THE INFLUENCE OF SERVICE QUALITY AND TIMELINESS ON PASSENGER LOYALTY, YOGYAKARTA INTERNATIONAL AIRPORT TRAIN

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ABSTRACT

Yogyakarta International Airport (YIA) is a new airport located in Kulon Progo Regency, Yogyakarta. One of the transportation modes that can be used to reach the airport is the YIA Airport Train. With the increasing number and routes of airlines operating at YIA, the number of airport train passengers has also increased. However, this increase in passenger numbers has not been accompanied by an improvement in the quality of service provided and train delays are still occurring. This study aims to determine the influence of service quality on passenger loyalty, on-time performance on passenger loyalty, and the combined influence of service quality and on-time performance on passenger loyalty. The methods used in this study are Structural Equation Modeling (SEM) and multiple linear regression analysis. Data processing was done using SmartPLS 3.2.9 software for the SEM method and IBM SPSS 20 for the multiple linear regression analysis method. The results of this study indicate that both methods used support each other's findings. The results show that service quality has an impact on passenger loyalty. On-time performance also has an impact on passenger loyalty. Additionally, service quality and on-time performance have a positive and significant influence on passenger loyalty. In conclusion, it can be inferred that the better the service quality and on-time performance provided by the service provider, the higher the passenger loyalty will be.

Keywords: multiple regression analysis; on-time performance; passenger loyalty; SEM; service quality

INTRODUCTION

Yogyakarta International Airport (YIA) is a new airport which has a distance of about 45 km from the center of Yogyakarta city (Basuki & Chuadinata, 2019). The mode of transportation that can be used to get to this airport is a motorized vehicle with a travel time of 1.5 hours, or by the YIA Airport Train (KA) mode with a travel time of 40 minutes with the same starting point from Yogyakarta City (Arieza, 2023). The YIA Airport Train will start operating in April 2022 under the auspices of the PT Railink Yogyakarta company. With the operation of the Airport Train, of course, it will make it easier for the public and tourists to get to YIA Airport (Giovanny, Ircham, & Puji, 2021). The presence of this airport train was welcomed enthusiastically by the public as evidenced by the increasing number of passengers that occurred along with the addition of routes and airlines at YIA Airport which can be seen in the following graph:

Figure 1. Number and Occupancy of YIA Airport Train Passengers 2023

From the picture above, it can be seen that the number of YIA Airport Train passengers has increased from June 2022 to early January 2023. As for passenger occupancy, it has experienced a fluctuating increase and decrease, namely the increase occurred in April-May 2022 and September-December 2022. Meanwhile, the decrease in passenger occupancy occurred in July-September 2022 and December 2022-January 2023. From this increase and decrease in passenger occupancy, important for PT. Railink as an airport train management company to build and maintain the loyalty of its passengers. Companies need to maintain loyalty in passengers because passengers with loyalty will help companies survive in the midst of business competition (Hastuti & Muhammad, 2014). One of them is the construction of the Yogya-NYIA (New Yogyakarta International Airport) toll road which is now starting to be prepared for a public consultation schedule, related to the land acquisition of residents affected by the toll road (Sunartono, 2023).

Service quality plays an important role in efforts to build and increase passenger loyalty (Dewi, 2013). So the quality of service must be maintained and improved by service providers. However, in real situations on the ground the increase in the number of passengers above has not been accompanied by an increase in service quality (Sulistyo & Ahmad, 2022). Some of the majority of complaints submitted from YIA Airport Train passengers through the call center include (PT Railink, 2023): difficulties in paying for YIA Airport Train tickets; luggage space in trains that does not meet the needs of passengers; discomfort standing in the waiting room and on the way; officers are less responsive in serving customer needs. Apart from the quality of service, complaints from passengers also occurred on the YIA Airport Train which experienced delays. The following is a graphic image of YIA Airport train delays:

