



# Analysis of the Relationship Between Perception of Waiting Room Facility Services and Passenger Characteristics at Sentani - Jayapura Airport

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## Abstract

This study explores passenger perceptions of the waiting room facilities at Sentani Airport in Jayapura. Through a survey involving a number of passengers, the study assesses several service aspects such as seating adequacy, comfort, availability of souvenir kiosks, cleanliness of the area, and other additional facilities. Survey results indicate that the majority of passengers are satisfied with the services received, although there are some areas that received less positive evaluations, such as toilet cleanliness and the presence of a designated smoking area. Further analysis was conducted to understand the relationship between passenger characteristics, education level, and their perceptions of the services. Although most of the statistical analysis results showed insignificant relationships, these findings still provide important insights into passenger preferences and expectations. This study concludes that despite some areas needing improvement, the waiting room services at Sentani Airport in Jayapura generally meet passenger expectations. These findings are expected to provide feedback for airport management in their efforts to improve service quality and passenger comfort in the future.

## Keywords

Airport Service Quality, Passenger Perception, User Satisfaction, Waiting Room Facilities

## INTRODUCTION

As a developing country, Indonesia has great potential to develop air transportation services (Irefan & Adry, 2018). Air transportation significantly contributes to accelerating travel time and reaching areas that are difficult to reach by land and sea transportation. Jayapura City, as the capital of Papua Province, relies on Sentani Airport for air transportation services. Located about 45 km south of the center of Jayapura City, Sentani Airport is the main gateway for flight service users from surrounding cities and districts (Fauzi & Mabui, 2020).

Sentani Airport, which is an important node in the air transportation network, must be able to provide effective and efficient services to its passengers. The rapid growth in the number of passengers and aircraft movements marks the importance of this air transportation infrastructure in supporting economic growth and regional connectivity. According to air traffic data, the number of passengers at Sentani Airport increased by 16% from 1,333,806 people in 2012 to 1,547,775 in 2016, while the number of aircraft movements increased by 19% in the same period (Fauzi & Mabui, 2020).

Along with this growth, it is important for related parties to ensure that airport facilities, especially departure lounges, can meet passenger needs and expectations. The lounge is where passengers spend their time before the flight,

and the quality of service in this lounge can significantly impact passenger perception and satisfaction. The increase in passengers at an airport should be in line with the improvement of various airport facilities (Napitupulu & Aptakusuma, 2024).

Passenger satisfaction is the level of a person's feelings after comparing expected performance with actual performance (Rong et al., 2022). This level of satisfaction is based on the difference between expected and actual performance. If performance is less than expected, passengers feel dissatisfied; if performance is in line with expectations, passengers feel satisfied; and if performance exceeds expectations, passengers will be delighted. The public needs to evaluate the quality of service, especially those related to air transportation services (Subiyantoro, Wahyuning, & Lestari, 2022).

Therefore, this study aims to study how passenger perceptions of the waiting room facility services at Sentani Airport, Jayapura, relate to each other. This study focuses on the characteristics of passengers who use the departure lounge facilities and how they view the service of these facilities. Understanding this relationship, it is hoped that the key factors contributing to passenger satisfaction can be revealed and valuable suggestions for related parties can be provided.

By formulating clear research objectives and scopes, this study is expected to help improve the quality of service and passenger experience at Sentani Airport, Jayapura. The results are expected to be used to develop departure lounge facilities and used by related parties when they make policies.

## **LITERATURE REVIEW**

### **Airport**

An airport is a place on land or water with specific boundaries for landing and taking off aircraft, boarding and disembarking passengers, loading and unloading goods, and transporting goods between and within modes. Airports also have important safety and security facilities (Law Number 1 of 2009). Airports play an important role in driving growth because they can reach remote areas that cannot be reached by land or sea transportation and act as air bridges connecting various airports in various countries and continents (Kalakou, 2021). Safety and quality of service are the main characteristics of the implementation of aviation and airport services (Adisasmita, 2008).

### **Airport Passenger Terminal**

A passenger terminal is a facility that can connect land and air transportation systems that handle transition activities between land access to aircraft or vice versa, process arrivals, departures, transits, and passenger transfers, as well as moving passengers and baggage from and to aircraft (SNI 03-7046-2004). Passenger terminal operations include passenger movement arrangements, services, and mode exchange. According to the Decree of the Director General of Air Transportation Number: SKEP/347/XII/1999, the passenger terminal is the main link between the land and air transportation systems (Frisnawati, 2022).

