EVALUATION THE LEVEL OF SERVICE IN THE BAGGAGE CLAIM AREA ON PASSENGER SATISFACTION AT THE AIRPORT INTERNATIONAL MINANGKABAU USING THE IMPORTANCE PERFORMANCE ANALYSIS METHOD

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ABSTRACT
Minangkabau International Airport is in West Sumatra, more precisely in Pariaman Regency. This airport hasseveral terminals, namely Domestic Terminal, International Terminal, VIP Terminal and Cargo Terminal. At the domestic terminal at Minangkabau Airport, baggage claim facilities and several other facilities are quite good but are considered to be lacking during peak passenger hours. This research aims to determine the priority attributes for improvement from terminal operators to airport service users. This research uses a quantitative approach method where data is collected through observation, distributing questionnaires, and literature study. The guidelines used are Ministerial Regulation no. 178 of 2015 concerning servicestandards for airport service users. Questionnaires were distributed to 50 incoming passenger respondents who immediately experienced the facilities available in the baggage claim area of Minangkabau International Airport. Thenthe data from the research results was processed using the SPSS application. The data processing methods used are Importance-Performance Analysis (IPA) and Customer Satisfaction Index (CSI). Based on the CSI Customer Satisfaction Index analysis, the passenger satisfaction index is 84.17%, this illustrates that passengers are very satisfied with the performance of the services provided. The results of the CartesianImportance-Performance Analysis IPA diagram analysis show that there are four attributes which are the main priorityto be improved, namely the size of the baggage claim area, the availability of trash cans, the availability of seats in thebaggage claim area, and the cleanliness of the baggage claim area.

Keywords : Baggage Claim Area, Passenger Satisfaction, Performance Quality, Importance Performance Analysis (IPA), Customer Satisfaction Index (CSI).

1. INTRODUCTION

The rapid development of the digital era has significantly impacted various aspects of human life. This phenomenon occurs because humans inherently desire everything to be more practical and efficient. One of the sectors most affected by digitalization is the air transportation service sector. The growth in air transportation service users has played a crucial role in the transportation sector. To address this growth, the proposed solution is to enhance the efficiency of airport facilities and optimize passenger services. In the face of increasingly intense competition in the transportation industry, airport operators must continuously assess optimization designs and determine the capacity for infrastructure development to maintain service performance. One area that requires particular attention is the baggage claim area, which functions as the gateway to a region and often forms passengers' first impression upon arrival at an airport.

Minangkabau International Airport, known by its ICAO code WIEE and IATA code PDG, is an international airport operating in West Sumatra Province. Located about 24 kilometers from Padang City, the airport is situated in Ketaping District, Batang Anai Subdistrict, Padang Pariaman Regency. The construction of Minangkabau International Airport began in 2002 and became fully operational on July 22, 2005, replacing the previous Tabing Airport. Notably, BIM is the only airport in the world named after an ethnic group, "Minangkabau."

With a domestic passenger terminal area of 16,149.48 square meters and an international terminal area of 4,234.52 square meters, BIM has the capacity to serve up to 3.2 million passengers per year. However, in 2018, the number of passengers served by the airport had already reached 4.2 million, surpassing its designed capacity. To address the need for improved service standards and passenger comfort, PT Angkasa Pura II,

the managing body of Minangkabau International Airport, decided to construct a new terminal building adjacent to the existing terminal. This construction began on September 17, 2018. The existing terminal, which originally covered 20,587 square meters, was expanded by adding a new terminal building of 25,725 square meters, bringing the total airport building area to 46,312 square meters. With this expansion, BIM now has the capacity to accommodate up to 5.7 million passengers annually. On March 10, 2020, part of the new terminal building began operating minimally as a domestic arrival terminal. However, this operation did not last long due to a drastic decline in passenger numbers caused by the COVID-19 pandemic. Consequently, the domestic arrival terminal resumed operations in the existing terminal building, where it remains today.

According to 2023 data, Minangkabau International Airport in Padang served a total of 2,400,436 passengers. This figure represents a 27% increase from the previous year, which recorded only 1,887,531 passengers. The post-pandemic increase in passenger numbers indicates a rhythm in line with the economic and tourism recovery in West Sumatra. Therefore, the facilities provided by the airport must be a primary concern to ensure the safety, comfort, and satisfaction of air travel service users. The condition of service facilities, support facilities, and terminal capacity can significantly influence service level fluctuations, especially during peak hours. The baggage claim area is a crucial facility because it is the first that passengers encounter upon arrival, indirectly reflecting the overall quality of the airport's service. Thus, the service provided by the airport in this area must be seriously considered to give passengers a positive first impression.

During my On the Job Training (OJT) at Minangkabau International Airport in Padang, I observed terminal facilities in both departure and arrival areas. Generally, the facilities and services provided are in line with the service levels stipulated in the Ministry of Transportation Regulation No. 178 of 2015 concerning Airport Service User Standards. However, I noticed passenger congestion in the baggage claim area, especially during peak hours. For example, in a photo I documented during an inspection in the arrival area at 11:00 AM WIB, passenger congestion in the baggage claim area was evident. This congestion was due to the busy flight schedule at certain times, as reflected in BIM's Daily Schedule during the Winter period.

