





“Airport service performance at Abu Dhabi International Airport”

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AIRPORT SERVICE PERFORMANCE AT ABU DHABI INTERNATIONAL AIRPORT

Abstract

To acquire a significant footing in today's competitive airport environments, enhancing airport service performance for passengers is essential. This study aims to investigate the relationship between queuing time, prime services, security screening, and service performance at Abu Dhabi International Airport in the United Arab Emirates (UAE). A quantitative methodology was employed. The sample size for the PLS-SEM analysis and the passengers' airport service performance was determined to be 230 respondents. The results revealed a significant relationship between queuing time, prime services, security screening, and airport service performance. The findings also demonstrated a significant positive relationship between queuing time and airport service performance ($\beta = 0.193$, $t = 3.564$, $p \leq 0.000$), a significant positive relationship between prime services and airport service performance ($\beta = 0.478$, $t = 9.225$, $p \leq 0.000$), and a significant positive relationship between security screening and airport service performance ($\beta = 0.227$, $t = 4.196$, $p \leq 0.000$). The outcomes are anticipated to support Abu Dhabi International Airport management in making efficient processes to augment airport service accomplishment for passengers from UAE and different countries.

Keywords

airport service performance, queuing time, prime services, security screening, Abu Dhabi International Airport

JEL Classification

L84, M16

INTRODUCTION

Nowadays, air travel is widely accepted as one of the most common ways of transportation. It contributes significantly to the global GDP and has a massive impact on the economy, atmosphere, and people (Karagiannis et al., 2019). Especially in Abu Dhabi, the UAE economy is highly dependent on hydrocarbon and gas revenues. The UAE government aims to reduce the economy's reliance on energy exports by 2030 (Turak, 2018). Many people believe that airports and air travel are critical to the economic development of cities and countries. Every country relies on the aviation business to transport people and goods across national borders (Oxford Economics, 2014). In addition, technological progress and competition increase passenger expectations. To attract more businesses and airlines, airports must ensure high customer service quality (Arif et al., 2013).

Air transportation has had a significant influence on the global economy in the UAE over the past few decades and is a significant contributor to tourist and international trade development. In the 2016 fiscal year, air travelers spent \$650 billion, while the average global exchange delivered by air was \$5.5 trillion. There are many benefits to the global economy from airline activity, and this is represented in the additional value it generates globally in the form of new jobs in the air transportation sector's supply chain, which has a significant impact on other

economic sectors. 67.7 million jobs in the supply chain were expected to be sustained during the 2016 fiscal year, resulting in a \$3 trillion value added. As a result, aviation is one of the world's most important industries, with a gross domestic product share of 3.5% in 2014 as a point of comparability (IATA, 2018), and it has tremendous financial and public influence surrounding this sphere.

An essential component of effective airport management is service quality. It illustrates how a company has evolved from having a strong emphasis on infrastructure and operations to having a strong emphasis on providing excellent customer services. The need to gauge airport efficiency from a passenger's perspective, from check-in to baggage claim, prompted this study. The development of Abu Dhabi International Airport has paralleled that of the city itself, which has grown from a modest oasis to a global hub. To put it another way, Abu Dhabi International Airport is one of the world's most efficient and busiest airports, serving more than 150 airlines from its small airstrip. Terminal 3 at Abu Dhabi International Airport opened in 2009, increasing the airport's annual passenger capacity to 21 million (IATA, 2018).

Regarding the demands and expectations of passengers, Abu Dhabi International Airport always attempts to meet them. Passenger experience is a major concern for many research studies. According to Figueiredo and Castro (2019) and Wattanacharoensil et al. (2017), the airport is the place where visitors or passengers get their first view of a country they are visiting, so making a solid first impression and giving first-rate service is essential. Therefore, this study seeks to determine the factors influencing the service quality of Abu Dhabi International Airport.

1. LITERATURE REVIEW

The airline companies are responsible for offloading aircraft; immigration entrances are the personalized border protection services (Irando, 2018). All these units socialize in the airport to promote the risk-free, successful, and protected services for passengers (Abeyratne, 2017; Mazhar et al., 2019). This enables airport managers to embrace effective methods to enhance airport service quality and achieve excellent customer satisfaction and engagement (Pitchforth et al., 2015).

