

The Effect of Airlines Delay Towards Customer Retention in Indonesian Low Cost Carrier

Muhamad Zidane Fathurahman^{1*}, Andrea Permata Putri², Basri Fahriza³,

Rr. Endang Wahyuni⁴, Asep Ali Thabab⁵

^{1,2,3,4,5}Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

*Corresponding author: zidanefaturahman@gmail.com

Abstract

Delay is one of the possible problems faced in the aviation world; the airline's company and the users of the company's airline services will feel the effect of this delay. This research is aimed to find out the effect of airline's delay towards customer retention in Indonesian low-cost carrier with a total of 120 respondents. There are two variables in this research, the first one is the airline's delay as the independent variable and the second one is customer retention as the dependent variable. This research used a simple linear regression analysis with a quantitative approach. The result showed that there is an effect of airline's delay towards the customer retention and can be proved using simple linear regression ($Y = 13.337 + 0.384X$). It means that each increasing point of variable X (airline's delay) will affect variable Y (customer retention) which is 0.384 in 13.337 constants. Based on the result of correlation analysis, $r = 0.476$ shows that there is a medium correlation level between two variables. The determinant coefficient is 22.6% proved that airline's delay has an affect of 22.6% on customer retention while the rest (77.4%) come from other factors. The result from hypothesis test is $t \text{ count} > t \text{ table}$ or $5.875 > 1.980$ it means there is a significant impact of variable X (airline's delay) towards variable Y (customer retention).

Keywords: Airline's Delay, Customer Retention, Low-Cost Carrier, Indonesia, Aviation

Introduction

Hundreds of Low-cost carrier airline passengers have directed their anger towards low-cost carrier airlines for many flight delays (The Jakarta Post, 2015). Flight delays cause a lot of disadvantages for passengers. It can make them late for scheduled events or miss connecting flights, causing anger and frustration. Flights are said to be delayed when arriving 15 minutes or more the schedule. The airline claims that several reasons that cause flight delays are due to flight disruptions, weather conditions, problems with aircraft maintenance, congestion in air traffic,

delays in the arrival of aircraft that will be used for flights from previous flights and security issues.

Delay is a temporary postpone in flight departures so that a setback is not set as specified (Gifari, 2017). According to Nam-Yi Kim & Jin-Woo Park, delay includes waiting for service to provide an unpleasant experience for customers. If customers wait for a long time due to service delays, they will assess the quality of services provided is low, causing customer dissatisfaction and negative behavioral intentions. Customer satisfaction for a service greatly affects customer retention to use the service. Customer retention is about increasing the sales by serving and satisfying customers fully so that they will continue to use the services (Zangmo, Liampreecha, & Chemsripong, 2015).

Delay can cause disappointment for the passengers if they wait for a long time. The disappointment provides a bad experience for passengers of the airlines. If this problem is not solved it can affect customer retention and can provide a bad image for the company due to poor testimony from customers who have experienced delays.

Nam-Yi Kim & Jin-Woo Park in "A study on the impact of airline service delays on emotional reactions and customer behavior" concluded, Customers who experience disappointment due to service delays try not to reuse the airline that causes delays in service. They also gave negative testimonials to others (Kim & Park, 2016).

Based on the statements above, we can conclude that delay is one of the most important problems for an airline company. The airline company must have a fast and precise response when the delay occurs because the response given by the airline company can determine the customer retention. If customers feel satisfied they will continue to use the same airline services.

This research is aimed to find out whether the delay of a flight service will affect customer retention to use the same flight services, especially in Indonesian LCC (Low Cost Carrier) flights.

Method

This research used a simple linear regression analysis with a quantitative approach to see the impact between two variables. Quantitative Research is a research method based on the philosophy of positivism, used to research in a particular sample, data collection using research instruments, quantitative data analysis, with the aim of testing a predetermined hypothesis (Sugiyono, 2012).

(Fitantri, Madhani, & Widiastuti, 2017) explains that quantitative methods are used when:

1. When the problem from the starting point for conducting research is clear. The problem discussed is the deviation between what should happen and what happens, between rules and execution, between theory and practice, between plans and implementation.
2. if the researcher wants to get broad information from a population. Quantitative research methods are suitable for broad information but not for obtaining in-depth information.

Regression analysis is a method that determine the relationship between the dependent variable (Y) and a series of independent variables (X). The simple linear regression model is the simplest regression model because it has only one independent variable (X). Regression analysis has several uses, one of them is to determine the effect on the dependent variable (Y) (Astria Hijriani, 2016).

