

## The Effect of Waiting Room Service Quality and Departure Terminal Facilities on Passenger Satisfaction in International Airport Kualanamu North Sumatra

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### Abstract

This study aims to identify, analyze, and assess the effect of waiting room service quality and departure terminal facilities on passenger satisfaction at Kualanamu International Airport, North Sumatra. This study uses a quantitative approach with associative methods. A total of 100 respondents were selected through random sampling techniques and data were collected using questionnaire instruments that include variables of waiting room service quality, departure terminal facilities, and passenger satisfaction. Data analysis was done by multiple linear regression techniques. The results of partial analysis showed that the quality of Service waiting room has a significant effect on passenger satisfaction with the value of  $t_{count} = 6.311$  which is greater than  $T_{table} = 1.660$  and significance of 0.000 ( $< 0.05$ ). Similarly, the departure terminal facilities have a significant effect with the value of  $t_{count} = 4.127$  which is also greater than  $T_{table} = 1.660$  and significance 0.000 ( $< 0.05$ ). Simultaneously, the quality of Service waiting room and departure terminal facilities significantly affect passenger satisfaction with a value of  $F_{count} = 152.284$  greater than  $F_{table} = 3.09$  and significance 0.000 ( $< 0.05$ ). Determination value of 75.3% indicates that the variable quality of service lounge and departure terminal facilities explain most of the variations in passenger satisfaction variables. This study recommends that Kualanamu airport managers improve service quality by adding seats, improving air conditioning systems and renewing entertainment facilities. Further research, it is recommended to expand the scope of variables, use qualitative methods and conduct comparisons between airports in order to broaden the outlook and develop a more comprehensive service improvement strategy.

**Keywords:** Service Quality, Terminal Facilities, Passenger Satisfaction

### INTRODUCTION

One of the main gateways in Indonesia is Kualanamu International Airport located in North Sumatra. The airport plays an important role in promoting economic growth and community mobility in the region. Kualanamu airport was inaugurated in 2013 and serves as the main airport in North Sumatra, replacing Polonia airport in Medan. Strategically located near the city of Medan, the airport is an important domestic and international aviation hub connecting North Sumatra with various places in Indonesia and around the world.

Kualanamu airport has experienced a significant increase in passenger volume in recent years. This can be seen in the following graph:

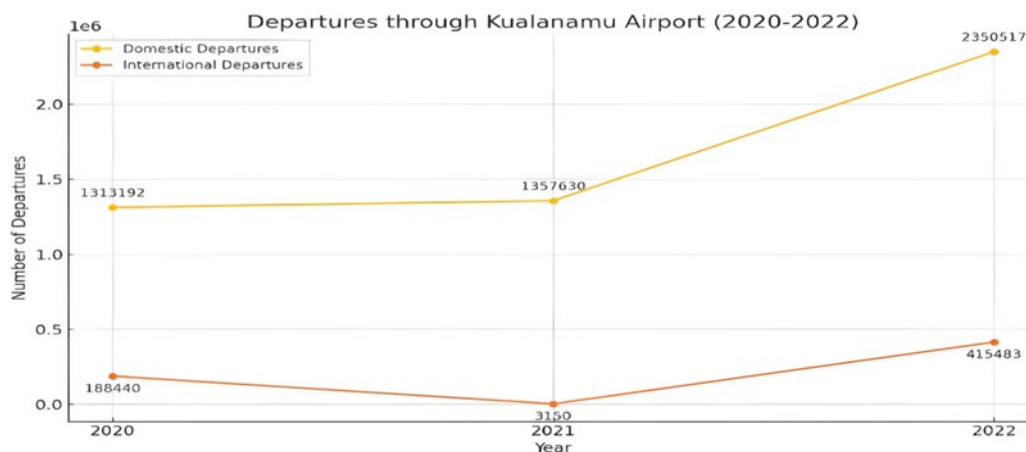


Figure 1. Departure via Kualanamu Airport in 2020-2022

From 2020 to 2022, there is an increasing trend in the number of domestic passenger departures through Kualanamu Airport. The airport has served 1,313,192 domestic passenger departures in 2020. In 2021, the number of departures increased to 1,357,630 and in 2022, this figure increased significantly to 2,350,517. Meanwhile, the number of international passenger departures has undergone significant changes. The number of departures was 188,440 in 2020. However, the pandemic limited international travel and decreased the number of departures in 2021 to only 3,150 and the number of international departures again increased sharply to 415,483 in 2022.