Based on Ministry of Transportation Regulation No. 178 of 2015, the standard for passenger service at airport terminals includes facilities used during passenger departure and arrival processes, facilities providing comfort, and the terminal's capacity to accommodate passengers during peak hours. Therefore, it is necessary to calculate the IAP4 coefficient (Initial Indication of Development, Utilization, Expansion, and Operation) to measure the operational utilization level of the airport. The IAP4 calculation results indicate that Minangkabau International Airport has a score of 1.22, meaning that the available terminal capacity needs further development. To maintain service performance, particularly in the arrival area, such as the baggage claim area, an in-depth assessment of service levels and adequate facilities for passengers is needed. This assessment is crucial to ensure that the airport meets the required service level standards and can enhance passenger satisfaction at Minangkabau International Airport in Padang. Once the service level is determined, efforts should be made to improve and add facilities to ensure that the airport continues to provide the best service for all its users.

Based on the explanation provided above, the author formulates the title of this final project as "EVALUATION OF SERVICE LEVELS AT THE BAGGAGE CLAIM AREA ON PASSENGER SATISFACTION AT MINANGKABAU INTERNATIONAL AIRPORT USING THE IMPORTANCE PERFORMANCE ANALYSIS METHOD." This title was chosen due to the importance of evaluating the service levels at the baggage claim area, which is a vital aspect of the passenger experience at the airport. The baggage claim area at the domestic arrival terminal of Minangkabau International Airport in Padang plays a crucial role in shaping the first and last impressions passengers have regarding the efficiency and comfort of airport services. Therefore, it is essential to assess how passengers perceive this service and identify areas in need of improvement.

To achieve the objectives of this research, the author has formulated several key issues that need to be addressed. First, how satisfied are passengers with the services and facilities at the baggage claim area of the domestic arrival terminal at Minangkabau International Airport in Padang? This question is critical because passenger satisfaction is a primary indicator of the success of airport services. The level of passenger satisfaction can be influenced by various factors, including the speed of baggage delivery, the cleanliness of the baggage claim area, the availability of information, as well as the comfort and security of the surrounding environment. By understanding the extent to which passengers are satisfied with the existing facilities, airport management can take appropriate steps to maintain or improve service quality.

Second, what efforts are being made to enhance passenger satisfaction at the baggage claim area at Minangkabau International Airport in Padang? This question not only seeks to understand the current level of satisfaction but also aims to identify the steps that have been or need to be taken to improve the passenger experience. This includes evaluating the effectiveness of existing policies, identifying areas that require improvement, and developing strategies to enhance efficiency and passenger comfort. Considering that the baggage claim area is the final point of a passenger's journey, improvements in service at this area can

significantly enhance the overall perception of the airport and encourage passengers to choose Minangkabau International Airport as their departure and arrival point in the future.

Thus, this research will use the Importance Performance Analysis method to analyze how important each service element is to passengers and how well the airport performs in meeting those expectations. The results of this analysis are expected to provide concrete and strategic recommendations for airport management in their efforts to enhance overall passenger satisfaction, thereby improving the reputation and competitiveness of Minangkabau International Airport at both national and international levels.

2. METHOD

2.1 Research Design

This research utilizes quantitative data collection methods. Quantitative data is a research method based on a positivistic approach, where the data collected is concrete and consists of numerical figures. This data is then measured and analyzed using statistics as a calculation tool, relating to the issues being investigated in order to produce reliable conclusions, as explained by Sugiyono (2018;13).

Before starting the research, the first step that needs to be taken is to create a plan or research design. A research design is a sequence of activities that the researcher will undertake to solve the problem at hand. Creating a research design is crucial because it helps ensure that the research is structured and organized. The research design guides the researcher through various aspects, such as data collection, problem identification, and problem-solving. In this research, the design is developed using a descriptive qualitative method, which facilitates the process of collecting data, identifying issues, and finding appropriate solutions.

2.2 Rsearch Variable

Research variables refer to all elements that are defined by the researcher to be studied in order to obtain information and draw conclusions (Sugiyono, 2019). Theoretically, a research variable is an object, attribute, or value of a person or activity that varies between different instances, which is defined by the researcher with the aim of studying and drawing conclusions. In this study, the researcher uses two types of variables: independent variables (Variable X) and dependent variables (Variable Y).

According to the illustration in Figure 3.2, it is understood that the independent variable (Variable X) is the one whose value influences other variables. In this context, Variable X is the Service in the Baggage Claim Area. Meanwhile, the dependent variable (Variable Y) is the one whose value depends on other variables. Here, Variable Y is Passenger Satisfaction. The points related to Variable X and Variable Y will serve as the main basis for creating a questionnaire consisting of statements that will be given to respondents to obtain information necessary for drawing conclusions. To facilitate the creation of the questionnaire, the researcher has developed indicators for each variable, which will guide the formulation of the questionnaire statements.

