



## Impact of Price Fairness and On-Time Performance On Customer Loyalty Factor of Low-Cost Carrier Airlines (Case Study: Lion Air Airline)

Muhammad Diva<sup>1</sup>, Ronaldo Dominggus Saukoly<sup>2</sup>, Juliater Simarmata<sup>3</sup>, Deslida Saidah<sup>4</sup>

<sup>1</sup>Faculty of Management and Business, Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

<sup>2</sup>Faculty of Management and Business, Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia, [rsaukoly23@gmail.com](mailto:rsaukoly23@gmail.com)

<sup>3</sup>Faculty of Management and Business, Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

<sup>4</sup>Faculty of Management and Business, Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia

Corresponding author: [rsaukoly23@gmail.com](mailto:rsaukoly23@gmail.com)<sup>2</sup>

**Abstract:** The main goal of this study is to find out how customer loyalty at Lion Air is affected by key operational factors like price fairness, on-time performance, and flight frequency. The review populace comprised of travelers of Lion Air at Soekarno-Hatta Air terminal. The Slovin formula was used to determine the sample size, and 100 people from the aforementioned population were chosen to participate. As Using a five-point Likert scale, a questionnaire survey was conducted online via Google Forms to collect the data for this study. For data analysis on Smart-PLS, the resulting data were then processed with structural equation modeling (SEM). The study produced three hypotheses, two of which were accepted and one of which was rejected. The hypothesis that was rejected was that low-cost airline customer loyalty factors are influenced by price fairness.

**Keywords:** Price Fairnes, On Time Perfomance, Flight Frequency, Customer Loyalty, Low Cost Carrier

### INTRODUCTION

In The current era of the service industry in the field of air transportation is marked by intense competition. These competitions are sparked by an expanding population, which in turn drives up the use of air transportation. According to (*UU Nomor 1 Tahun 2009*, n.d.) air transportation is any activity involving the use of aircraft to transport passengers, cargo, or other goods on one or more trips from one airport to another airport or multiple airports. The high mobility of the population is a result of the high rate of population growth, which is also a factor in the rising demand for transportation services. In order to meet the high demand for services, businesses in this industry must continue to innovate in the operational services sector.

The operation of a one-of-a-kind flight model known as the Low-Cost Carrier (LCC) is one example of the ever-evolving range of air transportation services. According to (Bunga

& Kholid Mawardi, 2017) the term "low-cost carrier" (LCC) refers to a schedule airline that charges less than the other options. A low-cost carrier is an airline that reduces passenger services to lower airfares. LCCs attract cost-conscious customers who still want an efficient air travel experience by focusing on lowering operating costs and offering lower fares.

According to (Yadav & Dhingra, 2018), similar shifts began in Europe in the mid-1990s, beginning with passenger airlines in 1978. Lion Air from Indonesia was the first of the LCC airlines to appear in Asia around the beginning of 2000. Due to this phenomenon, many customers have switched to low-cost carrier (LCC) airlines in order to take advantage of the lower ticket prices. However, despite the rapid rise in popularity of LCC airlines, there are still a few unanswered questions regarding their impact on factors that influence customer loyalty. In this instance, customer loyalty is the tendency of customers to select the same airline over and over again and to remain loyal to it over time. The intention of customers to use the same service from the same company on a regular basis is known as customer loyalty.

One of the biggest private airlines in Indonesia is Lion Air, a low-cost carrier with its headquarters in Jakarta. Furthermore, Lion Air is the biggest airline in Indonesia and, after Air Asia, the second-biggest low-cost carrier in Southeast Asia. Lion Group is the largest airline group in the country, along with Wings Air and Batik Air. Lion Air has a large number of customers because of its low prices on tickets and ease of travel. An important indicator of an airline's operational effectiveness is the passenger occupancy rate, which measures the extent to which an aircraft reaches its capacity. However, Lion Air does not go unnoticed by the general public, who frequently voice complaints about the company, one of which is that it frequently delays flights. As a result, passengers' perceptions of the airline suffer.

As a result, this study aims to improve our comprehension of Lion Air's passenger load factor dynamics by combining these parameters. By conducting a comprehensive examination of the relationship between price, on-time performance, flight frequency, and customer loyalty, this study aims to provide important insights to the management of Lion Air in the formulation of effective measures to improve operational performance. Additionally, it aims to analyze the effect that price fairness, flight frequency, and on-time performance have on customer loyalty. In addition, this study's findings have the potential to significantly enrich the literature on air transport management and the aviation industry as a whole.

