

The Influence of Airport Service Quality toward Passenger Satisfaction

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Abstract—Passenger satisfaction is an important goal of an airport to provide services in an airport. Passenger satisfaction arises when an airport can provide facilities provided more than passenger expectations. On this research, the independent variable (X) used is Airport Service Quality consisting of Servicescape, Service Personal, and Services. The dependent variable (Y) is Passenger Satisfaction. The types of research used is descriptive verification, and the method used is explanatory survey and cross-sectional approach with saturation sampling technique, therefore the minimum sample size is as many as 100 passengers at Soekarno Hatta International Airport. Techniques of data analysis and hypothesis testing used multiple linear regression. The results showed that Airport Service Quality consisting of Servicescape, Personal Service, and Services had a significant influence on Passenger Satisfaction.

Keywords—*airport service quality; passenger satisfaction; soekarno hatta international airport.*

I. INTRODUCTION

Consumer satisfaction leads to assume that marketing continues to follow consumer needs as a basic assumption in developing a company's strategy. It is very important for a company to create customer satisfaction in all industries due to the fact that competition between companies gets tighter, the company is not just a matter of price competition but at this time what views are needed to value consumer company itself. [1] said that "satisfaction about the product / service as a whole that merits attention, since this satisfaction influences the Consumers' future buying and consuming behavior that says that satisfaction about products or services must receive attention overall, because this satisfaction affects consumers in the future to come and their behavior. [2] also said "customer satisfaction measurements provide a significant information for modern management processes and a warning signal about future business result "that measures customer satisfaction provide important information for modern management processes and warning signal about future business results. customer satisfaction has been recognized to be a key success factor of a business organization (Clemes et al., 2008) in [3] states that consumer satisfaction has become a key success for a business organization. Positive customer satisfaction can affect psychological variable strategies such as customer trust, customer repurchase intention, and customer satisfaction can influence on verbal communication as well affecting customer

satisfaction can affect variables economics such as market share and return on investment [3].

Problems with satisfaction become a problem in each industry, as in the Hotel industry [4], Retail Industry [5], Restaurant Industry [6], Industrial Banking [7], as well as the airport satisfaction industry is still being the problem. In the context of satisfaction with passengers (passenger satisfaction) is very necessary because the passenger satisfaction is a measure of the performance of the company itself, especially airport. Satisfaction is an experience produced which at least meets or exceeds expectations previously (Engel et al, 1995) in [8] therefore, it added that satisfaction occurs when experience meet expectations. However, passenger satisfaction from the airport can also be influenced by the surrounding environment, technical facilities and the service they received. This relates to (Rendeiro Marti'n-Cejas 2006) in [9] who "found that efficient check-in procedures positively influence passenger satisfaction ". Which mean speed or efficiency in the check-in process is an important indicator in creating passenger satisfaction within the city. So that airport passengers can feel satisfied from what he felt while in the air from using the service in the airport.

Airport is a facility where aircraft can take off and land. The airport is perceived as a gateway to a country for business and travel. Therefore, the airport must carry out its functions in an integrated manner so that consumers such as passengers, airline staff, service provider company staff, and other visitors can feel satisfied when using the facilities of the airport.

There are 5 major airports in Indonesia, namely Kuala Namu (Medan), Sultan Hassanudin (Makassar), Juanda (Surabaya), Ngurah Rai (Bali) and also Soekarno Hatta (Jakarta). But in terms of the use and availability of flying services from many airlines coming from the Soekarno Hatta International airport and also made into HUB airports in Indonesia. Based on the online survey conducted by Skytrax, satisfaction only gets a rating of 3 out of 5 and for the overall value of 129 reviewers that is 5 to 10. This gives full dissatisfaction that is felt while using Soekarno Hatta International Airport. This implies that the performance has not reached maximum because there are still many users of Soekarno-Hatta airport services who do not recommend using an international airport with people expressing dissatisfaction.

