

Fulfillment of Quality of Service at Komodo Labuhan Bajo Airport to Increase Passenger Satisfaction

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Abstract: Komodo International Airport is the main gateway for tourists to eastern Indonesia, especially foreign tourists. The increase in flight service users at the Komodo Labuhan Bajo Airport Operator Unit is very high, this is evidenced by the frequent accumulation of passengers. This research uses Importance Performance Analysis, Gap Analysis and Kano Model. The results showed that there are 3 service variables Komodo Airport has the highest negative gap value, the highest is There are 3 service variables Komodo Airport has the highest negative gap value, the highest is var 20 Wifi facilities and public internet access are available and functioning (-0.94), var 6 Availability and adequacy of the number of trolleys (-0.75), and var 22 Availability of clean and comfortable children's playroom facilities (-0.68). This high gap means that the 3 service variables have not met passenger expectations. There are 5 variables in the basic factor group, namely: 1) Var1, Maintained and the availability of cleaning facilities at the airport terminal, (2) Var2, Suitability of seating capacity in the waiting room, (3) Var5, Adequate airport terminal lighting, (4) Var16, Availability and adequacy of commercial areas and (5) Var24, Availability of smoking room facilities.

1 INTRODUCTION

Air transportation has a function as a supporting element (servicing sector) and a driving element (promoting sector). The function as a supporting element is related to the ability of air transportation to provide effective and efficient transportation services. The function as a driving element is the ability of air transportation to open isolated areas and remote areas and islands (Wijaya, 2017).

Service quality is an important issue in the management of transportation services at this time, including air transportation services. Public service providers in this case airports do not only focus on providing infrastructure, facilities, and human resources, but the development of information encourages transportation service users to be more critical of public services, by proactively communicating with consumers to find out the dynamics of consumer needs, therefore it is necessary to continuous improvement of public services is carried out.

The development of airport traffic requires good facilities and infrastructure as well as services so that it can accommodate the movement of air traffic

flows and provide comfort for air transportation service users, the better and more complete the existing facilities and infrastructure, the better the efficiency and level of service based on applicable minimum standards (Frans,dkk, 2014).

Komodo International Airport is an airport located in the city of Labuhan Bajo, West Manggarai Regency - NTT - East Nusa Tenggara and is the main gateway for tourists to eastern Indonesia, especially foreign tourists. Labuan Bajo is one of 19 villages located in West Manggarai Regency, East Nusa Tenggara which is being developed into a tourist city. Komodo Airport is the second airport with the most passengers in the NTT region, after Eltari Airport, Kupang. The total number of arriving passengers at the airport reached 35,284 passengers in October, while the total departing passengers reached 35,173 passengers. This amount accounts for 20.82% of the total passengers who come to the province of NTT (Agustiyanti, 2019). The increase in traffic, especially the movement of international passenger, aircraft and cargo flows at Komodo Airport is a potential market for business actors. Especially after the development of Komodo Airport is completed in 2021. The increase in flight service

users at the Komodo Labuhan Bajo Airport Operator Unit, West Manggarai Regency - NTT is very high, this is evidenced by the frequent accumulation of passengers due to inadequate terminal and aircraft transport capacity, for this reason it is necessary to widen the capacity of the passenger terminal, especially in the terminal section. Passengers when passengers get off the plane (the baggage claim area) so that there is no accumulation of passengers and congestion there. In order to become an airport with a high level of service satisfaction, the management of Komodo Airport must provide the best service to users.

Based on the description above, it is necessary to do research to find out how passengers perceive services at Komodo Labuhan Bajo Airport?, find out how the gap between the level of importance and satisfaction in service variables is, find out whether service variables are included in the main priority in the quadrant Importance Performance ? and find out what service variables are included in the basic factor group in the Kano model? The problem limitation in this study is the passenger's perception of services at Komodo Labuhan Bajo Airport (Subekti, 2016).

