

The Determinant Model of Passenger Satisfaction with Low-Cost Carrier Airlines in Indonesia During the Covid-19 Pandemic

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ABSTRACT

The purpose of this study was to examine the effect of service quality, price, and brand image on passenger satisfaction of Low-Cost Carrier Airlines in Indonesia, both partially and simultaneously. This type of research can be classified as causal research. This research was conducted in several big cities in Indonesia. Data collection is done by distributing questionnaires to respondents via Google Form which is distributed using the WhatsApp application. In this study, the total population is known, so that the determination of the number of samples using the Lemeshow formula and obtaining a sample of 96 people will be rounded up by the researcher to 100 respondents. The data analysis technique used multiple linear regression analysis. The results showed that Service Quality, price, and Brand Image had a positive and significant effect on passenger satisfaction on airlines Low-Cost Carrier (LCC) in Indonesia either partially or simultaneously.

Keywords: Satisfaction, brand image, price and service quality.

1. INTRODUCTION

The service sector is one sector that is quite developed in this era. The transportation service sector has an important role, especially for a country like Indonesia, which is one of the countries with the largest population in the world with the geographical condition of an archipelagic country thereby increasing the need for inter-island transportation.

Therefore, for inter-island destinations, two types of transportation exist in Indonesia, namely sea transportation and air transportation. In Indonesia, there are two types of flights: Low-Cost Carrier (LCC) flights and non-Low-Cost Carrier flights. The term "low cost" flight, also known as Budget Airlines, no-frills flight, or Discounter Carrier, refers to flights that are less expensive. LCC is a unique flight model with a strategy to reduce operating costs but the safety factor is maintained to ensure the safety of passengers to their destination [1].

Low-Cost Carrier (LCC) is called no-frills and the budget airline is a scheduled airline company (schedule carrier) with much lower costs than companies in general. The implementation of this LCC can shift the decline in aircraft fares by half. This is because the LCC concept prioritizes passenger volume rather than price (yield-oriented) as applied by most airline operators. Of course, the implementation of this

LCC brings its consequences for airplane passengers. Because the rates are very cheap, airline products that apply LCC are also very simple. During flights, for example, passengers are not served food (no meals), without ticket reservations, the seats provided by airlines are even narrower.

Low-Cost Carrier (LCC) is a form of product differentiation from an airline company. In essence, an airline company that uses the LCC concept is a company that combines a scheduled Direct Air Carrier with an Indirect Air Carrier Cargo. There is no special form of LCC used by airlines. However, there are characteristics of airlines that use the LCC concept. Low-Cost Carrier can save money on expenses that aren't necessary. Sales and reservations, onboard service, pilot pay, aircraft ownership, maintenance, and ground handling all have different costs [2]. In short, Low-Cost Carriers try to cut costs as low as possible by providing minimal services to cater to various market segments.

The air transportation service industry is also not spared by the presence of several low-cost airlines (LCC) such as AirAsia, Lion Air, and Sriwijaya Air. However, the increase in airline ticket prices that occurred since November 2018 caused the number of passengers on domestic flights to decline. In addition, with the emergence of the covid-19 pandemic, where during the current Covid-19 pandemic, the number of

people predicted to be airplane passengers is estimated to increase by 62 percent in 2021. However, there will still be a decrease in passengers of up to 30 percent compared to before the Covid-19 pandemic occurred. This means that consumer decisions on purchasing airline tickets during the COVID-19 pandemic have decreased quite sharply.

The Central Statistics Agency (BPS) noted that as of January-February 2019, the number of passengers fell by 15 percent compared to the same period last year, this certainly illustrates the decline in passenger satisfaction and loyalty. Because the fairness of the price is very influential on the satisfaction and loyalty of passengers [3]; [4]; [5]. Determining the right price by the services and performance offered by the company can create customer satisfaction, satisfied consumers can create consumer loyalty. This of course has an impact on Passenger Satisfaction. Meanwhile, the results of other studies show that the factors that affect the satisfaction of Low-Cost Airline Passengers are service quality [6]; [7].

Results According to the research, service quality, corporate image, price fairness, and flight safety are the stimuli for LCC consumer happiness. Customer satisfaction will also have an impact on airline brand loyalty [4]. Furthermore, research shows that price has an effect on consumer satisfaction[3].

