13	
	Baggage handling process	4.88	5	4.79	5		0.09	

Labels	Factors	Importance (X)		Efficiency (Y)		IPA Quadrants	Gab (X-Y)	p-value
		Mean	Level	Mean	Level			
X13	Self-check-in baggage system is available.	4.76	6	4.60	5	Low Priority	0.16	
X14	The sufficiency of the cart	4.80	5	4.78	5	Possible Overkill	0.02	
X15	The quality of the cart	4.82	5	4.82	5	Possible Overkill	0.00	
X16	Efficiency in baggage handling	5.16	6	4.97	5	Possible Overkill	0.19	*
	Safety management	5.47	6	5.16	5		0.31	
X17	Duration of security checks in each step.	5.43	6	5.15	5	Good Work	0.28	
X18	Courtesy and service willingness of security inspectors.	5.39	6	5.11	5	Good Work	0.28	
X19	The security inspectors are professional.	5.51	6	5.18	5	Good Work	0.33	
X20	The procedure for screening at the scanning point is simple.	5.50	6	5.15	5	Good Work	0.35	
X21	Sense of safety and security in this airport.	5.54	6	5.23	5	Good Work	0.31	*
	Passport/ID control	5.41	6	5.08	5		0.33	
X22	Rapid passport check	5.52	6	5.18	6	Good Work	0.34	
X23	Courtesy and service willingness of the passport inspector.	5.41	6	5.08	6	Good Work	0.33	
X24	There is a simple screening process.	5.43	6	5.07	5	Good Work	0.36	
X25	Sense of security in the travel document inspection process.	5.40	6	5.12	5	Good Work	0.28	*
X26	Provide social distancing while waiting at passport control area.	5.30	6	4.97	5	Good Work	0.33	*
	Mobility	5.33	6	4.96	5		0.37	
X27	Signs and symbols are easy to understand.	5.56	6	5.19	6	Good Work	0.37	
X28	The flight information display is visible.	5.60	6	5.04	6	Good Work	0.56	
X29	Shuttle service within the terminal	4.95	6	4.68	5	Low Priority	0.27	
X30	Walking distance between terminals is execrable.	5.20	6	4.98	5	Good Work	0.22	

Labels	Factors	Importance (X)		Efficiency (Y)		IPA Quadrants	Gab (X-Y)	p-value
		Mean	Level	Mean	Level			
X31	Readiness to help people with disabilities.	5.37	6	4.92	5	Good Work	0.45	*
	Airport facilities	4.97	6	4.38	5		0.59	
X32	Variety of shops, souvenirs / duty free (shopping) within the airport.	4.62	5	4.03	4	Low Priority	0.59	
X33	Value for money of shopping at the airport.	4.74	5	3.97	4	Low Priority	0.77	
X34	Variety of restaurants and beverages.	4.91	5	3.81	4	Low Priority	1.10	
X35	Value for money of foods and beverage.	4.92	5	3.93	4	Low Priority	0.99	
X36	Airport executive lounge is available.	4.44	5	4.18	5	Low Priority	0.26	
X37	WIFI signal quality	5.33	6	4.20	5	Concentrate Here	1.13	
X38	Availability of toilets	5.60	6	5.20	6	Good Work	0.40	
X39	The cleanliness of the toilet facilities.	5.62	6	5.14	5	Good Work	0.48	*
X40	Charging battery station and seats at the boarding gate available.	5.17	6	4.84	5	Possible Overkill	0.33	
X41	Children's area/playground.	4.33	5	4.04	4	Low Priority	0.29	
X42	Drinking water point and quality of water.	4.90	6	4.39	5	Low Priority	0.51	
X43	Availability of banks/ATM/exchange.	4.77	5	4.38	5	Low Priority	0.39	
X44	Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.	5.21	6	4.89	5	Good Work	0.32	*
	Total Departure	5.18		4.78			0.4	
	Arrival							
	Deboarding	5.04	5	4.79	5		0.25	
X45	The waiting time before deboarding the aircraft.	5.20	5	4.83	5	Concentrate Here	0.37	

Labels	Factors	Importance (X)		Efficiency (Y)		IPA Quadrants	Gab (X-Y)	p-value
		Mean	Level	Mean	Level			
X46	Provide social distancing while deboarding the aircraft.	4.97	6	4.52	5		0.45	
X47	The walking distance from the aircraft to the exit of the restricted area.	5.07	5	4.83	5	Low Priority	0.24	
X48	Provide clearly defined zones from the aircraft to the exit of the restricted area.	5.17	5	4.86	5	Low Priority	0.31	*
X49	Provide alcohol gel between aisle to the exit of the restricted area.	4.92	6	4.83	5	Possible Overkill	0.09	
X50	Body temperature screening by non-contact infrared thermometer at the exit of the restricted area.	4.93	5	4.88	5	Low Priority	0.05	*
	Immigration	5.27	6	4.78	5		0.49	
X51	Waiting time before accessing the immigration system.	5.26	6	4.79	5	Concentrate Here	0.47	
X52	The ease of using the system.	5.29	6	4.75	5	Concentrate Here	0.54	*
X53	Courtesy and helpfulness of airport staff in managing queues.	5.34	6	4.86	5	Good Work	0.48	
X54	Courtesy and politeness of the immigration officer.	5.33	6	4.79	5	Concentrate Here	0.54	
X55	Provide social distancing while waiting immigrant area.	5.14	6	4.70	5	Low Priority	0.44	*
	Baggage reclaims	5.24	6	5.01	5		0.23	
X56	Walking distance to get to the baggage claim area	5.08	5	5.03	5	Possible Overkill	0.05	*
X57	Flight display on carousel screens.	5.30	6	5.08	5	Good Work	0.22	*
X58	Waiting time before retrieving baggage.	5.32	6	4.97	5	Good Work	0.35	
X59	Availability of toilets in the baggage claim area.	5.31	6	4.99	5	Good Work	0.32	
X60	The cleanliness of toilets at the baggage reclaims area.	5.39	6	4.99	5	Good Work	0.40	
X61	Availability of carts/trolleys	5.05	5	4.99	5	Possible Overkill	0.06	

Labels	Factors	Importance (X)		Efficiency (Y)		IPA Quadrants	Gab (X-Y)	p-value
		Mean	Level	Mean	Level			
	Customs	5.24	6	4.94	5		0.30	
X62	Waiting time to go through customs.	5.26	6	4.98	5	Good Work	0.28	
X63	Setup/organization of queues	5.26	6	4.96	5	Good Work	0.30	
X64	Courtesy and politeness of the customs officer.	5.32	6	4.97	5	Good Work	0.35	
X65	Provide social distancing while waiting in the customs area.	5.13	6	4.85	5	Low Priority	0.28	*
	Before leaving from the airport	5.15	5	4.68	5		0.47	
X66	Arrival tourist assistance center	4.98	5	4.80	5	Low Priority	0.18	*
X67	Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.)	5.21	5	4.70	5	Concentrate Here	0.51	
X68	Public transport prices are appropriate for each type of service.	5.26	6	4.55	5	Concentrate Here	0.71	*
	Total Arrival	5.18		4.85			0.33	

4.6.1 Overall Research Results Integration

In this section, three groups of research results were summarized. ‘Customer Journey Management Policy of Phuket International Airport’, ‘Factors of Customer Journey Management of Phuket International Airport Influencing Customer Experience’, and ‘Efficiency of Customer Journey Management at Phuket International Airport’. The results on importance-efficiency quadrants analyzed through the IPA were combined in this section (Figure 4.20).

1) Significant results from research objective 1 (RO1)

Results of customer journey management policy of Phuket International Airport (RO1). Each group of respondents has five similar interview questions comprising of: respondents’ profiles, important issues on airport management, important issues on customer journey management, questions about advantages and disadvantages of the airport, and other suggestions on airport.

Effective customer journey management at Phuket International Airport requires a comprehensive approach involving service quality, safety, operational efficiency, and passenger amenities. This study identifies key areas for improvement, such as continuous staff training, leveraging technology, improving infrastructure, and enhancing public transportation. Recommendations include expanding commercial activities, promoting competition among service providers, and implementing robust feedback mechanisms. By addressing these factors, the airport can significantly enhance passenger experience and operational efficiency. Implementing these policy recommendations will position Phuket International Airport as a leading hub that effectively meets the evolving needs of its passengers.

2) Significant results from research objective 2 (RO2)

Twelve research hypotheses were involved underneath the 2nd objective ‘to study factors of customer journey management of Phuket International Airport influencing customer experience’.

(1) Accessibility

Two of six accessibility to the airport variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, ‘X3 strictly

screened for COVID-19 (terminal screening)’ and ‘X6 provide clearly defined zones and paths for entry and exit’.

(2) Check-in processes

Two of six check-in processes variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, ‘X11 provide social distancing while waiting at check-in counters’ and ‘X9 the check-in area is enough and convenient’.

(3) Baggage handling

One of four baggage handling processes to the airport variable show significant results on customer journey management of Phuket International Airport influencing customer experience is X16 ‘efficiency in baggage handling’.

(4) Safety and security

One of five safety and security variables shows significant results on customer journey management of Phuket International Airport influencing customer experience is X21 ‘sense of safety and security in this airport’.

(5) Passport/ID control

Two of five passport/ID control variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, ‘X25 sense of security in the travel document inspection process.’ and ‘X26 provide social distancing while waiting at passport control area’.

(6) Mobility

One of five mobility in the airport variable shows significant results on customer journey management of Phuket International Airport influencing customer experience is X31, ‘readiness to help people with disabilities.’

(7) Airport facilities

Two of thirteen airport facilities variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, ‘X44 provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.’ and ‘X39 the cleanliness of the toilet facilities.’

(8) Deboarding

Two of six deboarding variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, 'X48 provide clearly defined zones from the aircraft to the exit of the restricted area.' and 'X50 body temperature screening by non-contact infrared thermometer at the exit of the restricted area'.

(9) Immigration

Two of five immigration variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, 'X52 the ease of using the system.' and 'X55 provide social distancing while waiting immigrant area'.

(10) Baggage reclaims

Two of six baggage reclaim variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, 'X56 walking distance to get to the baggage claim area.' and 'X57 flight display on carousel screens.

(11) Customs

One of four customs in the airport variable show significant results on customer journey management of Phuket International Airport influencing customer experience is X65, 'provide social distancing while waiting in the customs area'.

(12) Before leaving from the airport

Two of three before leaving from the airport variables show significant results on customer journey management of Phuket International Airport influencing customer experience. In descending orders of significant variables, 'X66 arrival tourist assistance center.' and 'X68 public transport prices are appropriate for each type of service'.

2) Significant results from research objective 3 (RO3)

On the 3rd research objective, the differences between importance mean and efficiency mean were analyzed to find significant gaps reflecting passengers' requirements.

(1) IPA of Departure's zone

According to four quadrants analyzed through the IPA, 22 attributes of 'keep up good work' quadrant (high importance & high efficiency) were accessibility X5, X6/ check-in process X8, X9, X10/ safety management X17, X18, X19, X20, X21/ passport/ID control X22, X23, X24, X25, X26/ mobility X27, X28, X30, X31/ and facilities X38, X39, X44. Two attributes belonging to the 'concentrate here' quadrant (high importance & low efficiency) was accessibility X1 and facilities X37. Thirteen attributes belonging to the 'low priority' quadrant (low importance & low efficiency) were accessibility X2/ check-in process X7, X11/ baggage handling X13/ mobility X29/ and facilities X32, X33, X34, X35, X36, X41, X42, X43. And the rest seven attributes fit in 'possible overkill' quadrant which reflected low importance and high efficiency.

(2) IPA of Arrival's zone

According to four quadrants analyzed through the IPA of Arrival's zone, eight attributes of 'Keep Up Good Work' quadrant (high importance & high efficiency) were immigration X53/ baggage reclaims X57, X58, X59, X60/ customs X62, X63, X64. Six attributes belonging to the 'concentrate here' quadrant (high importance & low efficiency) was deboarding X45/ immigration X51, X52, X54/ and before leaving X67, X68. Six attributes belonging to the 'low priority' quadrant (low importance & low efficiency) were X46, X47, X49/ immigration X55/ customs X65/ before leaving X66. And the rest four attributes fit in 'possible overkill' quadrant which reflected low importance and high efficiency (deboarding X48, X50/ baggage reclaims X56, X61).

Customer Journey Management Policy of Phuket International Airport (RO1)		Factors of Customer Journey Management of Phuket International Airport Influencing Customer Experience (RO2)	
Overall airport management policy Staff and services: professional staff, service with pleasure, speed /convenient	Customer journey management policy Staff and services: professional staff, service with pleasure, speed /convenient	Departure's zone Accessibility: X3 Strictly screened for COVID-19 (Terminal Screening) and X6 Provide clearly defined zones and paths for entry and exit) Check-in processes: Provide social distancing while waiting at check-in counters X11 The check-in area is enough and convenient X9 Baggage handling: Efficiency in baggage handling X16 Safety and security: Sense of safety and security in this airport. X21 Passport control: Sense of security in the travel document inspection process X25 and provide social distancing while waiting at passport control area X26 Mobility: Readiness to help people with disabilities X31 Airport facilities: Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal X44 and the cleanliness of the toilet facilities X39 Arrival's zone Deboarding: Provide clearly defined zones from the aircraft to the exit of the restricted area X48 and Body temperature screening by non-contact infrared thermometer at the exit of the restricted area X50 Immigration: The ease of using the system X52 and provide social distancing while waiting immigrant area X55 Baggage reclaim: Walking distance to get to the baggage claim area X56 and . Flight display on carousel screens X57 Customs: Provide social distancing while waiting in the customs area X65 Before leaving from the airport: Arrival tourist assistance center X66 and public transport prices are appropriate for each type of service X68	
Shops and restaurants: more shop/restaurant, bar free lough	Airport facilities and equipment: modern equipment/ technology, signs/symbols are clear, clean toilet		
Safety and security: baggage safety, travel document security, service under security	Airport management: allocate flight routes, reorganization, multiple sources of income, manage cost, planning new policies		
Facilitation and promotional: shop/restaurant, promotional activities	Advantages and Disadvantages Advantages Professional staff Service Technology Law Safety and security Place and location Suggestions on Airport *Improve the area/wider *It should easily connect to Wi-Fi *Phone charger at the chair *full option services *More display/demonstration of Thai culture. *Separate zones for people with children		
Efficiency of Customer Journey Management at Phuket International Airport (RO3)			
Importance – Performance through IPA			
Departure's zone		Arrival's zone	
2. Concentrate Here 2 attributes: accessibility X1/ facilities X37	1. Keep Up Good Work 22 attributes: accessibility X5, X6/ check-in process X8, X9, X10/ safety management X17, X18, X19, X20, X21/ passport/ID control X22, X23, X24, X25, X26/ mobility X27, X28, X30, X31/ facilities X38, X39, X44	2. Concentrate Here 6 attributes: deboarding X45/ immigration X51, X52, X54/ before leaving X67, X68	1. Keep Up Good Work 8 attributes: immigration X53/ baggage reclaims X57, X58, X59, X60/ customs X62, X63, X64
3. Low Priority 13 attributes: accessibility X2/ check-in process X7, X11/ baggage handling X13/ mobility X29/ facilities X32, X33, X34, X35, X36, X41, X42, X43	4. Possible Overkill 7 attributes: accessibility X3, X4/ check-in process X12/ baggage handling X14, X15, X16 facilities X40	3. Low Priority 6 attributes: deboarding X46, X47, X49/ immigration X55/ customs X65/ before leaving X66	4. Possible Overkill 4 attributes: deboarding X48, X50/ baggage reclaims X56, X61

Figure 4.20 Overall Research Results Integration

4.6.2 Proposed Customer Journey Management Model for Phuket International Airport

To propose a customer journey management model for Phuket International Airport, data were collected through in-depth interviews with 10 key informants, who were the same group as those interviewed in Objective 1, except for the group of airport passengers. Therefore, it can be divided into two main groups: 1) 5 airport executives or representatives, and 2) 5 airline representatives. (Table 4.133)

Table 4.133 Key Informants' General Information

Respondents	Sector/Affiliation	Task/Responsibility
AL1	Thai airway	Supervisor
AL2	Thai airway	Passenger Service
AL3	Nok air	Supervisor
AL4	Singapore airlines	Customer service Assistant
AL5	Emirates Phuket	Senior Airport Services Agent
AP1	Immigration	Executive
AP2	Passenger Service Division	Executive
AP3	Security	Supervisor
AP4	Airside Operations	Supervisor
	Department	
AP5	AOTGA	Ground service

Based on the comprehensive findings presented in Figure 4.20, they can be condensed into a preliminary model intended for presentation to stakeholders, serving as a blueprint for customer journey management at Phuket International Airport, as illustrated in Figure 4.21.