This increase shows the importance of Kualanamu airport as an air transportation hub that connects domestic and foreign passengers. With the increasing number of passengers, service is certainly important in providing a satisfying travel experience for passengers because passenger satisfaction is an important measure of an airport's performance that can affect its image and reputation.

Basoni (2022) states that satisfaction is the level of state that a person feels through the comparison of the results or appearance of the perceived product with his expectations. Darus and Mahalli (2019) suggest satisfaction is when there is no difference between what is expected and what is received. Passengers at airports have certain expectations of the service they receive. When service meets or exceeds their expectations, passengers will feel satisfied, but if not, passengers will feel dissatisfied, then passengers perception of the airport as a whole will be directly affected by this satisfaction or dissatisfaction.

Ichsan and Karim (2021) suggest that service quality is the main component that service providers must pay attention to to increase customer satisfaction. Research conducted by Gonda et al (2022) shows that the quality of services provided by international airports affects customer value and satisfaction. Passengers should have a comfortable lounge while waiting for the flight. Adequate space and a clean and comfortable environment can reduce stress and increase passenger satisfaction, making waiting times more enjoyable.

Research conducted by Sihaloho and Syaputra (2023) shows that waiting rooms have a significant influence on passenger satisfaction. This study found that the quality of the waiting room is directly correlated with the level of passenger satisfaction, while Suprpto (2017) research proved that the waiting room substantially affects the perception of consumer satisfaction. Therefore, the quality of the waiting room service is one of the factors that plays a crucial role in ensuring passenger satisfaction, so Kualanamu airport organizers must continue to improve the quality standards of the waiting room, both in terms of comfort, cleanliness, and service in order to ensure a satisfactory experience for passengers. Consistent efforts in improving the quality of service this waiting room will create a pleasant thing for every passenger and will have an impact on increasing passenger satisfaction.

Based on the results of the pre-survey, it is known that to meet passenger expectations, the management of the waiting room must be improved because 66.67% of passengers are dissatisfied with the cleanliness. Cleanliness is very important to make the place of waiting for the flight comfortable and pleasant. The percentage of passengers dissatisfied with seating comfort reaches 60% which indicates that the seating in the waiting room may not be ergonomic enough to make passengers feel comfortable for a long time. Furthermore, one of the most common complaints from passengers was their dissatisfaction with the waiting room temperature by 73.33%. Passengers' experience at the airport is greatly affected by uncomfortable temperatures, especially if they have to wait for a long time. This shows that there is an urgent need for better temperature regulation or better cooling systems for passenger comfort and the last is that 60% of passengers consider the distance between the waiting room and the place to eat or food court too far, passengers feel dissatisfied because they have to walk further to reach the place to eat or food court.

The availability of other facilities outside of the waiting area certainly increases comfort and makes travel easier for different types of passengers with different needs. For example, children's play areas can make traveling with children more comfortable and disability-friendly toilets show attention to inclusivity. A clear signage system makes it easy for passengers to find the area they are looking for in the terminal, reducing passenger confusion.