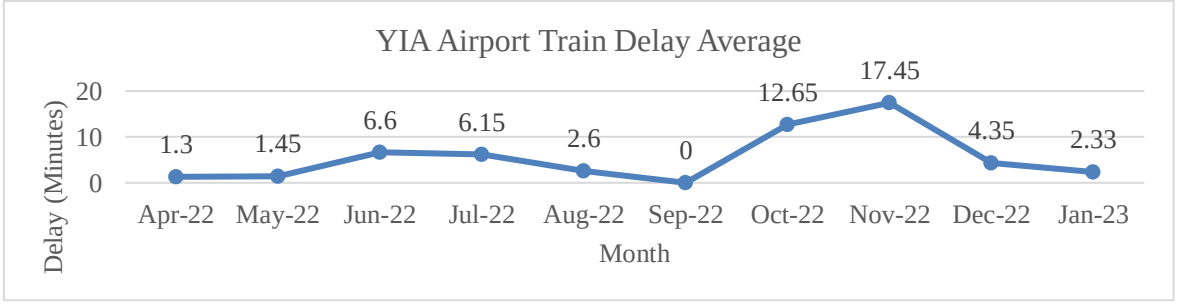

Figure 2. YIA Airport Train Delays

From the table above it can be concluded that the YIA Airport Train experienced the highest average delay in November which reached 17.45 minutes. This train delay certainly makes passengers wait longer than the scheduled time and the possibility for passengers to miss the flight schedule is also quite large. Timeliness itself is a form of support service so that passengers do not switch to other modes of transportation (Siahaan, 2013). And also research from Hawkins and Looney in (Tjiptono, 2002) which states that the time dimension influences consumer perceptions of the quality of both goods and services. However, other research shows that punctuality has no effect on service user loyalty (Tampubolon, Jannah, Gultom, & Sibarani, 2020). From the problems described above, research is needed to examine the effect of the service quality variable and timeliness variable on the YIA Airport Train passenger loyalty variable.

The aims of this research are as follows:
1. Analyze the significance of service quality variables on passenger loyalty variables.
2. Analyze the significance of the punctuality variable to the passenger loyalty variable.
3. Analyze the significance of service quality and timeliness variables on passenger loyalty variables.

Literature review

Service quality

Service quality is the ability of a company to meet and exceed passenger expectations (Dewi, 2013). Service quality is an important thing that must be considered and its performance maximized in order to be able to form loyalty and services from the company remain the customer's choice in the future (Riyadin, 2019). According to Tjiptono (2000) in (Sunyoto, 2013) the following are indicators of service quality dimensions:

1. Tangible, is the ability of a company to show its existence to external parties. The appearance and capabilities of the company's physical facilities and infrastructure and the condition of the surrounding environment are clear evidence of the services provided by the service provider. This includes physical facilities (buildings, warehouses, etc.), equipment, and the appearance of employees
2. Reliability, has a definition of the company's ability to provide services as promised accurately and reliably. This means the company's ability to provide promised services promptly, accurately and satisfactorily.
3. Responsiveness, namely a willingness to help and provide fast and appropriate services to customers by conveying clear information.
4. Assurance is knowledge, courtesy, and the ability of company employees to foster customer trust in the company. This includes several components including communication, credibility, competence, and courtesy.
5. Empathy, is giving sincere and individual or personal attention given to customers from employees by trying to understand consumer desires.

Punctuality

Time is a vital object in the world of transportation, especially trains. Timeliness or on-time performance is the departure and arrival of trains according to the schedule specified in the Train Travel Chart (GAPEKA) (Hastuti, Hidayat, & Firdaus, 2020). GAPEKA is a guideline for managing the implementation of train travel which is depicted in the form of a line indicating the station, time, speed, time and position of the train journey starting from departure, crossing, overtaking and stopping which is depicted graphically for controlling train travel. Train trips must be according to the schedule specified in GAPEKA (PP 72, 2009). Timeliness is very

important to note to increase customer confidence so that they will always be loyal or loyal in using the company's transportation services (Apriyadi, 2017). This timeliness indicator will later be adjusted to GAPEKA which applies in the year the train operates.

Passenger Loyalty

Passenger loyalty is the main key for companies to gain an advantage over competition, both in service companies and goods companies (Sarwono, 2011). Many previous studies have looked at aspects of customer loyalty as a form of organizational success (Dewi, 2013). Indicators of customer loyalty described by (Fardani, 2015) include the following:

1. Repeat Purchase, namely loyalty to product purchases.
2. Retention, namely resistance to negative influences on the company.
3. Referrals, namely referring the total existence of the company.

The hypothesis in this study can be formulated as follows:

1. There is no significant effect of service quality (X1) on loyalty of YIA Airport Train passengers (Y) (H0). There is a significant effect of service quality (X1) on the loyalty of YIA Airport Train passengers (Y) (H1).
2. There is no significant effect of timeliness (X2) on the loyalty of YIA Airport Train passengers (Y) (H0). There is a significant effect of timeliness (X2) on the loyalty of YIA Airport Train passengers (Y) (H2).
3. There is no significant effect of service quality (X1) and timeliness (X2) on the loyalty of YIA Airport Train passengers (Y) (H0). There is a significant influence of service quality (X1) and timeliness (X2) on the loyalty of YIA Airport Train passengers (Y) (H3).

METHOD

This research is a type of research with a quantitative approach by distributing questionnaires. Questionnaires were distributed directly to respondents containing statement items from each variable and measured with a Likert scale. The Likert scale is a scale used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena (Sugiyono, 2013). Before distributing the questionnaires to the actual respondents, it is necessary to test the validity and reliability of the instrument. The questionnaire instrument needs to be tested for validity and reliability to ensure that the resulting research is valid and reliable research.