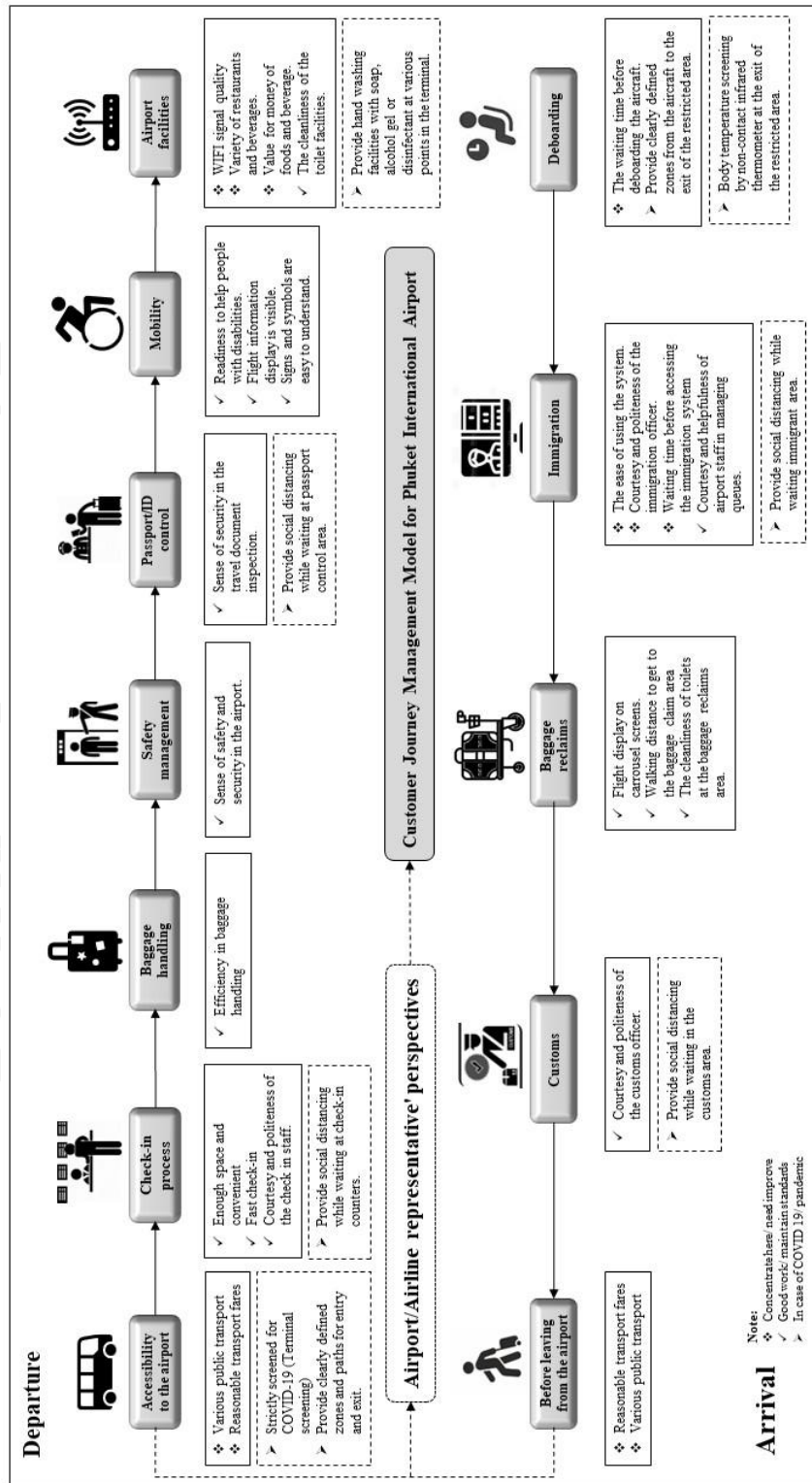


Figure 4.21 Cumulative Information for Model Creation

Results of Recommendations

The interviews revealed unanimous agreement among all respondents regarding the Customer Journey Management model for Phuket International Airport. Nevertheless, key informants also provided suggestions aimed at optimizing efficiency in Customer Journey Management. To facilitate this, the researcher devised an index and a code for identifying keywords extracted from the in-depth interviews with key informants. The aim is to ensure that the specified policies are implemented for encoding and tallying keyword frequency as follows (Table 4.134).

Table 4.134 Results of Recommendations to Propose the Model

Recommendation for CJM Model	Key Informants
1. Enhanced airport accessibility and diverse transportation options should be provided.	AL2, AL4, AP2, AP4, AP5
2. Bus fares to and from the airport should be regulated, with transparent pricing for different vehicle types, and strict enforcement of penalties for violators.	AL1, AL3, AL5, AP1, AP2 AP3
3. Consistently uphold high service standards at every service stage.	AL1, AL2, AL3, AL4, AL5, AP1, AP2
4. Ensure passengers are served promptly, safely, and conveniently.	AL2, AP3, AP4, AP5
5. Expand or augment passenger waiting areas, particularly at boarding gates.	AL2, AL4, AL5, AP1, AP2
6. Establish luggage storage service points to facilitate passengers.	AL5, AP2, AP3, AP5
7. Increase the number of permanent staff for immigration and safety-related services.	AP1, AP3, AP4
8. Introduce express lanes at each touchpoint for expedited service.	AL1, AL3, AL4, AP2
9. Upgrade the WIFI signal connection system to improve accessibility.	AL2, AL4, AP2, AP5
10. Further develop and stabilize biometric systems and airport technologies.	AL1, AL3, AP1, AP2, AP4

The recommendations on this issue from key informants in airline sectors and airport passengers are as follows.

“Phuket International Airport lacks a main road, resulting in the absence of bus services. Instead, reliance is placed solely on airport cars, leading to prolonged waiting times. Thus, there is a need to augment and diversify access routes to the airport.” (AP2)

“Transportation costs are high, necessitating control over the fare prices of each vehicle type and the establishment of average pricing standards. Furthermore, strict enforcement of the law is imperative to address violations effectively” (AL3)

“We gotta make sure we keep training our employees regularly to keep up the good service and safety standards.” (AP1)

“Providing good service is crucial, and it should always prioritize safety. Do not reduce the rights of customers and must also safeguard the company’s interests.” (AL2)

“There isn’t sufficient waiting space for passengers, particularly near the boarding exit area. The boarding area needs further expansion, and one solution could be to repurpose some of the vacant shop spaces designated for tenants. We could transform these areas into additional waiting zones for passengers.” (AL4)

Establish a luggage storage service point to assist passengers, particularly those arriving at the airport well in advance. Additionally, offer a luggage delivery service to transport baggage directly to passengers’ accommodations, especially for arrival passengers. (AP3)

“Special channels should be designated for passengers seeking convenience, providing an additional option to enhance their overall experience.” (AL1)

“Wi-Fi registration is complicated. Simplifying this, airport Wi-Fi names should be prioritized and displayed ahead of others for easier accesses.” (AL5)

“The technology systems in airports should be developed and enhanced to operate at their maximum potential.” (AP4)

4.6.3 Customer Journey Management Model for Phuket International Airport

The customer journey management model for Phuket International Airport has been developed based on research and recommendations from key informants. It will be utilized to develop and enhance operational procedures aimed at providing a positive passenger experience within Phuket International Airport, as illustrated in Figure 4.22. The model comprises two primary elements: firstly, the departure zone encompasses accessibility, check-in processes, baggage handling, safety and security, passport/ID control, mobility, and airport facilities. Subsequently, the arrival zone, which includes deboarding, immigration, baggage reclaims, customs, and before leaving from the airport, is detailed.

4.6.3.1 Departure Zone

1) Accessibility: Results of the study on accessibility factors revealed the use of six variables, with one variable, X1 (variety of buses), falling into the second quadrant, indicating a need for urgent improvement. Interviews with stakeholders also highlighted limited access to the airport due to a single main route and the absence of public buses, leading passengers to opt for expensive airport or private transportation. This aligns with passenger feedback, emphasizing the necessity for increased travel options with lower costs. Urgent improvements in airport accessibility, specifically in the variety of buses and fare structures, are recommended.

Furthermore, the study emphasized the importance passengers place on measures such as screening at building entrances and maintaining physical distancing during COVID-19 outbreaks. Phuket International Airport was found to perform well in this respect. Based on the research and various solutions, the following suggestions are proposed:

- (1) Expand sea routes for airport access.
- (2) Construct a light rail line connecting the airport to various locations within Phuket City.
- (3) Allow passengers to utilize additional car rental services for airport access, beyond existing options like Uber and Grab car. Provide designated parking and waiting areas for passenger pick-up.

(4) Clearly specify or regulate the median price for each type of vehicle to control fare rates.

(5) Enforce strict legal measures against those violating fare regulations and charging excessive fees.

2) Check-in processes: The study investigated six variables in the Check-in processes, yielding overall impacts evaluations. Two influential variables were identified: X9, related to adequate check-in space and easy access, and X11, focusing on social distancing while waiting at the check-in counter. Interviews indicated passenger satisfaction with courteous and prompt service from check-in counter staff, aligning with a top-priority policy at Phuket International Airport.

In conclusion, the airport should emphasize check-in area space, staff service quality, and the efficiency of the check-in process. Despite the already positive evaluations, maintaining high standards is essential.

3) Baggage handling Process: The study examined four variables, with most falling into the 4th quadrant (Possible Overkill), suggesting that baggage handling factors are less crucial to a passenger's travel experience. This is attributed to the standard baggage handling system at Phuket International Airport, typically managed during check-in. Currently lacking a self-service baggage check-in system, passengers prioritize overall baggage management efficiency. To maintain high operational standards, future considerations should include implementing an Early Baggage Storage (EBS) system. This would enable passengers to check in several hours before their scheduled departure, enhancing convenience for those waiting to board flights well in advance.

4) Safety management: In terms of factors related to Safety management, there were a total of five variables used in the study. All variables are in quadrant 1: Keep up good work, which means that the overall safety management performance is good. The variable that passengers' value most is Sense of safety and security in the airport. But the interview results also found that currently the company has reduced the hiring of outsourced employees, which may affect work efficiency at this point. Therefore, the airport should maintain good operational standards in Safety management, especially in the matter of Sense of safety and security in the airport.

5) Passport/ID control: Research indicates that passengers place a high value on Passport/ID control. The study also confirmed the high efficiency of Passport/ID control management. To sustain these excellent standards and further improve the passenger experience, it is recommended that the airport administration implements a Priority line/Fast Track line for passengers seeking convenience, speed, and enhanced mobility.

6) Mobility: Despite the high importance level of mobility within airports and its high performance, the interview results revealed that the majority of tourists visiting Phuket were Chinese and Russian, who may not be proficient in English. Consequently, those involved should consider implementing signs or symbols for tourists who do not understand English to enhance the overall passenger experience at Phuket International Airport.

7) Airport Facilities: The study on factors related to airport facilities identified three variables out of thirteen requiring immediate improvement, with one falling into the second quadrant. Specifically, the variable X37, WIFI signal quality, emerged as needing urgent attention. The interview results revealed complexities in accessing WIFI, aligning with the quantitative evaluation. Additionally, passengers expressed a desire for more shops and restaurants with reasonable prices. The study emphasized the significance passengers place on the cleanliness of toilet facilities, where overall research results were positive. In conclusion, Phuket International Airport should promptly address WIFI, shops, and restaurant issues, ensuring appropriate pricing while maintaining high standards of bathroom cleanliness.

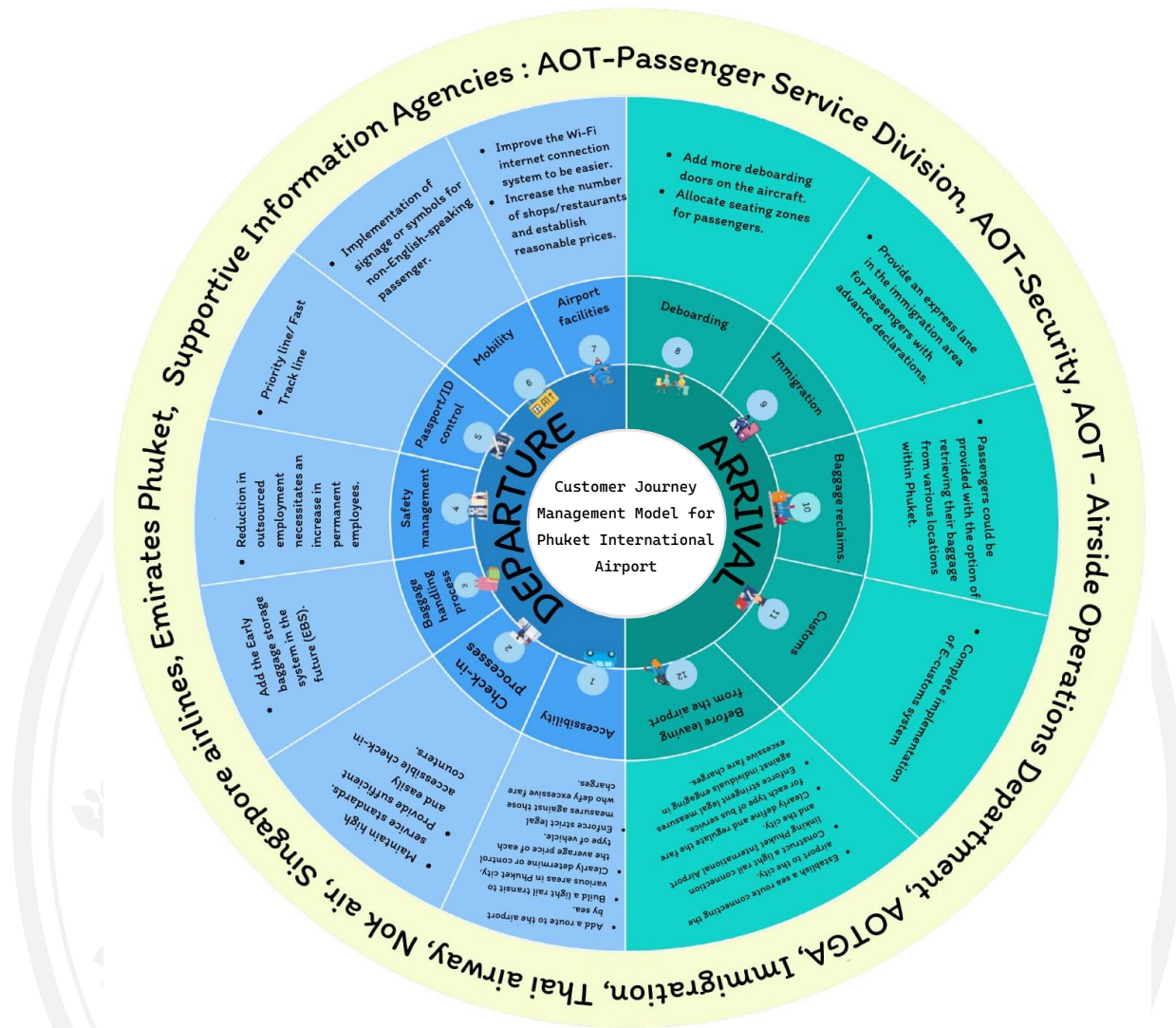


Figure 4.22 Customer journey management model for Phuket International Airport

4.6.3.2 Arrival Zone

1) Deboarding: The study on deboarding factors examined the six most common elements influencing a positive evaluation. Notably, variables X48 and X50 were prominent, with an additional consideration in quadrant 2 (Concentrate here) for variable X45. The research noted that during the study period, with ongoing COVID-19 concerns and weather conditions affecting visibility during deboarding, adherence to prescribed preventive measures for social distancing led to longer boarding times than usual.

In summary, Phuket International Airport should prioritize the establishment of clearly defined zones from the aircraft to the exit of the restricted area and implement body temperature screening using non-contact infrared thermometers at the exit of the restricted area. While maintaining good evaluation standards, particular attention should be given to reducing the time required for passengers to deboard. Airlines should explore strategies for enhancing the efficiency and speed of this process. Drawing insights from past research, the following guidelines for developing an improved deboarding experience can be recommended:

(1) Introduce an additional door for passenger deboarding based on research findings, which indicates that having two doors can significantly reduce the deboarding time.

(2) Implement seating zone arrangements for passengers to expedite the boarding process. Additionally, include information collection during ticket purchases, such as the number of bags and accompanying individuals, to facilitate efficient organization for the next flight.

2) Immigration: The overall performance evaluation was satisfactory. However, the study revealed that passengers assign a significant level of importance to this touchpoint, resulting in most of the IPA evaluation results falling into quadrant 2. Examples of factors falling into this category include X51, which pertains to the waiting time before accessing the immigration system, X52, evaluating the ease of using the system, and X54, measuring the courtesy and politeness of immigration officers. Airports should, therefore, explore diverse channels or methods aimed at reducing the time and steps involved in the immigration process. For instance, providing express lanes in customs areas for passengers who have completed their Advance Declaration, allowing them to bypass line-ups for primary inspection kiosks.

3) Baggage reclaims: Two out of the six baggage reclaim variables exhibit significant results regarding the customer journey management of Phuket International Airport, impacting the customer experience. In descending order of significance, these variables are (X56) walking distance to reach the baggage claim area and (X57) flight display on carousel screens. Both factors have performance evaluation results in quadrants 4 and 1, respectively, indicating their already good performance. It is essential to uphold the quality of operations in these areas and

consider introducing more options for baggage pickup in the future, providing passengers with the convenience of retrieving their luggage from various locations within Phuket.

4) Customs: The customs segment has been identified with a low level of importance and, notably, the lowest level of performance. Therefore, in the future, airport management may consider full implementation of the E-customs system to enhance passenger convenience, reduce physical contact, and minimize paper usage, aligning with government policies aimed at improving the overall passenger experience at the airport.

5) Before leaving the airport: two out of three variables demonstrate significant results in customer journey management at Phuket International Airport, influencing the customer experience. In descending order of significance, these variables are 'X66 arrival tourist assistance center' and 'X68 public transport prices are appropriate for each type of service.' Enhancing accessibility to the airport is a critical priority, necessitating an urgent and effective approach to resolve travel-related issues. This can be achieved by diversifying and regulating fares appropriately while implementing strict legal measures against individuals who impose excessive charges.

Phuket International Airport is a significant global travel hub; however, findings suggest areas for improvement. Enhancing accessibility to the airport access, optimizing transportation options, considering a light rail system, and refining the check-in process can enhance passenger comfort and convenience. Implementing an Early Baggage Storage system (EBS) improves baggage handling. Strengthening security management and increasing full-time staff ensure safety. Passport/ID control, language accommodations, and Wi-Fi improvements enhance overall passenger experience. Optimizing deboarding, expediting customs processes, and emphasizing E-customs improve incoming passenger experiences. Expanding baggage reclaim options and promoting E-customs in customs work reduce paper use and increase convenience. Lastly, pre-departure efficiency and legal measures against excessive fees contribute to a more streamlined customer journey management in the airport.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a comprehensive summary of the dissertation titled “Customer Journey Management Model for Phuket International Airport.” It encapsulates the key findings, briefly outlines the entire research process, and offers recommendations for future studies. The dissertation comprises five chapters, each serving a specific purpose. The initial chapter elucidates the study’s significance, rationale, objectives, and outcomes, while the second chapter delves into the literature review, encompassing relevant concepts and theories pertaining to customer journey management and airport management. The third chapter elucidates the research methodology employed, followed by the fourth chapter, which encompasses data analysis, research findings, and ensuing discussions. Finally, the fifth chapter serves as the conclusion, addressing study limitations and presenting recommendations for further exploration.

5.2 Conclusion

5.2.1 The Descriptive Statistics Results of Passengers’ Socio-Demographic Profiles

From the conclusion of the 400 respondent’s profile, 239 (59.8%) were males, and 161 (40.3%) were female. The majority of respondents were Gen Y (1981-1996), representing 46.0% of respondents. The next four groups were generation X (1965-1980) representing 26.8%, Gen Z (1997-2012) 14.5%, baby boomers (1946-1964) 11.5%, and silent generation (1925-1945) 1.3%. Most of total respondents gained bachelor’s degree, 184 (46.0%), below bachelor’s degree, 125 (31.3%), and rest 91 (22.8%) respondents achieved Above bachelor’s degree. 87 (21.8%) were private

business employees, 75 (18.8%) were temporary worker / Freelance, 73 (18.3%) were business owners, 67 (16.8%) were government/civil servant, 38 (9.5%) were student, and 20 (5.5%) were others. Only 5.5%, 3.3%, and 1.3% respectively were retired persons, unemployed, and housewives.