When it comes to airport facilities, availability and quality of Service are essential to make the experience more comfortable, safe and satisfying for passengers. Therefore, to improve passenger satisfaction and maintain the airport's reputation as a superior service provider, improving the quality of terminal facilities must be a top priority for airport managers. This is in line with the findings of research conducted by Rahmadiansyah and Wakhidah (2022) which shows that there is a significant influence between the quality of public facilities on passenger satisfaction at Iskandar Pangkan Bun airport as well as research conducted by Ferreira (2021)

which proves that physical evidence that in this case is a facility affects passenger satisfaction. Likewise, the results of the pre-survey of terminal facilities, it is known that as many as 53.33% of passengers are satisfied with the availability of disability-friendly toilets, but 46.67% still feel that these facilities need to be improved. Smoking area facilities in need to be improved as 53.33% of passengers are dissatisfied with the area. On the signage system, there are 80% of passengers are dissatisfied because it is considered less informative so that passengers are confused in finding the facilities or directions they are looking for and 60% of passengers are dissatisfied with inadequate children's play facilities.

Based on the background that has been described previously, the author is interested in studying this topic in more depth in a study entitled The effect of waiting room service quality and departure Terminal facilities on passenger satisfaction at Kualanamu International Airport in North Sumatra.

## Literature Review

### Passenger Satisfaction

Antwi et al (2022) suggest in the transportation sector, including airports, passenger satisfaction is an important concept because it shows how well the service provided to passengers meets their expectations. Understanding passenger satisfaction is critical to improving service and ensuring that every aspect of the travel experience meets expectations.

According to Chandra et al (2020) customer satisfaction which in this context is a passenger is a response shown by the passenger to the service or performance received, then the passenger will compare the performance with the expectations he wants. If the performance received is more than the expectation then the passenger is satisfied, and vice versa if the performance received does not meet or equal to the expectation then it can be said that the passenger is not satisfied with the performance received. Ferreira (2021) defines passenger satisfaction as the difference between the perception that passengers have of a service before it is provided or perceived, and the perception that passengers occur after experiencing the use or receiving a service. Bae and Chi (2022) mention the understanding of passenger satisfaction is how good the services and facilities they receive at the airport compared to their expectations.

Rahmadiansyah and Wakhidah (2022) say satisfaction is a feeling of pleasure or disappointment that arises when a person compares the performance of a service with what he expected. Darus and Mahalli (2019) said passenger satisfaction is when passenger expectations are met by the service provided by the service provider. According to Indrasari (2019) passenger satisfaction is the level of feelings passengers have after comparing what they receive and what they expect while Ichsan and Nasution (2022) say satisfaction is the mood and feelings that arise after equating between the expected ability and the service or product purchased.

Based on the opinions of experts above, it can be concluded that passenger satisfaction is the result of comparing the performance or service provided to passengers with what they expect. Passengers will feel satisfied if the service they receive exceeds or meets their expectations, but if the service does not match their expectations, passengers will feel dissatisfied. Satisfaction it is an emotional response that can be a feeling of pleasure or disappointment and comes after passengers have rated their experience thus customer satisfaction shows how well the service can meet or even exceed passenger expectations.

### Quality of Service

The quality of Service is very important for the operation and management of the airport because the airport is involved in the service industry. Therefore, the performance of the airport can be seen from the perception of passengers towards the service and the level of satisfaction, this is in accordance with the opinion of Ichsan and Karim (2021) who say service quality is the main thing that must be considered by organizations when they strive to increase user satisfaction. According to Sulistiyowati (2018) service quality can be defined as everything that centers on efforts to meet the needs and desires of users quickly and precisely so that they meet their expectations.

Reiwines and Hidayat (2022) mention that service quality is a measure of how effective and efficient a service is in meeting the needs and desires of service users. Anugrah and Sudarmayasa (2020) suggest that service quality is an expected level of excellence as well as excellence control measures to meet the expectations of service users. According to Pratama et al (2024) service quality is defined as the presentation of services that are minimally in accordance with what users expect and demand. Johnson and Karlay (2018) define service quality as the ability of a service provider to match expected service with perceived service to

achieve user satisfaction.