Yet another concern is that airport functions create a significant volume of information daily, which is complicated to save lasting (Monterrubio et al., 2020). Big datasets are also complicated to process, frequently needing specialist components to deal with the analytical requirements for filtering many items. The initial efforts focused on queue patterns that emphasized travelers' communication with baggage delivery, security, and the general layout of the airport (Georgios, 2019). In particular, it is a usual kind of likeness model for airport control, related to information from a series of terminals (Wu & Chen, 2019). While this approach offers a viewpoint of the standard behavior of the incurable located upon well-known

requirements, it neither offers supervisors an understanding of exactly what passenger top qualities are demonstrated in the files nor provides any evaluation of the changeability around model foresight (Prentice & Kadan, 2019).

Process models are typically utilized to deliver incurable methods concerning refining options and passenger capability (Adacher & Flamini, 2020). The providers connected with the passenger assistance method are asked for passenger security and efficiency well-being (Amro et al., 2020). The performance in connection with specified aims is not constantly analyzed, while queuing time is a strong performance hint. There is currently no straight dimension of when somebody takes part in the queue to become refined in the airport (e.g., simple records that keep track of when a plane has landed and when each passenger has completed immigration procedures) (Brownlee et al., 2020). Apart from being difficult to investigate, it is hard to determine whether passengers are taking a significant opportunity to produce it through immigration since they are progressively honed (Pitchforth et al., 2015). The variables identified in these analyses need evidence of where passengers may be avoided by spotting attributes popular to those sub-processes (Kohli & Muthusamy, 2018).

According to da Rocha et al. (2022), the traveling experience can be enhanced when airport operators surpass passengers' expectations in all facets of service. The objective is to fulfill or surpass the anticipations of passengers. Airport management must be able to identify enhancement opportunities in the service areas of the airport. Airports and airlines must analyze passengers' desires to decide which components are crucial and how to deal with any insufficiency.

Handling and discretionary activities are the two basic categories into which passenger adventure can be divided (Zhao et al., 2020). Handling activities need to be finished by a passenger, which is composed of check-in, security assessment, immigration, and boarding. At the same time, discretionary tasks are unordered and optionally available activities based on passengers' selection (El Najjar, 2018; Nikolova & Garkova, 2022).

Alodhaibi et al. (2017) noted a restricted amount of assessment conducted to scrutinize the performance of airport services. Specifically, this evaluation focused on the various duties that passengers undertake from the moment they arrive at the departure terminal to the point at which they depart from the arrival terminal. Mazhar et al. (2019) and Bellizzi et al. (2022) inspected passengers' managing and extra tasks in each airport domain to boost understanding.

Classifying and recognizing the factors affecting airport service performance is vital and pertinent for governments. Numerous challenges remain, notably those connected to the poor performance of airport services (Hong et al., 2020). However, there are certain factors proposed as predictors of airport service performance. These factors are queuing time (IATA, 2019; Bogicevic et al., 2016; Wiredja et al., 2019; Antwi et al., 2020), prime services (Wiredja et al., 2019; Antwi et al., 2020), and security screening (Bogicevic et al., 2013; Fakfare et al., 2021; Arif et al., 2013; Wiredja et al., 2019).

Queuing time is an essential predictor of airport performance services (Wiredja et al., 2019). Thus, passengers perceive lower value in airport services if they wait longer. Naturally, passengers' satisfaction (with airport service performance) will decrease when longer queuing times are creat-

ed. Theoretically, the AIPEX model (Airport Indicators of Passenger Experience) argues that queuing time influences airport performance services (Antwi et al., 2020). Thus, the studies and implementations of the relationship between queuing time and airport performance services were progressively used in Western countries. These research findings become significant orientations for business strategies (IATA, 2019). However, only few studies examined queuing time as a predictor of airport performance services in the UAE. Therefore, studying this critical factor affecting airport performance services at Abu Dhabi International Airport is worthwhile.

Prime services are the second key component influencing airport service performance. Scholars have highlighted prime services, especially in the Western culture, for their potential (Wiredja et al., 2019; Antwi et al., 2020). However, only some studies examined the effect of prime services on airport service performance in the Middle Eastern cultures such as the UAE. According to the AIPEX model, prime services in the primary processing domain form the core of airport performance services (Antwi et al., 2020). Ideally, passengers are known to be interested in such services (Wiredja, 2017).