## **Literature review**

### **Price fairness**

Price is defined as the monetary cost or the value that consumers forego in return for the advantage of possessing or making use of a product or service (A. Kotler, 2018). While (Song et al., 2019) states that price fairness is defined as consumers' perception of their payments as rational and equitable. In addition (Martín-Ruiz & Rondán-Cataluña, 2008) consider that, there are three primary price references for consumers evaluating price fairness: 1) past prices; 2) prices applied by competitors; and 3) prices charged by the business.

### **On-time Performance**

On The widely accepted On-Time Performance (OTP) method is used to evaluate whether or not flights, as well as other forms of public transportation, arrive on time. According to (Hajko & Badánik, 2020) this method provides a standard method for comparing how well one service provider adheres to its published schedule in comparison to other service providers. One of the indicators of airline service rankings of the highest quality is on-time performance. In addition, competition with new airlines frequently results in a decline in the old airline's On Time Performance (Prince & Simon, 2012) as old airlines divert On Time Performance to other areas in order to compete with new airlines, resulting in

a decline in the old airline's performance. OTP has a significant impact on passenger satisfaction and perceptions of the quality and dependability of airline services (Simarmata et al., 2018).

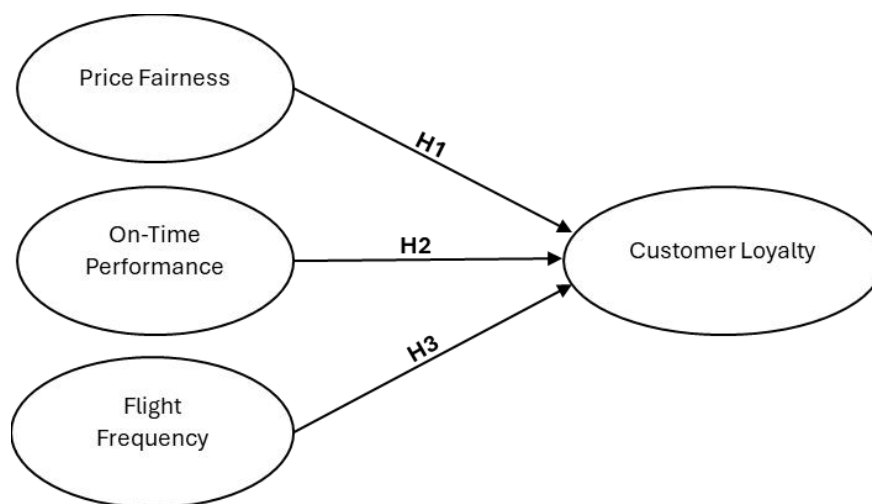
### Flight Frequency

The total number of monthly flights that an airline offers between an origin and destination is referred to as flight frequency. Based on (Ussinova et al., 2018) flight frequency can also be defined as the number of flights that an airline operates between two airports over a specific time period, typically measured in days or weeks.

### Customer Loyalty

(Philip. Kotler et al., 2018), defines customer loyalty as the unwavering will to keep buying or supporting a product or service that is valued by the consumer. Meanwhile, "consumer loyalty" is defined by (Deslida Saidah, 2024) as "a customer's commitment to a market based on their positive attitude, as evidenced by their consistent and repeated purchases." To put it simply, customer loyalty is when a consumer is willing to buy a product again and again. By fostering consumer loyalty, companies may sustain their marketing efforts.

### Conceptual Framework



**Figure 1. Conceptual Framework**  
Source: Image processed by the author

### METHOD

The research instrument was a quantitative method that used primary data from a survey or questionnaire that was filled out by a sample of the population. According to (Sugiyono, 2017) states that the most crucial step in research is the use of data collection methods because obtaining data is the primary goal. Therefore Consequently, this research surveyed Lion Air customers at Soekarno-Hatta International Airport using a questionnaire built in Google Docs. The study's methodology relied on the Structural Equation Model (SEM). As a means of verifying the theory, the PLS approach was used. The term "research population" refers to the entire population of study participants. In this research, non-probability sampling techniques are used to collect data, in this case, purposive sampling. (Sugiyono, 2018) was said, Non-probability sampling is a technique employed in the selection of a sample from a population, whereby the opportunity to participate is not afforded to all members of the population in a manner that is consistent with the principles of equal opportunity. While (Sugiyono, 2018) was also stated, The purposive sampling technique

is a method of selecting samples based on specific criteria, with the aim of ensuring that the selected samples align with the desired characteristics. The population in this study consisted of service users on Lion Air airlines at Soekarno-Hatta International Airport, with an average number observed on a daily basis.