82.8% of respondents gave information about their average monthly income. This might be because the question related to income, which is sometimes a confidential matter for some respondents. 129 (32.3%) of respondents had average incomes of 90,001-200,000 THB per month. 49 (12.1%) of respondents had an average monthly income of more than 200,000 THB, followed by 45 (11.3%) of respondents receive 30,001-50,000 THB per month. and the rest were less than 30,001 THB (10.8%), 70,001-90,000 THB (8.3%), and 50,001-70,000 THB (8.0%) per month respectively.

Focusing on the top five country of residence, 82 respondents (20.5%) were from Australia, followed by 44 respondents (11.0%) from UK, 42 respondents (10.5%) from Russia, 41 respondents (10.3%) from Germany, and 28 respondents (7.0%) from Sweden. Of these, 196 were married (49.0%), 182 were single (45.5%), and 22 were widowed / divorced (5.5%). Exactly, 271 (67.8%) respondents were Christian, 28 (7.0%) were Muslim, 25 (6.3%) were Buddhist, and 76 (19%) were other. 232 or 58.0% of the respondents had visited Phuket airport 1-2 times. while 107 or 26.8% respondents had visited 3-5 times, and 61 or 15.3% respondents had visited Phuket International Airport more than 5 times. Respondents spent time at the departure terminal, most of 225 (56.3%) respondents spent time 3-4 hours at airports. Followed by 1-2 hours at 147 (36.8%) and more than 4 hours for 28 (7.0%). Considering travelling companions, the majority, or 232 respondents (58%) traveled with 2-3 people, the rests of respondents with 81 traveled with 4-5 persons (20.3%), travel alone 70 persons (17.5%), and more than 6 persons, 17 traveled (4.3%) respectively.

And regarding Estimated spending at the airport, 142 respondents (35.5%) spent 501-1,000 THB per person, 87 respondents (21.8%) spent less than 501 THB, 62 respondents (15.5%) spent 1,001-2,000 THB, 25 respondents (6.3%) spent 3,001-4,000 THB, 24 respondents (6.0%) spent 2,001-3,000 THB, 19 respondents (4.8%) spent 4,001-5,000 THB, and 16 respondents (4.0%) spent more than 5,000 THB per person. Most of the 368 respondents (93.9%) went on leisure / holidays. Followed by 30 (7.7%) visiting friends/relatives, while business, education, meeting / seminar, and others were

the least popular. Accounted for 2.3%, 1.5%, 1.3%, and 0.8%, respectively. 264 respondents (68.8%) prefer dining, while 222 respondents (57.8%) prefer waiting at the boarding gate as the second most popular activity. In the meantime, shopping (185) and taking a walk (127) ranked third and fourth, accounting for 48.2% and 33.1%, respectively. And the least preferred activity was buying postcards, accounting for only 1%. Most passengers, 108, or 32.80%, require a lounge, while 75, or 22.8%, want a library, 74 or 22.5 % need a shuttle. And other facilities, calculated as a percentage, as follows: theater 16.1% beauty shop 15.5% playground 14% museum 12.8% medical service 10.6% cultural center 7.9% no need 7.3% wheelchair service 5.8% interpreter 4.9% and Others 12.5%. And lastly in terms of products and services that passengers spend on in the airport. The top five found that passengers spent the most on food 304 people accounted for 83.7%, beverages 242 (66.7%), souvenir 95 (26.2%), snacks 94 (25.9%), and liqueur 42 (11.6%) respectively.

5.2.2 The Results of Research Objective 1: Customer Journey Management Policy of Phuket International Airport

The customer journey management policy of Phuket International Airport aims to enhance passenger experiences through strategic improvements in service quality, safety and security, airport management, facilitation, promotion, shops and restaurants, airport facilities, and internal management. The policy recommendations and solutions are as follows:

- 1) Service Quality and Training
 - (1) Continuous training for airport staff focusing on customer service, problem-solving, and emergency response.
 - (2) Optimized manpower planning to ensure adequate staffing during peak hours.
- 2) Safety and Security
 - (1) Enhanced security protocols through regular internal and external audits.
 - (2) Updated health and safety protocols for COVID-19 compliance.
- 3) Airport Management

(1) Regular monthly planning meetings to review and update policies.

(2) Integration of smart airport technologies to streamline processes.

4) Facilitation and Promotion

(1) Improved facilities for better passenger experiences.

(2) Focus on retention marketing strategies, including loyalty programs and personalized promotions.

5) Shops and Restaurants

(1) Expansion of retail and dining options to cater to diverse passenger needs.

(2) Competitive pricing to offer good value for passengers.

6) Airport Facilities and Equipment

(1) Regular maintenance and cleanliness of facilities and equipment.

(2) Investment in modern technology for efficiency and convenience.

7) Internal Management

(1) Comprehensive training for staff on handling passengers and specific programs like “Pet on Board.”

(2) Development of multilingual skills among staff for better communication with international passengers.

8) Addressing Disadvantages

(1) Increase in staff numbers, especially in areas affected by COVID-19.

(2) Redesign of waiting areas for more comfort and better crowd management.

(3) Improvement of public transportation options to and from the airport.

(4) Encouragement of competition in ground services to improve service quality.

(5) Enhancement of passenger facilities with more shops and restaurants.

In conclusion, the proposed customer journey management policy will help Phuket International Airport provide high-quality services, ensure safety and security, and continuously improve facilities and management practices. These improvements will lead to greater passenger satisfaction and operational efficiency, solidifying the airport's reputation as a premier travel destination.

5.2.3 The Results of Research Objective2: Factors of Customer Journey Management of Phuket International Airport Influencing Customer Experience

This section presents the results of the evaluation of important levels of customer journey management of Phuket International Airport influencing customer experience. The evaluation utilized a six-level rating system, where level six represented the highest importance, while level one indicated the lowest. The results show three variables were significant influence toward customer experience. Based on the predicted model above, we can conclude, for every increment change in the 'deboarding' will be influencing on the customer experience at Phuket International Airport about 0.143, while the other variable is constant. On the 'immigration' significant, for every increment of the immigration will be influencing on the customer experience at Phuket International Airport about 0.202 while the other variable is constant, and 'accessibility' for every increment of the accessibility will influence the customer experience at Phuket International Airport about 0.097 while the other variable is constant. Since all independent variables, deboarding, immigration and accessibility are very important to the customer experience at Phuket International Airport, the management should consider improving the highest beta in the result above, followed with others variable with have a significant.

The result of factors of customer journey management of Phuket International Airport influencing customer experience in all twelve variables assessments shown in Table 5.1

Table 5.1 The Overall Result of Factors of Customer Journey Management of Phuket International Airport Influencing Customer Experience

Factors	R	R Square	Ad R Square
Departure's zone			
Accessibility to the airport (Access)			
(X6) Provide clearly defined zones and paths for entry and exit.	.299	.090	.085
(X3) Strictly screened for COVID-19 (Terminal Screening)			
Check-in process management (Check)			
(X11) Provide social distancing while waiting at check-in counters.	.235	.055	.050
(X9) The check-in area is enough and convenient.			
Baggage handling process (Bagg)			
(X16) Efficiency in baggage handling	.123	.015	.013
Safety management (Safe)			
(X21) Sense of safety and security in this airport.	.229	.052	.050
Passport/ID control (Pass)			
(X25) Sense of security in the travel document inspection process.	.294	.086	.082
(X26) Provide social distancing while waiting at passport control area.			
Mobility (Mobi)			
(X31) Readiness to help people with disabilities.	.199	.040	.037
Airport facilities (Faci)			
(X44) Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.	.263	.069	.065
(X39) The cleanliness of the toilet facilities.			
Arrival's zone			
Deboarding (Debo)			
(X50) Body temperature screening by non-contact infrared thermometer at the exit of the restricted area.	.361	.131	.126
(X48) Provide clearly defined zones from the aircraft to the exit of the restricted area.			

Factors	R	R Square	Ad R Square
Immigration (Immi)			
(X55) Provide social distancing while waiting immigrant area.	.358	.129	.124
(X52) The ease of using the system.			
Baggage reclaims (Bagre)			
(X57) Flight display on carousel screens.	.249	.062	.057
(X56) Walking distance to get to the baggage claim area			
Customs (Cust)			
(X65) Provide social distancing while waiting in the customs area.	.250	.062	.060
Before leaving from the airport (Before)			
(X68) Public transport prices are appropriate for each type of service.	.274	.075	.070
(X66) Arrival tourist assistance center			

In the section regarding factors affecting the passenger experience in the departure zone, when divided into different aspects, it is found that in the Accessibility aspect, there are two variables that influence the experience. These variables are “Provide clearly defined zones and paths for entry and exit” and “Strictly screened for COVID-19 (Terminal Screening).” In the Check-in process aspect, there are two variables that impact the experience, namely “Provide social distancing while waiting at check-in counters” and “The check-in area is spacious and convenient.” In the Baggage handling process aspect, there is one variable that affects the experience, which is “Efficiency in baggage handling.” In the Safety management aspect, there is one variable that influences the experience, which is “Sense of safety and security in this airport.” In the Passport/ID control aspect, there are two variables that have an impact on the experience. These variables are “Sense of security in the travel document inspection process” and “Provide social distancing while waiting at passport control area.” In the Mobility aspect, there is one variable that affects the experience, which is “Readiness to help people with disabilities.” Finally, in the Airport facilities aspect, there are two variables that influence the experience. These variables are “Provide hand

washing facilities with soap, alcohol gel, or disinfectant at various points in the terminal” and “The cleanliness of the toilet facilities.”

And in terms of factors affecting the passenger experience in the Arrival’s zone, divided into areas, it was found that in the Deboarding (Debo) area, there were two variables that affected the experience, namely the variable Body temperature screening by non-contact infrared thermometer at the exit of the restricted area. and the variable Provide clearly defined zones from the aircraft to the exit of the restricted area. On the Immigration side (Immi), there are two variables that affect the experience: the variable Provide social distancing while waiting immigrant area. and the ease of using the system. As for Baggage reclaims (Bagre), there are two variables that affect the experience: Flight display on carousel screens. and Walking distance to get to the baggage. Claim area: Customs (Cust) has one variable that affects the experience, which is Provide social distancing while waiting in the customs area. And in the Before leaving from the airport (Before) area, there are two variables that affect the experience. namely public transport prices are appropriate for each type of service. Arrival tourist assistance center.

5.2.4 The Results of Research Objective 3: Efficiency of Customer Journey Management at Phuket International Airport

Both importance and efficiency levels were evaluated by airport passengers using six-level evaluation. Level 6 is the maximum score referred to ‘Strongly important’ or ‘Strongly efficient’ whereas level 1 reflects ‘Strongly unimportant’ and ‘Strongly inefficient’.

5.2.4.1 Description on Importance Levels

The overall efficiency evaluation results in terms of assessing importance reveal that every factor had an impact at the 5 level (Important) as shown in Table 5.2.

Table 5.2 The Overall Efficiency Evaluation Results in Terms of Assessing Importance

Rank		Attributes	Mean	S.D.	Importance Levels*
Departure					
5	1	Accessibility to the airport	5.16	.852	5: Important
4	2	Check-in process management	5.28	.663	5: Important
7	3	Baggage handling process	4.88	.975	5: Important
1	4	Safety management	5.47	.660	5: Important
2	5	Passport/ID control	5.41	.612	5: Important
3	6	Mobility	5.33	.738	5: Important
6	7	Airport facilities	4.97	.684	5: Important
Total Departure			5.18	.536	5: Important
Arrival					
5	1	Deboarding	5.04	.783	5: Important
1	2	Immigration	5.27	.681	5: Important
3	3	Baggage reclaims	5.24	.640	5: Important
2	4	Customs	5.24	.680	5: Important
4	5	Before leaving from the airport	5.15	.802	5: Important
Total Arrival			5.19	.563	5: Important

Regarding the importance level evaluation in the departure zone, the most critical factor is in the safety management aspect, followed by passport/ID control, mobility, check-in process management, accessibility to the airport, airport facilities, and lastly, baggage handling process, respectively. And in the evaluation of importance level in the arrival zone, the most crucial factor is in the immigration aspect, followed by customs, baggage reclaims, before leaving from the airport, and lastly, deboarding, in that order.

5.2.4.2 Description on Performance Levels

The overall efficiency evaluation results in terms of assessing performance reveal that every factor had an impact at the 5 level (Important) as shown in Table 5.3.

Table 5.3 The Overall Efficiency Evaluation Results in Terms of Assessing Performance

Rank	Attributes		Mean	S.D.	Performance Levels*
Departure					
6	1	Accessibility to the airport	4.78	.756	5: Performance
4	2	Check-in process management	4.87	.782	5: Performance
5	3	Baggage handling process	4.79	.823	5: Performance
1	4	Safety management	5.16	.699	5: Performance
2	5	Passport/ID control	5.08	.736	5: Performance
3	6	Mobility	4.96	.743	5: Performance
7	7	Airport facilities	4.38	.816	5: Performance
Total Departure			4.86	.566	5: Performance
Arrival					
3	8	Deboarding	4.79	.704	5: Performance
4	9	Immigration	4.78	.822	5: Performance
1	10	Baggage reclaims	5.01	.677	5: Performance
2	11	Customs	4.94	.752	5: Performance
5	12	Before leaving from the airport	4.68	.880	5: Performance
Total Arrival			4.84	.603	5: Performance

Apropos the performance level evaluation in the departure zone, the greatest critical factor is in the Safety management aspect, followed by Passport/ID control, Mobility, Check-in process management, Baggage handling, Accessibility to the airport, and lastly, Airport facilities, respectively. And in the evaluation of performance level in the arrival zone, the most crucial factor is in the Baggage reclaims

aspect, followed by Customs, Deboarding, Immigration, and lastly, before leaving from the airport, in that order.

5.2.4.3 Importance-Performance Analysis on Airport Operations

The mean scores of 44 operational attributes from passenger departure zone in relation to importance and performance. There were 22 attributes captured in the 1st quadrant Keep Up the Good Work, 2 attributes in the 2nd quadrant Concentrate Here, 13 attributes in the 3rd quadrant Low Priority and 7 attributes in Possible Overkill quadrant.

Besides IPA on operational attributes of departure zone, operational attributes of arrival zone results of Phuket International Airport were also analyzed in the IPA. Among 24 attributes, there were eight attributes dropped into 'Keep Up the Good Work' quadrant, 6 attributes in 'Concentrate Here' quadrant, 6 attributes in 'Low Priority' quadrant, and 4 attributes in 'Possible Overkill' quadrant. Based on the results obtained from the study, it is recommended that Phuket International Airport are required to implement the following recommendations to improve passenger experience:

Accessibility: accessibility to the airport is crucial for the passenger experience at Phuket International Airport, particularly in terms of convenient public transportation options like airport buses and limousines. Therefore, it is recommended that stakeholders focus on improving transportation choices in Phuket. This can be achieved by introducing a sea route to the airport, developing a light rail transit system connecting various city areas, establishing designated waiting areas for Uber and Grab car passengers, implementing transparent pricing regulations for different vehicle types, and enforcing stringent legal measures against those who impose excessive fare charges.

Check-in processes: check-in processes have also been identified as a crucial factor that impacts on the passenger experience. Airports should consider implementing measures to enhance check-in processes, such as maintaining high service standards and ensuring an adequate number of easily accessible check-in counters.

Baggage handling process: baggage handling processes: The study has revealed that passengers highly prioritize the baggage handling process. Therefore,

stakeholders should consider implementing the Early Baggage Storage system (EBS) in the future to expand passenger convenience options.

Safety management: safety management is a pivotal factor influencing the passenger experience at Phuket International Airport. While the airport already maintains a commendable level of security management, the interviews have highlighted the significance of having adequate manpower. To address this, it is recommended that proactive measures be taken. In cases where outsourced employees' contracts are nearing expiration, efforts should be made to find suitable replacements. Consequently, the airport management should contemplate increasing the number of permanent employees as outsourcing is scaled down.

Passport/ID control: Research indicates that passengers place a high value on Passport/ID control. The study also confirmed the high efficiency of Passport/ID control management. To sustain these excellent standards and further improve the passenger experience, it is recommended that the airport administration implements a Priority line/Fast Track line for passengers seeking convenience, speed, and enhanced mobility.

Mobility: Despite the high importance level of mobility within airports and its high performance, the interview results revealed that the majority of tourists visiting Phuket were Chinese and Russian, who may not be proficient in English. Consequently, those involved should consider implementing signs or symbols for tourists who do not understand English to enhance the overall passenger experience at Phuket International Airport.

Airport facilities: The study has revealed that passengers at Phuket International Airport prioritize the quality and availability of WIFI signals. However, the performance evaluation results indicate that these aspects are at the lowest performance level, highlighting a significant gap between importance and efficiency levels. Additionally, interviews with passengers have shown that there is a demand for more shopping options and dining establishments. As a result, airport management should consider enhancing the Wi-Fi internet connection system for greater accessibility and increasing the number of shops and restaurants while offering reasonable pricing.

Deboarding: The waiting time before passengers can deboard the aircraft has been identified as a significant factor affecting the passenger experience at Phuket International Airport. The airport should consider implementing measures to address these issues, such as adding more deboarding doors on the aircraft and allocating seating zones for passengers.

Immigration: The overall performance evaluation was satisfactory. However, the study revealed that passengers assign a significant level of importance to this touchpoint, resulting in most of the IPA evaluation results falling into quadrant 2. Examples of factors falling into this category include, which pertains to the waiting time before accessing the immigration system, evaluating the ease of using the system, and measuring the courtesy and politeness of immigration officers. Airports should, therefore, explore diverse channels or methods aimed at reducing the time and steps involved in the immigration process. For instance, providing express lanes in customs areas for passengers who have completed their Advance Declaration, allowing them to bypass line-ups for Primary Inspection Kiosks.

Baggage reclaims: The study has determined that the Baggage reclaims segment is currently operating performing well. To further enhance the quality of operations in this area, there may be opportunities to expand the range of baggage pickup options in the future. For instance, passengers could be provided with the option to retrieve their luggage from various locations within Phuket, offering added convenience for their passengers.

Customs: The customs segment has been identified with a low level of importance and, notably, the lowest level of performance. Therefore, in the future, airport management may consider full implementation of the E-customs system to enhance passenger convenience, reduce physical contact, and minimize paper usage, aligning with government policies aimed and improving the overall passenger experience at the airport.

Before leaving from the airport: The phase before leaving from the airport is of equal significance to the accessibility to the airport. Enhancing accessibility to the airport is a critical priority, necessitating an urgent and effective approach to resolve travel-related issues. This can be achieved by diversifying and regulating fares

appropriately while implementing strict legal measures against individuals who impose excessive charges.