Lee and Yu (2018) said airport service quality is a multi-dimensional construct that represents various passenger experiences whereas according to Ferreira (2021) service quality is defined as the mental perception that passengers have about the services they receive at an airport which includes cognitive and subjective considerations about various operational aspects and facilities provided. This perception results from an internal process in which passengers compare their experience while receiving the service with their expectations prior to receiving the service. Setiawan et al (2020) mentioned that the perceived quality of Service is defined as the passenger's assessment of the overall excellence of airport services. Mirghafoori et al (2018) stated that airport service quality refers to the level of performance and efficiency of various airport services and facilities provided and evaluated based on passenger perceptions and experiences which include evaluating various aspects of airport operations, such as security checks, cleanliness of facilities, waiting room comfort, accessibility of Information, speed and ease of check-in processes, and the attitude and responsiveness of airport staff.

### Quality of Waiting Room Services

According to Tomos and Astutik (2023) the waiting room is a special area in the airport terminal, where passengers wait for the departure of the aircraft. This room is designed to make passengers feel comfortable and safe during the waiting process, and is equipped with various supporting facilities to meet the needs of passengers before entering the aircraft. Cholkongka (2019) defines a lounge as a quiet space where passengers can relax and access a variety of services and entertainment while waiting for their flight.

Park and Park (2018) stated the departure lounge is a special area in the airport designed to provide optimal comfort for passengers while waiting for their flight. In this space, they can relax and rest comfortably while enjoying various conveniences such as comfortable seats, access to flight information and other supporting services. The departure lounge also aims to meet the needs of passengers before departure, ensuring they can prepare well for the upcoming journey. According to Chua et al (2017) a lounge is an area designed to provide a superior service experience, providing a place for passengers to relax and refresh before a flight. The room aims to increase travel comfort and productivity by providing a supportive environment and meeting the various needs of passengers. One of the key factors influencing passenger satisfaction and their experience while waiting for a flight is the quality of the airport waiting room. Having a comfortable, safe waiting room supported by good services can enhance passengers' overall perception of airport services. According to Tseng and Wu (2019), the quality of waiting room services refers to how satisfied passengers are with the services provided in the airport waiting area, including aspects such as comfort, safety, availability of information, responsiveness, and staff professionalism.

Kefallonitis and Kalligiannis (2019) stated that the quality of waiting room services is the extent to which an airport waiting room meets the needs and expectations of passengers through superior services, such as cleanliness, comfort, supporting facilities, and the availability of accurate and timely information. Park and Park (2018) argued that the quality of waiting room services is a measure of how effectively and efficiently the airport waiting room provides a pleasant waiting experience for passengers, including cleanliness, availability of comfortable seating, and the friendliness of staff.

Shah et al. (2020) suggested that passengers' overall perception of the services provided in the airport waiting area is referred to as the quality of waiting room services, which includes physical elements such as comfort and cleanliness, as well as service elements like the speed and accuracy of flight information. Meanwhile, according to Lee et al. (2017), the quality of waiting room services is the degree of alignment between passengers' expectations and the services provided in the airport waiting room, including ease of access to information, space comfort, staff friendliness, and the availability of facilities that help passengers feel comfortable while waiting.

### Departure Terminal Facilities

Facilities are essential for the comfort and satisfaction of passengers before proceeding with air travel. Facilities at the departure terminal are a transit point and where passengers spend time before boarding. According to Rahmadiansyah and Wakhidah (2022) facilities are equipment inside and outside buildings that support the fulfillment of the implementation of the building's function as infrastructure and facilities for building buildings. Sihaloho and Syaputra (2023) mention that facilities are the provision of physical facilities

that allow guests to carry out their activities or activities. Dayarathna et al (2017) mentioned any form of convenience or means provided to meet the needs of users and increase their comfort while performing certain activities are called facilities.

According to Bezerra and Gomes (2020) departure terminal facilities include all facilities around an airport terminal that are designed to meet the needs and comfort of passengers before they proceed with air travel. Relógio and Tavares (2023) say departure terminal facilities include infrastructure designed to serve passengers well, such as check-in areas and flight information systems.