Instrument Validity and Reliability Test

Validity test is an index that shows the instrument used can measure what will be measured. The instrument is said to be valid if the r count > r table. Decision making based on the value of r count > r table of 0.3610 for df = 30-2 = 28; $\alpha = 0.05$. The following is the result of data processing from the answers to the questionnaire, the validity test results are obtained as follows:

Table 1
Instrument Validity Test Results

Variable	Question Items	r count	r table	Information
Service Quality (X1)	*Tangible*			
	X1.1	0,809	0,3610	Valid
	X1.2	0,823	0,3610	Valid
	X1.3	0,786	0,3610	Valid
	X1.4	0,814	0,3610	Valid
	X1.5	0,759	0,3610	Valid
	Reliability			

Variable	Question Items	r count	r table	Information
	X1.6	0,813	0,3610	Valid
	X1.7	0,895	0,3610	Valid
	X1.8	0,703	0,3610	Valid
	Responsiveness			
	X1.9	0,848	0,3610	Valid
	X1.10	0,888	0,3610	Valid
	Assurance			
	X1.11	0,744	0,3610	Valid
	X1.12	0,723	0,3610	Valid
	Empathy			
	X1.13	0,869	0,3610	Valid
	X1.14	0,529	0,3610	Valid
Punctuality (X2)	X2.1	0,937	0,3610	Valid
	X2.2	0,877	0,3610	Valid
	X2.3	0,844	0,3610	Valid
Passenger Loyalty (Y)	Y1.1	0,841	0,3610	Valid
	Y1.2	0,903	0,3610	Valid
Variable Service Quality (X1)	Y1.3	0,812	0,3610	Valid

Table 1 shows the results of the comparison of r count with r table for each statement. These results show that the correlation coefficient for each statement item produces a value of r count > r table (0.3610), so it can be concluded that overall the questionnaire instrument is declared valid. Then for the reliability test, instrument reliability is measured by the Cronbach's alpha value of each variable. Respondents' answers that have been collected are processed into SPSS to find the Cronbach's alpha value. Later this value will be compared with a reference measure of reliability (Dhamayanti, et al., 2017).

Table 2.
Instrument Reliability Test Results

Variable	Cronbach's Alpha value	Information
Service Quality (X1)	0,947	Very Reliable
Punctuality (X2)	0,862	Very Reliable
Passenger Loyalty (Y)	0,783	Reliable

Table 2 Cronbach's alpha value for each variable has a reliable level of reliability, with Alpha values ranging from 0.783 to 0.947 so it can be concluded that the questionnaire instrument has good reliability because the results are very reliable and reliable when compared to the reliability reference table. From both the validity test and the reliability test above, the questionnaire instrument that was compiled has met the requirements of a valid and reliable instrument

Data analysis

After the instrument meets the valid and reliable requirements, then the questionnaire can be distributed to the respondents to be analyzed using the Structural Equation Modeling (SEM) method. The SEM method is used to examine the relationship between variables in a model (Ginting, 2009). Then for the second method used multiple linear regression analysis method, this analysis is used to describe the relationship of more than one independent variable with one dependent variable (Rinaldi, 2015). Both analyzes are used to see the relationship between several independent variables on one dependent variable. In this study the independent variables

used were service quality and timeliness variables, while the independent variable was the loyalty variable of YIA Airport Train passengers.

Population and Sample

The population of this study were YIA Airport Train passengers whose origins were Yogyakarta Station, Wates Station and YIA Airport Station. In this study the sampling technique used was stratified random sampling. Stratified random sampling is a sampling technique that is used when the population is stratified but less proportional (Sugiyono, 2019). In this study, the number of samples was determined, namely 120 samples from the population. Sampling was carried out using a stratified random sampling technique from Sugiyono (2011) in (Haryudi, 2018) as follows:

$$n = \frac{\text{population group (stratum)}}{\text{total population}} \times specified\ number\ of\ samples$$

The calculation results from the formula above obtained samples for each station, namely Yogyakarta station with 60 samples, Wates station with 9 samples and YIA Airport station with 51 samples.

RESULT AND DISCUSSIONS

SEM method

The SEM method was carried out with the help of Smart-PLS 3.0 software. The processed data is the result of data tabulation from the answers to the questionnaires for each variable. This data processing method consists of 2 (two) stages, namely the analysis of the outer model and the inner model with the elaboration:

1. Outer Model Analysis
   This outer model analysis consists of a validity test and a reliability test. This validity test consists of two stages, namely convergent validity and discriminant validity. Then proceed with the reliability test which is divided into two, namely the reliability test based on the Cronbach's alpha value and the composite reliability value with the following description:
   a. Convergent Validity, an indicator is declared eligible if the loading factor value is > 0.5 and the Average Variance Extracted (AVE) value is > 0.50. The primary data obtained is then processed and the results of the calculation of the loading factor from the model are obtained as follows:

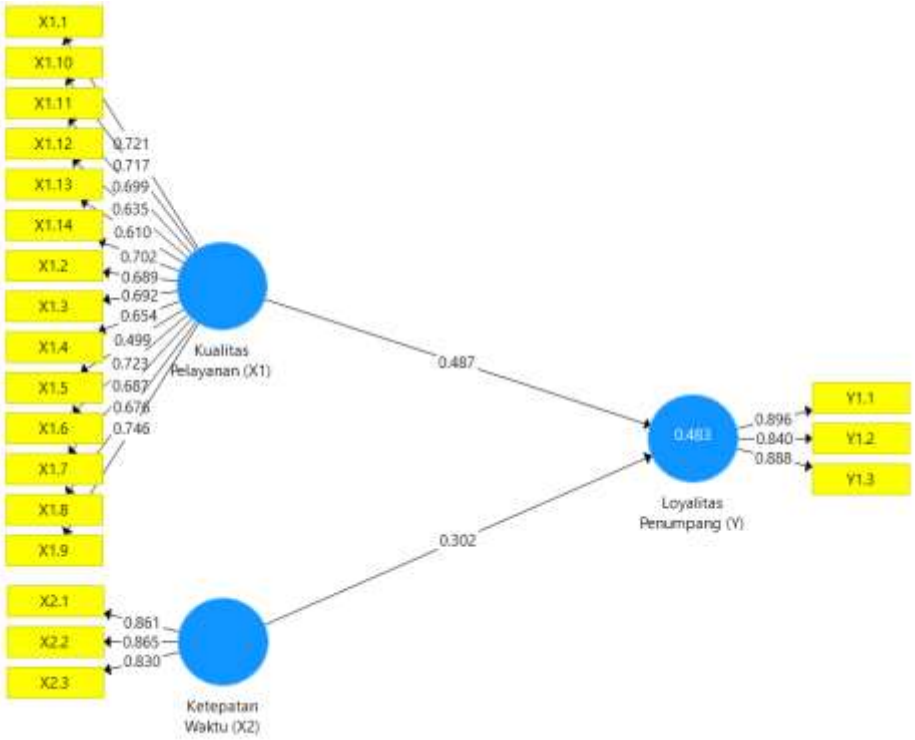

Figure 3. First Estimation Model

Based on the picture above, it is known that there are indicators on the service quality variable, namely (X1.5) which do not meet the convergent validity requirements with a loading factor value of 0.499 <0.5. Then the indicators were removed and the model was re-estimated with the following results:

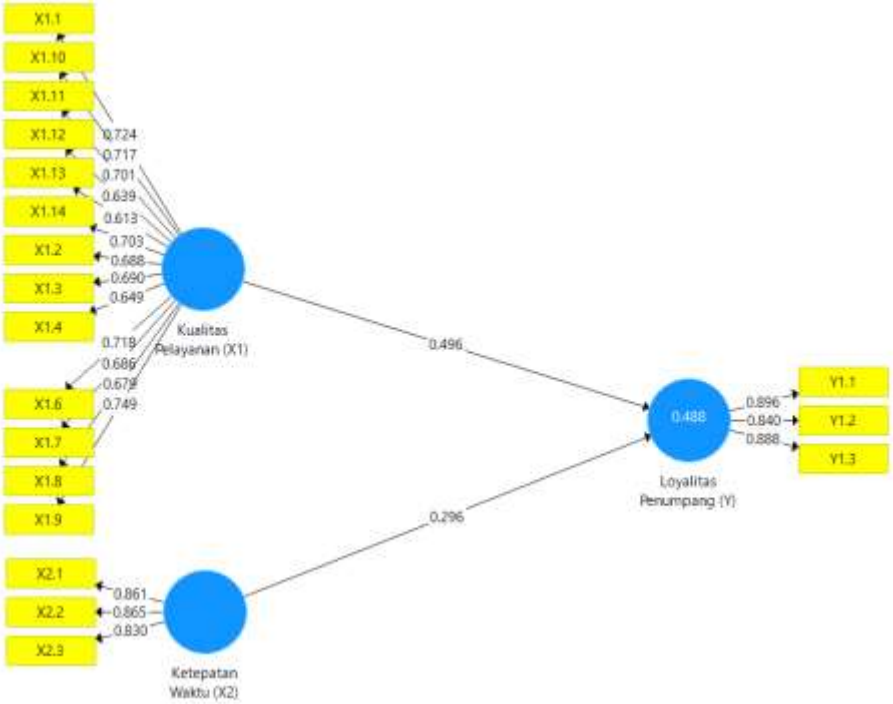

Figure 4. Second Estimation Model

Based on the picture above, all the variable indicators for the loading factor values have met the requirements, namely > 0.5. Then proceed by looking at the AVE value from the results of the second estimation model with the calculation results of the estimation model:

Table 3.
AVE Value of the Second Estimation Model

	Average Variance Extracted (AVE)
Punctuality (X2)	0,726
Service Quality (X1)	0,476
Passenger Loyalty (Y)	0,766

Table 3 above shows that the AVE value for the service quality variable does not meet the criteria, namely 0.476 <0.50. Then the indicator with the lowest loading factor value was excluded, namely indicator X1.13 from the service quality variable and the model was re-estimated with the following results:

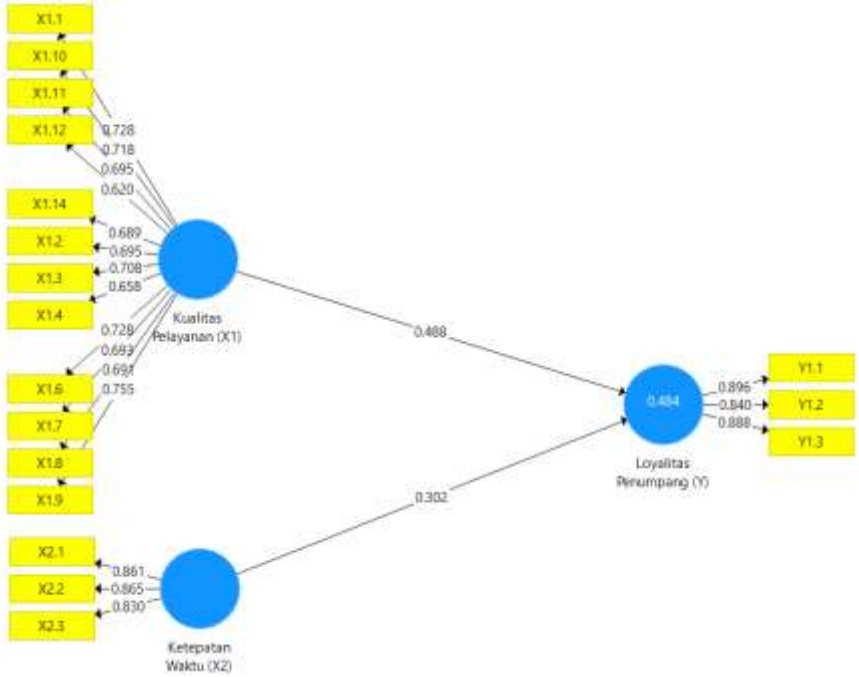

Figure 5. The Third Estimation Model

Table 4.
AVE Value of the Third Estimation Model

	Average Variance Extracted (AVE)
Punctuality (X2)	0,726
Service Quality (X1)	0,489
Passenger Loyalty (Y)	0,766

Table 4 above shows that the AVE value does not meet the criteria, namely 0.489 <0.50. Then the indicator with the lowest loading factor value is removed, namely X1.12 and the model is re-estimated with the following results:

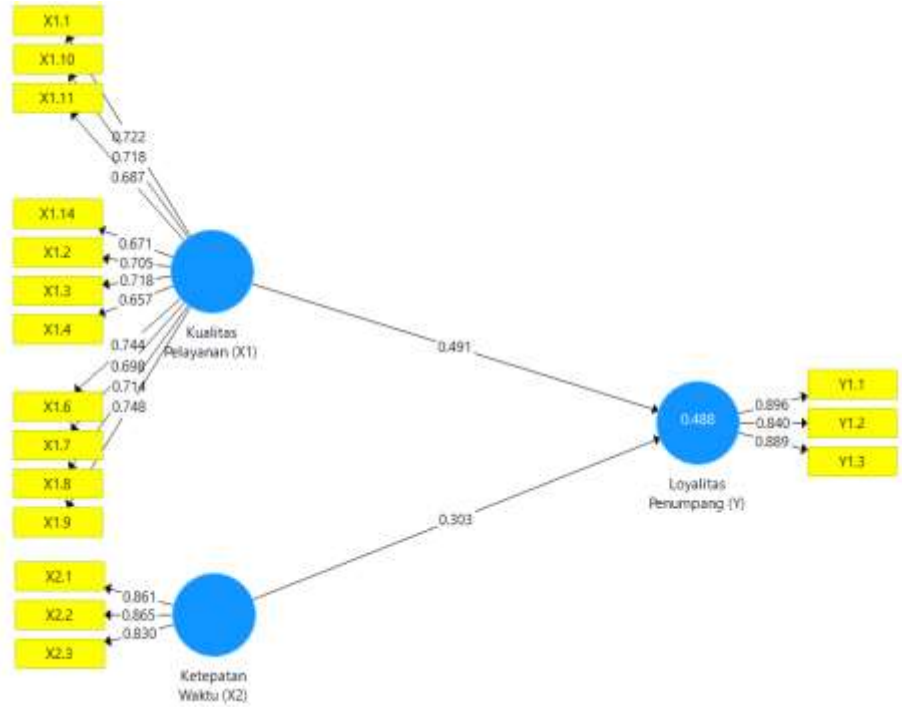

Figure 6. The Fourth Estimation Model

Table 5.
AVE Value of the Fourth Estimation Model

	Average Variance Extracted (AVE)
Punctuality (X2)	0,726
Service Quality (X1)	0,501
Passenger Loyalty (Y)	0,766

Table 5 above shows that each indicator for each variable has met the convergent validity value with a loading factor > 0.50 and a value (AVE) > 0.50. So that each instrument is concluded to be valid and can measure each variable to be studied.