5.3 Discussion of Research Finding

Based on the findings of the in-depth interviews conducted with relevant individuals, the overall airport management policy places a strong emphasis on delivering excellent service while prioritizing the safety of both passengers and the airport itself. The internal management of each sector is well-organized, aligning with the work of Knol et al. (2019), which underscores the interconnectedness of services across various airport checkpoints.

Regarding policies related to the comprehensive management of passenger experience at airports, the primary focus is on service quality. This includes the crucial aspect of employee performance, emphasizing professionalism, efficiency, and speed in service delivery. This aligns with the findings of Kayapınar and Erginel (2019), who highlight the significance of service quality under the SERVQUAL framework, especially in the transportation industry. Furthermore, the interview results reveal that various facility factors within the airport necessitate further development. This includes the modernization of airport technologies, an increase in the number of shops and restaurants, and improvements to signage for better foreign visitor understanding. This mirrors the research by Liu (2019), which explores strategies for enhancing mobility for international passengers around Schiphol Airport.

Additionally, a presentation of the research findings at each touchpoint within Phuket International Airport can be outlined as follows.

5.3.1 The Comparison of Related Theories at Each Touchpoint

5.3.1.1 Accessibility to the Airport

The study's findings revealed that airport accessibility factors significantly impact the passenger experience at Phuket International Airport. Upon closer examination of each component, it becomes evident that the clarity in defining entry and exit zones and the adequacy of COVID-19 screening measures play a crucial role in shaping the passenger experience. Given the ongoing COVID-19 pandemic,

travelers are particularly concerned about their safety during this phase of their journey. This aligns with the concept of new tourism behavior, as analyzed by the Ministry of Tourism and Sports (2020), which places a strong emphasis on S-Safety (coming first). According to this theory, “Tourists will prioritize safety and security to protect themselves and prevent the virus from spreading to others. Their travel preparations will change, becoming more health-conscious, including wearing masks, practicing good hygiene, and maintaining social distancing.”

Considering this, airports should prioritize providing passengers with clear guidance, rigorous oversight, and strict enforcement of safety measures, especially with regard to social distancing practices. In cases where passengers fail to comply with these measures, airports should consider suspending services to prevent any adverse impact on other travelers.

5.3.1.2 Check-in Process

The study’s results indicated that process-related factors in the check-in process significantly impact the passenger experience at Phuket International Airport. Upon closer examination of each factor, it became evident that the distance maintained while waiting at the check-in counter and the sufficiency and accessibility of the check-in area play crucial roles in shaping the passenger experience. These findings align with the research conducted by Sriwilai and Thongsri (2021), which outlines guidelines for providing a safe experience for tourists. For instance, these guidelines recommend arranging seating for customers in compliance with government regulations and offering a contactless check-in/check-out tool. These guidelines aim to prepare the tourism industry for the challenges posed by COVID-19 and facilitate the transition to the “new normal” way of life.

5.3.1.3 Baggage Handling Process

The study’s findings highlight the impact of baggage handling factors on the passenger experience at Phuket International Airport. A closer examination of these factors reveals that the quality of baggage carts significantly influences the passenger experience. This observation aligns with the research conducted by Puacharoe and Sucher (2019), which underscores the importance of effectively managing baggage cart service points in terms of readiness for use and overall airport facility management. Importantly, this relationship is statistically significant at the 0.05 level.

5.3.1.4 Safety Management

Safety management factors play a crucial role in shaping the passenger experience at Phuket International Airport. A closer examination of these measures reveals that the perception of feeling safe while using airport services (X21) significantly influences the passenger experience. This emphasis on safety is likely due to passengers' heightened focus on their well-being and security while using airport services. This finding aligns with previous research on guidelines for developing and disseminating security measures to passengers at public airports, demonstrating that passengers generally hold a positive attitude toward aviation security and proactively seek information about these measures before embarking on their journeys (Kad-Osoth, 2019). To enhance passenger awareness, airports should consider effective media and information dissemination strategies.

5.3.1.5 Passport/ID Control

The study's findings indicate that various factors within the passport control process significantly impact the passenger experience at Phuket International Airport. Upon closer examination of the specific elements within this process, it becomes evident that the spacing during passport screening and passengers' perception of safety during the travel document screening process hold particular importance for enhancing the passenger experience. These findings align with previous research, emphasizing that travelers continue to prioritize COVID-19 measures when evaluating their airport experience.

5.3.1.6 Mobility

Factors related to airport mobility significantly impact the passenger experience at Phuket International Airport. Upon closer scrutiny of these factors, it becomes evident that the availability of assistance for people with disabilities plays a crucial role in shaping the passenger experience. This heightened focus on disability assistance may be attributed to the increasing awareness and emphasis on the rights and inclusion of individuals with disabilities in society. Moreover, there is growing recognition that businesses and organizations should create opportunities for people with disabilities, as exemplified by laws and regulations ensuring their equal participation. For instance, a study on employment practices found that smaller companies with fewer than 56 employees are not mandated to meet a specific quota for

hiring people with disabilities; however, they are encouraged to employ at least one person with a disability (Yuvadee Viriyangkun, 2018). This demonstrates the global shift toward greater inclusion and support for individuals with disabilities.

5.3.1.7 Airport Facilities

Airport facilities factors significantly impact the passenger experience at Phuket International Airport. Upon closer examination of these factors, it becomes evident that the behavior and willingness of airport staff and the cleanliness of restrooms and restroom facilities play a crucial role in shaping the passenger experience. This aligns with the research conducted by Park and Park (2018), which focused on the impact of facility services on passenger behavior, with a specific case study at Incheon International Airport. The study revealed that cleanliness in bathroom facilities and the overall environment, along with quality service, significantly contribute to passenger satisfaction, thereby resulting in higher levels of overall satisfaction.

5.3.1.8 Deboarding

The study on deboarding factors examined the six most common elements influencing a positive evaluation. Notably, variables X48 and X50 were prominent, with an additional consideration in quadrant 2 (Concentrate here) for variable X45. The research noted that during the study period, with ongoing COVID-19 concerns and weather conditions affecting visibility during deboarding, adherence to prescribed preventive measures for social distancing led to longer boarding times than usual. As a result, the deboarding process took more time than usual. This aligns with the findings of Geng et al. (2017), which emphasized that optimizing the organization of passenger boarding/deboarding can potentially reduce airplane turnaround time and enhance the overall travel experience for passengers.

5.3.1.9 Immigration

The study revealed that passengers assign significant importance to this touchpoint, leading to most of the IPA evaluation results falling into quadrant 2. Examples of factors in this category include the waiting time before accessing the immigration system, the ease of using the system, and the courtesy and politeness of immigration officers. This finding is consistent with the research of Gumasing et al. (2020), who studied a service quality model for the Bureau of Immigration in NAIA

Terminal 1. Their study revealed that factors affecting the service quality of passengers in airports include waiting time at immigration, courtesy of staff, quality of flight information display, number of operating counters, queue length, lighting level, noise level, and temperature level. However, based on statistical analysis, the only significant factors affecting the service quality of passengers in NAIA 1 are the waiting time and queue length.

5.3.1.10 Baggage Reclaims

Two out of the six baggage reclaim variables show significant results regarding the customer journey management of Phuket International Airport, influencing the customer experience. These variables include walking distance to reach the baggage claim area and flight display on carousel screens. Both factors have performance evaluation results in quadrants 4 and 1, respectively, indicating their already good performance. It is essential to maintain the quality of operations in these areas and consider introducing more options for baggage pickup in the future, providing passengers with the convenience of retrieving their luggage from various locations within Phuket. Research by Bandarian and Kordani (2022) underscores the significance of the baggage claim area as the gateway to the city. Therefore, the initial impression of the quality of services provided at the destination airport is based on this area.

5.3.1.11 Customs

The customs segment has been identified with a low level of importance and notably, the lowest level of performance. Therefore, in the future, airport management may consider full implementation of the E-customs system to enhance passenger convenience, reduce physical contact, and minimize paper usage, aligning with government policies aimed at improving the overall passenger experience at the airport. However, fully deploying technology may not meet the needs of all groups of people (Halpern et al., 2021). Two Step Cluster Analysis is used to reveal the presence of distinct segments according to their preferences. The findings are based on a survey of 6082 passengers at airports in Norway. Three distinct segments are identified: those that prefer traditional manual processes, those that prefer automated technology-based processes, and those that prefer more personalized technology-based processes. Significant differences are revealed for each segment according to passenger and trip characteristics and opinions regarding how the use of digital technologies at airports

impact personal privacy and human dignity. The findings contribute to knowledge on passenger preferences at airports and can help inform airport decision-making.

5.3.1.12 Before Leaving from the Airport

Increasing the ability to leave the airport is a top priority. There is a need for an urgent and effective approach to solving travel-related issues. This can be achieved by properly distributing and controlling fares. At the same time, strict legal measures are being taken against those who charge excessive fees. Similar to the research of Bergantino et al. (2020) that studied Modeling regional accessibility to airports using discrete choice models: An application to a system of regional airports, it was stated that accessibility and increasing the ability to leave the airport are key factors in airport provision, and an efficient public transport system might represent both an alternative to opening “local” – often costly and inefficient – airports in the same catchment area and a means to exploit economies of scale aggregating demand for existing airports.

5.4 Recommendations

The researcher assures that this study holds significance and can contribute to the airport industry in Phuket, Thailand. In addition, the results would encourage greater enthusiasm from all stakeholders relevant to the tourism industry in Phuket. The researcher would like to recommend the following issues for further studies:

5.4.1 Recommendations for Airport Management

5.4.1.1 Airports of Thailand Public Company Limited (AOT)

AOT can identify and implement operational improvements based on the research to enhance the passenger experience at Phuket International Airport. This includes reducing wait times, optimizing baggage handling, and upgrading terminal facilities. Incorporating these findings into strategic planning ensures that future growth aligns with passenger needs and expectations, supporting sustainable development and operational efficiency.

5.4.1.2 Airport Operations Teams

Airport operations teams can apply practical changes in daily operations derived from the research findings, such as better queue management, improved signage, and enhanced customer service training. By focusing on cleanliness, safety protocols, and customer assistance, the teams aim to directly improve the passenger experience. These enhancements are intended to streamline airport operations and ensure that passengers have a pleasant and safe journey through Phuket International Airport.

5.4.2 Recommendations for Government Agencies

5.4.2.1 Civil Aviation Authority of Thailand (CAAT)

The CAAT can utilize research findings to revise and enhance aviation safety and operational standards, ensuring alignment with international best practices. This involves updating regulations to improve overall airport performance, addressing gaps in passenger services, and developing policies informed by current challenges and passenger needs. These efforts aim to elevate the safety, efficiency, and quality of services at Phuket International Airport.

5.4.2.2 Ministry of Transport

The Ministry of Transport can leverage insights from the research to prioritize infrastructure projects that address bottlenecks and improve passenger flow at Phuket International Airport. By formulating transportation policies that integrate efficient ground transport links with the airport, the Ministry aims to enhance overall accessibility and convenience for travelers, ensuring seamless connectivity from the airport to various destinations in Phuket.

5.4.2.3 Ministry of Tourism and Sports

Aligning tourism strategies with research findings, the Ministry of Tourism and Sports can enhance the travel experience for tourists, thereby boosting the local economy. Implementing safety campaigns based on the research will reassure travelers about their safety, promoting confidence in using Phuket International Airport. These efforts are aimed at ensuring that the airport supports broader tourism goals and offers a secure and pleasant travel experience.

5.4.3 Recommendations for Private Sector

5.4.3.1 Airlines

Airlines should collaborate closely with airport management to streamline check-in and boarding processes, ensuring a seamless experience for passengers. Enhancing customer service initiatives based on feedback and research findings will bolster overall satisfaction and loyalty among travelers.

5.4.3.2 Concessionaires and Retailers

Using research insights, concessionaires and retailers can align retail and dining options with passenger preferences at Phuket International Airport. Improving cleanliness and accessibility in retail areas will contribute positively to the passenger journey.

5.4.3.3 Technology Providers

Developing innovative solutions like contactless check-in systems and automated baggage handling, based on research findings, will address passenger pain points. Seamless integration of new technologies into existing airport systems will enhance efficiency and passenger convenience.

5.4.4 Recommendations for Tourism and Hospitality Sector

5.4.4.1 Tourism Authority of Thailand (TAT)

Utilizing research findings, TAT can design promotional campaigns that showcase the enhanced airport experience, attracting more tourists to Phuket. Partnering with local businesses and the airport will enable the creation of comprehensive travel packages that enrich the overall visitor experience.

5.4.4.2 Local Hospitality Businesses

Aligning service offerings with improved airport operations will facilitate a seamless transition for travelers from the airport to their accommodations. Using research insights to understand tourist needs will enhance the overall travel experience.

5.4.5 Recommendations for Further Research

5.4.5.1 Impact of Technological Innovations on Passenger Experience

Further research should explore the long-term impact of emerging technologies, such as AI-driven customer service, biometric screening, and automated baggage handling systems, on passenger experience at airports. Investigating how these technologies can be seamlessly integrated with existing systems to enhance efficiency and passenger satisfaction will provide valuable insights for future airport development.

5.4.5.2 Sustainability Practices in Airport Operations

Conduct studies on the implementation and effectiveness of sustainable practices within airport operations, focusing on waste management, energy efficiency, and sustainable infrastructure. Research could assess how these practices impact passenger experience, regulatory compliance, and the airport's environmental footprint, aiming to develop models for green airport management.

5.4.3.3 Collaborative Strategies for Enhancing Airport-Tourism Synergies

Investigate the development of collaborative strategies between airports, local businesses, and tourism authorities to enhance the overall travel experience. Research could explore models for public-private partnerships, innovative marketing strategies, and integrated service offerings that align airport services with local tourism development goals, enhancing the attractiveness of the destination.

These recommendations aim to build on the current research findings, driving continuous improvement in airport management practices and passenger experience at Phuket International Airport and beyond.

5.5 Limitations of the Study

While this research provides valuable insights into the customer journey management at Phuket International Airport, it is important to acknowledge the inherent limitations that could impact the interpretation and generalizability of the findings. Recognizing these limitations is crucial for understanding the context in which the study was conducted and for guiding future research efforts to build on and refine the current knowledge base. The following sections outline the key limitations

encountered during the study, highlighting areas where further investigation and consideration are necessary.

1) Scope and Generalizability: The study is focused specifically on Phuket International Airport, which may limit the generalizability of the findings to other airports with different sizes, locations, and operational conditions. The unique characteristics and challenges of Phuket International Airport may not be representative of airports in other regions or countries.

2) Data Collection Constraints: The research relies on data collected during a specific period, which may not capture variations over time or during different seasons. Factors such as peak travel seasons, holidays, or special events can significantly influence passenger behavior and experience, potentially skewing the results.

3) Limited Variables: While the study examines various factors influencing customer journey management, it may not account for all possible variables affecting passenger experience. Factors such as external economic conditions, changes in airline operations, or unforeseen events (e.g., natural disasters) could also impact the findings but were not included in the research.

4) Technological and Operational Changes: The rapid pace of technological advancements and operational changes in the aviation industry may render some findings outdated. Airports frequently adopt new technologies and processes, which can significantly alter the passenger experience and operational efficiency.

These limitations highlight the need for caution when interpreting the study's results and underscore the importance of ongoing research to continuously update and refine our understanding of airport customer journey management.

BIBLIOGRAPHY

- Academy, S. (2019). Customer journey important thing that marketers and entrepreneurs must know !! Retrieved from <https://stepstraining.co/content/customer-journey-to-know>
- Aconnect. (2017). What is customer experience? Retrieved from https://www.aconnect.co.th/news_c/th/37
- Adeniran, A., & Fadare, S. (2018). Assessment of passengers' satisfaction and service quality in Murtala Muhammed Airport (MMA2), Lagos, Nigeria: application of SERVQUAL model. *Journal of Hotel and Business Management*, 7(2), 188.
- Adeniran, A., & Fadare, S. (2018). Relationship between passengers' satisfaction and service quality in murtala muhammed international airport, Lagos, Nigeria. *International Journal of Research in Industrial Engineering*, 7(3), 349-369.
- Adeniran, A., Stephens, M., & Akinsehinwa, F. (2020). Factor analysis of passengers' satisfaction at Murtala Muhammed Airport (MMA2). *Aeron Aero Open Access Journal*, 4(1), 13-24.
- Aichner, T. (2012). The Zero Moment of Truth in Mass Customization. *International Journal of Industrial Engineering and Management (IJIEM)*, 3(4), 173-178
- Aichner, T., & Gruber, B. (2017). Managing customer touchpoints and customer satisfaction in b2b mass customization: A case study. *International Journal of Industrial Engineering and Management*, 8(3), 131-140.
- Al-Refai, A., Fouad, R. H., & Eteiw, D. (2013). Examining factors affect passenger's satisfaction and loyalty: A comparative analysis from Jordan airport. *Advances in Information Sciences and Service Sciences*, 5(3), 641.
- Alarids-Tomalin, D., Ansons, T. L., Reich, T. C., Sakamoto, Y., Davie, R., Leboe-McGowan, J. P., & Leboe-McGowan, L. C. (2014). Airport security measures and their influence on enplanement intentions: Responses from leisure travelers attending a Canadian University. *Journal of Air Transport Management*, 37, 60-68.
- Ali, F., Kim, W. G., & Ryu, K. (2016). The effect of physical environment on passenger delight and satisfaction: Moderating effect of national identity. *Tourism Management*, 57, 213-224.

