

ANALYSIS OF PASSENGER SATISFACTION WITH TERMINAL FACILITY SERVICES TO ENHANCE LEVEL OF SERVICE AT SULTAN THAHA JAMBI AIRPORT

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ABSTRACT

The airport waiting room facilities are among the crucial amenities for passengers, particularly for those who have to wait for their flights for an extended period. To assess the condition of supporting facilities at Sultan Thaha Jambi Airport Terminal. To identify the factors influencing passenger satisfaction with the terminal facilities at Sultan Thaha Jambi Airport. Therefore, maintaining passenger satisfaction in the airport waiting area is vital to provide a positive passenger experience and build a favorable airport image. The method employed in this research is a quantitative approach. Quantitative research is grounded in positivist philosophy, used to study specific populations or samples, sample selection techniques are typically conducted randomly, data collection employs research instruments, and data analysis is quantitative or statistical, aimed at testing predetermined hypotheses. From observational data, it can be concluded that the waiting room facilities at Sultan Thaha Jambi Airport are reasonably adequate, yet further improvements and additions are needed to enhance passenger comfort and satisfaction. The observational data reveals that the waiting room facilities at Sultan Thaha Jambi Airport are generally good and comprehensive. The availability of lighting, Wi-Fi, and well-maintained cleanliness provides additional comfort for passengers. Thus, the facilities at this airport significantly impact passengers and visitors, contributing to their comfort during their time at the airport.

Keywords: *Facilities, Comfort, Satisfaction, Waiting Area.*

1. INTRODUCTION

In the era of globalization and technological advancement, societal mobility has significantly increased. The desire for easy, affordable, comfortable, safe, and swift travel from one place to another has driven the growth of the transportation industry. Indonesia, composed of numerous islands, places a premium on efficient and rapid transportation. Transportation plays a pivotal role in fostering economic growth, facilitating trade, and commercializing goods across regions [1]. Air travel has emerged as a key alternative in meeting these mobility needs, particularly due to its relative speed.

One of the airports playing a crucial role in providing flight services is the Sultan Thaha International Airport in Jambi. This airport boasts a long history from the colonial era to its evolution into an international airport in 2012. Ensuring top-notch passenger services has remained the primary focus of the airport management.

The significance of customer satisfaction in maintaining business success has become an undeniable

reality. Customer satisfaction transcends merely providing positive experiences; it also cultivates trust and loyalty toward a brand or product [2]. In business, trust forms the foundational basis for cultivating long-term relationships with customers. When customers are content with their experiences and feel that brands or products deliver on their promises, trust naturally flourishes. This trust serves as the bedrock for customers to continually choose and promote products or services to others.

In the competitive business landscape, companies must continuously innovate to meet customer expectations. As an international airport, Sultan Thaha Jambi Airport continually strives to enhance passenger services. Within this endeavor, the airport's waiting lounge facilities play a pivotal role. Well-designed waiting lounge facilities can create positive passenger experiences, yet this satisfaction is influenced by factors such as facility quality, cleanliness, and comfort [3]. Optimal facilities within airport waiting lounges play a vital role in shaping positive experiences for passengers. The pre-flight waiting phase, often an integral part of air

travel, underscores the importance of comfortable waiting lounge conditions in fostering contentment and comfort for passengers. However, this satisfaction is not solely attributed to one factor; rather, it is the outcome of complex interactions among various elements.

Facility quality stands as one of the key factors significantly impacting passenger satisfaction. Various amenities and facilities like ergonomic seating, shopping areas, restaurants, and clear signage contribute to passenger comfort. The presence of comprehensive and high-quality facilities also mitigates potential boredom and discomfort that may arise during waiting periods.

The increase in passenger numbers also exerts a significant impact on service quality. With the growth in passenger numbers, airports must adapt resources and infrastructure to maintain service quality. This is because the level of service directly influences passenger experience, satisfaction, and the corporate image of the airport [4]. Balancing increased passenger numbers with enhanced service quality is essential to ensuring customer satisfaction.

However, despite the importance of service quality and customer satisfaction, there remains a dearth of studies specifically addressing facility analysis within the Terminal of Sultan Thaha International Airport in Jambi. Therefore, this research aims to uncover the condition of supporting facilities within the airport terminal and identify steps that can be taken to enhance service quality and customer satisfaction.