2. RESEARCH METHODS

Table 1. Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
Service Quality	100	19.00	60.00	50.5500	8.92435
Price	100	16.00	50.00	39.3200	7.09514
Brand Image	100	23.00	65.00	51.7700	8.73037
Satisfaction	100	24.00	57.00	49.6100	8.19077
Valid N (listwise)	100				

Source: SPSS Data Processing Results (2021)

According to the results of SPSS data processing above, it shows the number of respondents (N) is 100, from these 100 respondents for service quality variable obtained an average answer score of 50,5500. Respondents' answer scores regarding service quality ranged from 19 to 60 with a standard deviation of 8,92435. The price variable obtained an average answer score of 39,3200. Respondents' answer scores regarding prices ranged from 16 to 50 with a standard deviation of 7.09514. The brand image variable obtained an average answer score of 51,7700. Respondents' answer scores regarding brand image ranged from 23 to 65 with a standard deviation of 8,73037. The satisfaction variable obtained an average answer score of 49.6100. Respondents' answer scores regarding satisfaction ranged from 24 to 57 with a standard deviation of 8,19077.

Classic Assumption Test

The classical assumption test aims to analyze whether the regression model used in this study is good. If the model is good, then the data analyzed is feasible

This study begins with a study of theories and concepts related to loyalty, satisfaction, trust, price, brand image, and service quality. The goal of this research is to validate theoretical and empirical models based on theories about service passenger happiness and loyalty as they relate to trust, price, brand image, and service quality. It is hoped that the theoretical and empirical confirmation can contribute to the development of the theory built in this study. Therefore, this type of research can be classified as causal research. This research was conducted in several big cities in Indonesia such as Jakarta, Medan, Surabaya, Bandung, Yogyakarta, Semarang, and Makassar with Google Form which is distributed using the WhatsApp application. In this study, the total population is known, so that the determination of the number of samples using the Lemeshow formula and obtained a sample of 96 people who will be rounded up by the researcher to 100 respondents. The data analysis technique used multiple linear regression analysis

3. RESULTS AND DISCUSSION

Descriptive statistics

Based on the data that has been collected, the description of the research data is obtained as follows:

to serve as recommendations for knowledge or practical problem-solving purposes. The classical assumption test in this study can be stated as follows:

1) Normality Test

This test determines if the dependent and independent variables in a regression model have a normal distribution or not. The regression model fulfills the assumption of normality if the data spreads around the diagonal line and follows the diagonal line's direction, and vice versa. If the spread is far from the diagonal and follows the direction of the diagonal line or the histogram graph does not show a normal distribution pattern, then the regression does not meet the assumption of normality. The normally distributed data can be seen through histogram graphs and normal p-plot graphs.

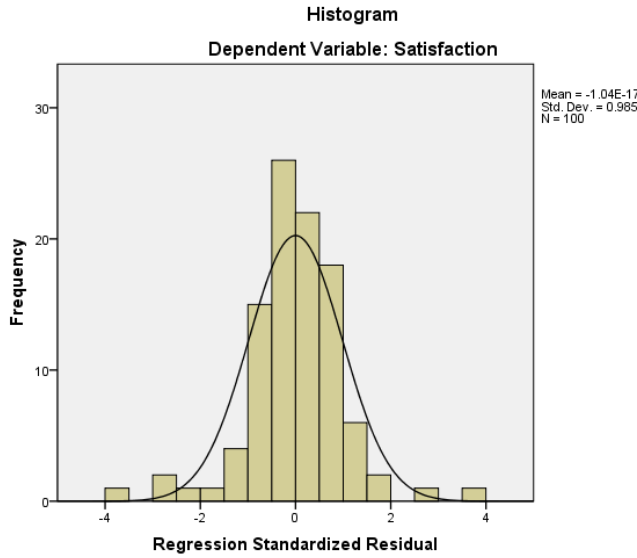


Figure 1. Histogram Graph
Source: SPSS Data Processing Results (2021)

The histogram graph in the figure above indicates a normal distribution pattern since it does not lean to the left or right. Similarly, the results of the normality test using the p-plot graph in Figure 5.2 below

