

**THE EFFECT OF E-TICKETING AND SERVICE
QUALITY ON PASSENGER SATISFACTION
INTERCITY INTERPROVINCE BUS JAKARTA-SOLO
ROUTE (STUDY CASE PT ROSALIA INDAH
TRANSPORT 2022)**

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Abstract: This study was conducted due to the technological advances that are increasingly developed and sophisticatedly increased every year. In this 4.0 era, the use of applications for online ticket bookings using smartphone applications that have features for booking public transportation tickets is quite simple. This study discusses purchasing tickets online or commonly known as E-ticketing on the PT Rosalia Indah Transport bus on Jakarta - Solo route. The purpose of this research is to analyze the effect of E-ticketing and service quality on passenger satisfaction. This research used a quantitative research method. A total of 152 passengers were used as research samples for data collection techniques. Validity and reliability testing were used in this study. The results of this study show that E-ticketing and service quality affect passenger satisfaction.

Keywords: *E-Ticketing, s, Passenger Satisfaction*

Introduction

The development of transportation today is strongly influenced by technology, such as information technology and telecommunications, as well as the use of technology that affects the implementation of transportation, such as purchasing tickets which previously still used manual methods, namely by coming directly to counter places, such as in terminals or at partner agents of bus companies. In the era of 4.0 technology is developing rapidly, the ease of transactions such as booking bus tickets through applications on mobile phones is very efficient, and can choose the starting point of departure, the starting point of destination, ticket fares, fleet classes to flexible payment methods. By utilizing existing technology, the previously manual ticketing

system has now implemented an e-ticketing system. This system utilizes the internet to help when purchasing tickets so that people can book and buy tickets from home or anywhere they are.

According to (Prawita Sari et al., 2016)(Acang et al., 2020) companies engaged in services need to maintain the role of service quality and passenger satisfaction, because it is very necessary for a company in the field of services. Services is an activity that utilizes offers from one party to another and is intangible in essence and will not give rise to ownership of something. The increasing intensity of competition and the number of competitors require companies to always pay attention to customer needs and desires and try to meet customer expectations by providing services to customers that are more satisfactory than those of competitors. Thus, only a quality company can compete and dominate the market.

In the service of PT Rosalia Indah, especially on the intercity interprovince bus route Jakarta - Solo, there are still problems that result in passenger complaints and dissatisfaction, such as inaccuracy in the departure time and arrival time at the destination and inconvenience when purchasing tickets at the terminal due to the limitations of prospective passengers knowing the procedures for purchasing through the application. Prospective passengers believe that messages through the company's partner agents will gain more trust when they come directly to transact with partner agents. Lack of customer knowledge with the existence of an online ticket booking system, interruptions during the trip that reduce customer comfort due to the presence of buskers and hawkers who enter the bus when the bus is at the departure terminal and the destination terminal which often forces customers to spend their money so that the customer's travel becomes disrupted.

E-ticketing

E-Ticketing is an example of electronic commerce (E-commerce). Electronic commerce otherwise usually call as E-commerce (marketing of goods and services, purchase, sale, and dissemination) using available

electronic systems, the internet or television, www, mobile phones, or through other computer networks (Auliya, 2018). E-Commerce users can speed up passengers to get the bus tickets they need with the best route and class according to the price.

According to (Purba, 2021) Using electronic ticketing or E-ticketing is one of the ways of documenting the sales process of passengers' travel activities by not having to provide physical documents or paper tickets. The way to document travel without having to provide physical documents can be done with the E-ticketing system in the process of a travel activity.

So, E-ticketing is an online ticket purchase system that is included in the E-commerce section, ticket purchases with the E-ticketing system can ease passengers to easily access tickets because passengers do not need to print tickets physically anymore and can be accessed directly use a smartphone that has the installed application

Service Quality

According to (MI Wahyuni, 2018) A system which had two main components of service operations are usually not tampered or their existence is unknown to the customer (back office or backstage) and service delivery which is normally can be seen or known to the customer (often called front office or frontstage) which is a view in terms of service.

According to (Rinjani, 2019), an e-service is an act, business or performance that is sent in mediation by information technology. These electronic services include elements of e-tailings services, customer support, and services. E-service is a combination of service and electronics.

In terms of service quality, service of all efforts meet needs and desires as well as provisions in terms of delivery to keep up with passenger expectations while maintaining the quality provided so that passengers are comfortable using the services prepared by the company.

Passenger Satisfaction

In the research conducted by (Wahyuningsih, 2018), Passenger satisfaction is a function of view of the performance of the product or service and the expectations of passengers. If the performance is below expectations, then the passengers are not content. If the performance meets expectations, then the passengers are satisfied. If the performance exceeds expectations, passengers are delighted.

According to (Tjiptono, 2019), Passenger satisfaction is a central concept in modern marketing theory and practice. Passenger satisfaction is considered a key factor in determining the success of marketing company 'vehicle' to realize the company's goals (sales, profit, market share, business growth, survival, public service, and so on). Passenger satisfaction is a consumer reaction to an experience resulting from a purchased product or service, a retail store, or a market.