2. METHOD

2.1. *Research Design*

The research employs a quantitative approach, which is grounded in positivism philosophy. Quantitative research method is utilized to investigate specific populations or samples and involves random sampling techniques. Data collection is facilitated through research instruments, and data analysis is predominantly quantitative or statistical in nature, with the primary goal of testing predefined hypotheses [5]. The approach used in this study is descriptive statistical analysis, which presents research findings in numeric form to facilitate a comprehensive discussion. The focus of this study is to analyze the Satisfaction of Terminal Facility Services (X) with the aim of enhancing the Level of Service (Y) at Sultan Thaha Airport in Jambi. Consequently, this quantitative approach assists in depicting and analyzing the interaction among the variables involved in the research in a more detailed manner.

2.2. *Research Setting*

The research is conducted at Sultan Thaha Airport in Jambi. The selection of this research location is based on the author's On Job Training carried out from January to March 2023. The study is conducted during the period of On Job Training, specifically between January and March 2023, during which the researcher had access to Sultan Thaha Airport in Jambi. Hence, the choice of this research site allows the author to gain a deeper insight into the existing conditions within the airport environment. Consequently, the information gathered from this research is more relevant and accurate regarding the facilities and services provided at the airport.

2.3. *Population and Sample*

Understanding the concept of population in a research context often varies, but fundamentally shares a common core. In the framework of this study, population refers to a specific group of objects or subjects that possess relevant characteristics pertaining to the investigated variables. In this context, the research population focuses on employees, staff, and passengers who interact at Sultan Thaha Airport in Jambi. A sample is a subset taken from the population using specific techniques, and this subset should ideally represent the characteristics of the entire population [6]. In the context of this research, the sample consists of employees and passengers selected as representatives of the larger population. The sampling technique employed in this study utilizes the Taro Yamane formula [7]. The calculation results indicate that the number of respondents taken as the sample amounts to 43 individuals.

2.4. *Data Collection Techniques*

Data collection techniques are a crucial aspect of the research process to obtain relevant and accurate information aligned with the research objectives. In this study, data collection techniques were carried out through observation and questionnaires.

2.4.1. *Observation*

Observation is a data collection method involving the direct observation of situations, activities, or objects under study. This method provides a tangible depiction of the observed conditions. In this research, observation was conducted in the waiting area of Sultan Thaha Airport in Jambi, aiming to gather information about the state of facilities, cleanliness, comfort, and the utilization of the waiting area. The observation was carried out meticulously to ensure the collection of valid and accurate data regarding the ongoing situations.

2.4.2. *Questionnaire*

A questionnaire is a data collection method that involves presenting a series of written questions to respondents. In this study, a questionnaire was distributed to 43 respondents comprising employees and passengers of Sultan Thaha Airport in Jambi. The questionnaire included inquiries related to passenger satisfaction with the facilities in the waiting area, encompassing aspects such as facility quality, cleanliness, comfort, services, and more. The responses from the respondents offer direct insights from facility users regarding their experiences and perceptions of the services and facilities at the airport.

In this research, the Likert Scale will be employed. The Likert Scale is a measurement method used to gauge the attitudes, opinions, and perceptions of an individual or group toward a phenomenon [6]. The Likert Scale is utilized as a research instrument to measure the optimization of cargo terminal security procedures based on the questionnaire research findings.

2.5. *Data Analysis Technique*

2.5.1. *Validity*

The purpose of conducting validity testing is to assess the extent to which the measuring instrument used in the research, in this case, the questionnaire, possesses validity. Validity refers to the ability of the questions in the questionnaire to accurately measure the intended concept or variable. In this context, the validity of the questionnaire is measured by ensuring that the existing questions can accurately reflect the aspects measured by the questionnaire. For example, if the aim is to measure Employee Performance, the questions in the questionnaire should accurately capture how the employee's performance is.

Specific criteria are utilized in validity testing. This testing involves the correlation between the scores of each indicator item and the total score of the measured construct. The commonly used significance level is 0.05.