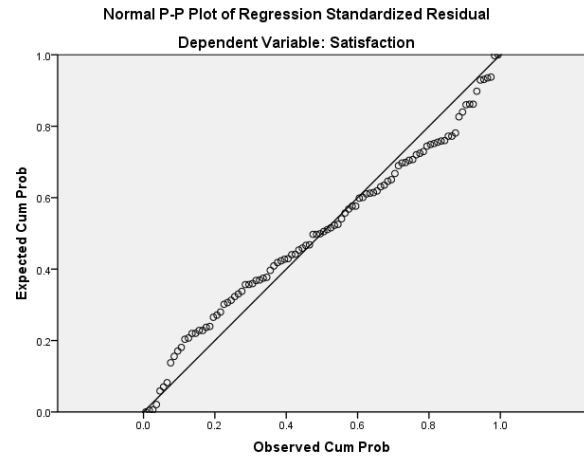


Figure 2. Normal P-Plot Chart
Source: SPSS Data Processing Results (2021)

In the normal p-plot graph shown above, the data spreads around the diagonal line and follows the direction of the diagonal line, showing that the regression model meets the condition of normality.

Another way of testing normality is to use a Kolmogorov Smirnov. The criteria for determining whether the data is normal or not can be seen in the probability value. The data is normal, if the value of Kolmogorov Smirnov is if (Asymp. Sig (2-tailed) > 0.05) then it is normally distributed. If (Asymp. Sig (2-tailed) < 0.05) then the distribution is not normal. The table data on the results of the Kolmogorov Smirnov test are as follows::

Table 2. Kolmogorov Smirnov Test Results

		Unstandardized Residual
N		100
Normal Parameters, b	mean	.0000000
	Std. Deviation	5.17142426
Most Extreme Differences	Absolute	.095
	Positive	.095
	negative	-.090
Kolmogorov-Smirnov Z		.955
asymp. Sig. (2-tailed)		.321

a. Test distribution is Normal.
b. Calculated from data.

Source: SPSS Data Processing Results (2021)

The Kolmogorov-Smirnov value is 0.955, and the significance is 0.321, based on the data processing results in the table above. H0 is accepted if the significance value is greater than 0.05, indicating that the residual data is regularly distributed.

Multicollinearity Test

The multicollinearity test is performed to examine if one independent variable and another have any symptoms of correlation. To test, use the tolerance value and the Variance Inflation Factor (VIF).

Table 3. Multicollinearity Test Results

Model		Unstandardized Coefficients		Collinearity Statistics	
		B	Std. Error	Tolerance	VIF
1	(Constant)	7,665	3,541		
	Service Quality	.226	.076	.602	1,662
	Price	.310	.108	.472	2.117
	Brand Image	.355	.089	.465	2.152

a. Dependent Variable: Satisfaction

Source: SPSS Data Processing Results (2021)

After analyzing the data with SPSS, it is clear that the tolerance value is larger than 0.10 and the VIF value is less than 10, indicating that the tolerance and VIF values of each variable are free of multicollinearity symptoms.

Heteroscedasticity Test

The heteroscedasticity test is used to examine if there is a difference in variance between one company's residuals and another's residuals. When the residual variation from one observation to the next remains the same, homoscedasticity is present, but heteroscedasticity is present when the variance differs. In a good model, there is no heteroscedasticity.

There is no heteroscedasticity if there is no visible pattern and the dots on the Y axis are spread above and below zero, as shown in the scatterplot graph. The regression model has no heteroscedasticity, allowing it to be used to determine Passenger Satisfaction of Low-Cost Carrier Airlines in Indonesia using the input of the independent variables, namely Service Quality, Price, and Brand Image.

Hypothesis test

Test This hypothesis aims to analyze whether the hypothesis is accepted or rejected, it can be seen that the t/F value is a probability value.