Theoretically, the results of this study are expected to contribute scientifically by adding a repertoire of understanding the science of tourism to the industry of the airport by

reviewing the Airport Service Quality in creating satisfaction with passengers at the airport. Empirically, it is expected that this research can build Soekarno Hatta airport to be more concerned about customer satisfaction through the services provided and the results of research can be an evaluation material for Soekarno Hatta Airport for its marketing strategy.

II. LITERATURE REVIEW

A. The Concept of Tourism

Tourism is part of regional and state development because it can improve the economy in terms of employment and business forms in tourism that can absorb foreign exchange into the country. [10] states that: "Tourism is staying one night or more away from home for holidays, visiting friends or relatives, business conferences or other exceptions things like boarding education or work ". The tourism industry according to [11] is a joint company that provides main products in the form of personal services. [12] explains the tourism industry consists of the four scopes consisting of: Attractions, Transportation, Lodging, Food and Beverages

B. Service

The service itself according to Gonros in [13] is a process that consists of a series of intangible activities that usually occur in the interactions between customers and employees. So, if something goes wrong, then the customer will feel dissatisfied. According to [14] "Services are any actions or actions that can be offered by a party to another party that are essentially intangible and do not produce ownership" and the airport is a pure service (pure industrial service) where service is the product they offer.

C. Airport Service Quality

Based on several definitions in airport service quality research, according to [15] stating that airport service quality can be interpreted as the expectations of the passengers to determine the level of satisfaction and the expectations in the quality of service in the airport. Airport service quality is one to measure airport service managements to give satisfaction to their users in this case passengers who feel the services provided by airport managements so that expectations in using airport services are in line with the expectations of the service users. Airport service quality is one to measure airport service managements to give satisfaction to their users in this case passengers who feel the services provided by airport managements so that expectations in using airport services are in line with the expectations of the service users. Therefore, airport service quality can be an effective solution to improve.

D. The Airport Service Quality Construct

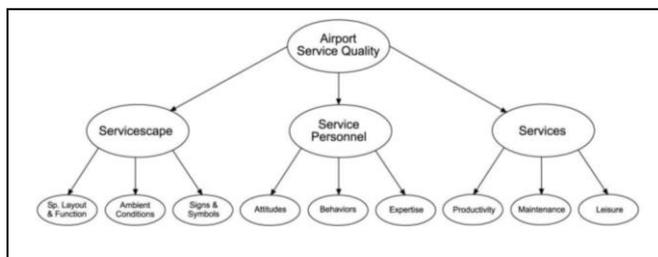


Fig. I. The Airport Service Quality Construct

E. Servicescape

[15] stated that servicescape is an important scope regarding to the effective movement of passenger flows both to go to the aircraft entrance gate and to exit from the plane to the transit building and move to the terminal and can easily find other services such as ATM, restaurant or toilet in terms of layout and functionality.

F. Personal Service

A second influence on the perception of the quality of airport services where a customer's physical presence is needed for service interaction with service personnel to find solutions and information [16].

G. Services

Passenger needs to physically present at the airport to emphasize the problem of time and how much time is spent. Servicescape's theory addresses this in terms of spatial and functionality. Services focus on the time spent for waiting. Both servicescape and services, however, are a bigger problem about how customer time is allocated or invested because inside the airport demanding the right time and for many passengers' time is the rarest resource and the extent to which the airport provides effective time so that the airport is not frustrated.

H. Passenger Satisfaction

Consumer satisfaction is one of the key elements that determine the successful implementation of the marketing concept. The consequences of customer satisfaction or dissatisfaction are crucial for business, government and consumers. The increase of customer satisfaction has the potential to lead to long-term and short-term sales growth, as well as market share as a result of repeat purchases. Consumer dissatisfaction can help companies to identify aspects that became weaknesses in their products or services that are not able to meet consumer expectations. [17] stated that "satisfaction reflects a person's judgment of a product's perceived performance in relationship to expectations. If the performance falls short from expectations, the customer is disappointed. If it matches expectations, the customer is satisfied. If it exceeds them, the customer is delighted ".