The process of validity testing is carried out as follows:

- 1) The null hypothesis (H0) is accepted if the computed correlation coefficient (r) is greater than the tabulated correlation coefficient (r table) from the distribution table.
- 2) The null hypothesis (H0) is rejected if the computed correlation coefficient (r) is less than or equal to the tabulated correlation coefficient (r table).

The value of the tabulated correlation coefficient (r table) can be determined using the degrees of freedom (df), which is obtained from the number of respondents

involved in the study. For instance, if the number of respondents is 13 and the significance level used is 0.05, then the value of the tabulated correlation coefficient (r table) can be calculated using the formula for df ($13-2$) at a significance level of 0.05.

2.5.2. *Reliability*

Reliability is an index that measures the extent to which a measuring instrument can be trusted or relied upon [8]. A measuring instrument is considered reliable if it can produce consistent results even when measurements are taken multiple times. The Cronbach's Alpha method is commonly used to test the reliability of research data and questionnaires. This method measures the internal consistency of a set of items or questions within a questionnaire. Using Cronbach's Alpha, researchers can assess how closely the items in the questionnaire are related to each other and measure the same concept. A higher Cronbach's Alpha value indicates a higher level of reliability for the measuring instrument.

2.5.3. *Normality Test*

The normality test is intended to assess whether, within the framework of a regression model, the distribution of the disturbance or residual variable exhibits a normal characteristic [9]. The normality test can be conducted using the Kolmogorov-Smirnov statistical method, where the null hypothesis (H0) states that the data follows a normal distribution, and the alternative hypothesis (H1) implies that the data does not follow a normal distribution. Data is considered to meet the normality assumption or to follow a normal distribution if the significance value resulting from the Kolmogorov-Smirnov test exceeds 0.05.

2.5.4. *Simple Regression*

Simple regression analysis is an approach used to model the relationship between a dependent variable and an independent variable. In the regression model, the independent variable explains the variation in the dependent variable. In simple regression analysis, the relationship between variables is linear, where changes in the independent variable (X) consistently correspond to changes in the dependent variable (Y). In this study, the independent variable X is the Satisfaction with Terminal Facilities (waiting area), and the dependent variable Y is the Level of Service.

3. RESULT AND DISCUSSION

This research method employs primary data as its main source of information. The data collected for this study was obtained through the distribution of questionnaires to respondents, aiming to gather information about the level of satisfaction of users at Sultan Thaha Jambi Airport regarding the facilities available in the terminal waiting area. The goal of this data collection is to enhance the services at the airport (Level of Service). A total of 43 respondents were selected as the sample for this study. The following section presents the findings obtained from the field data collection process.

3.1. Result

3.1.1. Observation

The researcher conducted observations at Sultan Thaha Jambi Airport during the On the Job Training (OJT) activities from February 10th to February 27th, 2023. During the OJT period, the author focused on the terminal inspection service. The results of the observations are presented in Table 1.

3.1.2. Simple Regression

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710 ^a	.503	.491	1.341

a. Predictors: (Constant), Kepuasan Pelayanan Fasilitas Terminal
b. Dependent Variable: Level of Service

Figure 1. R-square

The coefficient of determination, represented by R-squared (R²), is 0.503 (50.3%), which signifies the extent of the influence of variable X on Y. Meanwhile, the remaining 49.7% (100% - 50.3%) is influenced by other factors. In other words, the variability of Y that can be explained by variable X is 50.3%, while the remaining 49.7% of the influence is attributed to other variables outside of this model.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.110	3.228		.653	.517
	Kepuasan Pelayanan Fasilitas Terminal	.857	.133	.710	6.448	.000

a. Dependent Variable: Level of Service

Figure 2. Coefficients

Simple linear regression analysis aims to measure the strength of the influence of independent variables on the dependent variable. Based on the results of the simple linear regression analysis in the table above, the regression equation obtained is as follows:

$$Y = 2.110 + 0.857 X$$

The conclusions drawn from the above simple linear regression equation are as follows:

- 1) The constant value (α) is 2.110. This implies that if the variable Satisfaction of Terminal Facility Services (X) has a value of 0, then the Level of Service (Y) will be 2.110.
- 2) The coefficient of regression for variable X is 0.857. This indicates that for every one-unit increase in the Satisfaction of Terminal Facility Services (X) variable, there will be an associated increase in the Level of Service (Y) by 2.110.73.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.722	1	74.722	41.571	.000 ^b
	Residual	73.696	41	1.797		
	Total	148.419	42			

a. Dependent Variable: Level of Service
b. Predictors: (Constant), Kepuasan Pelayanan Fasilitas Terminal

Figure 3. F-Test

By examining the data presented in the table above, it becomes evident that the impact of variable X on Y is discernible. The calculated *F* value, which amounts to 41.571, exceeds the critical *F* value at a significance level of 0.05 and degrees of freedom (1,41), which is 4.08. Furthermore, the corresponding p-value of 0.000 is substantially less than the accepted threshold of 0.05. Consequently, the null hypothesis (*H*₀) is decisively rejected. Thus, with a confidence level of 95%, it can be definitively stated that there exists a substantial influence of variable X on Y. Specifically, the level of satisfaction with Terminal Facility Services significantly impacts the Level of Service provided. This outcome underscores the importance of understanding the intricate relationship between these variables in the context of enhancing service quality and passenger experience at Sultan Thaha Jambi Airport.

3.1.3. Questionnaire

The assessment results from 43 respondents regarding several questions reveal a significant level of agreement concerning various service aspects at Sultan Thaha Jambi Airport. Question number 2 indicates that 98.1% of the respondents strongly agree that the check-in time per passenger is in line with the applicable standards (< 2.5 minutes). Similarly, for question number 5, as many as 97.7% of the respondents stated that they strongly agree that the airport's WiFi facilities enhance passenger comfort.

The service of baggage and cargo inspection, as per question number 1, received a positive response from 97.2% of the respondents who strongly agreed that this service adheres to the applicable standards (< 3 minutes).

Furthermore, the survey results regarding the Flight Information Display System (FIDS) in question number 4 show that 97.2% of the respondents strongly agree that FIDS is consistently updated with timely information.

The availability of shopping areas, souvenir shops, and restaurants in the waiting lounge, in line with question number 3, received high approval from 96.3% of the respondents who strongly agreed with the presence of these facilities at Sultan Thaha Airport. The well-maintained cleanliness service in the terminal area and toilets, as inquired in question number 6, received a positive response from 94% of the respondents who strongly agreed that this enhances passenger comfort.

Question number 10 regarding air quality in the waiting lounge garnered a positive response from 92.6% of the respondents who strongly agreed that the cool air at Sultan Thaha Airport contributes to passenger comfort. The signage facilities in the terminal, based on question number 8, received approval from 90.7% of the respondents who strongly agreed that clear signage enhances comfort.

The lighting in the waiting area, according to question number 9, received a positive response from 90.2% of the respondents who strongly agreed that the lighting contributes to passenger comfort. Lastly, question number 7 regarding the availability of seating in the waiting lounge during peak hours obtained agreement from 89.8% of the respondents who strongly agreed that the seating is sufficient according to the passenger capacity at Sultan Thaha Airport. All of these findings depict a high level of satisfaction with various service aspects at the airport.

3.2. Discussion

Through a combination of manual analysis and the utilization of the SPSS application, the evaluation of data obtained from the validation questionnaire regarding various statements concerning facilities and services at Sultan Thaha Jambi Airport indicates convincing quality. During the validity testing process of the instruments for variables X and Y, all instruments included in the questionnaire exhibited significant correlations with the intended measured variables. Therefore, it can be concluded that these instruments possess adequate reliability in measuring the desired concepts.

The results of the simple linear regression analysis provide profound insights into the relationship between the variable Satisfaction with Terminal Facility Services (X) and Level of Service (Y). In this context, two key aspects emerge as essential points in understanding the impact of variable X on variable Y. First, the constant value (α) of 2.110 suggests that if customer satisfaction with terminal facilities is absent ($X = 0$), the Level of

Service (Y) remains at 2.110. While other factors might influence this, it indicates a basic level of service provided to passengers. Second, the regression coefficient of 0.857 indicates that each increase of one unit on the satisfaction scale significantly affects an increase in Level of Service by around 2,110.73. This highlights the close correlation between increased customer satisfaction and the enhancement of service quality offered by Sultan Thaha Airport. Overall, the regression results provide essential insights to identify the extent and manner in which variable X affects variable Y, along with its implications in the effort to enhance the standards of service provided by the airport.