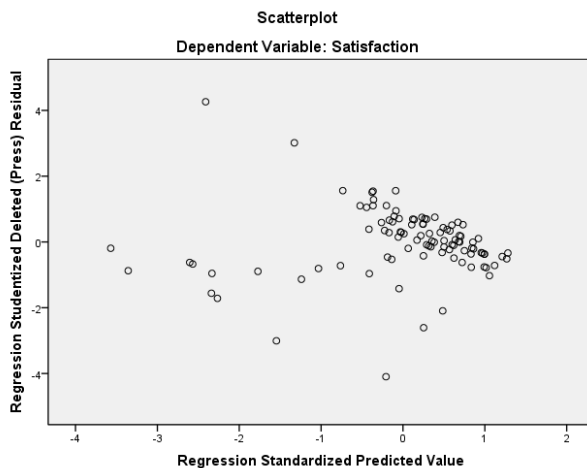


Figure 3. Heteroscedasticity Test Results

Source: SPSS Data Processing Results (2021)

Table 4. Partial Test Results (T Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7,665	3,541		2.165	.033
	Service Quality	.226	.076	.246	2,959	.004
	Price	.310	.108	.268	2.862	.005
	Brand Image	.355	.089	.378	3.998	.000

a. Dependent Variable: Satisfaction

Source: SPSS Data Processing Results (2021)

For criteria, the t test was carried out at the level of $\alpha = 5\%$ in one direction (0.05). The t value for $n = 100 - 2 = 98$ is 1.985.

Partial Test (t Test)

The T statistical test was used to see if the independent variable (X) had a significant association with the dependent variable or not (Y). The author utilizes SPSS for Windows version 20.00 data processing to simplify the t statistical test above, hence the t-test findings are as follows:

The Effect of Service Quality on Passenger Satisfaction

The t-value for the Service Quality variable is 2.959, and the t-table is 1.985, with a sig value of 0.004 less than 0.05, based on the partial test findings for the

effect of Service Quality on Passenger Satisfaction. As a result of this result, tcount obtained $2,959 > 1,985$ with a 5% error and a 95% confidence level, indicating that H_a is accepted and H_0 is rejected. Based on these findings, it appears that the Service Quality variable has a positive and significant impact on Low-Cost Carrier Airlines' Passenger Satisfaction in Indonesia.

The Effect of Price on Passenger Satisfaction

The t-value for the Price variable is 2.862, and the t-table is 1.985, with a sig value of 0.005 less than 0.05, based on the partial test findings for the effect of Price on Passenger Satisfaction. As a result of the t-value being $2.862 > 1.985$ with a 5% error and a 95% confidence level, it may be deduced that H_a is accepted and H_0 is rejected. Based on these findings, it appears that the variable Price has a positive and significant impact on Passenger Satisfaction with Indonesian Low-Cost Carrier Airlines.

The Effect of Brand Image on Passenger Satisfaction

The t-value for the Brand Image variable is 3.998, and the t-table is 1.985, according to the partial test findings for the effect of Brand Image on Passenger Satisfaction. As a result, the t-value obtained $3.998 > 1.985$ with a 5% error and a 95% confidence level, therefore it can be stated that H_0 is rejected and H_a is accepted. Based on these findings, it appears that the Brand Image variable has a positive and significant impact on Low-Cost Carrier Airlines' Passenger Satisfaction in Indonesia.

Significant Simultaneous Test (F Test)

The F statistic is used to determine whether or not the independent variable (X) has a significant association with the dependent variable (Y). The following results were produced as a consequence of data processing with the SPSS Version 20.00 program:

Table 5. Simultaneous Test Results (F Test)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3994.171	3	1331,390	48,275	.000a
	Residual	2647,619	96	27,579		
	Total	6641,790	99			

a. Predictors: (Constant), Brand Image, Service Quality, Price
 b. Dependent Variable: Satisfaction

Source: SPSS Data Processing Results (2021)

The F-count is 48,275, with a significance level of 0.000, according to the ANOVA test in the table above (less than 0.05). The F-table, on the other hand, is known to be 2,70. Based on these findings, H_0 is rejected and H_a is acceptable since $F\text{-value} > F\text{-table}$ ($48,275 > 2,70$). As a result, it can be stated that the variables of Service Quality, Price, and Brand Image all have a substantial impact on Low-Cost Carrier Airlines' Passenger Satisfaction in Indonesia.

Coefficient of Determination (R-square)

The coefficient of determination is used to determine the percentage of influence of the independent and dependent variables by squaring the

Table 6. Coefficient of Determination (R-square)

Model	R	R Square	Adjusted R	Std. Error of the
1	.775a	.601	.589	5.25161

a. Predictors: (Constant), Brand Image, Price, Service Quality
 b. Dependent Variable: Satisfaction

Source: SPSS Data Processing Results (2021)

The findings of the regression analysis as a whole have an R-value of 0.775, while the value of Adjusted Square (R^2) or the coefficient of determination is 0.589, as shown in the table above. This graph shows that Service Quality, Price, and Brand Image (independent variables) account for 58.90% of Passenger Satisfaction (dependent variable), with the remaining 41.10 percent explained by factors not addressed in this study.