### **Passenger Terminal Activity Components**

The activity components in the passenger terminal are divided into three components:

- i. Access Interface: Passengers moving from a particular mode to the passenger terminal, including parking, loading and unloading activities, and circulation.
- ii. Processing System: The process of passengers preparing for air travel, including baggage check-in, baggage claim, seat number assignment, inspection services, and security.
- iii. Aircraft Meeting: Passengers moving from processing to the aircraft.

### **Passenger Terminal Classification**

The classification of airport terminals is related to the area of the terminal and the desired level of service. The area of the terminal is calculated based on the schedule of the most significant aircraft movements and the number of passengers during peak times (Horonjeff & McKelvey, 1994). Regulation of the Director General of Air Transportation Number: SKEP/77/VI/2005 regulates the requirements for passenger terminal space.

### **Waiting Room**

The waiting room is a waiting area for passengers before boarding the aircraft (Afitasari & Puspitasari, 2023). Facilities in the waiting room include seating, toilets, AC, FIDS, entertainment TV, sound system, CCTV, and X-ray (Regulation of the Director General of Air Transportation Number: SKEP/77/VI/2005). The area of the departure waiting room is calculated by considering the number of passengers during peak hours (Cao et al., 2022).

### **Passenger Satisfaction**

Passenger satisfaction includes post-purchase evaluations of expectations and perceived outcomes after purchase. Customer satisfaction is a post-purchase evaluation where the product results at least meet or exceed customer expectations (Tata et al., 2021). Satisfaction or dissatisfaction is a response to an evaluation of perceived discrepancies between the actual performance of the product and customer expectations (Antonides & Hovestadt, 2021). Philip Kotler said customer satisfaction is a feeling of pleasure or disappointment that arises after comparing consumer perceptions of product performance and expectations (Kotler, Armstrong, Saunders, Wong, Miquel, Bigné, & Cámara, 2000). The

similarity of this definition includes the main components, namely expectations and perceived performance or results. Factors influencing passenger satisfaction include comfort, convenience, and safety while waiting for a flight. Evaluation of passenger satisfaction helps airports improve the quality of their services (Sudur & Pamuraharjo, 2024).

## **MATERIALS AND METHODS**

The study was conducted at Sentani International Airport - Jayapura, especially in the departure lounge. This study combines quantitative and qualitative analysis with a descriptive approach. Data were collected through questionnaires distributed randomly to prospective passengers in the waiting room to collect quantitative information about perceptions of waiting room facilities, such as comfort levels, service satisfaction, and preferences for certain facilities. Two trained surveyors conducted interviews to obtain in-depth qualitative data and explain questions that respondents may not understand. In addition, direct observation and documentation were used to complement information from library studies and Internet media about the airport and departure lounge conditions. Data processing was carried out using Microsoft Excel for tabulation and compilation of data from the questionnaire. Data analysis used a descriptive statistical approach to understand passenger characteristics and perceptions of waiting room facilities. With this method, the study is expected to comprehensively understand passenger preferences and perceptions of waiting room service facilities at Sentani International Airport - Jayapura.

## **RESULTS AND DISCUSSION**

### **Profile of Sentani Airport - Jayapura**

Sentani Airport in Jayapura is the main gateway to Jayapura city via air transportation. Located in Hawai Village, Hawai District, Sentani Regency, Papua Province, this airport is approximately  $\pm 45$  km south of the center of Jayapura City. The history of the establishment of Sentani Airport began with the Archbold expedition in 1938, a joint expedition between the American and Dutch governments. At that time, Jayapura did not have an airport, and the "Cuba" and "Dormier" type aircraft were used for research in the area. The Dutch East Indies government considered building an airport near Mount Ifar in 1939, but the plan was halted due to the conflict between the Netherlands and Japan. Finally, in 1942, the Japanese government built three airfields near Lake Sentani, but only one was operational as Sentani Airport.

The Sentani Airport class has undergone several changes over time. 1992, the airport was in class IIA, then upgraded to class C in 2002. Sentani Airport is a Class I Main International Airport after the terminal and runway expansion. The airport operates from 05.30 to 17.30 WIT with a terminal area of 3,995 m<sup>2</sup>. The runway is 3000 m x 45 m long. Although it operates until the afternoon, Sentani Airport does not have a night flight schedule, which causes passenger congestion, especially in the morning. Facilities at this airport include a departure lounge, which is divided into the 1st floor for small aircraft and the 2nd floor for large aircraft. Commercial facilities such as souvenir shops, restaurants, and children's recreation rooms are available in the departure lounge. Although it has experienced increased class and expansion, some commercial facilities in the departure lounge are not yet fully operational, especially on the second floor. This is a note to improve services at Sentani Airport.