Furthermore, the analysis results reveal that the variable of satisfaction with terminal services and facilities (variable X) has a strong influence on the level of service (variable Y). The Quality of Airport Services, including Service Environment, Personal Service, and General Service, significantly influences Passenger Satisfaction because when an airport provides facilities that exceed passengers' expectations, it leads to a higher level of satisfaction [10]. Delving deeper into the analysis, it becomes evident that the various aspects of airport services, encompassing the Service Environment, Personal Service, and General Service, play a pivotal role in shaping Passenger Satisfaction. This finding underscores a critical tenet of service management: when an airport goes above and beyond in providing facilities that surpass passengers' initial expectations, it invariably leads to a heightened sense of satisfaction. This phenomenon can be attributed to the psychological principle of exceeding expectations, where individuals tend to feel more content and valued when their experiences surpass what they anticipated.

The Service Environment, encapsulating factors such as cleanliness, lighting, and seating availability, directly contributes to passengers' overall impression of the airport. When these elements are well-maintained and offer a comfortable atmosphere, passengers are more likely to feel at ease and content during their wait times. Similarly, the quality of Personal Service, including interactions with staff, assistance, and communication, can significantly impact the perceived level of care and attention that passengers receive. Courteous and helpful staff, along with efficient communication, contribute to a positive passenger experience.

Moreover, the provision of General Services, which encompasses amenities like shopping, dining, and rest areas, offers passengers the convenience and comfort they seek during their time at the airport. When these services are well-organized, diverse, and easily accessible, passengers are likely to view the airport as a comprehensive destination that caters to their needs beyond mere transportation.

Taken together, these findings highlight the multifaceted nature of passenger satisfaction and its close interplay with the quality of airport services. As the aviation industry continues to evolve, airport authorities and management must continually invest in enhancing these service aspects to create a positive and memorable passenger journey. By meticulously attending to the various touchpoints that contribute to satisfaction, airports can cultivate loyalty, positive word-of-mouth, and an overall improved reputation, thereby creating a virtuous cycle of attracting and delighting passengers.

Thus, statistically, the analysis results support the premise that the quality of facilities and services at Sultan Thaha Jambi Airport has a positive impact on the level of service provided to passengers. The high level of agreement among respondents also indicates a high level of satisfaction with the airport management's efforts in providing adequate facilities and good services. These overall findings provide a clearer perspective on the importance of investing in airport facilities and services to ensure an optimal experience for passengers.

4. CONCLUSION

Based on the questionnaire analysis conducted, important conclusions can be drawn regarding the condition of facilities and services at Sultan Thaha Airport. Overall, the facilities at the airport have been considered good and adequate in providing comfort to passengers, especially in the waiting area. However, it is important to continuously monitor and improve aspects such as temperature, lighting, and cleanliness to maintain and enhance the quality of service and passenger experience.

Consistent efforts should be made to enhance the Level of Service to ensure quality service. This includes maintaining discipline in adhering to schedules, ensuring efficient service, and maintaining cleanliness and comfort in the waiting area. Reliability in providing accurate and timely information also significantly impacts passenger satisfaction.

In this study, valuable recommendations can be provided to the management of Sultan Thaha Jambi Airport:

1. For the Terminal Inspection Service Unit of Sultan Thaha Jambi Airport, it is recommended to continually maximize existing facilities and improve cleanliness in the waiting area. Facility management should be adapted to the changing times and the increasing needs of passengers.
2. For all service units at Sultan Thaha Jambi Airport, significant efforts are needed to

maintain and improve time discipline and accuracy in providing services to passengers. Consistency in adhering to time and service standards will directly impact passenger comfort and trust, ultimately enhancing their positive experience at the airport.

By implementing these recommendations, it is hoped that Sultan Thaha Jambi Airport can continuously enhance the quality of its services and facilities, thus providing passengers with a better and more reliable travel experience.

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