Another important organizational predictor of airport service performance is a reliable security screening. Applying linear regression analysis, Wiredja et al. (2019) examined the association involving security screening and airport service performance. Accordingly, it was found that security screening is a service factor representing the processing domain variable in measuring airport service performance (Wiredja et al., 2019). Moreover, a literature review on airport services has identified that security screening is one of the critical factors for predicting and enhancing airport performance services, which maximizes travelers' satisfaction (Bogicevic et al., 2013). However, the impact of security screening on airport performance services is yet to be studied (Wiredja et al., 2019). Under the AIPEX model, security screening is essential in enhancing airport performance services (Antwi et al., 2020). Therefore, more empirical research on the direct effect of security screening on airport performance services is required, especially in the UAE setting.

In summary, tracking queue monitoring innovation choices increases solution performance while considerably increasing passenger expertise through state-of-the-art sensor unit innovation and automated digital queuing. It immediately alerts passengers to the next available broker and the procedures personnel when passenger delay opportunities or even solution charges exceed pre-programmed restrictions (Cavada et al., 2017). A significant indicator of airport efficiency is the length of the average queuing time for various services (Wiredja et al., 2019). Recent research shows that passenger queuing time contributes to airport service quality.

The quality of prime services is a critical factor affecting airport service performance. Wiredja et al. (2019) and Antwi et al. (2020) have noted the potential of prime services; however, there have been few studies that have looked at the impact of prime services on airport service performance in Middle Eastern countries like the UAE (Alremeithi et al., 2022). Prime services in the primary processing area are the basis of airport service performance, as established by the AIPEX model (Airport Indicators of Passenger Experience) (Antwi et al., 2020).

Various studies have demonstrated that passenger standing may be influenced by times, the quantity of passenger fulfillment, the testing technique, and its subsequent effect on a passenger’s knowledge of security check (Ormerod & Dando, 2015). Lum et al. (2015) found that passengers prefer shorter lineups at security checkpoints when they view risks to their integrity as significantly higher. In contrast, those who felt a much better level of professionalism from airport security officials had higher safety sensations.

2. AIM AND HYPOTHESES

This paper addresses the airport service performance (queuing time, prime services, and security screening) to develop policies, and procedures in Abu Dhabi International Airport. While the study empirically examines the airport environment, the results could benefit a similar domain and various managerial and governance agencies, including policymakers, managers, CEOs, or designers. This study aims to understand airport service performance using a comprehensive analysis of concepts, performance concepts, the AIPEX model (Airport Indicators of Passenger Experience), and relevant literature.

This study proposed a model that examines the effects of airport service performance factors, namely queuing time, prime services, and security screening, on various constructs with unique relationships. The conceptual framework of the study is depicted in Figure 1. Thus, the study elaborates on the following hypotheses:

- H1: Queuing time positively affects airport service performance.*
- H2: Prime services positively affect airport service performance.*
- H3: Security screening positively affects airport service performance.*

3. METHODOLOGY

The methods and procedures directly affect the choice of an analysis design. It contains information on data collection and evaluation to ensure

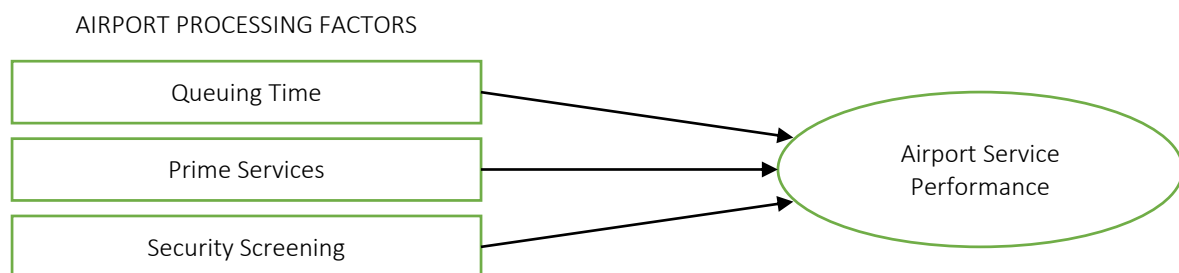


Figure 1. Conceptual framework

that the analysis is a success. In order to better understand what variables influence the efficiency of airport service performance at Abu Dhabi International Airport, this study employs a quantitative methodological approach. A questionnaire was used since it is the most reliable method for gathering primary data about people's opinions, experiences, and values (Sekaran & Bougie, 2016).

Samples are representatives of the entire population, where the size and selection techniques have to be appropriate and not bias the results. According to Roscoe's (1975) recommendation, the appropriate sample size for most studies falls between 30 and 500. This guideline is called the "rule of thumb" for sample size selection. However, according to some statistical experts, the number of data points should be between 5 and 10 times as many objects as the scale contains (Hair et al., 2009).