In the methodology, the measurement of each variable in this research used an ordinal scale and the scale of the instrument used in this research was by Likert Scale with a score range of 1 to 5. Determination of the sample in this research referred to Malhotra theory that the number of samples or respondents is at least five times the number of items studied (Mei Andika, 2012). The number of items examined in this research is 12, so the minimum sample for this research was at least 60 respondents. Therefore, we took a random sample of 120 respondents who had been affected by delays when they used low-cost airlines service by distributing questionnaires based on respondents' experience. Data collection

techniques used in this research are by distributing questionnaires. The main data obtained from the respondents who answer statements through questionnaire.

Discussion and Result

This research aims to analyze the effect of airlines delays towards customer retention particularly for low-cost airline customers in Indonesia. This research data is as much as 120 respondents who had been affected by delays when using low-cost carrier services by distributing questionnaires

From the results of the questionnaire, data recapitulation taken from the characteristics of respondents based on age, occupation and travel destination using the Low Cost Carrier airline from the data below:

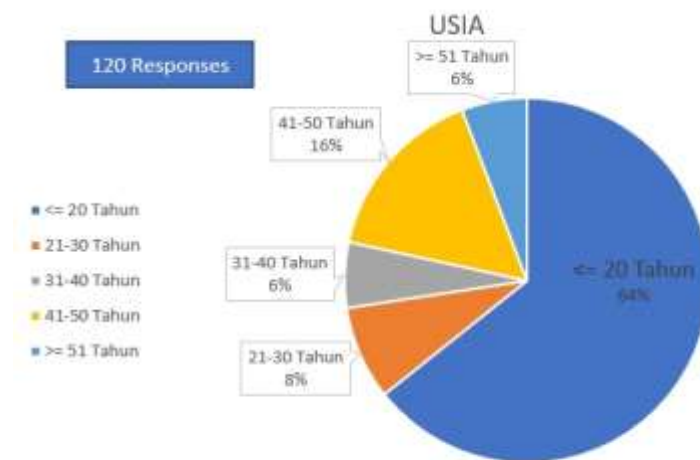


Figure 1. Characteristics of Respondents by Age

Based on **Figure 1**, most of the average low-cost airline users are people aged 20 years or below with a percentage of 64% of 77 respondents, then 16% of the 19 respondents aged 41-50 years, 8% of the 10 respondents who 21-30 years old, 6% of 7 respondents aged 31-40 years, and 6% of 7 respondents aged over 51 years.



Figure 2. Characteristics of Respondents by Occupation

Based on **Figure 2**, occupation of respondents are mostly college students with a percentage of 64% of 77 respondents, then 18% of 22 respondents are employees, 12% of 14 respondents are other, and 6% of 7 respondents are entrepreneurs.



Figure 3. Characteristics of Respondents by Travel Purpose

Based on the **Figure 3**, the majority of respondents travel purposes are travel with a percentage of 56% of 67 respondents, and then family visits of 26% of 31 respondents, 11% of 13 respondents traveled on duty and business, and 7% of 9 respondents traveled with purpose of other.

Based on the results of the research, validity of each items can be seen below:

Table 1. Validity Test Airline's Delay Variable

Items	R Count	R Table 5% (120)	Validity
1	0,574	0,179	VALID
2	0,604	0,179	VALID
3	0,449	0,179	VALID
4	0,706	0,179	VALID
5	0,782	0,179	VALID
6	0,633	0,179	VALID

Table 2. Validity Test Customer Retention Variable

Items	R Count	R Table 5% (120)	Validity
7	0,396	0,179	VALID
8	0,589	0,179	VALID
9	0,681	0,179	VALID
10	0,585	0,179	VALID
11	0,579	0,179	VALID
12	0,440	0,179	VALID

Based on Table 1 and Table 2 above, it proved that all the items from variable are valid because r count is bigger than r table. Because of all the items are valid, it can be used in this research.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,476	0,226	0,220	3,041

Table 4. Simple Correlation

		Airline's Delay	Customer retention
Airline's Delay	Pearson Correlation	1	.476**
	Sig. (2-tailed)		.000
	N	120	120
Customer retention	Pearson Correlation	.476**	1
	Sig. (2-tailed)	.000	
	N	120	120

Based on Table 3 and Table 4 above, it explains how much the correlation value is represented by (R), which is equal to 0.476. According to the correlation interpretation guidelines proposed by (Sugiyono, 2012) it means that the variables has a medium correlation level. The determination coefficient value represented by (R Square) is 0.226. It proved that airline's delay has an affect of 22.6% on customer retention while the rest (77.4%) come from other factors, which was not discussed by the researchers. Also It is proved that the value of significance on the simple correlation test is 0.00, below 0.005 that means between the airline's delay variable and customer retention variable have a correlation.