2.3 Population, Sample and Research Object

Population, according to Sugiyono (2019), is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then concluded. The population includes the entirety of the research subjects. In the Indonesian Dictionary, the population is defined as a group of people, objects, or things that serve as the source of sample collection, meeting specific criteria related to the research problem. Thus, the population does not only refer to people but can also include objectsor natural phenomena. The population is not merely the number present in the objects or subjects studied but includes all the characteristics or properties of those objects or subjects that can be measured or observed. In this research, the population was taken from the data of passengers during peak hours based on air transportation data at Minangkabau International Airport from January 2023 to February 2024, during which the researcher conducted data collection. The population in this study consists of 487 passengers who traveled during peak hours at Minangkabau International Airport.

A sample is a portion of the total number and characteristics possessed by the large population. When it is impossible for the researcher to study the entire population due to limitations in funding, manpower, and time, a sample can be taken from that population. According to Sugiyono (2018), the sample taken must be truly representative of the population. In this study, the sampling technique used is probability sampling with a simple random sampling method. Sugiyono (2018) states that simple random sampling gives equal opportunity to each member of the population to be selected as a sample, where the population members do not have strata and are relatively homogeneous. The sample in this study was calculated using the Taro Yamane formula, and with a precision of 0.15 (15%), a sample size of 41 respondents was obtained. The researcher then rounded the number of respondents to 50 passengers using the services at Minangkabau International Airport.

According to Sugiyono (2014:38), the research object is an attribute, characteristic, or value of a person, object, or activity that has certain variations determined by the researcher to be studied and then concluded. In this research, the object of study is the Baggage Claim Area facilities in the Domestic Arrival Terminal at Minangkabau International Airport, Padang.

2.4 Data Collection Techniques and Research Instrumnets

Data collection techniques and research instruments are crucial for gathering accurate and relevant information for a study. According to Sugiyono (2019), data collection can be carried out through various settings, sources, and methods. Data can be collected in natural settings, laboratories through experiments, at

home with various respondents, during seminars, discussions, on the streets, and more. From the data sources perspective, researchers can use observation, surveys, and literature studies to gather information.

Observation is defined in the Indonesian Dictionary as a meticulous examination or review. According to Bungin (2007), observation is a method used to collect data by means of direct observation and sensory experience. The purpose of observation is to describe the studied setting, the activities taking place, the people involved, and the meaning of events from their perspective. In this research, direct observation was conducted at the baggage claim area of Minangkabau International Airport during January to March 2024, as part of an On The Job Training (OJT) program. This observation aimed to assess passenger satisfaction with the baggage claim facilities. The observation was conducted based on the regulations outlined in PM 178 of 2015 concerning airport service standards.

Surveys involve distributing questionnaires to gather data. According to Sugiyono (2019), a questionnaire is a data collection technique that involves providing a set of written questions or statements to respondents for them to answer. Questionnaires are designed to gather opinions from research subjects, which are then analyzed to obtain valuable insights. For this study, questionnaires were used to collect relevant information from respondents regarding the study's issues.

Literature Study pertains to theoretical studies and references related to values, culture, and norms in the social situations under investigation. Literature study is essential for research as it provides a foundation of scholarly literature relevant to the issues being studied (Sugiyono, 2017). Data from literature studies are obtained by examining and relating scientific literature to the problems at hand, such as those related to facilities used in the departure and arrival processes at domestic terminals. Relevant regulations include PM 178 of 2015 concerning airport service standards.

Research Instruments are tools used to assist in data collection and processing. According to the Indonesian Dictionary, instruments are devices that help in carrying out activities for data collection. In research, instruments include questionnaires, observation forms, and other tools related to data acquisition.

Questionnaires are lists of questions related to the issues or fields being studied, designed to obtain data on opinions from research subjects. The questionnaire used in this study involves a scale for assessing satisfaction, including very satisfied (SP), satisfied (P), somewhat satisfied (CP), dissatisfied (TP), and very dissatisfied (STP). This scale helps gather relevant information about the research problem.

2.5 Data Analysis Techniques .

The data analysis in this research involves a detailed process to ensure that the findings are accurate, reliable, and applicable to the problem at hand. According to Sugiyono (2019), data analysis begins after data collection, where the researcher organizes the data by variables and respondent types, creating a clear tabulation that enables an effective presentation of the data. This process involves grouping the data, performing calculations to answer the research questions, and testing the hypotheses.

The first crucial step in the analysis is the validity test, which ensures that the questionnaire accurately measures the intended variables. This is done using software like SPSS (Statistical Product and Service Solutions), where the validity of each item is tested by correlating individual item scores with the overall score for each variable. For a questionnaire item to be considered valid, the calculated R-value must be greater than the R-value from the table, or the significance value must be less than 0.05. This ensures that the questionnaire is appropriately capturing the data needed for the research.

Following the validity test is the reliability test, which assesses the consistency of the responses. Reliability is a measure of whether the same results can be consistently obtained over repeated administrations of the questionnaire. This is also done using SPSS, where the Cronbach's Alpha value is calculated. A Cronbach's Alpha value greater than 0.70 indicates that the questionnaire is reliable, meaning that the responses are stable and consistent over time.

In this research, the Customer Satisfaction Index (CSI) is also utilized to measure the satisfaction level of passengers regarding the baggage claim area facilities. The CSI is a quantitative analysis method that converts survey responses into a percentage score, reflecting the overall satisfaction of the customers. The questionnaire used in this analysis is designed with attributes thatreflect the key aspects of satisfaction with the baggage claim area. The results are then categorized into satisfaction levels: a CSI score between 81% and 100% indicates a very high level of satisfaction, 66% to 80.99%indicates satisfaction, 51% to 65.99% indicates moderate satisfaction, 35% to 50.99% indicates low satisfaction, and 0 to 34.99% indicates very low satisfaction. This index helps in understanding the areas that need improvement and those that are performing well.