2 RESEARCH METHODOLOGY

2.1 Research Stages

The research stages begin with initial observations, data collection, data processing and analysis, to drawing conclusions and suggestions. This research starts from identifying problems that occur after direct observation in the study area. This is done to find out the problems that occur in the study area. The area of study and the scope of issues to be discussed are also limited. The analysis stage is a follow-up after data processing is completed. The purpose of this stage is to understand and analyze the results of data processing in depth. The analysis is carried out with Validity and Reliability Tests on service quality, Importance Performance Analysis (IPA) is used to compare the extent to which the performance of an activity is perceived by users or customers when compared to the level of satisfaction desired/perceived, Gap Analysis (Pranidiwya, 2015). The difference or distance between the expectations or the level of interest of the passengers and the service received by the passengers results in the quality of service based on the perceptions of the passengers themselves and the Kano Model aims to categorize product/service attributes that are able to

satisfy customer needs. Kano's analysis of data and images used an interest classification diagram, namely based on explicit and implicit interest classifications. Implicit interest is the interest obtained from the correlation between the interests of one another using the Spearman correlation coefficient. Explicit interests are interests that are stated or determined directly by consumers (Wijaya, 2011).

2.2 Data Collection

There are 4 stages of data collection method, namely the first stage of the interview, namely the method of collecting data by asking and answering questions. The second stage is a questionnaire, which is a method of collecting data by compiling a list of questions or questionnaires to respondents in writing, making it easier to process data. The third stage is the study of literature and the last is the research instrument, the research instrument used in the form of a list of questions or questionnaires consisting of 35 questions about the importance of service quality at the airport and 35 questions about the performance of service quality at the airport. Before the list of questions was used, the validity and reliability of the questionnaire was tested with a total of 100 respondents

3 RESULT AND DISCUSSION

3.1 Determination of Number of Samples

The total population is calculated by the average number of passengers from 2015 to 2020, so the total population used in this study is: 336650 passengers. The sample size used in the study was

$$N = \frac{336650}{336650 \cdot (0,1)^2 + 1}$$

$$= 99 \text{ rounded up to } 100 \text{ samples}$$

3.2 Reliability and Validity Test

This study uses 35 service variables referred to from the Regulation of the Minister of Transportation Number PM 178 of 2015 concerning Service Standards for Airport Service Users. The items of the research variables were tested statistically to determine the validity and reliability. Cronbach's alpha coefficient value of a total of 35 variables of

importance is 0.938. The value of the Cronbach alpha coefficient on all 35 question variables at the level of satisfaction/performance is 0.960. A construct or variable is said to be reliable if it gives a Cronbach alpha value > 0.60 (Sunnyoto, 2009). This means that the level of importance and satisfaction variables are reliable for use in research. The validity test was carried out by Pearson correlation analysis in the SPSS program. This is done to determine the correlation of items/variables of importance level 1, 2, 3 and so on up to 35 to the total score of importance level. The value of r table for the number of samples is 100, with a significance of 1% is 0.256. Table 1 below presents the Pearson correlation coefficient on 35 variables of importance and level of satisfaction.

Based on table 1, it can be seen that 35 variables of importance and level of satisfaction have a significant correlation at the 1% level. This means that all variables are valid and can be used in research.

Table 1: Pearson Correlation Coefficient Values on 31 Level of Interest Variables and Satisfaction Level.

Variable	Table r value	Interest Rate Correlation Coefficient	Satisfaction Level Correlation Coefficient	Validity
Variable 1	0.256	0.477*	0.443*	Valid
Variable 2	0.256	0.491*	0.575*	Valid
Variable 3	0.256	0.670*	0.677*	Valid
Variable 4	0.256	0.481*	0.535*	Valid
Variable 5	0.256	0.392*	0.536*	Valid
Variable 6	0.256	0.534*	0.526*	Valid
Variable 7	0.256	0.633*	0.541*	Valid
Variable 8	0.256	0.613*	0.544*	Valid
Variable 9	0.256	0.643*	0.629*	Valid
Variable 10	0.256	0.686*	0.686*	Valid
Variable 11	0.256	0.691*	0.691*	Valid
Variable 12	0.256	0.662*	0.662*	Valid
Variable 13	0.256	0.650*	0.650*	Valid
Variable 14	0.256	0.626*	0.626*	Valid
Variable 15	0.256	0.674*	0.674*	Valid
Variable 16	0.256	0.693*	0.693*	Valid
Variable 17	0.256	0.532*	0.532*	Valid
Variable 18	0.256	0.632*	0.632*	Valid
Variable 19	0.256	0.692*	0.692*	Valid
Variable 20	0.256	0.612*	0.612*	Valid
Variable 21	0.256	0.604*	0.604*	Valid