For this study, the population is not residents, and the actual sample size could be different from one time to another. Therefore, estimating the sample size based on population size could be messy, and it is better to make the estimation based on other formulas in which population size is separate from the mathematical function. This study uses the rule of thumb stated by Hair et al. (2009), in which the sample size is ten times as many questions as there are respondents. As this analysis has 18 perceptual items and 5 demographic objects, the sample size is estimated between 180 to 230 passengers. So, this study's target-sample size is 230 samples.

3.1. Questionnaire and scales

Most social science studies with empirical examination use questionnaires as the main tool for primary data collection. Questionnaires of multiple items and selection polls are the common method to collect the perceptions of participants to assess the opinion level or examine the relational model between different variables (Creswell & Creswell, 2017). The paper examines four major constructs, and selecting the appropriate instrument to measure each one is critical.

Five items (Table A1, Appendix A) derived from an Airports Council International (2008) scale

were used to measure queuing time. Five items (Table A2, Appendix A) derived from an Airports Council International (2008) scale were used to measure prime services. Four items (Table A3, Appendix A) derived from an Airports Council International (2008) scale were used to measure security screening. Four items (Table A4, Appendix A) derived from an Airports Council International (2008) scale were used to measure airport service performance. All scales used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

4. RESULTS

Constructs are summarized numerically in a descriptive analysis by describing the lowest and highest values (Zikmund et al., 2010). The mean and standard deviation describe the latent constructs (Table 1).

Table 1. Descriptive analysis of constructs

Constructs	N	Min	Max	Mean	Std. Deviation
QT	230	1.00	5.00	3.6687	0.57211
PS	230	1.00	5.00	3.8817	0.53319
SS	230	1.00	5.00	3.5609	0.59528
ASP	230	1.00	5.00	3.8587	0.58468

Note: QT = Queuing Time, PS = Prime Services, SS = Security Screening, ASP = Airport Service Performance.

The mean value of the variables, as shown in Table 1, varies from 3.5609 to 3.8817. The highest mean value was yielded by prime services (3.8817), and the lowest mean value – by security screening (3.5609). The mean values of the remaining constructs reveal not far from each other, while the standard deviation ranges from 0.53319 to 0.59528.

The PLS-SEM approach is commonly employed in marketing research using Smart PLS, version 3.0 M3 software (Hair et al., 2014). The structural and measurement models are used to measure and understand a PLS-SEM path model (Hair et al., 2014). This analysis followed a two-step method to obtain adequate results from the PLS-SEM path modeling technique. Figure 2 illustrates the two-step technique proposed by Henseler et al. (2009).

The initial stage in PLS-SEM analysis involves the assessment of the measurement model. The

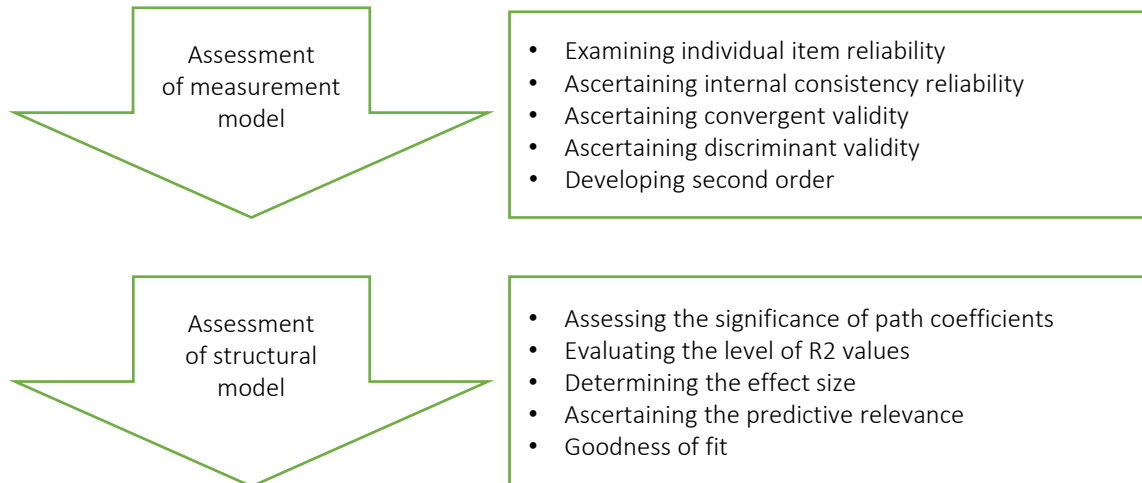


Figure 2. Path model assessment

process of component measurement is utilized to assess the degree to which indicators (items) are conceptually linked with their corresponding construct in the outer model. The assessment of the outer model demonstrates the reliability and validity of the survey items. The application of partial least squares structural equation modeling (PLS-SEM) is primarily employed to assess the measurement or outer