Passenger satisfaction is a feeling of comfort or discomfort is felt by the passengers who are given services by the service company they use, If the service provided does not meet passengers' expectations, then passengers will feel disappointed and dissatisfied with the service provided, but if the service provided is good, then passengers will feel satisfied and happy. Passenger satisfaction is also a central concept in modern marketing that must be able to meet passenger needs so that passengers feel satisfied with the service provided.

Hypothesis

H1: Effect of E-ticketing on Passenger Satisfaction

The effect of E-ticketing on passenger fulfillment has a positive impact according to research (Jaya & Basuki, 2021). After all, the existence of e-commerce services can make it easier for passengers to book tickets, the quality of online services that have a good influence on the quality of the

website provided to passengers because it makes it easier and faster to book tickets.

In research on the Effect of E-Ticketing Techniques on Satisfaction and Its Impact on Repurchase Intentions and Wom, the E-ticketing technique (customer technical support, infrastructure, data security, user-friendliness) carried out by (Loven & Elyawati, 2019) obtained positive results on consumer satisfaction and it was significant as it can predict 46% of changes in consumer fulfillment. Data security has a positive and significant impact on consumer fulfillment. Data security has a positive and significant impact on passenger satisfaction. User-friendliness has a positive and significant impact on passenger satisfaction.

Consumer satisfaction positively and significantly predicts a 52.8% change in repurchase intent. So, it can be said that the higher level of customer satisfaction is because Traveloka site can provide services, support good infrastructure, transaction security, and ease of use.

H2: Effect of Service Quality on Passenger Satisfaction

In research conducted by (Cholid, 2018) there is a significant impact between service quality on the level of passenger satisfaction, then based on the hypothesis formulated in the study, there is a positive impact between service quality and passenger satisfaction.

In research on domestic tourist satisfaction on the Indonesian Commuter Train conducted by (Elika et al., 2021). The Service Quality Variable affects the satisfaction of domestic tourists on the Indonesian Commuter Train. Results of the t test, responsiveness, empathy, and reliability have no influence on the satisfaction of domestic tourists.

H3: Effect of E-Ticketing and Service Quality on Passenger Satisfaction

The impact of service quality has an important role in increasing product sales online. According to research (Anggraini Puji Lestari, 2018) the combination of variables is no less important in online business ventures.

For this reason, entrepreneurs should be able to increase the quality of their services to encourage significant sales.

According to research conducted by (Jaya & Basuki, 2021) the element of service quality is an element that has a significant and positive impact on user satisfaction, it means that the quality of flight ticket sales services by Traveloka meets the expectations of users (consumers) according to the processed data above. As for the e-commerce that has not been able to meet the expectations of its users in buying flight tickets through Traveloka, likely, e-commerce is not too important in the user satisfaction process.

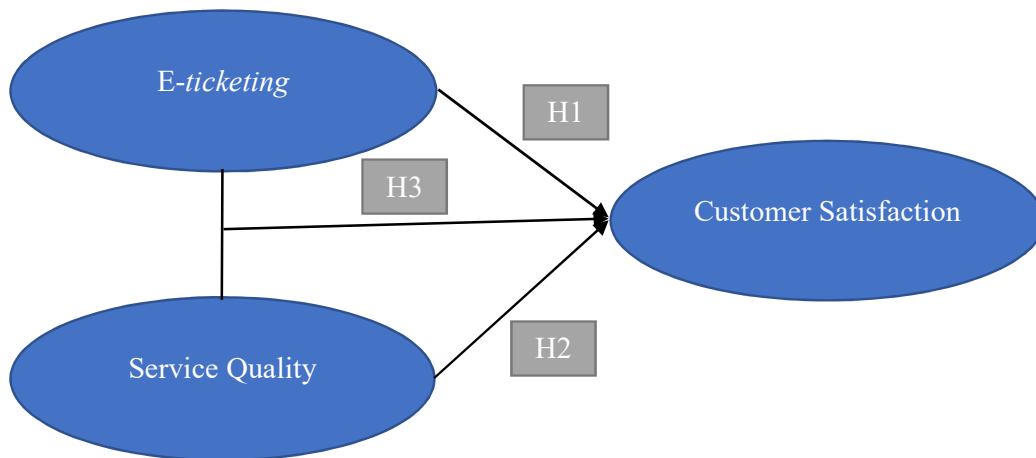


Image 1. Framework

Research Methods

This research uses 3 (three) variables, Dependent Variable consisting of E-Ticketing, Service Quality, and Independent Variables of Customer Satisfaction. The research design in this study is using descriptive research and multiple linear regression with the quantitative approach. The purpose of descriptive research is to explain/solve problems related to the facts and characteristics of a particular group or region systematically, factually, and accurately. Descriptive research is research that aims to describe a situation or event. (Rizki et al., 2021)

In this study, to obtain test results on the effect of E-ticketing and service quality on passenger satisfaction of PT Rosalia Indah Transport Jakarta-Solo Route passengers, hypothesis testing was carried out to obtain test results.