Table 5. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	319,092	1	319,092	34,511	,000
	Residual	1091,033	118	9,246		
	Total	1410,125	119			

Based on Table 5 above, explains that the F count value of this research is 34,511 with a significance value of 0,000. Because of the significance value is below 0.005 we can concluded that airline's delay variable have a significant impact towards customer retention variable and simple linear regression analysis can be used to predict customer retention variable.

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	13,337	1,230		10,846	,000
	Airline's delay	0,384	0,065	0,476	5,875	,000

Based on Table 6 above, we can conclude that the result of simple linear regression is $Y = 13.337 + 0.384X$. In this equation the constant is 13.337. Meanwhile, the regression coefficient X is 0.384 claim that every addition of one value or number on the value of Airline's delay (X), then the value of customer retention (Y) increases by 0.384. The regression coefficient is positive, so it can conclude the direction of variable influence (X) on (Y) is positive. Also based on Table 5 above, The result from coefficients test is t count > t table or 5.875 >

1.980 it means there is a significant impact of variable X (airline's delay) towards variable Y (customer retention).

Conclusion

Based on the result and data analysis can conclude that the effect of airline's delay towards customer retention in Indonesian low-cost carrier are:

- a. Based on the term of the simple linear regression test is all the items are valid and there is a linear relation between the independent variable, which is airline's delay, and the dependent variable, which is customer retention.
- b. The result of the simple correlation (R) is 0.476. It is proved that the relation between the airline's delay and the customer retention is at the level of medium (0.40 – 0.599). In addition, it is proved that the value of significance on the simple correlation test is 0.00, below 0.005 that means between the airline's delay variable and customer retention variable have a correlation.
- c. The result of the determination coefficient test (R Square) is 0.226. It means that airline's delay has an affect of 22.6% on customer retention while the rest (77.4%) come from other factors. The percentage shows that the effect of airline's delay towards customer retention is positive.
- d. The result of the simple linear regression is $Y = 13.337 + 0.384X$. It means that each increasing point of variable X (airline's delay) so variable Y (customer retention) will increase as much as 0.348 and the constant in this equation is 13.337.
- e. The result of the hypothesis test is to count $> t$ table or $5.875 > 1.980$, because of t count is bigger than t table it means there is a significant effect between the independent variable which is airline's delay and the dependent variable which is customer retention.

References

- Astria Hijriani. (2016). Implementasi Metode Regresi Linier Sederhana Pada Penyajian Hasil Prediksi Pemakaian Air Bersih Pdam Way Rilau Kota Bandar Lampung Dengan Sistem Informasi Geofrafis. *Jurnal Informatika Mulawarman*, Vol. 11.
- Fitantri, A., Madhani, A. I., & Widiastuti, S. (2017). Assessment Of Customer ' S Satisfaction On Baggage Handling Service At Soekarno-Hatta International Airport, 147(Grost), 561–570.
- Gifari, M. (2017). *Hubungan Delay Karena Penanganan Flight Operation Dan Teknik Dengan On Time Performance Pada Maskapai Penerbangan Nam Air Di Bandar Udara Soekarno-Hatta Tahun 2016*.
- Kim, N. Y., & Park, J. W. (2016). A Study On The Impact Of Airline Service Delays On Emotional Reactions And Customer Behavior. *Journal Of Air Transport Management*, 57, 19–25.
<https://doi.org/10.1016/j.jairtraman.2016.07.005>
- Mei Andika. (2012). *Analisis Faktor-Faktor Yang Mempengaruhi Kepuasan Pelanggan Pada Minimarket Alfamart Di Kota Malang*.
- Sugiyono, P. D. (2012). *Metode Penelitian Bisnis*.
- The Jakarta Post. (2015, February). Greater Jakarta: Passengers Angry Over Lion Air Delays. *The Jakarta Post*. Retrieved From <http://www.thejakartapost.com/news/2015/02/20/greater-jakarta-passengers-angry-over-lion-air-delays.html>
- Zangmo, M., Liampreecha, W., & Chemsripong, S. (2015). The Influencing Factors Of Customer Retention In Airline Industry : A Case Of Drukair Royal. *Asia Business And Economics Journal*, 84–92.