III. METHODOLOGY

This research was conducted to analyze the influence of Airport Service Quality in an effort to increase Passenger Satisfaction at the Soekarno Hatta International Airport. According to Uma Sekaran (2013: 69) independent variable is one that influences the dependent variable either positively or negatively. Variable free airport service quality (X) which consists of servicescape (X1), personal service (X2), service (X3). Whereas the dependent variable or dependent variable is a variable that is the main concern for researchers, namely Passenger Satisfaction (Y),

A. Research methods

The research method used is a cross-sectional approach and explanatory method survey.

B. Population, Sample, Sampling Technique

The population in this research were passengers using Soekarno Hatta International Airport in January to December 2017 totaling 63,015,620 people

Based on the Slovin formula, the sample size in this study is as follows:

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{63.015.620}{1 + (63.015.620)(0.1)^2}$$

$$n = \frac{63.015.620}{630.157.2}$$

$$n = 99,999 \approx 100$$

Based on the results of the above calculation, a sample of 99.99 is obtained but for guarantee of accuracy, the sample should be added a little more than the amount of mathematics. Based on the minimum sample size (n), in this study a sample size (n) of 100 respondents was determined to be more representative.

The sampling technique used in this research is systematic random sampling technique.

C. Validity and Reliability Testing Results

a. Validity

TABLE I. VALIDITY AIRPORT SERVICE QUALITY TESTING RESULT

No Item	Validity Airport Service Quality Testing Results		
	Sig.	Standard Sig.	Validity
A1	0.000	0.05	VALID
A2	0.002	0.05	VALID
A3	0.000	0.05	VALID
A4	0.000	0.05	VALID
A5	0.000	0.05	VALID
A6	0.000	0.05	VALID
A7	0.003	0.05	VALID
A8	0.003	0.05	VALID
A9	0.000	0.05	VALID
B1	0.000	0.05	VALID
B2	0.000	0.05	VALID
B3	0.000	0.05	VALID
B4	0.000	0.05	VALID
C1	0.000	0.05	VALID
C2	0.000	0.05	VALID
C3	0.000	0.05	VALID
C4	0.000	0.05	VALID
C5	0.000	0.05	VALID
C6	0.000	0.05	VALID
No Item	Validity Passenger Satisfaction Testing Results		
	Sig.	Standard Sig.	Validity
A1	0.000	0.05	VALID
A2	0.011	0.05	VALID
A3	0.000	0.05	VALID
A4	0.001	0.05	VALID
A5	0.005	0.05	VALID
A6	0.007	0.05	VALID
A7	0.006	0.05	VALID
A8	0.003	0.05	VALID

No Item	Validity Airport Service Quality Testing Results		
	Sig.	Standard Sig.	Validity
A9	0.022	0.05	VALID
B1	0.000	0.05	VALID
B2	0.000	0.05	VALID
B3	0.007	0.05	VALID
B4	0.003	0.05	VALID
C1	0.016	0.05	VALID
C2	0.023	0.05	VALID
C3	0.000	0.05	VALID
C4	0.000	0.05	VALID
C5	0.002	0.05	VALID
C6	0.000	0.05	VALID

b. Reliability

TABLE II. RELIABILITY TESTING RESULT

No	Reliability Testing Results		
	Variable	Cronbach's Alpha	Minimum Coefficient (Cronbach's Alpha)
1.	Airport Service Quality	0,871	0,700
2.	Passanger Satisfaction	0,878	0,700

D. Multiple Regression Analysis

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

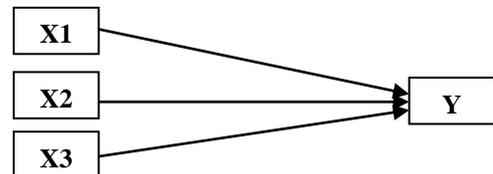


Fig II. Multiple Regression Analysis

IV. RESULT

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A. Passenger Response to Airport Service Quality at Soekarno Hatta Airport

Airport service quality has three indicators, namely Servicescape, Personal Services, and Services. Recapitulation of passenger responses regarding dominant factors in forming Airport service quality:

TABLE III. PASSENGER RESPONSE TO AIRPORT SERVICE QUALITY AT SOEKARNO HATTA AIRPORT

No	RECAPITULATION OF PASSENGER RESPONSE TO AIRPORT SERVICE QUALITY IN THE SOEKARNO HATTA INTERNATIONAL AIRPORT		
	Sub Variable	number of questions	Total Scores
1	Servicescape	9	3524
2	Personal Services	4	1538
3	Services	6	2321
Total		19	7382

The table shows that the indicator that has the highest average percentage of assessment is owned by the Servicescape indicator with 9 questions getting the average score of 391.5. this shows that Servicescape which consists of spatial layout, ambient and condition and sign and symbol is a very important factor in influencing Airport Service Quality at Soekarno Hatta International Airport. The second highest total gained is the Services indicator with the average score of 386.8. Then the Personal Service indicator gets the lowest average of 384.5. The total score of the Airport Service Quality variable is 1162.8. After knowing the total score owned by Airport Service Quality is equal to 1162.8, it can be calculated also to find the maximum index value and the minimum index value, which can then be calculated to get the variable level and interval distance which will be useful to make a percentage score for inclusion on the continuum line.

Maximum Index Value = Highest score x Number of items x Number of respondents = 5 x 19 x 100 = 9500

Minimum Index Value = Lowest score x Number of items x Number of respondents = 1 x 19 x 100 = 1900

Variable Level = Maximum index value - Minimum index value = 9500 - 1900 = 7600

Distance Interval = Variable level: Many interval classes = 7600/5 = 1520

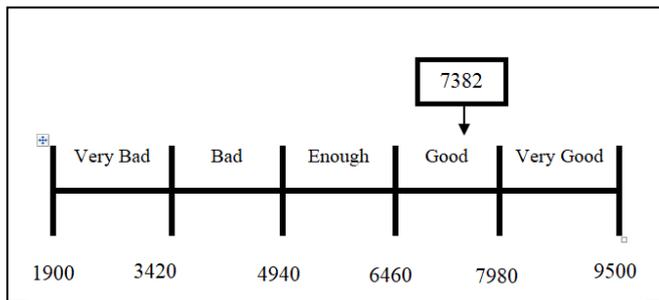


Fig. III. Continuum Value of the Recapitulation Results

The results of data processing explain the continuum value of the recapitulation results of the response of passenger responses to Airport Service Quality at Soekarno International Airport to get a score of 7,382. From these results it can be seen that the passenger assessment of Airport Service Quality consisting of Servicescape indicators, Personal Services, and

Services is in a good position and must be maintained and even improved

B. Passenger Response to Passenger Satisfaction at Soekarno Hatta Airport

Passenger satisfaction with indicators that are perceived and expectation based on satisfaction received from Airport Service Quality at Soekarno Hatta Airport based on the response of passengers satisfied with servicescape, personal services, and services explaining the recapitulation of the results of Passenger's response to Satisfaction at Soekarno Hatta International Airport.

TABLE IV. PASSENGER RESPONSE TO PASSENGER SATISFACTION AT SOEKARNO HATTA AIRPORT

No	RECAPITULATION OF PASSENGER RESPONSE TO PASSENGER SATISFACTION IN THE SOEKARNO HATTA INTERNATIONAL AIRPORT		
	Sub Variable	number of questions	Total Scores
1	Servicescape	9	3501
2	Personal Services	4	1569
3	Services	6	2241
Total		19	7311

Based on the results of data processing, it shows that the indicators that have the highest average percentage of assessment are owned by Personal Service indicators with 4 questions getting the average score of 392.25. This shows that the Personal Service which consists of hospitality, response and knowledge from airport employees gets Passenger Satisfaction at Soekarno Hatta International Airport. The second highest total gain is the Servicescape indicator with the average score of 389. Then the Services indicator gets the lowest average of 373.5. The total score of the Passenger Satisfaction variable is 1154.75. Having known the total score owned by Passenger Satisfaction that is equal to 1154.75, it can be calculated also to find the maximum index value and minimum index value, which can then be calculated to get the variable level and interval distance that will be useful to make a percentage score to be included in the continuum line .