**Table 1 Measurement of variables**

Variable	Operational definition	Items	Source
Price Fairness (X <sub>1</sub> )	Price is what consumers must either pay or forfeit in order to get the advantage of using or possessing a product or service.	<ol style="list-style-type: none"> <li>1. Price Compatibility with Product Quality.</li> <li>2. Price Compatibility with Benefits.</li> <li>3. Price Affordability.</li> <li>4. Price Competitiveness.</li> </ol>	(Kotler & Armstrong, 2018).
On-Time Performance (X <sub>2</sub> )	On Time Performance (OTP) is a measure of an airline's ability to provide flight services on time, or in other words, the airline's ability to complete flight activities on time.	<ol style="list-style-type: none"> <li>1. Departure Time.</li> <li>2. Arrival Time.</li> <li>3. Flight Schedule.</li> <li>4. Ground Time.</li> </ol>	(Wana Hayatun, Zenita Kurniasari, 2022).
Flight Frequency (X <sub>3</sub> )	The total number of monthly flights that an airline offers between points of departure and destination is referred to as flight frequency.	<ol style="list-style-type: none"> <li>1. Flight Route.</li> <li>2. Number of Flights.</li> <li>3. Passanger Demand.</li> <li>4. Load Factor.</li> </ol>	(Ussinova, Laplace, & Roucolle, 2018).
Customer Loyalty (Y)	Customer loyalty is the steadfast determination to keep buying or endorsing a favored product or service in the future.	<ol style="list-style-type: none"> <li>1. <i>Repeat</i>, loyalty to product purchases.</li> <li>2. <i>Retention</i>, Resistance to negative influences on the company.</li> <li>3. <i>Referalls</i>, Referring in total resistance to the company.</li> </ol>	(Kotler & Keller, 2016:138).

**RESULTS AND DISCUSSION**

**Conclusion Instrument Test Result**

**Table 2 Covergen Validity Test Results Outer Loading Value**

Variable	Indicator	Loading Factor	AVE
Price Fairnes (X <sub>1</sub> )	PF1	0.870	0.728
	PF2	0.884	
	PF3	0.872	
	PF4	0.783	
On-Time Performance (X <sub>2</sub> )	OTP1	0.916	0.714
	OTP2	0.894	
	OTP3	0.724	
	OTP4	0.833	

Flight Frequency (X <sub>3</sub> )	FF1	0.657	0.540
	FF2	0.809	
	FF3	0.720	
	FF4	0.745	
Customer Loyalty (Y)	CL1	0.906	0.858
	CL2	0.951	
	CL3	0.921	

(Source: Results of research data processing using SmartPLS 4)

The outer load can be used when the convergent validity value is between 0.4 and 0.7, as stated by (Hair et al., 2017). However, if the AVE value is higher than 0.5, the outside load cannot be employed. The convergent validity findings for the research model are shown in Table. According to the data processing outcomes, 100 respondents verified 15 statements: AVE X1 0.728, X2 0.714, X3 0.540, and Y 0.858. This indicates that the statements are true.

**Validity Discriminant Test**

**Table 3 Discriminant Validity Test Results**

	CL	FF	OTP	PF
CL				
FF	0.688			
OTP	0.578	0.775		
PF	0.564	0.678	0.598	

(Source: Results of research data processing using SmartPLS 4)

In According to the discriminant validity test, a variable is said to be valid if the value used to measure its own construct scores higher than any other value used to measure the construct variable. The HTMT value <0.9, which was deemed legitimate, was examined in order to determine the findings of the discriminant validity test in this investigation. The HTMT value of less than 0.9 was used in this study's discriminant validity test, and it was determined to be valid.