model. According to Hair et al. (2014), reflective measurement is employed to validate the evaluation through composite reliability, ensuring internal consistency. Convergent validity, item reliability, and average variance are assessed through statistical analysis. On the other hand, discriminant validity is evaluated through cross-loadings and the application of the Fornell and Larcker criteria.

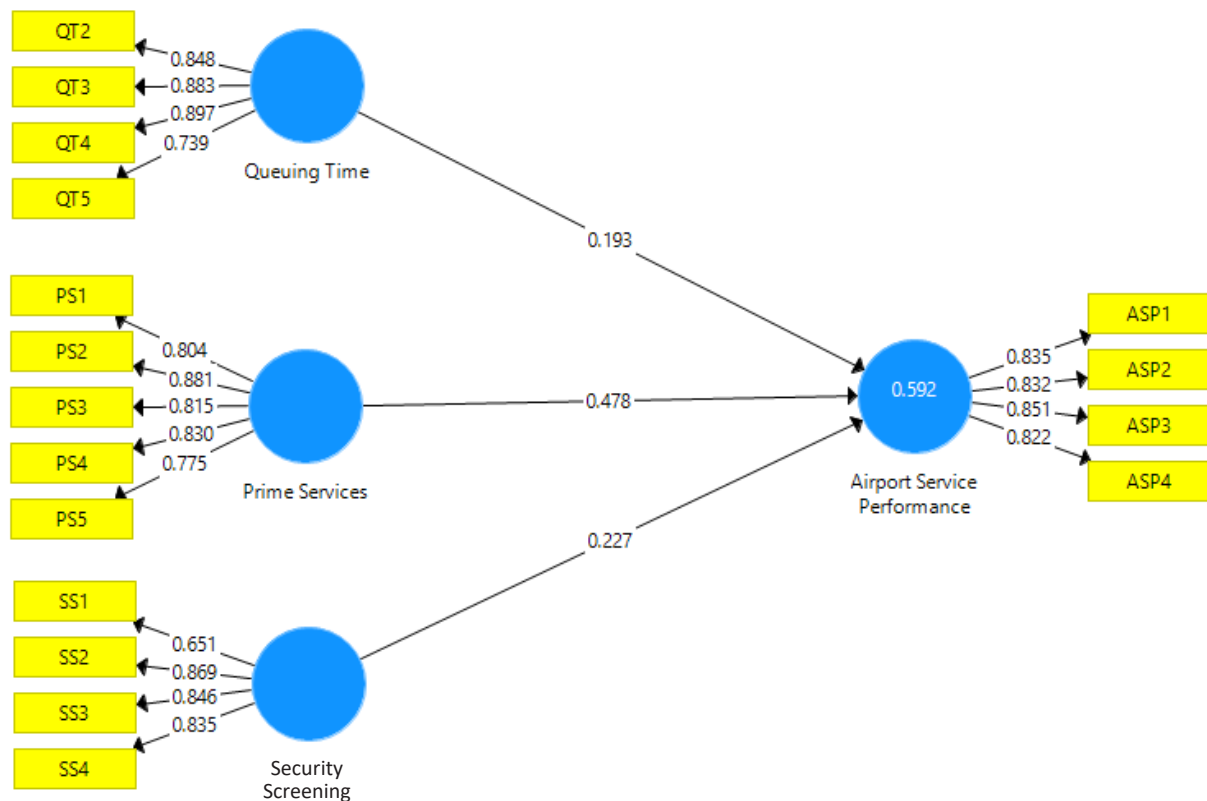


Figure 3. Measurement model

Table 2. Loadings, reliability, and convergent validity values

Construct	Item Loading	Cronbach's Alpha	Composite Reliability (CR)	Average Value Extracted (AVE)
Queuing Time				
QT2	0.848	0.865	0.908	0.713
QT3	0.883			
QT4	0.897			
QT5	0.739			
Prime Services				
PS1	0.804	0.879	0.912	0.675
PS2	0.881			
PS3	0.815			
PS4	0.830			
PS5	0.775			
Security Screening				
SS1	0.651	0.817	0.879	0.648
SS2	0.869			
SS3	0.846			
SS4	0.835			
Airport Service Performance				
ASP1	0.835	0.856	0.902	0.698
ASP2	0.832			
ASP3	0.851			
ASP4	0.822			

Note: QT = Queuing Time, PS = Prime Services, SS = Security Screening, ASP = Airport Service Performance.