Discriminant Validity

The requirement for discriminant validity can be seen from the √AVE value, in this case it can use the value generated from the Fornell-Larcker table. Good discriminant validity is indicated by the √AVE value of each variable which is greater than the correlation between the variables in the model. The following is the √AVE value of each indicator for each research variable:

Table 6.
Fornell-Larcker Calculation Results

	KW (X2)	KP (X1)	LP (Y)
Punctuality (X2)	(0,852)		
Service Quality (X1)	0,519	(0,708)	
Passenger Loyalty (Y)	0,558	0,648	(0,875)

Table 6, it can be concluded that the Fornell-Larcker value of each variable has a value > correlation between other variables. So it can be concluded that each variable has met the requirements of good discriminant validity.

Composite Reliability and Cronbach's Alpha

The reliability test of this method can be seen from the Cronbach's alpha value and the composite reliability value of each indicator. It is stated that it meets the reliability requirements

if the value of both is > 0.60. The following are the results of the calculations that have been carried out:

Table 7
Reliability Test Value

	Cronbach's Alpha	Composite Reliability
Punctuality (X2)	0,811	0,888
Service Quality (X1)	0,901	0,917
Passenger Loyalty (Y)	0,847	0,907

Table 7 can be seen that all variables have a value of > 0.60. The composite reliability value of the service quality variable is > 0.60, which is 0.917, punctuality is 0.888, and passenger loyalty is 0.907. The analysis is strengthened by the Cronbach alpha value > 0.60, where the Cronbach's alpha value of the service quality variable is > 0.60 which is 0.901, punctuality is 0.811, and passenger loyalty is 0.847. Judging from the results of the value of each variable shows that the three variables are reliable.

a. Inner Model Analysis
   This analysis is obtained by looking at the results of the R-square, Q-square and t-statistic results which are used to decide whether the hypothesis of the study will be accepted or rejected. This analysis was carried out by looking at the results of the significance value of each variable from the t-statistic values and p values. Decision making will later use a t-statistic value > 1.96 with a significant level of 5%.
b. Goodness of Fit test
   The model feasibility test is useful for measuring how much influence exogenous latent variables have on endogenous latent variables as seen from their R-Square values:

Table 8.
R-Square Test Results

	R-Square
Passenger Loyalty (Y)	0,488

Table 8 shows that the value generated by the R-Square variable of passenger loyalty (Y) is 0.488 which has moderate model feasibility (Ghozali & Latan, 2015). The R-Square value of the passenger loyalty variable (Y) is 0.488 explaining that the service quality variable (X1) and timeliness (X2) are able to explain passenger loyalty (Y) of 48.8%. Then for the Q-square value:

Table 9.
Q-Square Values

	Q-Square
Passenger Loyalty (Y)	0,364

Table 9 shows that the value generated by the Q-Square passenger loyalty variable is 0.364 > 0, so it can be concluded that it has good predictive relevance.

Hypothesis Test

Hypothesis testing is used to see how strong the influence between variables is. The test process is carried out by looking at the t-statistics and p values of the independent variables on the dependent variable:

Table 10.
Hypothesis Test Results

	T Statistics (|O/STDEV|)	*P Values*
Service Quality (X1) □ Passenger Loyalty (Y)	6,404	0,000
Punctuality (X2) □Passenger Loyalty (Y)	3,365	0,001

Table 10 shows that the value generated by the t-statistic for each variable with the conclusion of the test is as follows:

a. Based on table 10, service quality has a t-statistic value of 6.404 > 1.96 and a p-value of 0.000 <0.05 so that the decision H0 is rejected and H1 is accepted. Service quality (X1) has a positive and significant effect on passenger loyalty (Y). H1: There is a significant effect of service quality on passenger loyalty: Accepted
b. Based on table 10, timeliness has a t-statistic value of 3.365 > 1.96 and a p-value of 0.001 <0.05 so that the decision H0 is rejected and H2 is accepted. Punctuality (X2) has a positive and significant effect on passenger loyalty (Y). H2: There is a significant effect of timeliness on passenger loyalty: Accepted