**Cross Loading – Validity Discriminant Test**

**Table 4 Discriminant Validity Test Results HTMT Value**

	CL	FF	OTP	PF
CL1	0.906	0.558	0.552	0.482
CL2	0.951	0.554	0.472	0.460
CL3	0.921	0.556	0.472	0.485
FF1	0.286	0.657	0.349	0.383
FF2	0.355	0.809	0.467	0.433
FF3	0.554	0.720	0.518	0.379
FF4	0.469	0.745	0.433	0.419
OTP1	0.518	0.531	0.916	0.411
OTP2	0.544	0.506	0.894	0.451
OTP3	0.271	0.546	0.724	0.403
OTP4	0.418	0.553	0.833	0.518
PF1	0.468	0.473	0.379	0.870
PF2	0.507	0.530	0.563	0.884
PF3	0.400	0.402	0.436	0.872
PF4	0.353	0.451	0.379	0.783

(Source: Results of research data processing using SmartPLS 4)

Each construct's cross loading value is evaluated to make sure that the correlation between it and the measurement items is higher than that of other constructs. All indicator loadings on constructs that are > cross loading are shown in Table. Thus, all indicator loading values on the constructs are above (>) cross loading, which indicates that this model has met the requirements of discriminant validity.

**Reliability Test**

**Table 5 Reliability Test Results**

	<b>Cronbach's alpha</b>	<b>Composite reliability (rho_c)</b>
<b>CL</b>	0.917	0.948
<b>FF</b>	0.726	0.824
<b>OTP</b>	0.868	0.908
<b>PF</b>	0.876	0.914

(Source: Results of research data processing using SmartPLS 4)

Reliability testing is done using Cronbach's alpha and composite reliability criteria. Variables in confirmatory research are deemed dependable if their value is higher than 0.7. The reliability test findings showed that Cronbach's alpha and composite reliability (rho\_c) were both more than 0.70, suggesting that the data were considered trustworthy. The findings of the validity and reliability tests demonstrate the validity and stability of each variable's indicators, which were used as measuring tools in this investigation.

**Model Structural Test**

*R-Square Test*

**Table 6 Model Structural Test Result**

	<b>R-square</b>	<b>R-square adjusted</b>	<b>Result</b>
<b>Customer Loyalty (Y)</b>	0.435	0.418	Weak

(Source: Results of research data processing using SmartPLS 4)

The R-Square value's coefficient shows how much the independent variable affects the dependent variable. (Hair et al., 2011) classified the R-Square value into three categories: strong, moderate, or weak. The category with an R-square value of 0.25 is considered weak, the group with an R-square value of 0.50 is considered intermediate, and the group with an R-square value of 0.75 is considered strong. 43.5% of the time, the independent variable can account for the distribution of the dependent variable, as shown by the dependent variable's R-Square value of 0.435. The dependent variable is categorized as low to moderate with an adjusted R-Square value of 41.8%. Table 6 displays the R-Square test findings.

**Goodness of Fit (GoF)**

**Table 7 Good of Fit Test Value Result**

	<b>Saturated model</b>	<b>Estimated model</b>
<b>SRMR</b>	0.085	0.085

(Source: Results of research data processing using SmartPLS 4)

The goodness of fit (GoF) test is used to assess the measurement model (outer model) and the structural model (inner model). A fit model is defined as having an SRMR score of 0.10.

**F-Square Test**

**Table 8 Effect Size Analysis Results**

	CL	FF	OTP	PF
CL				
FF	0.123			
OTP	0.045			
PF	0.050			

(Source: Results of research data processing using SmartPLS 4)

When influence Size is present, the F-Square test is performed to determine the magnitude of the influence between variables. A score less than 0.02 indicates little impact, a value of 0.02 indicates minimal predictive relevance, a value of 0.15 indicates moderate predictive relevance, and a value of 0.35 indicates strong or substantial predictive significance to endogenous factors, according to (Hair et al., 2017).

**Hypothesis Test Path Coefficient**

**Table 9 Hypothesis Test Results**

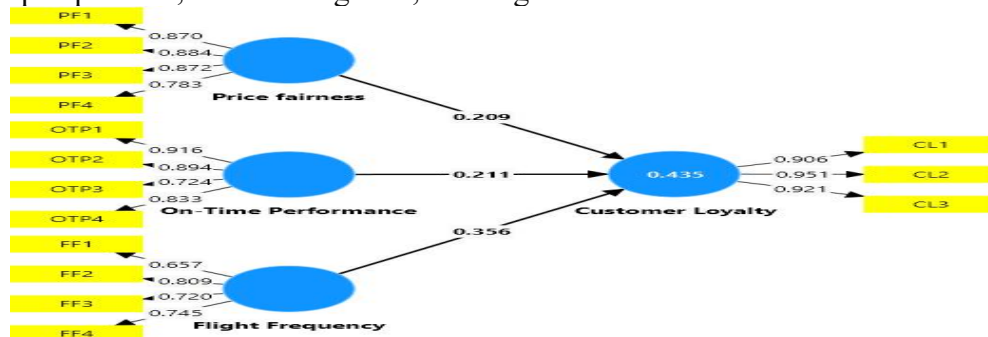
Hypothesis	Original sample (O)	T statistics	P values	Result
Flight Frequency → Customer Loyalty	0.356	3.328	0.001	Significant Effect
On-Time Performance → Customer Loyalty	0.211	2.003	0.045	Significant Effect
Price Fairness → Customer Loyalty	0.209	1.877	0.061	No Significant Effect