Table 2 and Figure 3 illustrate the results of item loadings and composite reliability (CR). The item loadings range from 0.651 to 0.897, and values of CR range from 0.889 to 0.912, which is also higher than the cut-off value.

Table 3 shows that every indicator loading (shown in bold) is over the suggested threshold value of 0.5 and the suggested cut-off point of 0.5. (Hair et

al., 2010). This demonstrates that discriminant validity is not a concern in this investigation.

The structural model (or inner model) in PLS-SEM direction simulation explains the association between external and endogenic latent structures. Accordingly, examining the fundamental version makes evaluating an empirical dataset's support for a theory easier (Hair et al., 2014). The valida-

Table 3. Cross loadings

	Airport Service Performance	Prime Services	Queuing Time	Security Screening
ASP1	0.835	0.581	0.445	0.498
ASP2	0.832	0.570	0.514	0.520
ASP3	0.851	0.610	0.495	0.495
ASP4	0.822	0.620	0.495	0.515
PS1	0.496	0.804	0.332	0.428
PS2	0.635	0.881	0.519	0.498
PS3	0.622	0.815	0.532	0.577
PS4	0.596	0.830	0.394	0.429
PS5	0.563	0.775	0.456	0.380
QT2	0.494	0.431	0.848	0.497
QT3	0.554	0.529	0.883	0.476
QT4	0.534	0.513	0.897	0.481
QT5	0.362	0.359	0.739	0.466
SS1	0.341	0.275	0.287	0.651
SS2	0.477	0.480	0.492	0.869
SS3	0.560	0.528	0.488	0.846
SS4	0.538	0.492	0.510	0.835