In addition to CSI, the research also employs Importance-Performance Analysis (IPA), a technique developed by Martilla and James in 1977. IPA helps identify which factors are most critical to the performance of a service in relation to customer satisfaction. By comparing the importance and performance ratings of various service attributes, the analysis can determine which areas require urgent improvement and which are performing well. The results are plotted on a Cartesian diagram divided into four quadrants: Quadrant I, which identifies areas that are important to customers but are currently underperforming; Quadrant II, which includes attributes that are both important and performing well; Quadrant III, which consists of less important attributes with low performance; and Quadrant IV, which identifies attributes that are not important but have high performance.

Through these combined methods—validity testing, reliability testing, CSI, and IPA—the research provides a thorough analysis of the baggage claim area's service quality at Minangkabau International Airport. The findings from this analysis are crucial for making informed decisions about where to focus efforts to improve passenger satisfaction and optimize the overall service quality of the airport. This comprehensive approach ensures that the results are not only statistically sound but also practically relevant, guiding future improvements in airport services.

2.6 Research Location and Time

This research is conducted at Minangkabau International Airport in Padang, specifically in the baggage claim area or passenger arrival terminal. The location was chosen for the study because the researcher had completed a three-month On the Job Training (OJT) at the airport, during which various issues were identified. The research began on December 11, 2023, coinciding with the start of the OJT, and will continue until March 1, 2024. The Final Project research is scheduled to be completed by July 2024, allowing for a thorough analysis and evaluation of the data collected.

3. RESULT AND DISCUSSION

Observation Results

Observation for this research was conducted at Minangkabau International Airport during the On the Job Training (OJT) period. The researcher performed the observation with the assistance of Terminal Service Officers (TSO), who are responsible for overseeing the facilities in the terminal. Observations were carried out during peak hours, when the terminal experiences high passenger volumes. As an air transportation facility, the level of comfort and service must be continuously evaluated and improved to enhance passenger satisfaction and achieve excellent service. The research focuses on the baggage claim area of the domestic arrival terminal, where deficiencies in service quality during peak times were identified and will be discussed in this chapter.

Questionnaire

The data collection method employed in this study involved distributing questionnaires to 50 respondents during peak hours at Minangkabau International Airport's domestic terminal, specifically in the Baggage Claim Area. The purpose of this survey was to assess customer satisfaction with the facilities in the baggage claim area and to gather insights for improving services at Minangkabau International Airport. Respondents were provided with a Google Form link containing 12 mandatory questions that required a single response. Respondents were asked to choose the indicators they felt were most appropriate, and the outputs of the survey were subsequently analyzed.

Description of Respondent Characteristics

Gender:

The first characteristic analyzed was the respondents' gender. According to the data in Table 4.2, the majority of respondents were male, accounting for 27 out of 50 respondents, which is 54% of the sample. The remaining 46% were female, comprising 23 respondents. This indicates a slight male dominance in the respondent group.

Age:

Next, the age distribution of respondents was examined. As detailed in Table 4.3, the majority of respondents fell into the 18-30 age group, with 22 individuals or 44% of the sample. This was followed by the 31-40 age group, with 20 respondents making up 40% of the sample. The smallest group consisted of those over 40 years old, representing 16% or 8 respondents. This distribution suggests that the majority of respondents were younger passengers, which may influence their perspectives on the services provided.

Description of Respondents' Answers

Expectation Level:

The analysis of the respondents' answers regarding their expectations of the baggage claim area facilities, as shown in Table 4.4, reveals several key insights. The question that received the highest response rate in terms of 'Very Important' was the one concerning the spaciousness of the baggage claim area, with 27 respondents (54%) marking it as very important. In contrast, the question about the clarity and informativeness of signage in the baggage claim area received the lowest 'Very Important' rating, with only 15 respondents (30%) marking it as very important. This suggests that while space in the baggage claim area is highly valued, the clarity of signage may be perceived as less critical by some respondents.

Satisfaction Level:

Regarding satisfaction levels, as depicted in Table 4.5, the respondents' feedback also provided valuable insights. The question concerning the waiting time for baggage retrieval, with a specified range of 20-40 minutes, received the highest satisfaction score. Here, 25 respondents (50%) indicated they were very satisfied, while 19 respondents (38%) were satisfied, and 6 respondents (12%) were somewhat satisfied. This indicates a generally positive perception of the baggage retrieval time. On the other hand, the question concerning the availability of adequate trash bins received the lowest satisfaction score, with only 13 respondents (26%) expressing they were very satisfied. A significant portion of respondents, 23 individuals (46%), felt that the availability of trash bins was merely satisfactory, indicating an area for potential improvement.

In summary, the data from the questionnaires highlight specific areas where the baggage claim area at Minangkabau International Airport meets or exceeds passenger expectations, such as in spaciousness and waiting times. However, it also reveals areas needing attention, particularly regarding signage clarity and the availability of trash bins, which were rated lower in terms of both importance and satisfaction. These findings can

guide airport management in prioritizing improvements to enhance overall passenger satisfaction.