- Ali, H., Khan, E., & Sajad, M. A. (2013). Phytoremediation of heavy metals—concepts and applications. *Chemosphere*, 91(7), 869-881.
- Altmann, S., Ringhof, S., Neumann, R., Woll, A., & Rumpf, M. C. (2019). Validity and reliability of speed tests used in soccer: A systematic review. *PloS One*, 14(8), e0220982.
- Alves, M., Young, C., Bozzetto, K., Poole-Warren, L., & Martens, P. (2012). Degradable, click poly (vinyl alcohol) hydrogels: characterization of degradation and cellular compatibility. *Biomedical Materials*, 7(2), 024106.
- Ansari, Z. A., & Agarwal, J. (2015). A critical analysis of the passenger's satisfaction from the services quality of the king abdulaziz international airport Jeddah, Saudi arabia. *International Journal of Economics, Commerce and Management*, 3(8), 213-228.
- AOT. (2016). *AOT Profile*. Retrieved from https://aotinter.airportthai.co.th/wp-content/uploads/2016/08/AOT_Company_Profile_TH-2.pdf
- AOT. (2018a). About AOT. Retrieved from <https://www.airportthai.co.th/en/airports-of-thailand-plc/about-aot/histories/>
- AOT. (2018b). Business Characters. Retrieved from <https://www.airportthai.co.th/en/airports-of-thailand-plc/about-aot/business-characters/>
- AOT. (2018c). Passenger Guides. Retrieved from <https://www.airportthai.co.th/en/security-information/>
- AOT. (2019a). *Air Traffic Report*. Retrieved from <https://www.airportthai.co.th/wp-content/uploads/2020/08/Report-2019.pdf>
- AOT. (2019b). *Airport strategic positioning*. Retrieved from <file:///C:/Users/LENOVO/Desktop/7bbf00a8.pdf>
- AOT. (2019c). *Annual Report 2019*. Retrieved from <http://investor.airportthai.co.th/ar.html>
- AOT. (2019d). *Annual Report/Phuket International Airport*. Retrieved from <https://corporate.airportthai.co.th/wp-content/uploads/2019/12/Annual-Report2019en.pdf>
- AOT. (2020a). Air Transport Statistic Fiscal Year 2009-2018. Air Transport Statistic. Retrieved from <http://investor.airportthai.co.th/transport.html>

- AOT. (2020b). HKT Facilities & service. Retrieved from <https://phuket.airportthai.co.th/facilities?category=431>
- AOT. (2020c). Organization Chart. Retrieved from <https://www.airportthai.co.th/en/airports-of-thailand-plc/about-aot/organization-chart/>
- AOT. (2020d). Real-Time Flight Schedule Operated. Retrieved from <https://www.airportthai.co.th/en/flight-schedule/>
- AQT Solutions. (2017). What Was the World's First Airport? Retrieved from <http://www.aqtsolutions.com/what-was-the-worlds-first-airport/>
- Araujo, G. E., & Repolho, H. M. (2015). Optimizing the airport check-in counter allocation problem. *Journal of Transport Literature*, 9(4), 15-19.
- Ariffin, A. A. M., & Yahaya, M. F. (2013). The relationship between airport image, national identity and passengers delight: A case study of the Malaysian low cost carrier terminal (LCCT). *Journal of Air Transport Management*, 31, 33-36.
- Artur, K., & Tomasz, K. (2017). A model of check-in system management to reduce the security checkpoint variability. *Simulation Modelling Practice and Theory*, 74, 80-98.
- ATALIAN Global Services. (2019). The Important of Airport Facility Management. Retrieved from <https://atalian.co.th/2019/07/05/the-important-of-airport-facility-management/>
- Aviajoin. (2018). Landside and Airside of an Airport. Retrieved from <https://aviajoin.com/airport/#comment>
- Aviation Benefits Beyond Borders. (2018a). *Beyond the industry aviation's global employment and GDP impact*. Retrieved from https://aviationbenefits.org/media/166711/abbb18_full-report_web.pdf
- Aviation Benefits Beyond Borders. (2018b). *Enabling economic growth*. Retrieved from Switzerland: https://aviationbenefits.org/media/166711/abbb18_full-report_web.pdf
- Aviation Industry Promotion. (2018). Aviation Industry Report of Thailand. AOT. Retrieved from <https://www.caat.or.th/th/archives/42379>
- Ayanso, A., Lertwachara, K., & Mokaya, B. (2015). Marketing meets social media.

- Bandarian, F., & Kordani, A. A. (2022). Evaluation of Passenger Behavior in the Baggage Claim Area of the Airport Passenger Terminal. *Mathematical Problems in Engineering*, 2022(1), 1200990.
- Bangkok Airways Public Co., L. (2020). Company Profile. Retrieved from <https://www.bangkokair.com/tha/pages/view/company-profile>
- Bangkok Post. (2017). Phuket airport struggling to handle demand. Retrieved from <https://www.bangkokpost.com/business/1304005/phuket-airport-struggling-to-handle-demand>
- Barnham, C. (2015). Quantitative and qualitative research: Perceptual foundations. *International Journal of Market Research*, 57(6), 837-854.
- Bellizzi, M. G., Eboli, L., Forciniti, C., & Mazzulla, G. (2018). Air transport passengers' satisfaction: an ordered logit model. *Transportation Research Procedia*, 33, 147-154.
- Benjaporn, S. (2017). *The users' perception of a public transport of Phuket International Airport*. Civil Aviation Training Center Thailand,
- Bergantino, A. S., Capurso, M., & Hess, S. (2020). Modelling regional accessibility to airports using discrete choice models: An application to a system of regional airports. *Transportation Research Part A: Policy and Practice*, 132, 855-871. doi:<https://doi.org/10.1016/j.tra.2019.12.012>
- Bezerra, G. C., & Gomes, C. F. (2015). The effects of service quality dimensions and passenger characteristics on passenger's overall satisfaction with an airport. *Journal of Air Transport Management*, 44, 77-81.
- Bezerra, G. C. L., & Gomes, C. F. (2016). Measuring airport service quality: A multidimensional approach. *Journal of Air Transport Management*, 53, 85-93.
- Blackwood, L. (2015). Policing airport spaces: The Muslim experience of scrutiny. *Policing: A Journal of Policy and Practice*, 9(3), 255-264.
- Blockdit. (2019). Civil aviation '+' Airport 'of Thailand. Retrieved from <https://www.blockdit.com/posts/5db66c1c71da620d079df108>
- Bogicevic, V., Bujisic, M., Bilgihan, A., Yang, W., & Cobanoglu, C. (2017). The impact of traveler-focused airport technology on traveler satisfaction. *Technological Forecasting and Social Change*, 123, 351-361.

- Bolton, R. N., McColl-Kennedy, J. R., Cheung, L., Gallan, A., Orsingher, C., Witell, L., & Zaki, M. (2018). Customer experience challenges: Bringing together digital, physical and social realms. *Journal of Service Management*.
- Bongkodrat, P., Nissa, S., & Hiran, P. (2020). Service Quality Model for Development of Airport Under The Department of Airports in Southern Thailand. *Phuket Rajabhat University Academic Journal*, 16(1), 64-82.
- Boonlert, J. (2008). *Airport management*
- Brida, J. G., Moreno-Izquierdo, L., & Zapata-Aguirre, S. (2016). Customer perception of service quality: The role of Information and Communication Technologies (ICTs) at airport functional areas. *Tourism Management Perspectives*, 20, 209-216.
- Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). *Competing in the age of omnichannel retailing*. MIT Cambridge.
- Burrows, P. (2015). Measuring the customer's journey through London City Airport. *Journal of Airport Management*, 9(2), 103-108.
- CAA. (2013). CAA passenger research: Satisfaction with the airport experience. Retrieved from [http://publicapps.caa.co.uk/docs/33/CAP%201044%20CAA%20passenger%20research%20satisfaction%20with%20the%20airport%20experience%20\(p\).pdf](http://publicapps.caa.co.uk/docs/33/CAP%201044%20CAA%20passenger%20research%20satisfaction%20with%20the%20airport%20experience%20(p).pdf)
- CAAT. (2018). Direction for the development of Thai airports. Retrieved from <https://www.caat.or.th/th/archives/32229>
- CAAT. (2019). State of Thai Aviation Industry, 2019. Retrieved from <https://www.caat.or.th/th/archives/50990>
- Castillo-Manzano, J. I., & López-Valpuesta, L. (2013). Check-in services and passenger behaviour: Self service technologies in airport systems. *Computers in Human Behavior*, 29(6), 2431-2437.
- Ceccato, V., & Masci, S. (2017). Airport environment and passengers' satisfaction with safety. *Journal of Applied Security Research*, 12(3), 356-373.
- Chaiyaphong, A., & Ekaporn, R. (2018). New Airport Policy For U-Tapao Airport. *Journal of Suvarnabhumi Institute of Technology (Humanities and Social Sciences)*, 4(Special), 321-333.

- Chalantip, P. *Public relations process of Suvarnabhumi Airport*. Chulalongkorn University,
- Chang, Y.-H., Shao, P.-C., & Chen, H. J. (2015). Performance evaluation of airport safety management systems in Taiwan. *Safety Science*, 75, 72-86.
- Chang, Y.-T., Park, H. K., Zou, B., & Kafle, N. (2016). Passenger facility charge vs. airport improvement program funds: A dynamic network DEA analysis for US airport financing. *Transportation Research Part E: Logistics and Transportation Review*, 88, 76-93.
- Changi Airport. (2019). Airport guides. Retrieved from <https://www.changiairport.com/en/airport-guide/download-airport-guides.html>
- Chao, C.-C., Lin, H.-C., & Chen, C.-Y. (2013). Enhancing airport service quality: A case study of Kaohsiung International Airport. *Journal of the Eastern Asia Society for Transportation Studies*, 10, 2235-2254.
- Chayada, C., Siriwan, G., & Lingjong, P. (2018). Factors associated with service quality perceived by the users of Udon Thani International Airport. *Chophayom Journal*, 29(2), 15-25.
- Chen, J. K., Yu, Y.-W., & Batnasan, J. (2014). *Services innovation impact to customer satisfaction and customer value enhancement in airport*. Paper presented at the Proceedings of PICMET'14 Conference: Portland International Center for Management of Engineering and Technology; Infrastructure and Service Integration.
- Ching, M. (2014). *Passengers' perception on airport service and quality satisfaction*. Paper presented at the Proceedings of International Academic Conferences.
- Chuangchoo, T. (2019) *Phuket hopes to upgrade to the same level as Haneda - Narita, Japan airport*/Interviewer: *Prachachat.net*. Thailand.
- Chumakova, A. (2014). Customer satisfaction on facility services in terminal 2 of Tampere Airport.
- Chung, E. K., Jung, Y., & Sohn, Y. W. (2017). A moderated mediation model of job stress, job satisfaction, and turnover intention for airport security screeners. *Safety Science*, 98, 89-97.

- Crazyegg. (2018). What is the Customer Journey and Why Do You Need to Create One? Retrieved from <https://www.crazyegg.com/blog/customer-journey/>
- Department of Airports. (2018). Background of Department of Airports. Retrieved from <https://www.airports.go.th/th/profile/172.html>
- Department of Airports. (2019). *Strategic plan 2017-2021*. Retrieved from <https://www.airports.go.th/th/download/19595.html>
- Dhebar, A. (2013). Toward a compelling customer touchpoint architecture. *Business Horizons*, 56(2), 199-205.
- Di Pietro, L., Mugion, R. G., Musella, F., Renzi, M. F., & Vicard, P. (2017). Monitoring an airport check-in process by using Bayesian networks. *Transportation Research Part A: Policy and Practice*, 106, 235-247.
- Dirsehan, T. (2019). Mapping Smart Mobility Technologies at Istanbul New Airport Using the Customer Journey. In *Smart Urban Development*. IntechOpen.
- DKMA. (2014). Why focus on improving the passenger experience? *9 great reasons to make customerservice a top priority*. Retrieved from <http://www.dkma.com/en/images/downloads/customer-service/Why%20focus%20on%20the%20passenger%20experience.pdf>
- Domazet, I. S., Đokić, I., & Milovanov, O. (2017). The Influence of advertising media on brand awareness. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 23(1), 13-22.
- Edelman, D. C. (2010). Branding in the digital age. *Harvard Business Review*, 88(12), 62-69.
- Elias Gonçalves, M. W., & Caetano, M. (2017). Airport Level of Service: A Model according to Departing Passenger's Perceptions at a Small-sized Airport. *Journal of Airline and Airport Management*, 7(1), 65-79.
- Everglades University. (2020). What Are The Common Airport Operations? Retrieved from <https://www.evergladesuniversity.edu/common-airport-operations/>
- Faiyetole, A., & Yusuf, T. (2018). Pre-flight Considerations, In-flight Services, and Post-flight Receptions: Factors Influencing Passengers' International Airline Choices. 9, 1-23. doi:10.38008/jats.v9i2.21

- Fitantri, A., Madhani, A. I., & Widiastuti, S. (2017). *Assessment of customer's satisfaction on baggage handling service at Soekarno-Hatta International Airport*. Paper presented at the Global Research on Sustainable Transport (GROST 2017).
- Flom, J. D., Ferris, J. S., Liao, Y., Tehranifar, P., Richards, C. B., Cho, Y. H., . . . Terry, M. B. (2011). Prenatal smoke exposure and genomic DNA methylation in a multiethnic birth cohort. *Cancer Epidemiology and Prevention Biomarkers*, 20(12), 2518-2523.
- Følstad, A., & Kvale, K. (2018). Customer journeys: A systematic literature review.
- Future Travel Experience. (2015). Passenger Survey Highlights Security, Passport Control And Baggage Collection As Most Negative Airport Touch-Points. Retrieved from <https://www.futuretravelexperience.com/2015/05/passenger-survey-highlights-security-passport-control-baggage-collection-negative-airport-touch-points/>
- Gambo, M. K. K. (2016). Service quality and customer satisfaction among domestic air passengers in Nigeria. *International Journal of Business And Management Studies*, 8(2), 32-49.
- Gazette, G. (2015). *Civil Aviation Authority of Thailand Emergency Decree B.E. 2558*. Retrieved from <https://www.caat.or.th/wp-content/uploads/2016/04/CAAT-Act-161115.pdf>
- Geng, Y., Yu, J., Lin, B., Wang, Z., & Huang, Y. (2017). Impact of individual IEQ factors on passengers' overall satisfaction in Chinese airport terminals. *Building and Environment*, 112, 241-249.
- Gibbons, S., & Wu, W. (2017). Airports, market access and local economic performance. Evidence from China.
- Gillen, D., Jacquillat, A., & Odoni, A. R. (2016). Airport demand management: The operations research and economics perspectives and potential synergies. *Transportation Research Part A: Policy and Practice*, 94, 495-513.
- Gilmore, J. H., & Pine, B. J. (2002). Customer experience places: the new offering frontier. *Strategy & Leadership*.

- Graham, A. (2014). Managing Airports: an international perspective. *Journal of Airport Management*, 8(2), 189-190.
- Greene, M. R., & Oliva, A. (2009). The briefest of glances: The time course of natural scene understanding. *Psychological Science*, 20(4), 464-472.
- Grewal, D., & Roggeveen, A. L. (2020). Understanding retail experiences and customer journey management. *Journal of Retailing*, 96(1), 3-8.
- Griggs, S., & Howarth, D. (2016). *The politics of airport expansion in the United Kingdom: Hegemony, policy and the rhetoric of 'sustainable aviation'*. Manchester University Press.
- Gumasing, M. J. J., Gatchalian, E. T., & Marquez, M. Y. M. (2020). *A Service Quality Model for Bureau of Immigration in NAIA Terminal 1*. Paper presented at the 2020 IEEE 7th International Conference on Industrial Engineering and Applications (ICIEA).
- Güreş, N., Yılmaz, H., Arslan, S., Durmuşçelebi, C., Yüksel, C., & Ünsal, H. H. (2017). Researching the Satisfaction Levels of Passengers for Security Services at Airports. *International Journal of Marketing Studies*, 9(5).
- Hai, P. T., Le Duc Toan, V. V. T., & Thuong, M. T. (2017). Factors affecting customer satisfaction with the quality of services: empirical evidence at Da Nang international airport, Vietnam. *Asian Journal of Empirical Research*, 7(3), 61-74.
- Halbherr, T., Schwaninger, A., Budgell, G. R., & Wales, A. (2013). Airport security screener competency: a cross-sectional and longitudinal analysis. *The International Journal of Aviation Psychology*, 23(2), 113-129.
- Hallock, J. N., & Holzäpfel, F. (2018). A review of recent wake vortex research for increasing airport capacity. *Progress in Aerospace Sciences*, 98, 27-36.
- Halpern, N., Mwesumo, D., Suau-Sanchez, P., Budd, T., & Bråthen, S. (2021). Ready for digital transformation? The effect of organisational readiness, innovation, airport size and ownership on digital change at airports. *Journal of Air Transport Management*, 90, 101949.
- Halvorsrud, R., Kvale, K., & Følstad, A. (2016). *Improving service quality through customer journey analysis*.

- Harrison, A. (2015). *Principles of experience design for airport terminals*. Queensland University of Technology,
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based Nursing*, 18(3), 66-67.
- Helm, S., Loth, S., & Schultz, M. (2015). *Advancing total airport management—an introduction of performance based management in the airport context*. Paper presented at the 19th ATRS World Conference.
- Hemdi, M., Rahman, S., Hanafiah, M., & Adanan, A. (2016). *Airport self-service check-in: The influence of technology readiness on customer satisfaction*. Paper presented at the Proceedings of the 3rd International Hospitality and Tourism Conference & 2nd International Seminar on Tourism, Bandung, Indonesia.
- Homburg, C., Jozić, D., & Kuehn, C. (2017). Customer experience management: toward implementing an evolving marketing concept. *Journal of the Academy of Marketing Science*, 45(3), 377-401.
- Hsu, H. Y. (2013). Post-9/11 US Airport security changes and displacement. *Policing & preventing terrorism around the globe*. de Sitter Publications, Ontario.
- Huderek-Glaska, S., & Nowak, H. (2016). Airport and low-cost carrier business relationship management as a key factor for airport continuity: The evidence from Poland. *Research in Transportation Business & Management*, 21, 44-53. doi:<https://doi.org/10.1016/j.rtbm.2016.07.004>
- Hussain, N. (2014). Airport Layout. Retrieved from <https://www.slideshare.net/engrnaveedhussain1/airport-layout>
- IATA. (2013). Fast travel program. Retrieved from <https://www.iata.org/en/programs/passenger/fast-travel/>
- ICAO. (2015). *News and Features on Travel Document and Identification Management Issues*. Retrieved from https://www.icao.int/publications/journalsreports/2014/MRTD_Report_Vol10_No1.pdf
- International Civil Aviation Organization. (2018). *Annex 14 to The Convention on International Civil Aviation*. Retrieved from file:///C:/Users/LENOVO/Desktop/an14_v1_cons.pdf

- Isa, N. A. M., Ghaus, H., Hamid, N. A., & Tan, P.-L. (2020). Key drivers of passengers' overall satisfaction at klia2 terminal. *Journal of Air Transport Management*, 87, 101859.
- Jacquillat, A., & Odoni, A. R. (2018). A roadmap toward airport demand and capacity management. *Transportation Research Part A: Policy and Practice*, 114, 168-185.
- Janic, M. (2016). Analyzing, modeling, and assessing the performances of land use by airports. *International Journal of Sustainable Transportation*, 10(8), 683-702.
- Jaruswitsarut, S., Sudhamasapa, C., & Pinprayong, B. (2014). Key Success Factors For Sustainable Development Management Of The Phuket International Airport. *Modern Management Journal*, 12(2), 121-132.
- Jen, W., LU, M. L., Hsieh, E.-H., Wu, Y.-H., & Chan, S.-M. (2013). Effects of airport servicescape on passengers' satisfaction: a hierarchical approach and importance-performance analysis. *Journal of the Eastern Asia Society for Transportation Studies*, 10, 2223-2234.
- Jiang, C., & Zhang, A. (2014). Effects of high-speed rail and airline cooperation under hub airport capacity constraint. *Transportation Research Part B: Methodological*, 60, 33-49.
- Jiang, H., & Zhang, Y. (2016). An assessment of passenger experience at Melbourne Airport. *Journal of Air Transport Management*, 54, 88-92.
doi:<https://doi.org/10.1016/j.jairtraman.2016.04.002>
- Jung, S.-Y., & Yoo, K.-E. (2016). A study on passengers' airport choice behavior using hybrid choice model: A case study of Seoul metropolitan area, South Korea. *Journal of Air Transport Management*, 57, 70-79.
- Kad-Osoth, A. (2019). *Development Guidelines for Disseminating Security Measures to Commercial Airport's Passengers*. Civil Aviation Training Center Thailand,
- Kalakou, S., Psaraki-Kalouptsidi, V., & Moura, F. (2015). Future airport terminals: New technologies promise capacity gains. *Journal of Air Transport Management*, 42, 203-212.