Multiple Linear Regression Analysis Method
The following are the stages of the multiple linear regression analysis method:

1. Data Transformation
   The first stage that is carried out before entering the classical assumption test is transforming the data. This transformation is carried out on ordinal data that has been obtained from the results of the questionnaire to interval data using the help of the StatCal application.
2. Classic assumption test
   Data analysis used in this study is multiple linear regression analysis. Before carrying out the analysis, assumption tests were carried out including the normality test, multicollinearity test, and heteroscedasticity test. The implementation of this prerequisite test uses SPSS 20.0 with the following description:

Normality Test
A normality test was carried out to find out whether the data on the research variables were normally distributed or not. Normality testing uses the Kolmogorov-Smirnov analysis technique. In this test the data can be said to be normally distributed if the sig. >0.05.

Table 11.
Normality Test Results

Class	Kolmogorov-Smirnov[a]	Information
Unstandardized Residuals	Normal Distribution	Berdistribusi Normal

Table 11, based on the results of the normality test, can be seen at a significant value in the significance section of 0.071 > 0.05. From the results obtained, it can be concluded that the data in this study were normally distributed.

Multicollinearity Test
The multicollinearity test aims to test whether there is a correlation between the independent variables in the regression. A regression model that is free from multicollinearity is a model that has a tolerance value > 0.1 or if the Variance Inflation Factorf (VIF) value is < 10.

Table 12.
Multicollinearity Test Results

Variabel	Collinearity Statistic	
	Tolerance	
X1 Total	0,718	No multicollinearity
X2 Total	0,718	No multicollinearity

Table 12 based on the table above obtained the tolerance value of the service quality variable (X1) 0.718 > 0.1 and VIF 1.393 < 10, timeliness (X2) tolerance value 0.718 > 0.1 and VIF 1.393 < 10. So it can be concluded that the correlation between the dependent variables shows no multicollinearity interference so that they can enter the next test.

Heteroscedasticity Test

The heteroscedasticity test was carried out to determine whether or not there were similarities in the variance of the residual values for all observations used in the regression model. A good regression model is a model that does not experience symptoms of heteroscedasticity with a sig. >0.05.

Table 13.
Heteroscedasticity Test Results

Variabel Independen	Sig.	Information
X1 Total	0,058	There is no heteroscedasticity
X2 Total	0,131	There is no heteroscedasticity

Table 13 based on the table above, it is known that the variables of service quality and timeliness have a Sig value. >0.05. With a value of Sig. the service quality variable is 0.058 > 0.05 and the timeliness variable is 0.131 > 0.05. So it can be concluded that there are no symptoms of heteroscedasticity of the two variables

Multiple Regression Analysis Equations

The analysis of multiple linear regression equations aims to determine whether or not there is an effect of two or more independent variables on the dependent variable. The calculation results can be seen as follows:

Table 14.
Calculation Results of Multiple Regression Equations

Variabel Independen	B	Sig.	Information
(Constant)	1,684	0,50	Not significant
X1 Total	0,122	0,000	Significant
X2 Total	0,317	0,000	Significant

Based on table 14 above, it can be seen that the regression equation is as follows:
Y = 1.684 + 0.122X1 + 0.317X2
Information:
X1 = Service Quality
X2 = Timeliness
Y = Passenger Loyalty
From the equation above, it can be interpreted that if the variable service quality (X1) and timeliness (X2) is equal to 0 then the value of passenger loyalty (Y) is 1.684. The regression coefficient of X1 is 0.122 which means that if the X1 variable increases by 1 unit, passenger loyalty will increase by 0.122. And also the X2 coefficient of 0.317 states that if the X2 variable increases by 1 unit, passenger loyalty will increase by 0.317.

Hypothesis testing

Partial Test (t test)

The calculation of the partial test is done by looking at the calculated t value compared to the critical t. The critical t value for n = 120 at α = 0.05 is 1.980448.

Table 15.
Test Results t

Variabel Independen	T	Sig.	Information
X1 Total	5,799	0,000	Significant
X2 Total	3,980	0,000	Significant

Table 15 above shows that the calculated value of X1 is 5.799 > critical t (1.980448) and the sig. 0.000 <0.05 then $H0$ is rejected, meaning service quality affects passenger loyalty. Then from the table above it also shows that the calculated value for X2 is 3.980 > critical t (1.980448) sig. 0.000 < 0.05 then $H0$ is rejected, meaning that timeliness affects passenger loyalitas.

Simultaneous Test (Test F)

The calculation of the F test is done by looking at the calculated F value compared to the critical F. The critical F value for n = 120 at α = 0.05 is 2.682132.

Table 16.
F Test Results

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	261,719	2	130,859	51,520	0,000[b]
Residual	297,179	117	2,540		
Total	558,898	119			

The calculated F value is 51.520 > critical F is 2.682132 and the sig value is 0.000 <0.05, so $H0$ is rejected. From the hypothesis, it can be concluded that service quality and timeliness simultaneously affect the loyalty of YIA Airport Train passengers.