Based on the results of data processing, the output results in the form of a t-value of 2,959. The

coefficients discovered. The coefficient of determination is reported as a percentage (percent) of the influence of Service Quality, Price, and Brand Image on Passenger Satisfaction and is calculated using a determination test. The coefficient of determination ranges from 0 to 1. The independent variables give practically all of the information needed to predict the fluctuation of the dependent variable if the coefficient of determination is high. When the coefficient of determination (R-Square) is modest, it suggests that the independent variables have a limited ability to explain the variance of the dependent variable. The statistical test yielded the following results:

results of the t-value shown are greater than 1.985, it can be concluded that the Service Quality variable has a positive and significant effect on Satisfaction. This means that the higher the quality of service supplied, the higher the Passenger Satisfaction will be. This outcome is in line with previous research [8]. Many airlines have discovered that enhancing long-term service quality is a long-term investment that can yield higher revenues, because creating, delivering, and maintaining higher service quality than competitors has an impact on customer satisfaction [9]. Customer satisfaction has now

become the gold standard of quality and performance for all businesses, as it has proven to be the key to their success [10] and [11].

Likewise, with the effect of price on satisfaction, the output results were obtained in the form of a t-value of 2.862. The results of the t-value shown are greater than 1.985, it can be concluded that the Price variable has a significant positive effect on Satisfaction. This means that the more appropriate the price according to the passenger's perception will be able to increase Passenger Satisfaction. Research results are consistent with studies from [12] and [13], where it is discovered that consumers believe that the more fair the price of the tickets they pay, the more satisfied they are with the linked airline. The level of consumer happiness is determined by the product's pricing [14]. The amount of money that consumers must forego in order to receive service is referred to as price [14]. Consumers are more likely to evaluate reasonable prices that are in line with their expectations for the services they want to buy [15].

Furthermore, from the results of data processing, the output results in the form of a t-value of 5.088. The results of the t-value shown are greater than 1.985, so it can be concluded that the Brand Image variable has a positive and significant effect on Satisfaction. This means that the better the airline's brand image will be able to increase Passenger Satisfaction. The results are consistent with the research of [16] and [8]. Consumers' personal experiences, as well as the experiences of others, contribute to a company's image [17]. Corporate image can provide buyers a sense of what they are willing to tolerate before purchasing a product, lowering the risk of purchase [18]. Consumers have higher hopes of obtaining satisfaction the lesser the risk they perceive before acquiring the goods [17]. A marketing approach to attract and keep customers is corporate image. Companies with a good image have a better chance of surviving in the competition because they can differentiate themselves from competitors and retain customers and trial users [19]. According to the study, the most powerful trigger determining LCC customer happiness is corporate image.

4. CONCLUSION

Based on data analysis and discussion, Service Quality, price, and Brand Image have a positive and significant effect on passenger satisfaction on airlines *Low-Cost Carrier* (LCC) in Indonesia either partially or simultaneously. The suggestion that the researcher put forward is that the Low-Cost Carrier (LCC) company must improve its services, especially on cleanliness, on-time flight schedules, so that passengers feel comfortable with cleanliness and passengers are satisfied because they are on-time according to the ontime flight schedule. As well as renovating existing facilities in Low-Cost Carrier (LCC) airlines so that they can compete with other airlines. This will certainly be able to increase Passenger Satisfaction. Due to increasingly fierce and competitive price competition, it

is hoped that LCC airline companies will continue to provide good service in various aspects, in order to obtain customer satisfaction for the airline. The implication of this research is to provide important value and information for the low-cost airline industry in Indonesia in managing their customers. This will make it easier for service providers to identify improvements as expected by the customer. Therefore, to improve the ability of low-cost airlines to serve their customers, they should concentrate more on the very important aspects of service quality. When customers pay very low prices for airfares, it does not mean that the quality of service should be lowered as well. This is inappropriate, as it may cause customers to switch to competitors' offerings. As a result, the company's ability to maintain and build Passenger Satisfaction may be vulnerable.

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