- Kamonnat, P. (2018). Government Loss From Luxury Bags And Watches Smuggling: Case Study of Thailand International Airports. *Graduate Law Journal*, 11(3), 778-780.
- Kandampully, J., Zhang, T. C., & Bilgihan, A. (2015). Customer loyalty: a review and future directions with a special focus on the hospitality industry. *International Journal of Contemporary Hospitality Management*.
- Kandampully, J., Zhang, T. C., & Jaakkola, E. (2018). Customer experience management in hospitality. *International Journal of Contemporary Hospitality Management*.
- Kayapınar, S., & Erginel, N. (2019). Designing the airport service with fuzzy QFD based on SERVQUAL integrated with a fuzzy multi-objective decision model. *Total Quality Management & Business Excellence*, 30(13-14), 1429-1448.
- Kierzkowski, A., & Kisiel, T. (2017). The human factor in the passenger boarding process at the airport. *Procedia Engineering*, 187, 348-355.
- Kim, J.-H., & Park, J.-W. (2019). The Effect of Airport Self-Service Characteristics on Passengers' Perceived Value, Satisfaction, and Behavioral Intention: Based on the SOR Model. *Sustainability*, 11(19), 5352.
- Kim, T. K. (2015). T test as a parametric statistic. *Korean Journal of Anesthesiology*, 68(6), 540.
- Kittiphich, N., & Paithoon, M. (2020). Guideline for Development of Service Competencies of Low-cost Airline Ground Staffs: At Phuket International Airport. *Dusit Thani College Journal*, 14(1), 191-210.
- Klaus, P. P., & Maklan, S. (2013). Towards a better measure of customer experience. *International Journal of Market Research*, 55(2), 227-246.
- Knoch, S., Staudt, P., Puzzolante, B., & Maggi, A. (2020). A Smart Digital Platform for Airport Services Improving Passenger Satisfaction. Paper presented at the 2020 IEEE 22nd Conference on Business Informatics (CBI).
- Knol, A., Sharpanskykh, A., & Janssen, S. (2019). Analyzing airport security checkpoint performance using cognitive agent models. *Journal of Air Transport Management*, 75, 39-50.

- kongkoon, T., & Burin, W. (2014). The Study of Flight Waiting Behavior of International Travelers. *Payap University Journal*, 24(1), 93-108.
- Kongsen, W. (2019). Management of Passenger Service Systems in Suvarnabhumi Airport in Competitive Situation and Achievement. *Journal of Graduate MCU KhonKaen Campus*, 6(2), 324-341.
- Kotopouleas, A., & Nikolopoulou, M. (2016). Thermal comfort conditions in airport terminals: Indoor or transition spaces? *Building and Environment*, 99, 184-199.
- Kunnapat, K. (2015). Suvarnabhumi Airport's Service Quality from the Passengers' Perspective. *Journal of Multidisciplinary in Social Sciences*, 11(3), 83-96.
- Lapa, O., & Krisda, M. (2017). *Knowledge Management Factors Affecting to Work Efficiency of Employees: A Case Study of Thai Airways Company at Suvarnabhumi Airport*. Paper presented at the Rangsit Graduate Research Conference: RGRC.
- Laroche, M., Habibi, M. R., & Richard, M.-O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management*, 33(1), 76-82.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69-96.
- Lin, W.-T., & Chen, C.-Y. (2013). Shopping satisfaction at airport duty-free stores: A cross-cultural comparison. *Journal of Hospitality Marketing & Management*, 22(1), 47-66.
- Liu, M. (2019). Enhancing Mobility around Schiphol Airport for International Passengers.
- Losby, J. (2012). Jan Losby and Anne Wetmore on Likert Scales—Odd or Even.
- Losby, J., & Wetmore, A. (2012). CDC coffee break: Using likert scales in evaluation survey work. *Centers for Disease Control and Prevention*.
- Losekoot, E. (2015). *Factors influencing the airport customer experience: A case study of Auckland International Airport's customers*. Auckland University of Technology,
- MacDonald, S. (2020). 7 Ways To Create A Great Customer Experience Strategy. Retrieved from <https://www.superoffice.com/blog/customer-experience-strategy/>

- Martin-Domingo, L., Martín, J. C., & Mandsberg, G. (2019). Social media as a resource for sentiment analysis of Airport Service Quality (ASQ). *Journal of Air Transport Management*, 78, 106-115.
doi:<https://doi.org/10.1016/j.jairtraman.2019.01.004>
- McColl-Kennedy, J. R., Gustafsson, A., Jaakkola, E., Klaus, P., Radnor, Z. J., Perks, H., & Friman, M. (2015). Fresh perspectives on customer experience. *Journal of Services Marketing*.
- McColl-Kennedy, J. R., Zaki, M., Lemon, K. N., Urmetzer, F., & Neely, A. (2019). Gaining customer experience insights that matter. *Journal of Service Research*, 22(1), 8-26.
- MGRonline. (2018). Phuket airport problems will be gone. Retrieved from <https://mgronline.com/south/detail/9610000011074>
- Milbredt, O., Castro, A., Ayazkhani, A., & Christ, T. (2017). Passenger-centric airport management via new terminal interior design concepts. *Transportation Research Procedia*, 27, 1235-1241. doi:<https://doi.org/10.1016/j.trpro.2017.12.008>
- Ming-kei, C., & Yui Yip, L. (2016). Travelers' perception on airport satisfaction. *Journal of Business & Economic Policy*, 3(2), 55-60.
- Ministry of Tourism and Sports. (2019). Tourism statistics 2019. Retrieved from <https://www.terrabkk.com/articles/196897>
- Ministry of Tourism and Sports. (2020). *Tourism economic review*. Retrieved from Thailand: <https://www.mots.go.th/download/TourismEconomicReport/4-1TourismEconomicVol4.pdf>
- Moon, H., Yoon, H. J., & Han, H. (2016). Role of airport physical environments in the satisfaction generation process: mediating the impact of traveller emotion. *Asia Pacific Journal of Tourism Research*, 21(2), 193-211.
- Moon, H., Yoon, H. J., & Han, H. (2017). The effect of airport atmospherics on satisfaction and behavioral intentions: Testing the moderating role of perceived safety. *Journal of Travel & Tourism Marketing*, 34(6), 749-763.
- Mota, M. M. (2015). Check-in allocation improvements through the use of a simulation–optimization approach. *Transportation Research Part A: Policy and Practice*, 77, 320-335.

- Motivate Design. (2019). Customer Experience: Touchpoints You Are Not Thinking Of. Retrieved from <https://www.motivatedesign.com/customer-experience-touchpoints-you-are-not-thinking-of/>
- Mwanza, C., & Chingarand, G. R. (2013). An evaluation of passenger satisfaction on service quality delivered at an airport in Namibia: A quality perspective approach. *International Journal of Managment, IT and Engineering*, 3(1), 292-304.
- Negri, N. A. R., Borille, G. M. R., & Falcão, V. A. (2019). Acceptance of biometric technology in airport check-in. *Journal of Air Transport Management*, 81, 101720.
- Norton, D. W., & Pine, B. J. (2013). Using the customer journey to road test and refine the business model. *Strategy & Leadership*.
- Nurhadi, M. I., Ratnayake, N., & Fachira, I. (2019). The practice of digitalization in improving customer experience of indonesian commercial aviation industry.
- Oh, H., Fiore, A., & Jeong, M. (2007). Measuring the tourist experience using experience economy concepts. *Journal of Travel Research*, 46(2), 119-132.
- Oh, S.-O., & Jin-Woo, P. (2014). A Study on importance and satisfaction of airport selection attributes: focus on gimpo international airport and incheon international airport. *International Journal of Business and Social Science*, 5(10).
- Okumus, F., Croes, R., Hutchinson, J., Bogicevic, V., Yang, W., Bilgihan, A., & Bujisic, M. (2013). Airport service quality drivers of passenger satisfaction. *Tourism Review*.
- OSM Andamnan. (2018). *Development Plan for Southern Andaman Provincial Cluster 2019 - 2022*. Retrieved from <http://www.osmsouth-w.moi.go.th/main/post/3192>
- Osmsouth. (2019). *Development Plan for Southern Andaman Provincial Cluster 2019 - 2022*. Retrieved from <http://www.osmsouth-w.moi.go.th/main/post/3192>
- Otieno, P. S., & Govender, K. (2016). Managing airport service quality–the impact of self-service technologies. *Investment Management and Financial Innovations*, 13(3), 387-393.

- Pabedinskaite, A., & Akstinaite, V. (2014). Evaluation of the airport service quality. *Procedia-Social and Behavioral Sciences*, 110, 398-409.
- Pakanya, P. (2020). Factors Affecting The Work Stress of Screening Officers at Suvarnabhumi Airport. *Sripatum Chonburi Journal*, 16(4), 152-166.
- Pantouvakis, A., & Renzi, M. F. (2016). Exploring different nationality perceptions of airport service quality. *Journal of Air Transport Management*, 52, 90-98.
- Paramonovs, S., & Ijevleva, K. (2015). Factor Analysis of Passengers' Satisfaction at "RIGA International Airport". *Economics and Business*, 27(1), 46-52.
- Park, J.-W., Choi, Y.-J., & Moon, W.-C. (2013). Investigating the effects of sales promotions on customer behavioral intentions at duty-free shops: An Incheon International Airport case study. *Journal of Airline and Airport Management*, 3(1), 18-30.
- Park, K., & Park, J.-W. (2018). The effects of the servicescape of airport transfer amenities on the behavioral intentions of transfer passengers: A case study on Incheon International Airport. *Journal of Air Transport Management*, 72, 68-76.
- Parrella, B. C. (2013). *Understanding airline and passenger choice in multi-airport regions*.
- Patel, V. (2018). *Airport passenger processing technology: A biometric airport journey*.
- Peeranthorn, P. (2018). *Guidelines for development of facility management in regional secondary airports in Thailand*.
- Petaumpai, T. (2016). Marketing Strategies for Building Brand Image of Suvarnabhumi Airport Among International Airlines. *SSRU Graduate Studies Journal*, 2(2), 123-135.
- Phiphat, N. (2015). *Causal Factors of Socially Responsible Leadership Influencing on Corporate Image of Phuket International Airport*. Paper presented at the Proceeding of International Conference on Applied Business Research.
- Phuwarak, P., & Chutimavadee, T. (2018). *The Effects of Integrated Marketing Communication Tools, Brand Equity, and Service Quality on Buyer Decision Process of a National Airline*. Paper presented at the Graduate School Conference.

- Posri, S., & Khaysuwan, P. (2018). *Marketing strategies affecting customers' decision on selecting Thai Airways Restaurant at Phuket Airport*.
- Potgieter, M., Saayman, M., & Du Plessis, L. (2014). Key success factors in managing a visitors' experience at a South African international airport. *Journal of Contemporary Management*, 11(1), 510-533.
- Prakasit, R., & Paithoon, M. (2018). Service quality of Phuket International Airport. *Research and Development Journal, Loei Rajabhat University (LRUJ)* 13, 46.
- Prentice, C., & Kadan, M. (2019). The role of airport service quality in airport and destination choice. *Journal of Retailing and Consumer Services*, 47, 40-48.
- Privage. (2018). How Customer Experience Importance For Business Retrieved from <https://www.privageapp.com/blog/customer-experience-business>
- Puacharoe, P., & Sucher, W. (2019). Facility Management in Regional Secondary Airport in Thailand. *The Journal of Social Communication Innovation*, 7(1), 46-54.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Raijmakers, B., Thompson, M., & Van de Garde-Perik, E. (2012). *New goals for design, new roles for designers*. Paper presented at the Cumulus Conference, Helsinki, 2012. Proceedings... Helsinki.
- Ramgulam, N., Raghunandan-Mohammed, K., & Raghunandan, M. (2012). Exploring the Dynamics of Socio-Cultural Sustainability in Trinidad's Mice Market. *American International Journal of Contemporary Research*, 2(6), 44-56.
- Ratchakitcha. (2018 - 2037). National Strategy Retrieved from http://www.ratchakitcha.soc.go.th/DATA/PDF/2561/A/082/T_0001.PDF
- Ravindaranaath, R., Karthik, K., Vishnupriyan, R., Suryakumar, S., & Thamaraiselvi, G. (2017). Automated Trolley System for Airport. *International Journal of Communication and Computer Technologies*, 5(1), 32-35.
- Rawson, A., Duncan, E., & Jones, C. (2013). The truth about customer experience. *Harvard Business Review*, 91(9), 90-98.

- review, A. (2019). A focus on PRMs: Passengers with restricted mobility and their rights. Retrieved from <https://www.internationalairportreview.com/article/31099/focus-prms-passengers-restricted-mobility-rights/>
- Rodrigue, J.-P. (2020). Airport Components and Terminal Configurations. In *The geography of transport systems*. USA.
- Rodríguez-Sanz, Á., Comendador, F. G., Valdés, R. A., & Pérez-Castán, J. A. (2018). Characterization and prediction of the airport operational saturation. *Journal of Air Transport Management*, 69, 147-172.
- Rossi, R., Gastaldi, M., & Orsini, F. (2018). How to drive passenger airport experience: a decision support system based on user profile. *IET Intelligent Transport Systems*, 12(4), 301-308.
- Sabel, T. (2018). *A More Satisfying Customer Journey Through Mariehamn Airport: How to develop the customer experience with service design methods*.
- Sakano, R., Obeng, K., & Fuller, K. (2016). Airport security and screening satisfaction: A case study of US. *Journal of Air Transport Management*, 55, 129-138.
- Salesforce.com. (2020). What is customer journey mapping & Why is it important? Retrieved from <https://www.salesforce.com/uk/blog/2016/03/customer-journey-mapping-explained.html>
- Salilathip, T. (2018). Digital age's customer journey, A new marketing quest. *Panyapiwat Journal*, 10(2).
- Schouten, P. (2014). Security as controversy: Reassembling security at Amsterdam Airport. *Security Dialogue*, 45(1), 23-42.
- Schüller, A. M. (2013). *Touchpoints: Auf Tuchfühlung mit dem Kunden von heute*: GABAL Verlag.
- Sismanidou, A., & Tarradellas, J. (2017). Traffic demand forecasting and flexible planning in airport capacity expansions: Lessons from the Madrid-Barajas new terminal area master plan. *Case Studies on Transport Policy*, 5(2), 188-199. doi:<https://doi.org/10.1016/j.cstp.2016.08.003>
- Sittipat, M., & Vichit, U. (2018). A Causal Model Leading to Organization's Safety Performance in Thailand: A Case Study of Airside Operation in Airports. *Journal of Social Academic*, 11(1), 09-23.

- Skorupski, J., & Uchroński, P. (2018). Evaluation of the effectiveness of an airport passenger and baggage security screening system. *Journal of Air Transport Management*, 66, 53-64. doi:<https://doi.org/10.1016/j.jairtraman.2017.10.006>
- Skytrax. (2019). The World's best airports. Retrieved from <https://www.worldairportawards.com/>
- Sriwilai, S., & Thongsri, R. (2021). The effects of the spread of COVID-19 Pandemic on Thai Tourism. *Journal of Legal Entity Management and Local Innovation*, 7(8), 405-416.
- Statista. (2020). Worldwide revenue with passengers in air traffic. Retrieved from <https://www.statista.com/statistics/263042/worldwide-revenue-with-passengers-in-air-traffic/#statisticContainer>
- Stewart, M. G., & Mueller, J. (2014). Cost-benefit analysis of airport security: Are airports too safe? *Journal of Air Transport Management*, 35, 19-28.
- Su, J. (2014). A study of touchpoints adaptability at Helsinki airport: from customer experience perspective.
- Suárez-Alemán, A., & Jiménez, J. L. (2016). Quality assessment of airport performance from the passengers' perspective. *Research in Transportation Business & Management*, 20, 13-19. doi:<https://doi.org/10.1016/j.rtbm.2016.04.004>
- Suda, S. (2018). Expectation and Perception on the Quality of Service of the Airports in Northeastern Region of Thailand. *SSRU Graduate Studies Journal*, 11(2), 114-128.
- Sukhuman, K. (2014). *Thailand Airport operation model for the low-cost carriers*.
- Sukpongthai, N., & Phungbangkruay, J. (2020). Influence of service convenience affecting toward satisfaction of U-Tapao International Airport Rayong Province. *Burapha Journal of Business Management Burapha University*, 9(1), 71-85.
- Sumrith, C., Burananuth, N., Kaewbandon, B., Meepong, S., & Boonpadung, P. (2020). Antecedents affecting the impression of passengers using an Suvarnabhumi International Airport. *Journal of MCU Peace Studies*, 8(1), 145-156.
- Sun, Y., & Schonfeld, P. (2015). Stochastic capacity expansion models for airport facilities. *Transportation Research Part B: Methodological*, 80, 1-18.

- Supaporn, C. (2019). *Perception of Public Relations Information Created by The Airports of Thailand Public Company Limited (Aot) About The Suvarnabhumi Airport*. Chulalongkorn University,
- Supitchaya, W. (2014). *The needs and the satisfactions of customers toward Suvarnabhumi Airport Services*. Chulalongkorn University Intellectual Repository.
- Suzan, R. M. B. E.-d., & Fawzy, B. H. N. M. (2016). *The effect of airport and in-flight service quality on customer satisfaction*.
- TAT Newsroom. (2023). Tourism statistics. Retrieved from <https://www.tatnews.org/>
- TechTarget. (2019). customer touch point. Retrieved from <https://searchcustomerexperience.techtarget.com/definition/customer-touch-point>
- Thaifly.com. (2020). Airport information. Retrieved from https://www.thaifly.com/index.php?route=news/news&news_id=1564
- The Civil Aviation Authority of Thailand. (2019). About Aviation Aerodromes List. Retrieved from <https://www.caat.or.th/en/archives/category/aviation-en/airport-list-en>
- The Constructor. (2020). Components of an airport. Retrieved from <https://theconstructor.org/transportation/airport-components/20033/>
- The Phuket News. (2015). Phuket airport 'still overcrowded' as number of flights increases. Retrieved from <https://www.thephuketnews.com/phuket-airport-still-overcrowded-as-number-of-flights-increases-53859.php>
- The Phuket News. (2016). Phuket International Airport facing staff shortage. Retrieved from <https://www.thephuketnews.com/phuket-international-airport-facing-staff-shortage-56400.php>
- The Phuket News. (2018). Phuket International Airport traffic rises, parking still lacking. Retrieved from www.thephuketnews.com/phuket-international-airport-traffic-rises-parking-still-lacking-65889.php
- Theeraphan, s., Nutpornpan, U., & Phumipat, P. (2020). The influence of service quality to customer satisfaction for international airports in Thailand. *Suthiparithat Journal* 34(110), 241-250.