Literature Review Results

Based on the literature review conducted by the researcher, grounded in regulations or provisions found in PM 178 of 2015 regarding Airport User Service Standards, it was found that the facilities available in the baggage claim area of the domestic terminal still have several inadequacies that need to be evaluated to enhance passenger comfort when using air transportation services.

The study identifies several key indicators that must be considered in airport services, such as timing, temperature, lighting, ease of baggage handling, cleanliness, information services, and restroom facilities.

Firstly, baggage service must meet the standard for the first baggage delivery time, which should not exceed 20 minutes. This time is calculated from when the aircraft performs block on until passengers can retrieve their luggage. However, in practice, there is potential for delays that could reduce passenger comfort.

Secondly, the temperature conditioning in the baggage claim area must be kept below 25°C, which can be achieved through air circulation facilities such as air conditioners (AC), fans, or ventilation systems. This aims to maintain thermal comfort for passengers while they wait for their luggage.

Thirdly, the lighting intensity in the terminal and baggage areas must comply with the established standards, which are 200-250 lux for the terminal and 250-300 lux for the baggage area. In restrooms, the ideal lighting intensity is 100-150 lux. Proper lighting is crucial to ensure the area is clearly visible and comfortable to use.

Fourthly, the ease of baggage handling is another important indicator, where the availability of trolleys must meet the standard of 4 trolleys for every 10 passengers during peak times. The available trolleys must be in good condition and sufficient to meet passenger needs.

Fifthly, cleanliness in the baggage claim area must be maintained at 100% with regular cleaning staff on duty. Cleanliness covers all airport facilities, including restrooms, which must be fully equipped, clean, odor-free, and free of standing water.

Additionally, information services through the Public Address System (Signage) and the Flight Information Display System (FIDS) must be available and strategically located. The information provided must be easily visible, clearly readable, audible, and informative to help passengers obtain the information they need.

This evaluation shows that while some standards have been met, there are several aspects that need improvement to meet all the indicators according to PM 178 of 2015. These improvements are expected to enhance the comfort and satisfaction of passengers using the services at Minangkabau International Airport, especially in the baggage claim area of the domestic terminal.

Data Analysis

Validity Test

The purpose of the validity test is to determine whether the items in each questionnaire are valid, legitimate, and reliable. Before the questionnaires are distributed to respondents, they must first pass the validity test. The following are the results of the validity test using the SPSS application.

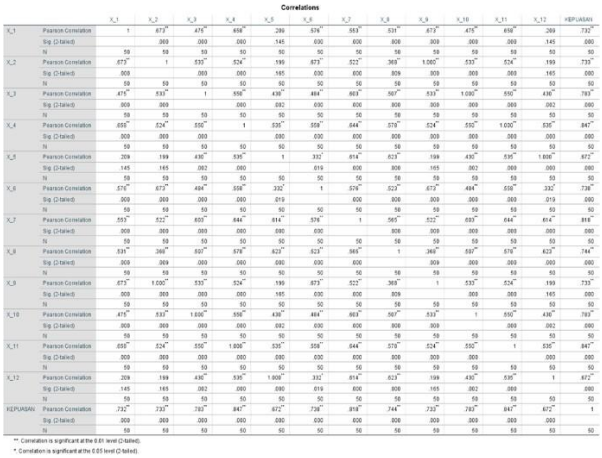
DISTRIBUSI NILAI r_{tabel} SIGNIFIKANSI 5% dan 1%

N	The Level of Significance		N	The Level of Significance	
	5%	1%		5%	1%
3	0.997	0.999	38	0.320	0.413
4	0.950	0.990	39	0.316	0.408
5	0.878	0.959	40	0.312	0.403
6	0.811	0.917	41	0.308	0.398
7	0.754	0.874	42	0.304	0.393
8	0.707	0.834	43	0.301	0.389
9	0.666	0.798	44	0.297	0.384
10	0.632	0.765	45	0.294	0.380
11	0.602	0.735	46	0.291	0.376
12	0.576	0.708	47	0.288	0.372
13	0.553	0.684	48	0.284	0.368
14	0.532	0.661	49	0.281	0.364
15	0.514	0.641	50	0.279	0.361
16	0.497	0.623	55	0.266	0.345
17	0.482	0.606	60	0.254	0.330
18	0.468	0.590	65	0.244	0.317
19	0.456	0.575	70	0.235	0.306
20	0.444	0.561	75	0.227	0.296

Figure 1. shows the r table value at a 5% significance level with df = 48.

Using the r table value (df=50-2=48; alpha=5%) of 0.284, all Pearson correlation values are greater than the r table, indicating that all indicators are valid. Below is a comparison table of the calculated R and R table values for Variables X and Y.

The Pearson Product Moment Validity Test is a method that compares the calculated r value with the r table value and assesses the significance value below 0.05. The calculated r value is equivalent to the Pearson Correlation value. The r table value is found in the r table distribution, where the r table value corresponds to df = n-2 with a 5% significance level (sig). If the calculated r value is greater than the r table value and the significance value is less than 0.05, then the questionnaire item for a variable is considered valid (Sujarweni, 2014).