Boc et al (2023) suggested that departure terminal facilities are areas and services provided in airports to facilitate the preparation of passengers before boarding. According to Ma and Ma (2022) facilities at the departure terminal are all things needed to make passengers comfortable and efficient while waiting for a flight, while according to Yulianto et al (2023) departure terminal facilities are all facilities around the airport departure terminal that help passengers feel comfortable, safe and easy while waiting for a flight. These facilities include food and beverage outlets and toilets.

Based on the things stated by the experts above, it can be concluded that the departure terminal facilities are an important part of air travel because they are designed to provide comfort, safety, and efficiency to passengers before they continue their journey and with adequate facilities, the departure terminal serves as an important transit point to support terminal operational functions and meet passenger needs, such as check - in areas, flight information systems, food outlets and toilets.

## METHOD

### Desain Study

This research uses a quantitative type and according to Sahir (2022) quantitative research is scientific thinking in which there is a process of forming ideas and ideas are strictly enforced using nomothetic principles and using deductive patterns. The research approach used in this study is an associative approach, namely an approach to causal relationships which, according to Ahyar et al (2020) causal relationships are relationships that are cause-and-effect consisting of independent variables (influencing variables) and dependent (influenced variables).

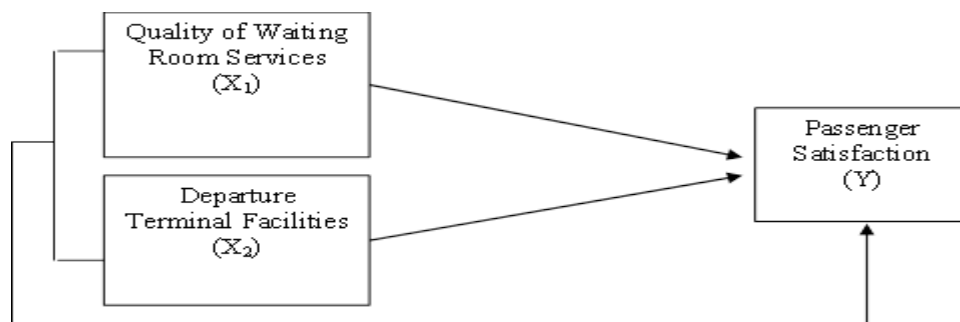


Figure 2. Research Framework

### Hypothesis

The hypotheses proposed in this study are as follows:

- H<sub>1</sub>: It is suspected that the quality of waiting room services has a significant effect on passenger satisfaction at Kualanamu International Airport, North Sumatra.
- H<sub>2</sub>: It is suspected that the departure terminal facilities have a significant effect on passenger satisfaction at Kualanamu International Airport, North Sumatra.
- H<sub>3</sub>: It is suspected that both the quality of waiting room services and the departure terminal facilities have a significant effect on passenger satisfaction at Kualanamu International Airport, North Sumatra..

### Population and Sample

Population according to Sahir (2022) is the overall score of the individual whose characteristics are to be studied and these units are called units of analysis and can be people, institutions, objects. Domestic passengers using services at Kualanamu International Airport in North Sumatra are the subjects of this study but the exact number of population is unknown so this study will use appropriate sampling techniques to obtain a

representative sample. According to Ahyar et al (2020) the part of the population selected for the study is referred to as the sample and the sample is taken to represent the entire population so that the findings of the sample can be used to make conclusions or generalizations about the population as a whole.

The technique for taking the size or number of samples in this study uses the Cochran formula, while the Cochran formula according to Mahrooz Hasanbarog et al (2023) is as follows:

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{e^2}$$

$$n = \frac{0,9604}{0,01} = 96,04$$

Then the number of samples was 96 and rounded to 100 respondents. In order to ensure the validity and relevance of the data collected, this study applies the inclusion sample criteria, namely passengers who use services at Kualanamu International Airport specifically passengers from Super Air Jet, Lion Air, and Citilink airlines and are willing to be respondents while the exclusion criteria are passengers who cannot provide the necessary information completely or accurately, such as those who cannot communicate in the language used in the survey as well as passengers who are in health conditions that limit their ability to provide relevant answers.