The analysis units in this study are individuals, customers, or passengers who have used the intercity interprovince bus transportation service of PT Rosalia Indah from August to October 2022. Meanwhile, based on the dimensions or time horizons, this study is cross-sectional, because the data is collected at a certain time. This approach is a type of quantitative research by taking a statistical approach. The questionnaire distribution method was carried out in this study on passengers of PT Rosalia Indah Transport. Techniques carried out for sampling and with quantitative analysis are then processed using Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI).

26 indicators are used for this study. To determine the study sample, this study used the Slovin formula with a population of 54,000 and the minimum sample obtained was $99.8 = 100$ respondents. And in this study, there were 152 respondents.

Discussion And Result

Analyzing the effect of E-ticketing and service quality on passenger satisfaction at PT Rosalia Indah Transport is the main purpose why this research was held. 152 passengers are the object of this study who can provide their experience when using the PT Rosalia Indah Transport bus.

A. t-Test

Table 1 t-Test Analysis Result

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,369	0,800		0,461	0,645
	E-Ticketing (X1)	0,144	0,056	0,179	2,583	0,011
	Service Quality (X2)	0,119	0,013	0,654	9,440	0,000

Source: SPSS Version 24

from the results shown in the independent test, there are 2 (two) significant variables because the value of service quality (X2) GIS is $0.000 < 0.05$ and E ticketing (X1) SIG $0.011 > 0.05$ so it means that the two variables have a significant influence on passenger satisfaction (Y)." this proves that if e ticketing is increased it will also increase passenger satisfaction. PT Rosalia Indah Transport.

B. F-Test (Simultaneous)

Table 2 F-Test Analysis Result

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	436,892	2	218,446	121,377	.000 ^b
	Residual	268,161	149	1,800		
	Total	705,053	151			

a. Dependent Variable: y

b. Predictors: (Constant), x2, x1

Source: SPSS Version 24

From the table above shows the result of ANOVA calculations that prove the hypothesis is accepted, it is indicated by a significant value ($0.000 < 0.05$). That means the effect of E-ticketing and service quality is proven to

jointly affect passenger satisfaction. It can be known that the result above the F count is 121,377 while in F the table is 3.09. To be able to know table-F on hypothesis testing using a regression model, that's important for calculating the degree of freedom (df)

Can solved by using a formula:

$$df1 = k - 1 \text{ and } df2 = n - k$$

Information:

n = number of observations in the data period

k = number of variables (free and dependent)

Then it can be known that the value of df1, namely $3 - 1 = 2$, and df2 which is $100 - 3 = 97$, this test is carried out with a significance value of 5% or 0.05. With the excel formula, FINVRT (0.05, C1, C2) can be known how to determine the F-table and obtain the value 3.09.

From the results of the output carried out, it can be seen that the F-count $>$ the F-table with a value of $121.327 > 3.05$ and with a significant level below 0.05, is 0.000. These results are carried out by joint and simultaneous testing that obtains a significant effect on passenger satisfaction.

C. Coefficient of Determination Test

Confidence level of 95% or $\alpha = 0.05$

The coefficient of determination (or correlation coefficient) measures the degree to which the independent variable (x) correlates with the dependent variable (y). The table below created by using the SPSS application shows the coefficient of determination in this summary model and for results of the coefficient in the R Square column.

Table 3 Coefficient of Determination Test Result

Model Summary				
Model	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	.787 ^a	0,620	0,615	1,342

a. Predictors: (Constant), X2 Kualitas Pelayanan, X1 E ticketing

Source: SPSS Version 24

It is known that R square is 0.615 or 61.5% as shown in the table above, the effect of E-ticketing and service quality had a strong stimulant the influence on passenger satisfaction, which is 61.5%, and the rest is affected by other factors that were not studied by the researchers by 38.5%.

Conclusion

The results shown by the discussion that has been explained in the previous chapters of the study the Effect of E-ticketing and Service Quality on Passenger Satisfaction concluded the results that are as follows:

1. Partially there is a significant positive impact among E-ticketing Variable (X1) on Passenger Satisfaction Variable (Y), where T counted $2.583 > 1.661$ and significantly $0.000 < 0.05$ with the result it was found that the significance value was smaller than $\alpha = 0.05$. Since the significance value is less than 0.05 so H_0 is rejected and H_a is accepted. It could be inferred that the E-ticketing variable has a significant and positive influence on passenger satisfaction, the regression coefficient has a positive value of 0.144.
2. Partially there was a significant positive increase among the Quality-of-Service variable (X2) and the passenger Satisfaction variable (Y) where the T test was $9.440 > 1.661$ and the significance of $0.000 < 0.05$ The results shown have a significance value lower than $\alpha = 0,05$. with results that show significant values lower than 0.05, therefore, H_0 gets rejection and H_a is acceptable, so the conclusion quality of

service variable has a significant and positive effect on passenger satisfaction. the regression coefficient is positively valued at 0.119.

3. Based on the data processing, it shows that E-ticketing and service quality together have a positive influence on passenger satisfaction. this is shown from the test value F of 121.377, the significance is less than $= 0.05$.

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