Correlations

		X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_10	X_11	X_12	KEPUASAN
X_1	Pearson Correlation	1	.673**	.475**	.656**	.299	.576**	.563**	.531**	.673**	.475**	.656**	.299	.732**
	Sig. (2-tailed)		.000	.000	.000	.145	.000	.000	.000	.000	.000	.000	.145	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_2	Pearson Correlation	.673**	1	.533**	.524**	.199	.673**	.522**	.369**	1.000**	.533**	.524**	.199	.733**
	Sig. (2-tailed)	.000		.000	.000	.165	.000	.000	.009	.000	.000	.000	.165	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_3	Pearson Correlation	.475**	.533**	1	.556**	.436**	.484**	.669**	.507**	.533**	1.000**	.550**	.436**	.783**
	Sig. (2-tailed)	.000	.000		.000	.002	.000	.000	.000	.000	.000	.000	.002	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_4	Pearson Correlation	.656**	.524**	.556**	1	.535**	.558**	.644**	.570**	.524**	.550**	1.000**	.535**	.847**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_5	Pearson Correlation	.299	.199	.436**	.535**	1	.332*	.614**	.623**	.199	.436**	.535**	1.000**	.672**
	Sig. (2-tailed)	.145	.165	.002	.000		.019	.000	.000	.165	.002	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_6	Pearson Correlation	.576**	.673**	.484**	.558**	.332*	1	.576**	.523**	.673**	.484**	.558**	.332*	.738**
	Sig. (2-tailed)	.000	.000	.000	.000	.019		.000	.000	.000	.000	.000	.019	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_7	Pearson Correlation	.563**	.522**	.669**	.644**	.614**	.576**	1	.565**	.522**	.669**	.644**	.614**	.818**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_8	Pearson Correlation	.531**	.369**	.507**	.570**	.623**	.523**	.565**	1	.369**	.507**	.570**	.623**	.744**
	Sig. (2-tailed)	.000	.009	.000	.000	.000	.000	.000		.009	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_9	Pearson Correlation	.673**	1.000**	.533**	.524**	.199	.673**	.522**	.369**	1	.533**	.524**	.199	.733**
	Sig. (2-tailed)	.000	.000	.000	.000	.165	.000	.000	.009		.000	.000	.165	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_10	Pearson Correlation	.475**	.533**	1.000**	.556**	.436**	.484**	.669**	.507**	.533**	1	.550**	.436**	.783**
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.000	.000	.000	.000		.000	.002	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_11	Pearson Correlation	.656**	.524**	.550**	1.000**	.535**	.558**	.644**	.570**	.524**	.550**	1	.535**	.847**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
X_12	Pearson Correlation	.299	.199	.436**	.535**	1.000**	.332*	.614**	.623**	.199	.436**	.535**	1	.672**
	Sig. (2-tailed)	.145	.165	.002	.000	.000	.019	.000	.000	.165	.002	.000		.000
	N	50	50	50	50	50	50	50	50	50	50	50	50	50
KEPUASAN	Pearson Correlation	.732**	.733**	.783**	.847**	.672**	.738**	.818**	.744**	.733**	.783**	.847**	.672**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	50	50	50	50	50	50	50	50	50	50	50	50	50

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Figure 2. shows the results of the Pearson Product Moment Validity Test for Variable X.

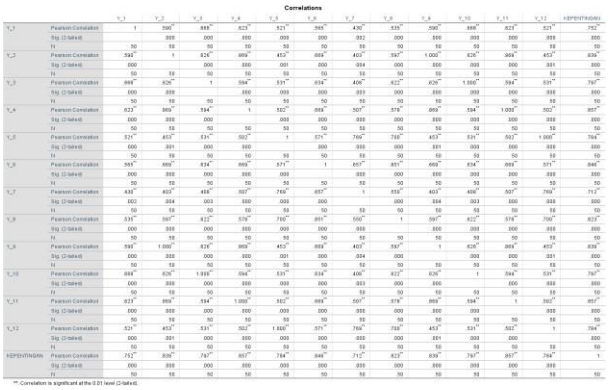


Figure 3. shows the results of the Pearson Product Moment Validity Test for Variable Y.

The calculated r values, derived from the Pearson Correlation, were obtained after processing using SPSS (Statistical Product and Service Solutions) software. It was found that the calculated r values were higher than the r table value of 0.284. Additionally, the significance values obtained were also less than 0.05. Therefore, it can be concluded that all questionnaire items tested for validity using the Pearson Product Moment method for both variable X and variable Y are valid.

Reliability Test

The reliability test is a measurement tool for questionnaires that contain indicators of variables or constructs. A questionnaire is considered reliable if a person's answers to statements are consistent or stable over time. A variable is deemed reliable if it provides a Cronbach's Alpha value greater than 0.6 (Ghozali, 2016).

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.933	.933	12

Figure 4. shows the results of the Cronbach's Alpha Reliability Test for Variable X.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.951	.951	12

Figure 5. shows the results of the Cronbach's Alpha Reliability Test for Variable Y.