After establishing inclusion and exclusion criteria, this study uses random sampling techniques to ensure that each passenger who meets the criteria has the same chance to be taken as a sample because by using this method it is expected that the data obtained is representative and valid so that the results of this study can be generalized to a wider population.

### Analytical Techniques and Research Instruments

To complete this study, researchers distributed questionnaires so that the necessary data can be collected. This type of questionnaire is using likert scale questionnaire. The purpose is to measure whether or not the sample agrees with the questions made by the researcher. The questionnaire made in this study is related to the quality of Service waiting room, departure terminal facilities and passenger satisfaction. The analysis technique used in this study is multiple linear regression. This statistical method aims to examine the relationship between two or more independent variables and a dependent variable. In the context of this research, multiple linear regression is employed to determine the influence of several independent variables, such as the quality of waiting room services and departure terminal facilities, on the dependent variable, which is passenger satisfaction.

## RESULTS AND DISCUSSION

### Multiple Linear Regression Analysis

**Table 1. Results of the Coefficients Test for the Quality of Waiting Room Services and Departure Terminal Facilities on Passenger Satisfaction**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	<b>7.193</b>	2.482		2.898	.005
Quality of Waiting Room Services	<b>.611</b>	.097	.551	6.311	.000
Departure Terminal Facilities	<b>.469</b>	.114	.360	4.127	.000

a. Dependent Variable: Passenger Satisfaction

Based on table 1, Passenger satisfaction is represented by a constant value of 7.193, which indicates that in the absence of variables related to the quality of waiting room services and departure terminal facilities, the observed passenger satisfaction value will remain at 7.193. Furthermore, the quality of waiting room services has a coefficient value of 0.611, signifying a direct relationship; this means that an increase of 1 point in the quality of waiting room services will result in a 0.611 rise in passenger satisfaction. Conversely, if the quality

of waiting room services decreases by 1 point, passenger satisfaction will decline by 0.611, assuming that the departure terminal facilities are held constant at zero. Similarly, the departure terminal facilities have a coefficient value of 0.469, indicating another direct relationship. This suggests that if the departure terminal facilities improve by 1 point, passenger satisfaction will increase by 0.469. Conversely, if there is a reduction of 1 point in the departure terminal facilities, passenger satisfaction will decrease by 0.469, again assuming that the quality of waiting room services remains at zero.

**Table 2. Multiple Linear Correlation Coefficient Test of the Quality of Waiting Room Services and Departure Terminal Facilities on Passenger Satisfaction**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.871 <sup>a</sup>	.758	.753	3.184	1.333

a. **Predictors:** (Constant), Departure Terminal Facilities, Quality of Waiting Room Services

b. **Dependent Variable:** Passenger Satisfaction

Based on table 2 above, it can be concluded that the results of the multiple linear correlation coefficient test for the quality of waiting room services (X1) and departure terminal facilities (X2) on passenger satisfaction (Y) is 0.871, which falls within the coefficient interval of 0.80 – 1.00. This interval value of 0.80 – 1.00 is categorized as indicating a very strong level of relationship. This means that the quality of waiting room services and departure terminal facilities have a very strong relationship with passenger satisfaction at Kualanamu International Airport, North Sumatra.