Variable 22	0.256	0.455*	0.455*	Valid
Variable 23	0.256	0.701*	0.701*	Valid
Variable 24	0.256	0.267*	0.267*	Valid
Variable 25	0.256	0.732*	0.732*	Valid
Variable 26	0.256	0.565*	0.565*	Valid
Variable 27	0.256	0.681*	0.681*	Valid
Variable 28	0.256	0.711*	0.711*	Valid
Variable 29	0.256	0.685*	0.685*	Valid
Variable 30	0.256	0.687*	0.687*	Valid
Variable 31	0.256	0.640*	0.640*	Valid
Variable 32	0.256	0.670*	0.670*	Valid
Variable 33	0.256	0.620*	0.620*	Valid
Variable 34	0.256	0.623*	0.623*	Valid
Variable 35	0.256	0.566*	0.566*	Valid

Source: SPSS output data, * significant at 1% level (2-sided test)

3.3 Interest Level Analysis

The questionnaire used used a Likert scale 5. Each item/variable was scored according to the respondents' answers. A scale of 1 means not important and a scale of 5 means very important. There are 35 variables and 100 respondents used in the analysis of research data. Table 2 below presents the total score and average of 35 variables of importance at Komodo Labuhan Bajo Airport.

Table 2: Values/Scores and Average Weights of 35 Variables of Level of Interest at Komodo Labuhan Bajo Airport.

No	Variable	Total Score	Average \bar{y}
1	Maintained and the availability of cleaning facilities at the airport terminal	477	4.77
2	Appropriate seating capacity in the waiting room	451	4.51
3	Adequacy of baggage service equipment	410	4.1
4	Availability of facilities for air circulation (AC, Fan)	417	4.17
5	Sufficient lighting/lighting system for airport terminals	442	4.42
6	Availability and sufficient number of trolleys	455	4.55
7	Clean and tidy checkin counter	416	4.16
8	Sufficient number and area of check-in counters	407	4.07

Table 2: Values/Scores and Average Weights of 35 Variables of Level of Interest at Komodo Labuhan Bajo Airport (cont.).

No	Variable	Total Score	Average \bar{y}
9	Availability of Public Information System (announcement) facilities	415	4.15
10	Availability of flight progress display (FIDS) facility	412	4.12
11	Clarity of information from the public address system (signage)	473	4.73
12	Information center counter facilities that are easy to find and informative	442	4.42
13	The coolness and comfort of the passenger waiting room	440	4.4
14	Availability of complete toilet facilities and easy to find	415	4.15
15	Cleanliness and comfort of toilet facilities	412	4.12
16	Availability and adequacy of commercial area (canteen/restaurant)	434	4.34
17	Availability of computer facilities for online ticket purchases	406	4.06
18	Availability and convenience of prayer rooms/places of worship	415	4.15
19	Availability of facilities for charging electronic devices (charging)	412	4.12
20	Wifi facilities and public Internet access are available and functioning	474	4.74
21	Availability of special room facilities for mothers and babies (nursery)	408	4.08
22	Availability of clean and comfortable children's playroom facilities bermain	418	4.18
23	Availability of passenger facilities with special needs	414	4.14
24	Availability of smoking room facilities (smoking area)	473	4.73
25	Availability of ATM facilities and money changers	409	4.09
26	Availability of lounge/executive waiting room for special passengers	417	4.17
27	Availability of adequate parking area facilities	414	4.14

28	Cleanliness and tidiness of the appearance of officers	420	4.2
29	Friendliness & ability of officers in serving	408	4.08
30	Availability of advanced transportation information from the airport	417	4.17
31	Easy access and transportation from/to the airport	415	4.15
32	Cabin crew conveys information during the flight, is responsive, skilled, friendly and looks neat and polite	472	4.72
33	The facilities provided on the plane to serve passengers are in good and clean condition	408	4.08
34	There is a car park for 80% of the busy time passengers	417	4.17
35	There are facilities to get on and off the plane (Use of the garbarata)	414	4.14
Amount		14949	149.49
		427.11	4.27

Source: primary data processed, 100 respondents

Based on table 2 above, it can be seen that the average value of 35 variables of importance ranges from 4.06 to 4.77. The variable awake and the availability of cleaning facilities at the airport terminal has the highest average value. This means that passengers consider this variable important to be provided by the airport in serving passengers. While the variable Availability of computer facilities for purchasing online tickets is the variable with the lowest average value, this means that passengers do not consider this facility important in Komodo Labuhan Bajo airport services. Overall, the average of 35 research variables shows a value of 4.27. This means that 35 service variables have an important meaning for passengers in supporting service activities at the airport.