- Theeraphan, s., & Phumipat, P. (2019). Service quality model for international airport in Thailand. *Phuket Rajabhat University Academic Journal*, 15(2), 230-245.
- Theeraphan, s., Pornchai, E.-a., Poonpat, C., Bongkodrat, P., & Weerachai, B. (2018). The service quality perception of domestic passenger at check-in counter of Nok Air at Phuket Station. *PULINET Journal*, 5(1).
- Timdang, P. (2020). A model of experiential marketing for foreign tourists. *Journal of the Association of Researchers*, 16(3), 89-101.
- Travel Tech Consulting. (2014). Customer experience management. Retrieved from https://www.traveltechnology.com/wp-content/uploads/2014/08/CEM_Report_Final.pdf
- U.S. Global Investors. (2020). How do airports make money. Retrieved from <http://www.usfunds.com/slideshows/how-do-airports-make-money/#.XrMQP6j7RPZ>
- UNWTO. (2018). *UNWTO tourism highlights: 2018 Edition*.
- UTAPAO International Airport. (2018). Our Story Utapao International Airport. Retrieved from <https://www.utapao.com/corporate/en/about-us/OurStory>
- Van Oel, C. J., & van den Berkhof, F. D. (2013). Consumer preferences in the design of airport passenger areas. *Journal of Environmental Psychology*, 36, 280-290.
- Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer experience creation: Determinants, dynamics and management strategies. *Journal of Retailing*, 85(1), 31-41.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122-146.
- Wannaphong, D. (2014). An economic impact of development project: Case of Phuket International Airport in Thailand. Retrieved from https://mpra.ub.uni-muenchen.de/53931/1/MPRA_paper_53931.pdf
- Wannasatit, M. (2011). *An investigation of service quality at Phuket international airport: An assessment from the passenger's viewpoint*. (Unpublished master's thesis). Prince of Songkla University, Songkla.



APPENDICES



Appendix A

Questionnaire

Questionnaire



QUESTIONNAIRE "CUSTOMER JOURNEY MANAGEMENT MODEL FOR PHUKET INTERNATIONAL AIRPORT"

This questionnaire survey is conducted by Mr. Weerachai Bunyapattanapong as a part of Ph.D dissertation in Integrated Tourism and Hospitality Management, Graduate School of Tourism Management, National Institute of Development Administration (NIDA). It aims at proposing "CUSTOMER JOURNEY MANAGEMENT MODEL FOR PHUKET INTERNATIONAL AIRPORT".

The researcher would highly appreciate your participation in this research in completing this entire questionnaire. All responses will be treated confidentially and used only for research purposes.

The questionnaire is divided into 4 parts which include;

Part A: Levels of importance and efficiency toward airport management attributes

Part B: Customer experience factors

Part C: Passenger's socio-demographic profiles

Part D: Suggestions on airport experiences

Thank you in advance for your time and effort in contributing to this study and wish you a safe journey.

Screening question

Have you ever used an arrival and departure flight at Phuket International Airport?

☐ Yes ☐ No

* In case you answer "No". There is no need to continue the next questionnaire.

Sincerely Yours,
Weerachai Bunyapattanapong
Email: ajweerachai@gmail.com

Part A: Levels of Importance and Efficiency toward airport management attributes.

Note: Please rate scale of your best opinion on each item.

As a passenger of Phuket International Airport, please RATE the level of Importance affecting your experience and assess the level of Efficiency in customer journey management of Phuket International Airport by marking ✓ on a number each attribute (If any of attribute you did not use the service, marks the box N/A).

6-Level Evaluation →		6. Strongly important 5. Important 4. Somewhat important 3. Somewhat unimportant 2. Unimportant 1. Strongly unimportant						No experience Please give "N/A"		6. Strongly efficient 5. Efficient 4. Somewhat efficient 3. Somewhat inefficient 2. Inefficient 1. Strongly inefficient					
Attributes		Levels of IMPORTANCE						No Experience	Levels of EFFICIENCY						
Departure's zone															
Accessibility to the airport															
1.	Public transport to the airport is convenient. (Airport bus, limousine, etc.)	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
2.	Public transport prices to the airport are appropriate for each type of service.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
3.	Strictly screened for COVID-19 (Terminal Screening)	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
4.	Body temperature screening by non-contact infrared thermometer.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
5.	Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
6.	Provide clearly defined zones and paths for entry and exit.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
Check-in process management															
7.	Self-check-in via mobile phone or kiosk	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
8.	Fast and convenient check-in processes	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
9.	The check-in area is enough and convenient.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
10.	Check-in staff provide service with politeness.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
11.	Provide social distancing while waiting at check-in counters.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	
12.	Provide alcohol gel at the check-in counters.	6	5	4	3	2	1	N/A	6	5	4	3	2	1	

6-Level Evaluation

6. Strongly important
 5. Important
 4. Somewhat important
 3. Somewhat unimportant
 2. Unimportant
 1. Strongly unimportant

No experience

 Please give "N/A"

6. Strongly efficient
 5. Efficient
 4. Somewhat efficient
 3. Somewhat inefficient
 2. Inefficient
 1. Strongly inefficient

Attributes	Levels of IMPORTANCE					
Immigration						
51. Waiting time before accessing the immigration system.	6	5	4	3	2	1
52. The ease of using the system.	6	5	4	3	2	1
53. Courtesy and helpfulness of airport staff in managing queues.	6	5	4	3	2	1
54. Courtesy and politeness of the immigration officer.	6	5	4	3	2	1
55. Provide social distancing while waiting immigrant area.	6	5	4	3	2	1
Baggage reclaims						
56. Walking distance to get to the baggage claim area.	6	5	4	3	2	1
57. Flight display on carousel screens.	6	5	4	3	2	1
58. Waiting time before retrieving baggage.	6	5	4	3	2	1
59. Availability of toilets in the baggage claim area.	6	5	4	3	2	1
60. The cleanliness of toilets at the baggage reclaims area.	6	5	4	3	2	1
61. Availability of carts/trolleys	6	5	4	3	2	1
Customs						
62. Waiting time to go through customs.	6	5	4	3	2	1
63. Setup/organization of queues	6	5	4	3	2	1
64. Courtesy and politeness of the customs officer.	6	5	4	3	2	1
65. Provide social distancing while waiting in the customs area.	6	5	4	3	2	1
Before leaving from the airport						
66. Arrival tourist assistance center	6	5	4	3	2	1
67. Public transport from the airport into the city is convenient and varieties. (Airport bus, limousine, etc.)	6	5	4	3	2	1
68. Public transport prices are appropriate for each type of service.	6	5	4	3	2	1

No Experience	Levels of EFFICIENCY					
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1
N/A	6	5	4	3	2	1

Part B: Customer experience factors.

Note: Please indicate your level of AGREEMENT with the following statement describing your perceived experience.

6 - Level Evaluation 	The Levels of Agreement					
	6	5	4	3	2	1
Physical experience						
1. You are provided with modern and adequate facilities.	6	5	4	3	2	1
2. You are satisfied with the environment and facilities at the airport.	6	5	4	3	2	1
3. Security monitoring technology is used within the airport.	6	5	4	3	2	1
4. You felt confident from the COVID-19 information provided by the airport.	6	5	4	3	2	1
Emotional experiences						
5. The experiences in the airport give you pleasure.	6	5	4	3	2	1
6. The experiences in the airport give me a sense of happiness.	6	5	4	3	2	1
7. You feel at ease when using services at the airport.	6	5	4	3	2	1
8. Convenience at the airport as an incentive for you to come back again.	6	5	4	3	2	1
Service experience						
9. Airport staff provides with a welcoming and humane.	6	5	4	3	2	1
10. Airport staff understand your needs very well.	6	5	4	3	2	1
11. You are provided by a professional and reliable team.	6	5	4	3	2	1
Thainess experience						
12. You have been served with a smile and friendliness.	6	5	4	3	2	1
13. Ambience of the airport expresses Thainess.	6	5	4	3	2	1
14. The Thainess in the airport made you feel delighted.	6	5	4	3	2	1

Part C: Passenger's socio-demographic profiles.

1. Gender ☐ 1) Male ☐ 2) Female
2. Age (Generation)

☐ 1) 1925-1945 Silent Generation	☐ 2) 1946-1964 Baby Boomers
☐ 3) 1965-1980 Gen X	☐ 4) 1981-1996 GenY
☐ 5) 1997-2012 Gen Z	
3. Education

☐ 1) Below Bachelor's degree	☐ 2) Bachelor's degree	☐ 3) Above Bachelor's degree
4. Occupation

☐ 1) Government / Civil servant	☐ 2) Business owner	☐ 3) Housewife
☐ 4) Temporary worker / Freelance	☐ 5) Student	☐ 6) Retired
☐ 7) Private business employee	☐ 8) Unemployed	☐ 9) Others (Please specify)

.....
5. Average monthly income Please specify your 'Currency'.....
6. Residence (Country)
7. Marital status ☐ 1) Single ☐ 2) Married ☐ 3) Widowed / Divorced
8. Religion

☐ 1) Christianity	☐ 2) Buddhism	☐ 3) Islam
☐ 4) Others (Please specify)		
9. How many times you have visited the Phuket International Airport (Including this time)

☐ 1) 1-2 time (s)	☐ 2) 3-5 times	☐ 3) More than 5 times
10. Time duration in the airport before boarding

☐ 1) 1-2 hour (s)	☐ 2) 3-4 hours	☐ 3) More than 4 hours
11. Number of Travel companions (Include you)

☐ 1) Travel alone	☐ 2) 2-3	☐ 3) 4-5
☐ 4) More than 6	☐ 5) Travel with tour group	
12. Estimated spending in the departure terminal of Phuket International Airport
(You can specify in your currency)

13. Purpose of trip (You can select more than 1)

☐ 1) Leisure / Holidays	☐ 2) Education	☐ 3) Visit friends / relatives
☐ 4) Meeting / Seminar	☐ 5) Business	☐ 6) Others (Please specify)
-

14. The activities at the airport while waiting for boarding (You can select more than 1)

☐ 1) Dining	☐ 2) Shopping	☐ 3) Take photos
☐ 4) Waiting at the boarding gate	☐ 5) Take a walk	☐ 6) Get a massage
☐ 7) Relax in a club lounge	☐ 8) Watch a movie	☐ 9) Read a book
☐ 10) Take your kids to a play area	☐ 11) Make friends	☐ 12) Buy postcards
☐ 13) Update your social media	☐ 14) Take a nap	☐ 15) Others (Please specify)
-

15. The requirement of facilities would you like at the airport while waiting for boarding (You can select more than 1)

☐ 1) Shuttle	☐ 2) Library	☐ 3) Museum
☐ 4) Wheelchair Service	☐ 5) Interpreter	☐ 6) lounge
☐ 7) Medical Service	☐ 8) Playground	☐ 9) Beauty shop
☐ 10) Cultural center	☐ 11) Theater	☐ 12) No need
☐ 13) Others (Please specify)		

16. Products and services that spent on in the departure terminal (You can select more than 1)

☐ 1) Beverages	☐ 2) Food	☐ 3) Souvenir
☐ 4) Executive lounge	☐ 5) Liqueur	☐ 6) Perfume
☐ 7) Cosmetics	☐ 8) Cigarettes	☐ 9) Spa/Massage
☐ 10) Electronics Appliances	☐ 11) Snack	☐ 12) Local Products
☐ 13) Clothes	☐ 14) Others (Please specify)	

Part D: Suggestions on airport experiences

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Thank you for your kind cooperation. Enjoy the journey!



Appendix B

In-depth Interview Questions

In-depth Interview Questions



In-Depth Interview

“Customer Journey Management Model for Phuket International Airport”

Dear Interviewee,

I am Weerachai Bunyapattanapong, a Ph.D. student in the Doctor of Philosophy program in Integrated Tourism and Hospitality Management at the National Institute of Development Administration (NIDA). I am currently conducting dissertation research on the topic “Customer Journey Management Model for Phuket International Airport.” Given your expertise and experience related to this research, I kindly request your participation in this individual in-depth interview to gather valuable qualitative data.

The information obtained from this interview will be used solely for research purposes. Your personal information (on this first page of the interview) will be securely stored in a database by myself and will be destroyed within two years. Your participation in this interview is entirely voluntary, and by agreeing to provide information, you authorize the researcher to document the interview in writing and to record audio and video during the interview.

If you have any questions regarding the interview, please contact the researcher directly at 086 768 6552 or email ajweerachai@gmail.com.

Thank you very much for your cooperation.

Weerachai Bunyapattanapong

The interviewee allows the researcher to record audio during the interview: ☐ Allow ☐ Do not allow

The interviewee allows the researcher to record video during the interview: ☐ Allow ☐ Do not allow

Signature of the interviewee (please sign after reading and confirming the notes)

Personal Information of the Interviewee

Name of the interviewee:

Position Work experience:

Location/Department..... Date of interview: Month..... Year

Location of interview: Start time..... End time

Interview Questions (to be noted by the researcher)

1. What is the overall management approach within your department?
2. What are the key management practices related to customer experience or service in your department?
3. From your perspective, what are the strengths and challenges related to the management of customer experience or service at the following areas of the airport? (Please choose to respond only to the points relevant to your department or comment on topics of your interest.)

For International Departures:

- 3.1 Accessibility to the airport
- 3.2 Check-in process management
- 3.3 Baggage handling process
- 3.4 Safety management
- 3.5 Passport/ID control
- 3.6 Mobility within the airport (e.g., clarity of signage, walking distances, facilities for people with disabilities, etc.)
- 3.7 Airport facilities

For International Arrivals:

- 3.8 Deboarding process from the airplane to the restricted area
- 3.9 Immigration process
- 3.10 Baggage reclaim process
- 3.11 Customs process
- 3.12 Facilities for tourists before leaving the airport
4. In your opinion, what aspects of this airport should be developed or improved to better meet passenger needs or enhance their travel experience?
5. Any other suggestions?

Thank you very much for participating in this interview



Appendix C

Item-Objective Congruence Results

Item-Objective Congruence Results

Items, Experts, Scores		1	2	3	Total	Average	Mean
Part A: Levels of Importance and Efficiency toward airport management attributes.							
Departure's zone							
Accessibility to the airport							
1	Public transport to the airport is convenient.	0	1	1	2	0.67	Consistent
2	Public transport costs are reasonable.	0	1	1	2	0.67	Consistent
3	Parking lot is enough and inexpensive.	-1	1	1	1	0.33	Inconsistent
4	Strictly screened for COVID-19 (Terminal Screening)	1	0	1	2	0.67	Consistent
5	Body temperature screening by non-contact infrared thermometer.	1	1	1	3	1	Consistent
6	Provide a place to wash your hands with soap and alcohol gel at the entrance to the terminal.	1	0	1	2	0.67	Consistent
7	Provide clearly defined zones and paths for entry and exit.	1	1	1	3	1	Consistent
Check-in process management							
8	Self-check-in via mobile phone or kiosk	-1	1	1	1	0.33	Inconsistent
9	Fast and convenient check-in processes.	-1	1	1	1	0.33	Inconsistent
10	Enough and convenient check-in area.	1	1	1	3	1	Consistent
11	Check-in staff provide service with politeness.	-1	1	1	1	0.33	Inconsistent
12	Efficiency of check-in staff	-1	1	1	1	0.33	Inconsistent
13	Provide social distancing while waiting at check-in counters.	1	1	1	3	1	Consistent
14	Provide alcohol gel at the check-in counters.	1	1	1	3	1	Consistent
Luggage handling process							
15	Self-check-in baggage system is available.	1	1	1	3	1	Consistent
16	There are enough luggage carts.	1	1	1	3	1	Consistent
17	The quality of the luggage	1	0	1	2	0.67	Consistent
18	Efficiency of baggage handlers	1	1	1	3	1	Consistent
Safety management							
19	Duration of security checks in each step.	1	1	1	3	1	Consistent
20	Courtesy and service willingness of security inspectors.	1	1	1	3	1	Consistent
21	The security inspectors are professional.	1	1	1	3	1	Consistent
22	The procedure for screening at the scanning point is easy.	1	1	1	3	1	Consistent
23	I feel of being safe and secured in this airport.	1	0	1	2	0.67	Consistent
Passport/ID control							
24	Rapid passport check	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
25	Courtesy and service willingness of the passport inspector.	1	1	1	3	1	Consistent
26	There is a simple screening process.	1	0	1	2	0.67	Consistent
27	Sense of security in the travel document inspection process.	1	1	1	3	1	Consistent
28	Provide social distancing while waiting at passport control area.	1	1	1	3	1	Consistent
Mobility							
29	Signs and symbols are easy to understand.	1	1	1	3	1	Consistent
30	The flight information display is visible.	1	1	1	3	1	Consistent
31	Shuttle service within the terminal	1	0	1	2	0.67	Consistent
32	Walking distance between terminals is execrable.	1	1	1	3	1	Consistent
33	Readiness to help people with disabilities.	1	1	1	3	1	Consistent
Airport facilities							
34	Variety of shops, souvenirs / duty free (shopping) within the airport	1	1	1	3	1	Consistent
35	Value for money of shopping at the airport.	-1	1	1	1	0.33	Inconsistent
36	Variety of restaurants and beverages.	1	1	1	3	1	Consistent
37	Value for money of foods and beverage.	-1	1	1	1	0.33	Inconsistent
38	Accommodation services at the airport.	-1	0	1	0	0	Inconsistent
39	Airport executive lounge is available.	1	1	1	3	1	Consistent
40	WIFI signal service	0	1	1	2	0.67	Consistent
41	WIFI signal speed	0	1	1	2	0.67	Consistent
42	Availability of washrooms/toilets.	0	1	1	2	0.67	Consistent
43	The cleanliness of the bathroom and toilet facilities.	1	1	1	3	1	Consistent
44	Charging battery station and seats at the boarding gate available.	1	1	1	3	1	Consistent
45	Children's area/playground.	0	1	1	2	0.67	Consistent
46	Drinking water point and quality of water.	1	1	1	3	1	Consistent
47	Availability of banks/ATM/exchange.	1	1	1	3	1	Consistent
48	Courtesy and service willingness of airport staffs.	-1	1	1	1	0.33	Inconsistent
49	Provide hand washing facilities with soap, alcohol gel or disinfectant at various points in the terminal.	1	1	1	3	1	Consistent
Arrival's zone							
Deboarding							
50	The waiting time before deboarding the aircraft.	1	1	1	3	1	Consistent
51	Provide social distancing while deboarding the aircraft.	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
52	The walking distance from the aircraft to the exit of the restricted area.	1	1	1	3	1	Consistent
53	Provide clearly defined zones from the aircraft to the exit of the restricted area.	1	1	1	3	1	Consistent
54	Provide alcohol gel between aisle to the exit of the restricted area.	1	1	1	3	1	Consistent
55	Body temperature screening by non-contact infrared thermometer at the exit of the restricted area.	1	1	1	3	1	Consistent
Immigration							
56	Waiting time before accessing the system.	1	0	1	2	0.67	Consistent
57	The ease of using the system.	1	0	1	2	0.67	Consistent
58	Courtesy and helpfulness of airport staff in managing queues.	1	1	1	3	1	Consistent
59	Courtesy and politeness of the immigration officer.	1	1	1	3	1	Consistent
60	Provide social distancing while waiting immigrant area.	1	1	1	3	1	Consistent
Baggage reclaims							
61	Walking distance to get to the baggage claim area.	1	1	1	3	1	Consistent
62	Flight display on carousel screens.	1	1	1	3	1	Consistent
63	Waiting time before retrieving baggage.	1	1	1	3	1	Consistent
64	Availability of toilets in the baggage claim area.	1	1	1	3	1	Consistent
65	The cleanliness of toilets	-1	1	1	1	0.33	Inconsistent
66	Availability of carts/trolleys	-1	1	1	1	0.33	Inconsistent
Customs							
67	Waiting time to go through customs.	0	1	1	2	0.67	Consistent
68	Setup/organization of queues	1	0	1	2	0.67	Consistent
69	Courtesy and politeness of the customs officer.	0	1	1	2	0.67	Consistent
70	Provide social distancing while waiting in the customs area.	-1	1	1	1	0.33	Inconsistent
Before leaving from the airport							
71	Arrival tourist assistance center	1	1	1	3	1	Consistent
72	Public transport from the airport into the city is convenient and varieties.	0	1	1	2	0.67	Consistent
73	Public transport prices are appropriate for each type of service.	0	0	1	1	0.33	Inconsistent