### The Significance of Individual Parameters (t test)

**Table 3. Partial Significance Test**

Model		t	Sig.
1	(Constant)	2.898	.005
	Quality of Waiting Room Services	<b>6.311</b>	<b>.000</b>
	Departure Terminal Facilities	<b>4.127</b>	<b>.000</b>

Based on table 3, the values of t-count and significance (Sig) for each variable are as follows:

1. The Effect of Waiting Room Service Quality on Passenger Satisfaction at Kualanamu International Airport, North Sumatra

The t-count value for the quality of waiting room services (X1) is 6.311, and the t-table value is 1.660. This t-table value is obtained from the degrees of freedom (df) calculated as n (sample size) – k (number of independent and dependent variables) = 100 – 3 = 97. Since the t-count (6.311) is greater than the t-table (1.660), and the significance level (Sig) generated is 0.000 < 0.05, it can be concluded that the hypothesis (H1) in this study is accepted, indicating that the quality of waiting room services significantly affects passenger satisfaction at Kualanamu International Airport, North Sumatra. This result suggests that the quality of waiting room services plays a crucial role in influencing passenger perceptions and satisfaction at Kualanamu International Airport, North Sumatra.

2. The Effect of Departure Terminal Facilities on Passenger Satisfaction at Kualanamu International Airport, North Sumatra

The t-count value for the departure terminal facilities (X2) is 4.127, and the t-table value is also 1.660. Again, this t-table value is derived from the degrees of freedom (df) = n – k = 100 – 3 = 97. Since the t-count (4.127) is greater than the t-table (1.660), and the significance level (Sig) generated is 0.000 < 0.05, it can be concluded that the hypothesis (H2) in this study is accepted, indicating that departure terminal facilities significantly affect passenger satisfaction at Kualanamu International Airport, North Sumatra. This result indicates that departure terminal facilities play an important role in influencing passenger

perceptions and satisfaction at Kualanamu International Airport, North Sumatra.

### Simultaneous Significance Test (F-Test)

**Table 4. Results of the Simultaneous Significance Test (F-Test)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3086.911	2	1543.456	<b>152.284</b>	<b>.000<sup>b</sup></b>
	Residual	983.129	97	10.135		
	Total	4070.040	99			

a. **Predictors:** (Constant), Departure\_Terminal\_Facilities, Quality\_of\_Waiting\_Room\_Services

b. **Dependent Variable:** Passenger\_Satisfaction

Based on table 4 above, it is known that the F calculation resulting from the simultaneous hypothesis test or F test for the effect between the quality of the waiting room service and departure terminal facilities together on passenger satisfaction is 152,284, while the Ftable resulting from the simultaneous hypothesis test or F test for the effect of the variable quality of Service waiting room and departure terminal facilities simultaneously to passenger satisfaction is equal to 3.09 ( $df_1 = k - 1 = 3 - 1 = 2$ ,  $df_2 = n - k = 100 - 3 = 97$ ) then  $F_{hitung} 152,284 > F_{table} 3.09$  then the probability or significance level (Sighting) produced is  $0.000 < 0.05$  Service waiting room and departure terminal facilities have a significant effect on passenger satisfaction at Kualanamu International Airport North Sumatra. These results indicate that the quality of Service waiting room and departure terminal facilities have an important role in influencing the perception and satisfaction of passengers at Kualanamu International Airport in North Sumatra.

### Determination Test

**Table 5. Determination Test Results**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.871 <sup>a</sup>	.758	<b>.753</b>	3.184	1.333

a. **Predictors:** (Constant), Departure\_Terminal\_Facilities, Quality\_of\_Waiting\_Room\_Services

b. **Dependent Variable:** Passenger\_Satisfaction

Based on table 5 above can be seen adjusted R Square value of 0.753 or 75.3% which means the variable quality of Service waiting room and departure terminal facilities are able to explain the variable passenger satisfaction of 75.3%, this value is in the interval 51-99 which means the level of this coefficient is expressed as a high determination relationship while the remaining 24.7% is influenced by other factors outside this study, such as travel time and accuracy of flight schedules, the quality of transportation between terminals and baggage services.