Based on the output table generated from the SPSS application, the Cronbach's Alpha value for Variable X is 0.93, and for Variable Y, it is 0.95. After performing the calculations, it can be concluded that the questionnaire is proven to be reliable because the results obtained are greater than (>) 0.6.

Analysis of Customer Satisfaction

The next stage in processing the data on service quality expectations and reality is to measure customer satisfaction levels by calculating the Customer Satisfaction Index (CSI). The CSI is used to determine the overall satisfaction level of consumers by assessing the actual performance of each service quality variable. The process begins by determining the Mean Importance Score (MIS) ectatioand the Mean Satisfaction Score (MSS). The MIS represents the average importance rating of an attribute based on consumers' expns, while the MSS represents the average satisfaction rating of an attribute based on the actual performance experienced by consumers.

For this study, data from 50 respondents were processed using Microsoft Excel, and the MIS and MSS values were calculated for 12 attributes related to service quality. For example, the attribute concerning the waiting time for baggage arrival (20-40 minutes) received an MIS of 4.38 and an MSS of 4.42, indicating that this attribute is highly important to passengers, and their satisfaction level is also high. Other attributes, such as the availability of trolleys in the baggage claim area and the cleanliness of the area, also received high scores, reflecting their significance in passenger satisfaction.

Following this, the Weight Factor (WF) for each attribute was calculated by dividing the MIS for each attribute by the total MIS. This provides the relative importance of each attribute in contributing to overall customer satisfaction. The Weight Factors were then used to calculate the Weight Score (WS) for each attribute, derived by multiplying the WF by the MSS and dividing by 100. The WS calculation helps quantify the contribution of each attribute to the overall satisfaction level.

The final step in the CSI calculation was to determine the overall Customer Satisfaction Index. Using the formula CSI = (sum of WS / Highest Scale) × 100%, where the Highest Scale is the highest Likert scale used (5 in this case), the CSI was calculated to be 84.17%. This indicates that the overall satisfaction level of passengers with the service quality in the baggage claim area of Minangkabau International Airport is 84.17%, placing it in the "Very Satisfied" category. This high level of satisfaction suggests that the services provided meet or exceed passenger expectations, but continuous efforts should be made to maintain and improve service quality to ensure that satisfaction levels remain high.

Importance Performance Analysis (IPA)

In addition to the CSI, an Importance Performance Analysis (IPA) was conducted to identify which attributes should be improved, maintained, or de-emphasized based on their importance and performance. The IPA uses a Cartesian diagram divided into four quadrants, which visually represent the positioning of each attribute based on the average importance (MIS) and performance (MSS) scores.

The analysis revealed that the attributes in Quadrant I (Main Priority) are those that are considered important by respondents but where performance is

lacking. These attributes, including the spaciousness of the baggage claim area, the availability of adequate trash bins, the availability of seating in the baggage claim area, and the cleanliness of the baggage claim area, require immediate attention and improvement to meet customer expectations.

Attributes in Quadrant II (Maintain) are those that are both important and well-performing. These attributes meet or exceed customer expectations, and efforts should be made to maintain this high level of service. For this study, attributes like the waiting time for baggage arrival, the functionality of the conveyor belt, and the updated Flight Information Display System (FIDS) fall into this category.

Quadrant III (Low Priority) contains attributes that are less important to respondents and do not require immediate attention, as their current performance is adequate. In this study, the air conditioning in the baggage claim area was identified as a low-priority attribute.

Lastly, Quadrant IV (Excessive) includes attributes that respondents consider less important, yet the performance is high, indicating that resources might be better allocated elsewhere. Attributes such as the clarity and informativeness of signage, the availability of trolleys, the lighting conditions, and the cleanliness of toilets were found to be in this quadrant. The airport management could consider reallocating resources from these areas to those identified in Quadrant I.

The IPA results provide a clear visual representation of which attributes require attention and which are performing well. This analysis will help Minangkabau International Airport management focus on improving the most critical areas to enhance overall passenger satisfaction while maintaining and possibly even reducing resources in areas that are already performing well.

Discussion of Research Results

Based on the research results and data analysis, a total of 50 arriving passengers were sampled for this study. The majority of respondents were in the age range of 18–30 years, accounting for 44% or 22 passengers. Additionally, the majority of respondents were male, with 54% or 27 respondents.

Customer Satisfaction Index (CSI)

Based on the calculation and data processing using the CSI method, the results were obtained from the twelve attributes listed in PM 178 of 2015 concerning Airport User Service Standards, specifically in the baggage claim area of Minangkabau International Airport in Padang. The interpretation of the Customer Satisfaction Index (CSI) values is aligned with criteria that can be determined as follows:

Table 1. Customer Satisfaction Index (CSI)

No	Value (CSI) %	Description (CSI)
1	81% - 100%	Very Satisfied
2	66% - 80,99%	Satisfied
3	51% - 65,99%	Quite Satisfied
4	35% - 50,99%	Less Satisfied
5	0 – 34,99%	Not Satisfied

Measuring passenger satisfaction is essential to understand how well Minangkabau Airport in Padang meets passenger expectations. The passenger satisfaction score, using the Customer Satisfaction Index (CSI) model, for the quality of service in the baggage claim area is 84.17%. According to the customer satisfaction index, a score of 84.17% falls within the 81-100% range, indicating that, in general, the customer satisfaction index for service quality in the baggage claim area for the tested attributes is in the "Very Satisfied" category. This means that the services received by passengers during their visit to Minangkabau International Airport in Padang meet their expectations, and their needs are fulfilled in terms of facilities and services. However, the airport management must continue to maintain and improve its performance so that customers feel even more satisfied, and the customer satisfaction index approaches 100%.