### **Passengers at Sentani Airport - Jayapura**

The characteristics of passengers at Sentani Airport - Jayapura reveal five main aspects: gender, age, education, income, and occupation. The following are the main findings of the study:

- i. Respondents' Gender: Most respondents are male, with 60% of the total respondents. At the same time, the remaining 40% are female.
- ii. Respondents' Age: Most respondents are in the age range of 21-30 years, with 42% of the total respondents. Meanwhile, the number of respondents over the age of 50 years is the lowest, only 4%.
- iii. Respondents' Last Education: Most respondents have a bachelor's degree, reaching 47% of the total respondents. Only a few respondents did not graduate from elementary school, only 2%.
- iv. Respondents' Income: Most respondents have an income of less than IDR 2,000,000, with 34% of the total respondents. The highest income recorded was IDR 4,000,000, only reaching 4% of the total.
- v. Respondents' Occupation: Most respondents work as private employees, with 26% of the total respondents. The least represented occupation is farmers, only 1% of the total respondents.

These results indicate that Sentani - Jayapura Airport passengers are dominated by men with relatively young ages (21-30 years) and higher education (S1). The majority of them have low incomes and work as private employees.

### **Passenger Perception Characteristics at Sentani - Jayapura Airport Regarding Waiting Room Services**

The characteristics of passenger perceptions at Sentani-Jayapura Airport regarding waiting room services reveal several important aspects as follows:

- i. Seating Capacity: Most passengers are satisfied with the available seating capacity, with 42% expressing satisfaction.
- ii. Comfort and Safety of Seating: Most passengers are satisfied with the comfort and safety of their seats, with 41% expressing satisfaction.
- iii. Souvenir and Gift Kiosks: Most passengers are only quite satisfied with the availability of kiosks selling souvenirs and souvenirs in the waiting room, with 47% expressing satisfaction.

- iv. Cleanliness and Coolness of the Room: Most passengers are satisfied with the cleanliness and coolness of the waiting room, with 41% expressing satisfaction with this aspect.
- v. Effect of AC: Most passengers are satisfied with the impact of AC in cooling the waiting room, with 39% expressing satisfaction.
- vi. Availability of TV: Most passengers are satisfied with the availability of TV, which can reduce boredom, with 41% stating satisfaction.
- vii. Cleanliness of Toilets: The majority of passengers are satisfied with the cleanliness of the toilets, with 38% stating satisfaction.
- viii. Availability of Tabloids and Newspapers: Most passengers are satisfied with the availability of tabloids and local and national newspapers, with 39% stating satisfaction.
- ix. Special Smoking Room: Most passengers are satisfied with the availability of a special smoking room, with 35% stating satisfaction, but a small portion (23%) are dissatisfied.
- x. Availability of Fast Food Canteen: The majority of passengers are satisfied with the availability of fast food canteen in the waiting room, with 34% stating satisfaction.
- xi. Accuracy in Delivery of Flight Information: Most passengers are satisfied with the accuracy of delivery of flight information, with 42% stating satisfaction.

These results indicate that passengers at Sentani-Jayapura Airport are generally satisfied with various aspects of service available in the waiting room. However, some areas still need further attention, such as the availability of special smoking areas and toilet cleanliness.

### **Relationship Model of Waiting Room Facility Service Perception to Passenger Characteristics at Sentani - Jayapura Airport**

Analyzing the relationship between waiting room facility service perception and passenger characteristics at Sentani-Jayapura Airport provides a deeper understanding of how these variables are interrelated. In looking at passenger satisfaction with the adequacy of seating in the waiting room, the data shows that most respondents from various educational backgrounds are satisfied with the seating capacity. Of the total respondents, 39 (42%) expressed satisfaction, while only 2 (2%) expressed dissatisfaction. Further analysis shows that these perceptions vary across educational groups, with some differences in the level of satisfaction among respondents with different educational levels. Perception of seating comfort is also a significant concern. Although the majority of respondents are satisfied with the comfort of the seats, the data shows that there is variation in perception between educational groups. Of the total respondents, 38 (41%) expressed satisfaction, while 2 (2%) felt dissatisfied. This variation suggests that other factors, such as personal preference or previous experience, may influence the perception of seating comfort. The availability of souvenir kiosks in the waiting room also influenced passenger perceptions. Although most respondents were quite satisfied with the availability of these kiosks, variations in satisfaction levels were also seen among education groups. The data showed that perceptions were quite complex, with some respondents from certain education levels feeling less satisfied than others. Cleanliness was also an important consideration for passengers. The data showed that most respondents were satisfied with the cleanliness of the spaces. However, there were variations in perceptions between education groups.