3.4 Analysis of Satisfaction Level

The satisfaction level variable also consists of 35 items which are calculated using a Likert scale 5. Number 1 shows passengers who are not satisfied with the service, number 2 is not satisfied, number 3 means normal, number 4 indicates satisfactory service and number 5 means service is very satisfying for the customer passenger. Table 3 below presents the total score and average of 35 service satisfaction variables at Komodo Labuhan Bajo Airport.



Source: Analysis Results, 2020

Figure 1: Importance Performance Quadrant of Komodo Airport Labuhan Bajo.

Based on Figure 1, it can be seen that there are 3 service variables in quadrant I. These variables are (1) var 02, suitability of seating capacity in the waiting room, (2) var 06, availability and adequacy of the number of trolleys and (3) var 20, Wifi facilities and public internet access are available and functioning. Variables that are in quadrant I are important variables that must get the main priority for service improvement from Komodo Labuhan Bajo Airport.

3.5 Gap Analysis (Gap)

Based on the analysis of the level of importance and level of satisfaction there is a gap between the two. The difference illustrates the distance that exists between the value of satisfaction/performance and the value of importance (Pranidiwya and Miharja, 2015). Table 4 below presents the difference/gap between the average level of importance and satisfaction for each service variable at Komodo Labuhan Bajo Airport.

Table 3: Differences/Gaps Between Levels of Interest and Satisfaction of Service Variables at Komodo Airport Labuhan Bajo.

Variable	Average Satisfaction/ Performance (X)	Average Interest (Y)	Difference / Gap
Var 1	4.77	4.77	0
Var 2	3.81	4.51	-0.7
Var 3	3.55	4.1	-0.55
Var 4	4.19	4.17	0.02
Var 5	4.45	4.42	0.03
Var 6	3.8	4.55	-0.75

Var 7	4.2	4.16	0.04
Var 8	3.95	4.07	-0.12
Var 9	4.18	4.15	0.03
Var 10	4.14	4.12	0.02
Var 11	4.75	4.73	0.02
Var 12	4.45	4.42	0.03
Var 13	4.42	4.4	0.02
Var 14	4.18	4.15	0.03
Var 15	4.14	4.12	0.02
Var 16	4.65	4.34	0.31
Var 17	3.65	4.06	-0.41
Var 18	4.2	4.15	0.05
Var 19	4.14	4.12	0.02
Var 20	3.8	4.74	-0.94
Var 21	3.81	4.08	-0.27
Var 22	3.5	4.18	-0.68
Var 23	4.16	4.14	0.02
Var 24	4.74	4.73	0.01
Var 25	3.98	4.09	-0.11
Var 26	4.18	4.17	0.01
Var 27	4.15	4.14	0.01
Var 28	4.21	4.2	0.01
Var 29	4.09	4.08	0.01
Var 30	4.19	4.17	0.02
Var 31	4.16	4.15	0.01
Var 32	4.73	4.72	0.01
Var 33	4.09	4.08	0.01
Var 34	4.18	4.17	0.01
Var 35	3.72	4.14	-0.42