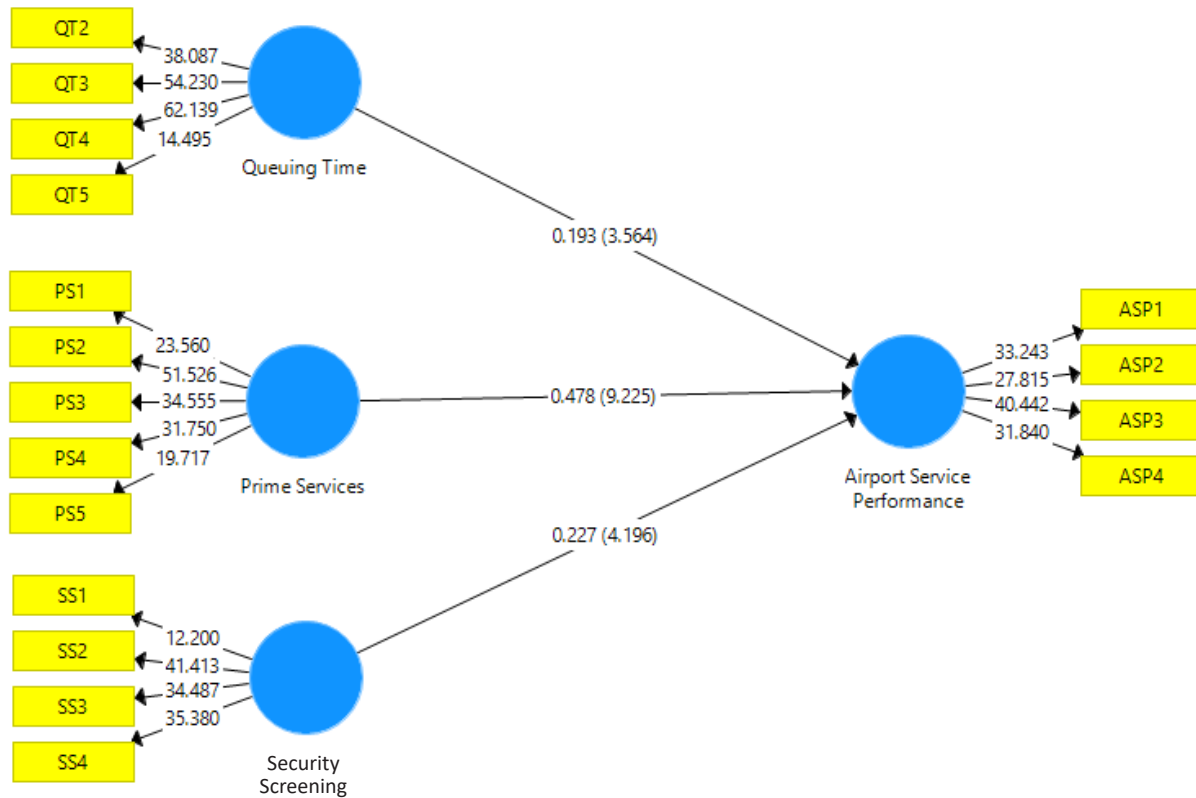


Figure 4. Structural model

tion of value standards via dimension shape evaluation is required before turning on to fundamental paradigm assessment and hypotheses testing. Figure 4 illustrates the fundamental pattern of this analysis.

230 examples and 5,000 bootstrap samples are used; a standard bootstrapping approach is utilized to establish whether the model’s route coefficients are considerable (Hair et al., 2017; Hair et al., 2014). Churchill (1979) and Sharma (2000) stated that the importance level of a t-value of 1% is more than or comparable to 2.58, and at 5%, it is greater or similar to 1.96, and at 10%, it is greater or equivalent to 1.645. Based on the t-values and p-values, this study accepts the hypotheses.

Table 4 shows that *H1* (queuing time positively affects airport service performance) is supported ($\beta = 0.193$, $t = 3.564$, $p \leq 0.000$). In the same way, *H2* (prime services positively affect airport service performance) is accepted ($\beta = 0.478$, $t = 9.225$, $p \leq 0.000$). Finally, *H3* (security screening positively affects airport service performance) is also accepted ($\beta = 0.227$, $t = 4.196$, $p \leq 0.000$). Thus, the study accepts all the hypotheses.

PLS-SEM path modeling does not consider the goodness of fit because predictive relevance measures the model’s accuracy. Henseler (2012) has recently made a case for avoiding empirical and conceptual model fit assessments. Because of this, according to Hair et al. (2017, 2016, 2014, 2013), the goodness of fit cannot discern between a valid and an erroneous model.

Table 4. Structural model assessment using the connection between the model’s direct pathways, t-values, and p-values

Hypothesis	Relationship	Path Coefficient	Std. Error	T-Values	P-Values	Supported
H1	Queuing Time → Airport Service Performance	0.193	0.054	3.564	0.000	✓
H2	Prime Services → Airport Service Performance	0.478	0.052	9.225	0.000	✓
H3	Security Screening → Airport Service Performance	0.227	0.054	4.196	0.000	✓

5. DISCUSSION

Airport services can simply be looked at as a queuing system, passengers, airplanes, luggage waiting to be claimed, circulation review, and the problems individuals experience (Schmidt, 2017). Generally, the customer satisfaction with the quality of airport services depend on queuing time, prime services, and security screening.

First, this study examined the regression path between queuing time and passengers' satisfaction with Abu Dhabi International Airport. The results of this study fully supported *H1*. These findings are aligned with Bogicarić et al. (2013), Wiredja et al. (2019), and Wiredja (2017), who discovered a substantial connection between queuing time and service performance. Queuing time is one of the most significant predictors of airport service performance (Wiredja, 2017). Therefore, the literature emphasizes that minimum queuing time boosts the individual perception regarding airport service performance (Wu & Mengersen, 2013). Also, these results are aligned with the AIPEX (Airport Indicators of Passenger Experience). Smooth queuing time significantly impacts the traveler's perception of airport management and its performance (Wiredja et al., 2019).

Prime services are delivered by air providers and airports with a vast array of airplanes, passengers, and security services to ensure their aircrafts are trusted, operations are secure, and the convenience of passengers is achieved (Gupta, 2018). The literature review shows that prime services at airports positively affect service performance. Thus, the impact of prime services on passengers' perception of airport service performance was tested (*H2*); the results accept this hypothesis. These results are aligned with Gupta (2018), Wiredja (2017), Wiredja et al. (2019).