(Source: Results of research data processing using SmartPLS 4)

The purpose of this path coefficient test is to determine the degree of significance of each hypothesis. The Smart-PLS 4.0 software is bootstrapped to conduct hypothesis testing and determine the conclusion's P-value.

**Research Design**

The research model using the T-statistic is shown in Table 9. Based on the test results, there is one significant association (T-statistics > 1.96) and one insignificant relationship (T-statistics 1.96). Additionally, the first sample's result indicates whether the variables have a positive or negative correlation. If the initial sample value was positive, the variable-relationship is positive; if it was negative, it is negative.



**Figure 2. PLS-Model, Outer Model**  
Source: Image processed by the author

**CONCLUSION**

On the basis of the study's findings, it is possible to draw the conclusion that the airline's customer loyalty level is directly and significantly influenced by on-time

performance and flight frequency, while the airline's price fairness factor is demonstrated to have no effect on customer loyalty. This can be drawn as a result of the fact that customers who utilize flight services typically are unaffected by low or cheap ticket prices. So that Lion Air flights are utilized by customers who utilize flight services more frequently due to its high level of flight frequency and excellent On-Time Performance. The effect of low prize tickets is only for short-term and does not build customer loyalty. Customers prefer Lion Air because of its punctuality and high flight frequency. In addition, Lion Air often has no competition on some domestic routes, making price have less influence on purchasing decisions. Instead, a high flight schedule and availability is one of the main factors in building customer loyalty to Lion Air.

### **Implications**

The strategic management of the business is significantly impacted by the theoretical and practical findings of this study.

First, Table 9 demonstrates that the price fairness factor has no effect on customer loyalty. This suggests that, at this point in time, customer loyalty to an airline is no longer influenced by price. Lion Air, a low-cost airline, may stop using the marketing tactic of offering customers low prices. Other aspects of service quality, such as flight frequency and punctuality, can instead be improved by the company.

On-time performance also has a small impact on factors that affect customer loyalty, as shown in Figure 2. Based on the responses from respondents, this suggests that Lion Air is thought to have fairly good timekeeping abilities. By making its flights more timely, Lion Air can also continue to improve the quality of its services.

Additionally, the aspect of flight frequency has the highest effect value of all the aspects, as shown in Table 8. This is consistent with one of Lion Air's advantages over other airlines, which is its large fleet, which enables Lion Air to fly numerous flights and satisfy market requirements. Customers of Lion Air are also more likely to remain loyal to the company as a result.

This way, the company can take into account some of the suggestions made by the authors so that it can evaluate how well it has done so far and take the right steps to keep its current customers and get new ones, which will lead to long-term growth and sustainability in the aviation industry.

### **Research limitations**

**Scope:** In order to limit the issues that are discussed in this study, the authors have decided to concentrate on examining the effect of variable X, which consists of variable X<sub>1</sub>, which is Price Fairness; variable X<sub>2</sub>, which is Performance on Time; variable X<sub>3</sub>, which is Flight Frequency; and variable Y, which is Customer Loyalty, on Lion Air Indonesia's Low Cost Carrier.

**Time limit:** This research is limited to data collected during the last two-month period, from June 2024 to August 2024.

The authors only use three to four indicators for each variable because there are a large number of indicators that can be used with each variable. Price justice is determined by a number of factors, including affordability, price compatibility with product quality, price compatibility with benefits, price according to ability, and price competitiveness. Departure time is one of the On-Time Performance metrics. When you should show up. Flight Frequency (Flight Routes, Number of Flights, Passenger Demand, Load Factor), Customer Loyalty (Repeat, Loyalty to Product Purchases, Retention, Resistance to Negative Influences on the Company Referalls, Referring in Total Company Resistance) and Schedule of Flights Ground Time all make use of indicators.

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