Results of Importance Performance Analysis (IPA)

Given that the Customer Satisfaction Index (CSI) for passengers at Minangkabau International Airport in Padang falls within the 82-100% range, it is necessary to evaluate and sustain or improve this index by focusing on certain attributes based on importance and satisfaction levels. The Cartesian diagram shown in Figure 4.7 reveals the position of each variable within quadrants I, II, III, and IV.

1. Quadrant I (Main Priority)

Quadrant I includes factors that respondents consider important, but the service performance provided by the company is deemed unsatisfactory. This implies that the factors in this quadrant are important to airport users, but the services provided do not meet their expectations, indicating that the airport needs to concentrate on allocating its resources to improve performance in these areas. The factors in Quadrant I, as identified by the Importance Performance Analysis (IPA), are:

- The baggage claim area is sufficiently spacious and does not hinder passenger movement (5).
- Availability of adequate trash bins (6).
- Availability of seating in the baggage claim area (8).
- Cleanliness of the baggage claim area (12).

2. Quadrant II (Maintain)

Quadrant II contains factors that respondents consider important, and the service provided by the company meets their expectations. This indicates that the factors in this quadrant are crucial to passengers at Minangkabau International Airport in Padang, and the services provided by the airport are satisfactory. The company should maintain this level of performance. The factors in Quadrant II, as identified by the Importance Performance Analysis, are:

- Waiting time for baggage arrival (20-40 minutes) (1).
- Conveyor Belt or baggage handling equipment functions well (no malfunctions) (2).

- Flight Information Display System (FIDS) is updated and functions well (3).

3. Quadrant III (Low Priority)

Quadrant III contains factors that respondents consider less important, and the service provided by the company is not particularly remarkable. This suggests that the factors in this quadrant are less important to users of Minangkabau International Airport, and the service provided by the airport is not exceptional. Therefore, the company does not need to prioritize or give extra attention to these factors. The factor in Quadrant III, as identified by the Importance Performance Analysis (IPA), is:

- Air conditioning (AC) in the baggage claim area (7).

4. Quadrant IV (Excessive)

Quadrant IV includes factors that respondents consider less important, but the service provided by the company is perceived as excessive. This implies that the factors in this quadrant are less important to users of Minangkabau International Airport, and the service provided by the airport is overly generous. The company would be better off reallocating resources from these factors to others with higher priority. The factors in Quadrant IV, as identified by the Importance Performance Analysis (IPA), are:

- Signage or directional signs in the baggage claim area are clear and informative (3).
- Availability of Trolleys or carts in the baggage claim area (4).
- Lighting conditions in the baggage claim area (10).
- Cleanliness of the toilets in the baggage claim area (11).

4. CONCLUSION

Based on the research findings and discussions, several conclusions can be drawn to address the questions posed in this study. Firstly, passenger satisfaction at Minangkabau International Airport in Padang, as measured by the Customer Satisfaction Index (CSI), reached 84.17%. According to the criteria set by Widodo & Sutopo (2018), this level of satisfaction falls within the "Very Satisfied" category, indicating that the services provided at the airport generally meet or exceed passenger expectations.

Secondly, the Importance Performance Analysis (IPA) revealed that the various service attributes at the airport can be categorized into four quadrants, each representing different levels of importance and performance. In Quadrant I, there are four attributes that are considered highly important but are currently underperforming. These attributes should be prioritized for improvement as they are not meeting passenger expectations. In contrast, Quadrant II contains three attributes that are both important and performing well, suggesting that these areas should be maintained and possibly enhanced by airport management. Quadrant III contains only one attribute, which is of low importance to passengers and thus does not require significant attention. Finally, Quadrant IV includes four attributes that, while deemed less important by passengers, are nonetheless being performed very well, suggesting that current efforts should be maintained in these areas.

In light of these findings, several recommendations are proposed to improve service quality at Minangkabau International Airport. For attributes in Quadrant I, which are of high importance but have low performance, immediate action should be taken to enhance service delivery. Specifically, the airport should consider utilizing the new terminal building as the domestic arrival terminal, which was temporarily used in early 2020 before operations reverted to the existing terminal. This consideration is particularly important given the 27% increase in passenger traffic at the airport over the past year. Additionally, the airport should increase the availability of trash bins in easily accessible locations that do not impede passenger movement in the baggage claim area. Similarly, more seating should be provided in the baggage claim area, especially considering the limited space and the need to accommodate passengers, including the elderly and pregnant women. Lastly, cleanliness in the baggage claim area must be rigorously maintained, especially during peak hours when up to seven or eight flights may arrive simultaneously. This area is one of the first points of contact for arriving passengers and plays a crucial role in shaping their overall impression of the airport's service quality. Therefore, ensuring that this area is clean and well-maintained is essential for providing a positive first impression and enhancing overall passenger satisfaction.

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