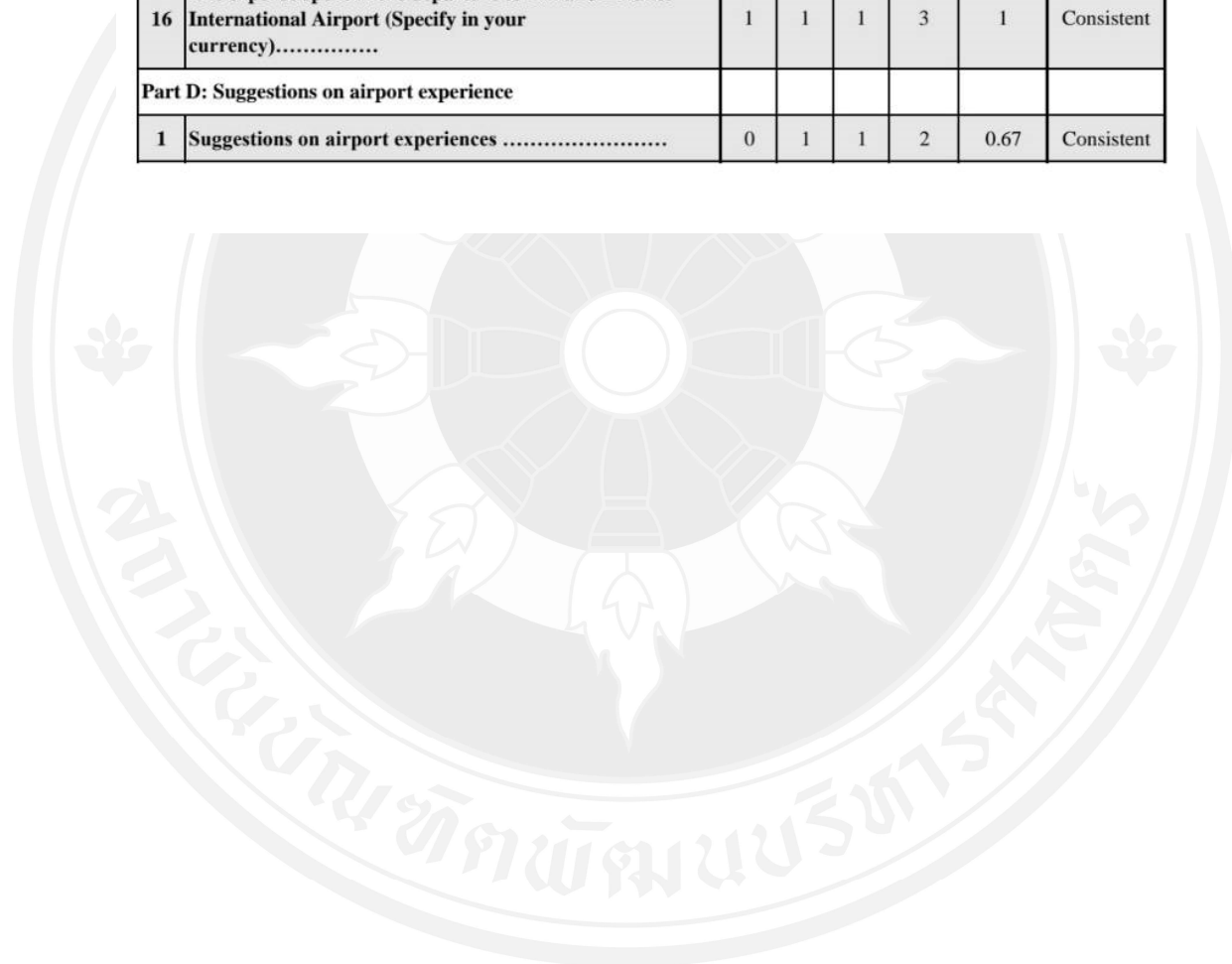
Items, Experts, Scores		1	2	3	Total	Average	Mean
Part B: Customer experience factors.							
Physical experience							
1	You are provided with modern and adequate facilities.	1	0	1	2	0.67	Consistent
2	You are satisfied with the environment and facilities at the airport.	1	1	1	3	1	Consistent
3	Security monitoring technology is used within the airport.	1	1	1	3	1	Consistent
4	You felt confident from the COVID-19 information provided by the airport.	1	1	1	3	1	Consistent
Emotional experiences							
5	The experiences in the airport give you pleasure.	1	1	1	3	1	Consistent
6	The experiences in the airport give me a sense of joy.	0	1	1	2	0.67	Consistent
7	You feel at ease when using services at the airport.	1	1	1	3	1	Consistent
8	Convenience at the airport as an incentive for you to come back again.	1	1	1	3	1	Consistent
Service experience							
9	Airport staff provides with a welcoming and humane.	1	1	1	3	1	Consistent
10	Airport staff understand your needs very well.	1	1	1	3	1	Consistent
11	You are provided by a professional and reliable team.	1	1	1	3	1	Consistent
Thainess experience							
12	You have been served with a smile and friendliness.	1	1	1	3	1	Consistent
13	Ambience of the airport expresses Thainess.	1	1	1	3	1	Consistent
14	The Thainess in the airport made you feel delighted.	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
Part C: Passenger's socio-demographic profiles.							
1	Gender	1	1	1	3	1	Consistent
	o Male	1	1	1	3	1	Consistent
	o Female	1	1	1	3	1	Consistent
2	Age (Generation)	1	0	1	3	1	Consistent
	o 1925-1945 Silent Generation	1	1	1	3	1	Consistent
	o 1946-1964 Baby Boomers	1	1	1	3	1	Consistent
	o 1965-1980 Gen X	1	1	1	3	1	Consistent
	o 1981-1996 Gen Y	1	1	1	3	1	Consistent
	o 1997-2012 Gen Z	1	1	1	3	1	Consistent
3	Education	1	1	1	3	1	Consistent
	o Below Bachelor's degree	1	1	1	3	1	Consistent
	o Bachelor's degree	1	1	1	3	1	Consistent
	o Above Bachelor's degree	1	1	1	3	1	Consistent
	o Other (Please specify)	1	1	-1	1	0.33	Inconsistent
4	Occupation	1	1	1	3	1	Consistent
	o Government / Civil servant	1	1	1	3	1	Consistent
	o Business owner	1	1	1	3	1	Consistent
	o Housewife	1	1	1	3	1	Consistent
	o Temporary worker / Freelance	1	1	1	3	1	Consistent
	o Student	1	1	1	3	1	Consistent
	o Retired	1	1	1	3	1	Consistent
	o Private business employee	1	1	1	3	1	Consistent
	o Unemployed	1	1	1	3	1	Consistent
	o Others (Please specify)	1	1	1	3	1	Consistent
5	Average monthly income Please specify your 'Cur	1	1	1	3	1	Consistent
6	Residence (Country)	1	1	1	3	1	Consistent
7	Marital status	1	1	1	3	1	Consistent
	o Single	1	1	1	3	1	Consistent
	o Married	1	1	1	3	1	Consistent
	o Widowed / Divorced	1	1	1	3	1	Consistent
8	Religion	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
	o Christianity	1	1	1	3	1	Consistent
	o Buddhism	1	1	1	3	1	Consistent
	o Islam	1	1	1	3	1	Consistent
	o Others (Please specify.....)	0	1	1	2	0.67	Consistent
9	Purpose of trip (If multiple purposes please give ranks 1,2, & 3)	1	1	1	3	1	Consistent
	o Lesure / Holidays	1	1	1	3	1	Consistent
	o Education	1	1	1	3	1	Consistent
	o Visit friends / Relatives	1	1	1	3	1	Consistent
	o Meeting / Seminar	1	1	1	3	1	Consistent
	o Business	1	1	1	3	1	Consistent
	o Others (Please specify).....	1	1	1	3	1	Consistent
10	How many times you have visited the Phuket International Airport (Including this time)	1	1	1	3	1	Consistent
	o 1-2 Time (s)	1	1	1	3	1	Consistent
	o 3-5 Times	1	1	1	3	1	Consistent
	o More than 5 times	1	1	1	3	1	Consistent
11	Number of Travel Companions (Include you)	1	1	1	3	1	Consistent
	o None/ Travel alone	1	1	1	3	1	Consistent
	o 2-3	1	1	1	3	1	Consistent
	o 4-5	1	1	1	3	1	Consistent
	o More than 6	1	1	1	3	1	Consistent
	o Travel with tour group	1	1	1	3	1	Consistent
12	Time duration in the airport before boarding	1	1	1	3	1	Consistent
	o 1-2 Hr(s).	1	1	1	3	1	Consistent
	o 3-4 Hrs.	1	1	1	3	1	Consistent
	o More than 4 Hrs.	1	1	1	3	1	Consistent
13	The activities at the airport while waiting for boarding (You can select more than 1)	1	0	1	2	0.67	Consistent
	o Dining	1	1	1	3	1	Consistent
	o Shopping	1	1	1	3	1	Consistent
	o Take photos	1	1	1	3	1	Consistent
	o Waiting at the boarding gate	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
	o Take a walk	1	1	1	3	1	Consistent
	o Get a massage	1	1	1	3	1	Consistent
	o Relax in a club lounge	1	1	1	3	1	Consistent
	o Watch a movie	1	1	1	3	1	Consistent
	o Read a book	1	1	1	3	1	Consistent
	o Take your kids to a play area	1	1	1	3	1	Consistent
	o Make friends	1	1	1	3	1	Consistent
	o Buy postcards	1	1	1	3	1	Consistent
	o Update your social media	1	1	1	3	1	Consistent
	o Take a nap	1	1	1	3	1	Consistent
	o Others (Please specify).....	1	1	1	3	1	Consistent
14	The requirement of facilities would you like at the airport while waiting for boarding (You can select more than 1)	1	0	1	2	0.67	Consistent
	o Shuttle cart	1	1	1	3	1	Consistent
	o Library	1	1	1	3	1	Consistent
	o Museum	1	0	1	2	0.67	Consistent
	o Wheelchair service	1	1	1	3	1	Consistent
	o Interpreter	1	0	1	2	0.67	Consistent
	o lounge	1	1	1	3	1	Consistent
	o Sports equipment rentals	1	-1	1	1	0.33	Inconsistent
	o Theater	1	0	1	2	0.67	Consistent
	o Playground	1	1	1	3	1	Consistent
	o Beauty shop	1	1	1	3	1	Consistent
	o Cultural center	1	0	1	2	0.67	Consistent
	o Medical service	1	1	1	3	1	Consistent
	o Others (Please specify)	1	1	1	3	1	Consistent
15	Products and services that spent on in the departure terminal (You can select more than 1)	1	0	1	2	0.67	Consistent
	o Beverages	1	1	1	3	1	Consistent
	o Food	1	1	1	3	1	Consistent
	o Souvenir	1	1	1	3	1	Consistent
	o Executive lounge	1	1	1	3	1	Consistent
	o Liqueur	1	1	1	3	1	Consistent

Items, Experts, Scores		1	2	3	Total	Average	Mean
	o Perfume	1	1	1	3	1	Consistent
	o Cosmetics	1	1	1	3	1	Consistent
	o Cigarettes	1	1	1	3	1	Consistent
	o Spa/Massage	1	1	1	3	1	Consistent
	o Electronics appliances	1	1	1	3	1	Consistent
	o Snack	1	1	1	3	1	Consistent
	o Local products	1	1	1	3	1	Consistent
	o Clothes	1	1	1	3	1	Consistent
	o Others (Please specify)	1	1	1	3	1	Consistent
16	The expense spent in the departure terminal of Phuket International Airport (Specify in your currency).....	1	1	1	3	1	Consistent
Part D: Suggestions on airport experience							
1	Suggestions on airport experiences	0	1	1	2	0.67	Consistent



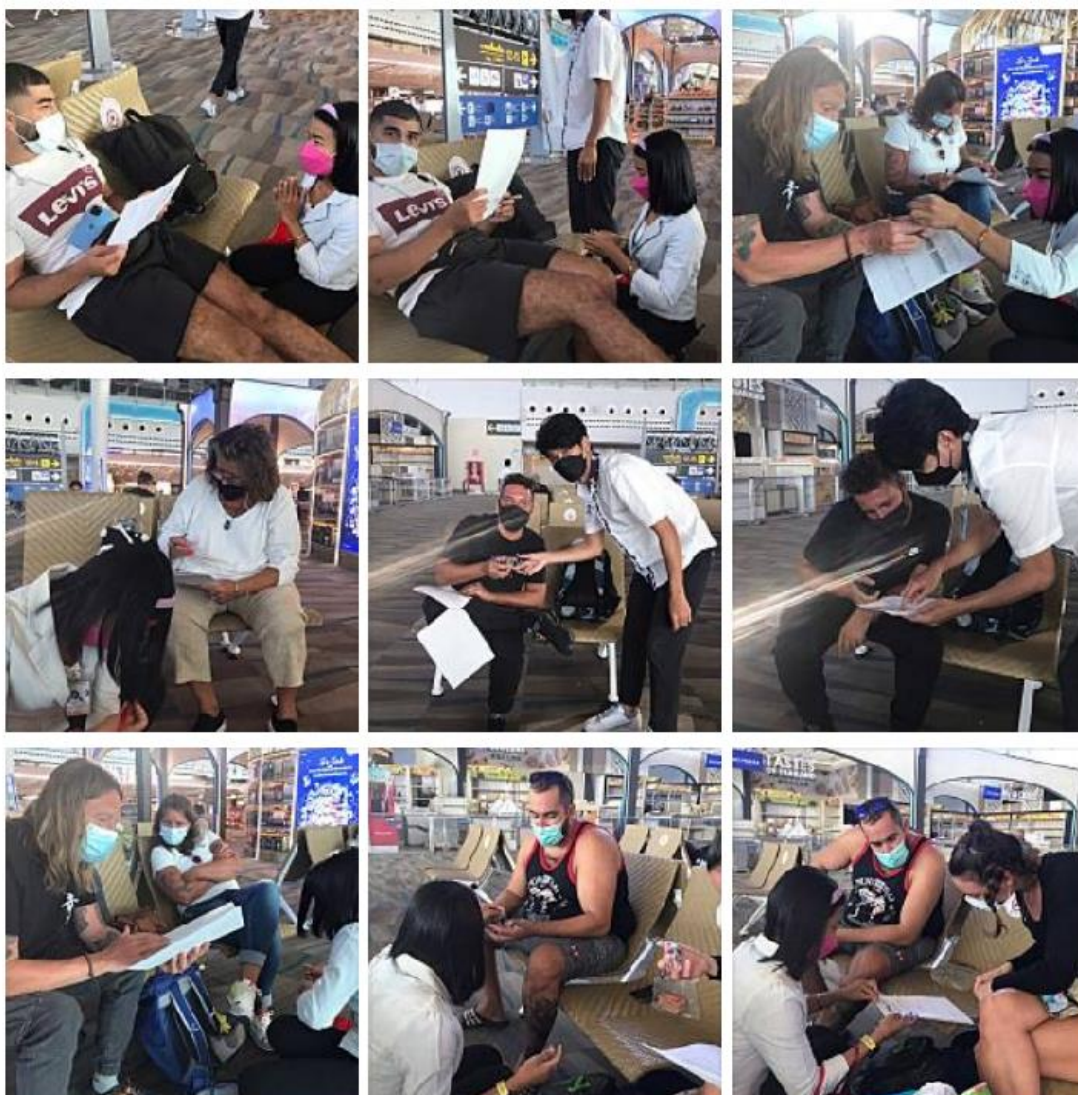


Appendix D

On-Site Photos

On-Site Photos









มกราคม 2022



BIOGRAPHY

NAME

Weerachai Bunyapattanapong

ACADEMIC BACKGROUND

- Master of Business Administration
(Hotel and Tourism Management) Stamford International
University Hua Hin. 2012

- Bachelor of Arts
(Airline Business Management) Suan Dusit Rajabhat
University (Hua Hin Campus) 2009

EXPERIENCES

- Lecturer at Phuket Rajabhat University 2013 - Present

- Team Member HR. at Amari Hua Hin 2012 - 2013

- Courtyard by Marriott Hua Hin at Cha Am 2009 - 2011