Source: primary data processed, 2021

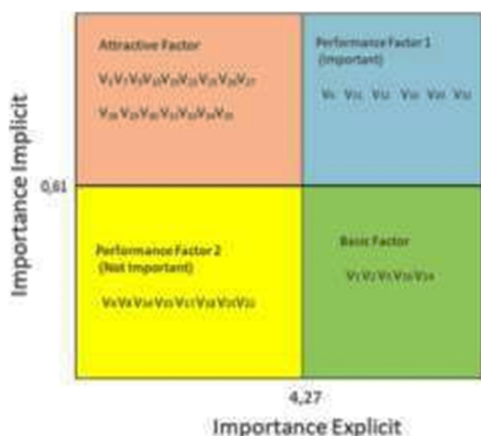
Based on table 3, it can be seen that there are 35 service variables, 10 have negative gap values. This means that the gap between the value of satisfaction/performance and the value of the level of importance of passengers, each attribute has not all met the expectations of passengers. The three variables with the highest negative values are var 20 Wifi facilities and public internet access that are available and functioning (-0.94), var 6 Availability and adequacy of the number of trolleys (-0.75), and var 22 Availability of children's playroom facilities clean and comfortable by (-0.68). This shows that passengers feel the highest dissatisfaction with the service aspect at Komodo Labuhan Bajo Airport. The three variables with the smallest minimum values are var 2 Suitability of seating capacity in the waiting room (-0.7), var 25 Availability of ATM and money changer facilities (-0.11) and var 8 Adequate number and area of check-in counters (- 0.12). This

shows that passengers feel low dissatisfaction with the service aspect at Komodo Labuhan Bajo Airport. The results of the gap analysis can be concluded that based on passenger perceptions, service variables at Komodo Labuhan Bajo Airport are still below passenger expectations.

3.6 Analysis of Services with the Kano Model

Kano model is used to determine the service variables included in the basic factor. If there are variables that fall into this category, the airport should improve services so that it can achieve passenger satisfaction. The level of implicit importance is obtained from the correlation coefficient between item variables 1, 2, 3 and so on until 35 to the total score of the level of importance. Spearman correlation in SPSS program is used to calculate the value of implicit importance level. The following table 5 presents the values of the explicit and implicit importance levels at Komodo Labuhan Bajo Airport.

There are 6 service variables in the performance group 1, namely: (1) Var6, Availability and adequacy of the number of trolleys, (2) Var11, Clarity of information from the public address system (signage), (3) Var12 Information center counter facilities that are easily found and informative, (4) Var13, Coolness and comfort of the passenger waiting room, (5) Var20, Wifi facilities and public internet access available and functioning and (6) Var32, Cabin crew conveys information during the flight, responsive, skilled, friendly and well-groomed and polite. Based on the canoe model,



Source: Analysis Results, 2021

Figure 2: Grouping of Implicit and Explicit Interest Variables Komodo Airport Labuhan Bajo.

it can be seen that the variables in the basic factor group are variables that are the basic needs that must be met by Komodo Labuhan Bajo Airport. In addition to the variables in the basic factor group, Komodo Labuhan Bajo Airport must also pay attention to the service variable in the performance 1 (important) group.

If the variables in this group are met, then Komodo Labuhan Bajo Airport can increase passenger satisfaction, and vice versa if it is not fulfilled it can reduce passenger satisfaction.

4 CONCLUSION

Based on the results of data analysis, it can be concluded as follows:

1. Passenger perceptions of service quality at Komodo Labuhan Bajo Airport indicate that overall the satisfaction variable is in the ordinary classification with an average value of 4.15 while the importance variable is in the important classification with an average value of 4.27
2. There are 3 service variables Komodo Airport has the highest negative gap value, the highest is var 20 Wifi facilities and public internet access are available and functioning (-0.94), var 6 Availability and adequacy of the number of trolleys (-0.75), and var 22 Availability of clean and comfortable children's playroom facilities (-0.68). This high gap means that the 3 service variables have not met passenger expectations,
3. The value of the passenger satisfaction index is 97%, meaning that based on the passenger's perception the services provided by Komodo Labuhan Bajo Airport are good.
4. There are 3 service variables that require the main priority of service improvement from Labuhan Bajo Airport, NTT, namely (1) var 02, suitability of seating capacity in the waiting room, (2) var 06, availability and adequacy of the number of trolleys and (3) var 20, Wifi facilities and public internet access are available and functioning.
5. There are 5 variables in the basic factor group, namely: 1) Var1, Maintained and available cleaning facilities at airport terminals, (2) Var2, suitability of seating capacity in waiting rooms, (3) Var5, airport terminal lighting system sufficient, (4) Var16, Availability and adequacy of commercial area (canteen/restaurant) and (5) Var24, Availability of smoking room facilities (smoking area).

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