Providing prime services has become a strategic objective for airports looking to improve service delivery. In an environment that is getting more and more competitive, such services have

an influential role in the airport performance, signaling the transition from a large emphasis on infrastructure and processes to giving a provision of knowledge that is driven by the demands of passengers (Wyman, 2012; Wiredja et al., 2019). Moreover, the development of prime solutions in the airport transport resources and the resulting advantages to the national economic situation expected to result from any provided project might rouse the regulation of such support for various explanations (Nahvi, 2019). Such services also generate extra income for the airports, and prime services motivate passengers to revisit these airports (Wiredja, 2017).

Passenger security screening system enriches security by identifying reduced and high-risk passengers just before they get to the airport by matching their labels versus dependent on visitor and view checklists (Weydner-Volkman, 2017). Thus, the relationship between security screening and guests' opinions on the effectiveness of airport services among Abu Dhabi International Airport travelers was examined (*H3*). This study fully supported *H3*. This result is similar to Wiredja (2017) and Wiredja et al. (2019). A security check is a non-co-operated service based on rigorous methods that require all passengers to become wholly observed to ensure their safety (Wiredja, 2017).

Standard screening processes must be conducted practically and thoughtfully as travelers intend to have a safe trip (Yu & Hyun, 2019). Passengers can be pre-qualified for various levels of assessment using an online risk-based airport security approach (Sakano et al., 2016); after background checks, many of those categorized as low threats will then look at reduced testing at gates while an arbitrary example experiences specified screening. Travelers suspected of posing security risks are taken to checkpoints and subjected to critical physical body inspections (Lee, 2019). However, such a secure atmosphere engages passengers and develops an attraction to such airport fetchers. Security screening at the airport significantly influences the service performance of airports.

CONCLUSION

This study investigated the relationship between queuing time, prime services, security screening, and service operation in the Abu Dhabi International Airport context. A questionnaire was used to gather data for a quantitative research strategy. Analysis was done using Smart PLS 3 in the study. The research model with three hypotheses was developed; all of the proposed hypotheses were supported.

This study found that the relationships between queuing time, prime services, security screening, and service performance are positively significant. The analysis revealed that the R2 value is 0.59, indicating a significant correlation; in-service performance is explained by the queuing time, prime services, and security screening, respectively.

These findings can be implemented in other public sector organizations in Abu Dhabi, Dubai, and in developing countries to create assistance distribution and managerial implementation. As a result, applying this strategy in Abu Dhabi and other developing countries in the Asian region is predicted to accelerate economic growth. In today's corporate environment, fierce competition and rivalry among companies are commonplace. For now, the only option for increasing the service's performance level is to adopt appropriate actions. This model can guide policymakers and practitioners in the evolving context of the Abu Dhabi Airport Industry to ensure high-level organizational performance.

AUTHOR CONTRIBUTIONS

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Writing – review & editing: Mansour Almheiri, Aminurraasyid Yatiban, Sabina Sultana.

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APPENDIX A

Table A1. Queuing time scale

Variable	Source	Items
Queuing Time	Airports Council International (2008)	<ol style="list-style-type: none"> 1. There should be no more than 15 minutes of standing in line for immigration clearance. 2. Waiting in line for visa on arrival should not be more than 15 minutes. 3. There should be no more than 15 minutes of standing in line for customer clearance. 4. There would be no more than 15 minutes of standing in line for screening. 5. Overall, queuing during my travel in Abu Dhabi International Airport is reasonable.

Table A2. Prime services scale

Variable	Source	Items
Prime services	Airports Council International (2008)	<ol style="list-style-type: none"> 1. Immigration staff is helpful and courteous. 2. Airport should ensure that the passengers receive their bags securely, without any delays, harm, or missing items. 3. Waiting at conveyor belt to collect the luggage(s) should not be more than 15 minutes. 4. Customs and quarantine staffs are helpful and courteous. 5. Incoming Passenger Card (IPC) or equivalent shall afford clear information for customs declaration.

Table A3. Security screening scale

Variable	Source	Items
Security screening	Airports Council International (2008)	<ol style="list-style-type: none"> 1. Secure screening is professional and have zero issues. 2. Security staffs are helpful and courteous. 3. Equipment of secure screening used are safe for human beings. 4. Equipment of secure screening used are safe for my electronic belongings.

Table A4. Airport service performance scale

Variable	Source	Items
Airport service performance	Airports Council International (2008)	<ol style="list-style-type: none"> 1. Immigration services are efficient and have zero issues. 2. Custom services are efficient and have zero issues. 3. Baggage services are efficient and have zero issues. 4. Overall airport processing services are efficient and have zero issues.