Of the total respondents, 38 (41%) expressed satisfaction, while only one respondent (1%) expressed dissatisfaction. The effect of air conditioning in creating coolness in the waiting room was also important. Most respondents were satisfied with the coolness provided by the air conditioning. However, differences in perceptions were found between education groups. From the data, 36 respondents (39%) expressed satisfaction, while three (3%) felt dissatisfied. The availability of a TV that can reduce boredom also influences the passenger experience. Most respondents were satisfied with the presence of a TV. However, variations in perceptions were also seen among education groups. Of the total respondents, 38 (41%) expressed satisfaction, while five (5%) felt dissatisfied. Toilet cleanliness is also an important factor in the passenger experience. The majority of respondents were quite satisfied with the cleanliness of the toilets. However, there was variation in perception between education groups. Of the total respondents, 35 (38%) expressed satisfaction, while 8 (9%) were dissatisfied. The availability of local and national tabloids or newspapers in the waiting room also influenced passenger perception. Most respondents were quite satisfied with this availability. However, differences in perception were found between education groups. From the data, 36 respondents (39%) expressed satisfaction, while 16 (17%) felt dissatisfied. For passengers who smoke, the availability of a special smoking room is also an important consideration. Most respondents were quite satisfied with the availability of this space. However, variations in perception were also seen between education groups. Of the total respondents, 32 (35%) expressed satisfaction, while 21 (23%) felt dissatisfied. The availability of a ready-to-eat canteen in the waiting room also influenced the passenger experience, especially for those who wanted to enjoy food and drinks. Most respondents were quite satisfied with this availability. However, differences in perception were found between education groups. From the data, 31 respondents (34%) expressed satisfaction, while four (4%) felt dissatisfied. Accuracy in delivering flight information is also an important concern. Most respondents were satisfied with this accuracy. However, there was variation in perception between education groups. Of the total respondents, 39 (42%) expressed satisfaction, while 5 (7%) felt dissatisfied.

Statistical analysis using STATA software has evaluated the relationship between waiting room facilities and passenger characteristics at Sentani - Jayapura Airport. This analysis provides an overview of the significant influence of

passenger characteristics on their perceptions of service in the waiting room. The analysis results show that most of the P (value) values are above 0.05, indicating the statistical significance level of the relationship between variables. A P (value) value greater than 0.05 indicates that the variable does not significantly affect other variables studied in the analysis. Conversely, if the P (Value) value is less than 0.05, it indicates a significant influence.

From these results, most relationships between passenger characteristics, last education, and service in the waiting room do not show a statistically significant effect. However, this does not mean passenger characteristics do not affect their perceptions of airport service. However, other factors outside the variables analyzed may play a role in the overall passenger experience.

## CONCLUSION

1. Exploration of Passenger Perception: This study explores passenger perceptions at Sentani-Jayapura Airport towards service in the waiting room.
2. Survey and Service Characteristics: Through a survey involving several passengers, this study reviewed several service characteristics, such as the adequacy of seats, comfort of seats, the presence of souvenir kiosks, cleanliness of the room, and various other facilities.
3. Survey Results: Most passengers were satisfied with the service they received in the airport lounge. Some areas received little criticism, such as the cleanliness of the toilets and the presence of a special smoking area. Overall, passengers tended to assess their experience at the airport positively.
4. Further Analysis: We analyzed the relationship between passenger characteristics and last education and their perceptions of lounge service. Statistical analysis showed that most relationships were not statistically significant, but understanding passenger preferences and expectations is still emphasized.

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## DECLARATION OF CONFLICT

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## AUTHOR CONTRIBUTIONS

The idea and design of the study were contributed to by all authors. AA conducted the data analysis and literature search. OL wrote the original draft of the manuscript, SAA and MIR provided feedback on earlier drafts. The final manuscript was read and approved by all writers.

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