The quality of waiting area services and departure terminal facilities plays a central role in shaping passengers' perceptions and overall satisfaction with airport services. The quality of service in the waiting area is a crucial element that influences passengers' experiences before embarking on their journeys. Previous studies have shown that the quality of waiting area services is influenced not only by cleanliness, comfort, information accuracy, staff friendliness, and availability of facilities, but also by various aspects of departure terminal facilities. Bezerra and Gomes (2020) and Relógio and Tavares (2023) state that these facilities include infrastructure and services designed to meet passengers' needs and comfort, including cleanliness, accessibility of toilets for persons with disabilities, and the presence of clear signage. Survey results at Kualanamu International Airport indicate that service aspects such as security and flight information accuracy received positive feedback from passengers. However, some areas, such as the availability of seating and room temperature comfort, still require more attention to enhance passenger satisfaction. In this regard, this study found that the quality of waiting area services and departure terminal facilities has a significant relationship with passenger satisfaction, where each improvement in waiting area service quality can increase passenger satisfaction, while departure terminal facilities also show a positive influence on that satisfaction. Therefore, improvements in these aspects are expected to create a better experience for passengers at Kualanamu



International Airport.

## CONCLUSIONS

Based on the results of research that has been done it can be concluded as follows:

1. The quality of the waiting room service has a significant effect on passenger satisfaction at Kualanamu International Airport in North Sumatra. These results indicate that the quality of lounge service has an important role in influencing the perception and satisfaction of passengers at Kualanamu International Airport in North Sumatra
2. Departure terminal facilities have a significant effect on passenger satisfaction at Kualanamu International Airport in North Sumatra. These results indicate that departure terminal facilities have an important role in influencing passenger perception and satisfaction at Kualanamu International Airport in North Sumatra
3. The quality of Service waiting room and departure terminal facilities significantly affect passenger satisfaction at Kualanamu International Airport in North Sumatra. These results indicate that the quality of Service waiting room and departure terminal facilities have an important role in influencing the perception and satisfaction of passengers at Kualanamu International Airport in North Sumatra.

## Recommendations

The management of Kualanamu Airport can take several steps to enhance the quality of waiting area services. First, increasing the number of seats in frequently crowded areas, especially during peak times, will not only improve passenger comfort but also provide sufficient space for passengers to rest before their flights. Second, maintenance of the air conditioning system should be improved to ensure a comfortable room temperature at all times; installing automatic temperature sensors that can adjust in real-time could be a solution to ensure passenger comfort. Third, enhancing information technology in the waiting area can significantly improve the passenger experience. Providing accurate, real-time flight information and improving communication between staff and passengers can help alleviate the uncertainty often experienced while waiting for flights. Additionally, the management should enhance entertainment facilities in the terminal by improving television quality or providing more attractive and safe play areas for children, thereby increasing passenger comfort, especially during long waits. Furthermore, clarity in signage is crucial; increasing the number of signs and ensuring they are easy to follow will facilitate navigation within the terminal. Interactive or digital solutions could be employed for better guidance. On the other hand, the maintenance of cleanliness in toilets and public areas must be consistently upheld, ensuring that facilities for persons with disabilities remain accessible. While medical services and security have received high ratings, it is important to maintain the quality and availability of these services, especially during busy periods, to guarantee optimal passenger safety and comfort. Future researchers are encouraged to broaden the scope of their studies by incorporating additional variables that may influence passenger satisfaction, such as baggage service quality, flight punctuality, and inter-terminal transportation facilities. Qualitative research methods could also be employed to delve deeper into passengers' subjective experiences regarding specific service aspects. Moreover, future studies should consider comparing several international airports in Indonesia to identify differences in service quality and facilities provided. This approach will yield a broader perspective and assist airport managers in developing more comprehensive service enhancement strategies. The use of the latest technology, such as application-based information systems to facilitate passenger access to information, should also be a focus of subsequent research. Finally, expanding the sample size or utilizing longitudinal analysis to monitor changes in passenger satisfaction over time will provide a more holistic view of the passenger experience.

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