Coefficient of Determination

The coefficient of determination to get the percentage value of the influence of the independent variable, namely service quality (X1) and timeliness (X2) simultaneously on the dependent variable, namely loyalty (Y).

Table 17.
Test Results for the Coefficient of Determination

R	R Square	Adjusted R Square	Std. Error of the Estimate
0,684	0,468	0,459	1,59374

Based on the table above, R Square has a value of 0.468, which means that the effect of the service quality variable (X1) and timeliness (X2) on the passenger loyalty variable (Y) is 46.8%. While the other 53.2% is influenced by other variables outside of this study.

The effect of service quality on YIA Airport Train passenger loyalty

The results of the analysis show that service quality has an influence on passenger loyalty. Based on the results of the hypothesis of each method as follows:

1. SEM method
   Based on the results of the hypothesis testing conducted, it shows that service quality affects passenger loyalty with an i value of 6.404 > 1.96 and a p-value of 0.000 <0.05 so that the decision H0 is rejected and H1 is accepted. Service quality (X1) has a positive and significant effect on passenger loyalty (Y).

2. Multiple Linear Regression Analysis Method
   Based on the results of the hypothesis testing conducted, it shows that service quality affects passenger loyalty with a t-value of X1 of 5.799 > critical t (1.980448) and a sig. 0.000 <0.05, then H0 is rejected, meaning service quality affects passenger loyalty. The results above are in line with research (Setianingrum, 2018) which shows that service quality has a positive effect on the loyalty of Jabodetabek Commuter Line passengers. The results of this study indicate that perceived service quality has an important role in the loyalty of YIA Airport Train passengers. The better the service quality has a positive influence on passenger loyalty.
3. The effect of timeliness on the loyalty of YIA Airport Train passengers
4. The results of the analysis show that punctuality has an influence on passenger loyaltywhich is concluded from the hypothesis testing of each method as follows:
   a. SEM method
      Based on the results of the hypothesis testing conducted, it shows that punctuality has an effect on passenger loyalty by having a t-statistic value of 3.365 > 1.96 and a p-value of 0.001 <0.05 so that the decision H0 is rejected and H2 is accepted. Punctuality (X2) has a positive and significant effect on passenger loyalty (Y).
   b. Multiple Linear Regression Analysis Method
      Based on the results of the hypothesis testing conducted, it shows that punctuality has an effect on passenger loyalty with a t-value for X2 of 3.980 > critical t (1.980448) and a sig. 0.000 <0.05, then H0 is rejected, meaning punctuality affects passenger loyalty.

The results of this study are in accordance with research conducted previously by (Hasna & Purwanto, 2022). This research concludes that the timely delivery of goods has a positive influence on consumer loyalty for the Lion Parcel expedition. The results of this study indicate that the perception of punctuality has an important role in the loyalty of YIA Airport Train passengers.

The effect of service quality and timeliness on the loyalty of YIA Airport Train passenger.
The results of the analysis show that service quality and timeliness have an influence on passenger loyalty. With an explanation of each method as follows:

a. SEM metho
   Based on the calculation of the SEM method, the value generated by the R-Square passenger loyalty variable (Y) is 0.488. From the value of 0.488 it can be concluded that the variables of service quality (X1) and timeliness (X2) are able to explain passenger loyalty (Y) of 48.8%.
b. Multiple Linear Regression Analysis Method
   Based on the results of the hypothesis testing conducted, it shows that timeliness service quality has an effect on passenger loyalty with a calculated F value of 51.520 > F critical 2.682132 and a sig value of 0.000 <0.05, so *H*0 is rejected. From the hypothesis, it can be concluded that service quality and timeliness simultaneously affect the loyalty of YIA Airport Train passengers.

The results of this study are in accordance with previous research conducted by (Puspitasari, 2022). This study has the conclusion that service quality, timeliness and shipping rates have a positive effect on customer loyalty of expedition users. The results of this study indicate that perceptions of service quality and timeliness affect the loyalty of YIA Airport Train passengers. The better the quality of service and the punctuality of the train will increase passenger loyalty.

CONCLUSIONS

Based on the results of the research using the SEM method and the multiple linear regression analysis method that has been carried out, it can be concluded that: The service quality variable has a positive and significant effect on the variable loyalty of YIA Airport train passengers. This can be interpreted that the better the quality of service provided, the loyalty of YIA Airport Train passengers will increase. The punctuality variable has a positive and significant effect on the YIA Airport Train passenger loyalty variable. This can be interpreted that trains that have good punctuality will increase the loyalty of YIA Airport Train passengers. The variables of service quality and timeliness have a positive and significant effect on the loyalty variable of YIA Airport Train passengers.

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