Maximum Index Value =

Highest score x Number of items x Number of respondents = 5 x 19 x 100 = 9500

Minimum Index Value =

Lowest score x Number of items x Number of respondents = 1 x 19 x 100 = 1900

Variable Level =

Maximum index value - Minimum index value = 9500 - 1900 = 7600

Distance Interval = Variable level: Many interval classes = 7600/5 = 1520

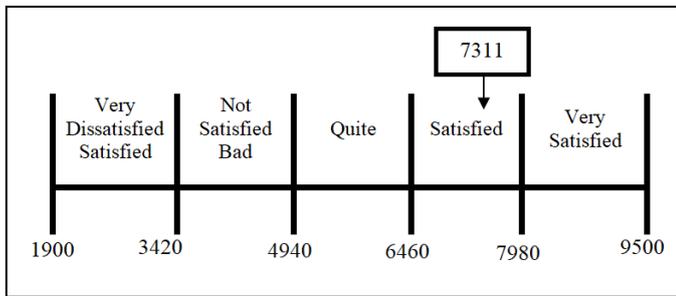


Fig. IV. Continuum Value of the Recapitulation Results

Based on the results of data processing in explaining the continuum value of the recapitulation results of respondents' responses to Passenger Satisfaction at Soekarno Hatta International Airport got a score of 7.311. From these results it can be seen that the respondents' assessment of satisfaction based on Passenger Satisfaction received from Airport Service Quality is in a satisfied position and must be maintained and even increased

C. Multiple Linear Regression Equation Model of The effect of Airport Service Quality on Passenger Satisfaction at Soekarno Hatta International Airport

Based on the results of the t test described in the table above, the multiple linear regression equation is obtained for the influence of Airport Service Quality on Passenger Satisfaction.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 34,543 + 0,592X_1 + 0,174 X_2 + 0,883X_3$$

Information:

- a = Constant
- Y = Passenger Satisfaction.
- X₁ = Servicescape
- X₂ = Service Personal
- X₃ = Services

The results of the analysis show a constant value of 34.543 means that if X₁, X₂, X₃ are ignored then the purchase decision level is 34.543. The X₁ coefficient of 0.592 means that each increase in the Servicescape value unit will increase the Passenger Satisfaction value by 34.543 + 0.592 which is 32.135. The coefficient of X₃ is 0.883 which means that each increase in the value of Services increases the value of Passenger Satisfaction by 34.543 + 0.883 which is equal to 32.426.

V. CONCLUSION

This study shows that Airport Service Quality is one of the factors in consideration affecting Passenger Satisfaction. Research result explains that sequentially there are influential dimensions in Passenger Satisfaction is Servicescape, Personal Service and Services. Servicescape dimension is the highest factor in influencing Passenger Satisfaction. Servicescape at Airport Service Quality at Soekarno International Airport Hatta referred to a model of the layout made by the airport so that the efficiency of time to come in or out of the aircraft more quickly, find various facilities easily and quickly, the sign or signed symbol is clearly and widely displayed for giving

passengers to various facilities, and also comfort in the airport is an important aspect in Servicescape inside Soekarno Hatta International Airport. Meanwhile, the dimension that has the lowest score is Service Personal, this is because many passengers cannot identify employees who are truly from the Airport Soekarno Hatta International because the problem is wrong with the employees of airlines that are at the airport so there is a lot thinking that employees who work at the airport are all employees from Soekarno Hatta International Airport

This study shows that the Passenger Satisfaction is located in the high category. Passenger Satisfaction Dimensions has the highest contribution to Passenger Satisfaction based on Personal Service. With a response, hospitality and knowledge to passengers has felt good satisfaction. This is because the manager of Soekarno Hatta airport has provided training for customer service that faces passengers directly, and increase high criteria when hiring HR.

Hypothesis testing results show that Airport Service Quality has an influence on Passenger Satisfaction at Soekarno Hatta International Airport.

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