



The Influence of Service Quality and Price on KRL Commuter Line Route Solo - Jogja to Customer Loyalty

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ABSTRACT: Transportation as an important element in human life, plays a role in facilitating daily activities and supporting the economy. But because of the heavy traffic caused by so many motorized vehicles, people are looking for alternate options, including taking the KRL commuter line. This study attempts to determine how customer loyalty is affected by the cost and level of service provided on the KRL Commuter Line Solo-Jogja route. The findings, which emphasize providing excellent service and living up to customer expectations, demonstrate that service quality has a favorable and substantial impact on customer loyalty. However, pricing has little effect on consumer loyalty. This is mostly because workers use the KRL Commuter Line a lot when they are commuting, which may make prices inaccessible to some groups. Customer loyalty is influenced by both price and service quality, according to simultaneous study, which implies that raising prices and enhancing customer service quality can boost customer loyalty. However, this study adds to our understanding of the variables influencing consumer loyalty in the context of public transportation in particular and is significant in relation to the Solo-Jogja route of the KRL Commuter Line.

KEYWORDS: transportation, krl commuter line, Service quality, price, customer loyalty

INTRODUCTION

Transportation is very important for humans because it makes it easier for humans to carry out daily activities and can smooth the wheels of the economy. In addition, transportation is also a means that plays a role in human life, both for the continuity of interactions between humans, as well as a tool to facilitate humans in moving goods (Siti, 2019). BPS (Central Bureau of Statistics) stated that in 2022 the number of motorized transportation in DI Yogyakarta province was 6,217,930 units and in Central Java province was 39,191,872 units, the number of motorized transportation resulted in traffic jams on the roads so that people who wanted to carry out their daily activities were hampered. However, there is an alternative to avoid traffic jams by using KRL *Commuter Line* transportation. KRL *Commuter Line* transportation on the Solo - Jogja route is one of the important lines for the people of the Special Region of Yogyakarta and its surroundings because it is one of the choices for the community to avoid congestion. There are three advantages of using KRL *Commuter Line* Transportation, the first is shortening travel time for passengers who switch types of transportation. Although the time savings felt are not too pronounced, using the KRL *Commuter Line* has a low cost than other transportation. Second, separated train transit can reduce delays on parallel roads. Third, if residents live in neighborhoods where cars are more common, KRL Commuter Line transit may encourage them to walk more and drive less (Ulkhay et al., 2014). (Ulkhay et al., 2019).. In addition to having the advantage of avoiding congestion, the KRL *Commuter Line* also has several disadvantages such as when leaving and returning from work and weekends the KRL *Commuter Line* is very full so you have to scramble and share seats.

Thus, in order to foster client loyalty, KRL Commuter Line must be aware of what customers have to say. The results of several studies (Thungasal & Siagian (2019), Shen & Yahya (2021), Rosalia (2021), Martua & Djati (2018), Alya Insani & Nina Madiawati (2020), Sueni et al., (2019), Sugiarsih Duki Saputri (2019)) indicate that price and service quality have a positive and significant influence on customer loyalty, making research on this topic interesting. The study's findings (Shen & Yahya, 2021) substantiate the notion that consumer loyalty is positively impacted by more reasonable costs as well as superior quality, empathy, and image.

According to study (Alya Insani & Nina Madiawati, 2020) that was partially evaluated, the service quality variable has a value of 7.090 (to) > 1.65536 (ta), which indicates a positive and significant effect on customer loyalty. As a result, price and service quality have an impact on customer loyalty. The price variable, however, yields values 2.912 (to) > 1.65536 (ta), indicating a noteworthy and favorable impact on consumer loyalty. suggests that a customer's loyalty will increase with higher service and pricing quality.



Thungasal and Siagian (2019) have found through further research that price has a significant and positive effect on customer loyalty, indicating that price offers that are in accordance with customer expectations can form customer loyalty, and service quality has a significant and positive effect on customer loyalty, demonstrating that good service quality can form customer loyalty. The degree to which a consumer is satisfied with the services they receive has a direct and positive impact on their loyalty. Customer loyalty is significantly positively impacted by pricing; paying a higher price but receiving superior service can boost loyalty. (Rosalia, 2021). The service quality variables have a positive and large impact on customer loyalty, whereas the price variables also have a positive and significant impact on customer loyalty. (Martua & Djati, 2018). However, a study conducted by Sueni et al. (2019) found that service quality does not exert a positive and statistically significant impact on customer loyalty. On the other hand, price was found to have a substantial effect on customer loyalty. The study conducted by Maharani Purnama (2019) elucidates that service quality plays a crucial role in fostering customer loyalty, however price does not have a significant impact on consumer loyalty.

The impact of price and service quality on customer loyalty is substantial. Price factors such as affordability, quality suitability, competitiveness, and benefit suitability, along with service quality factors such as tangibility, reliability, responsiveness, assurance, and empathy, all contribute positively and significantly to customer loyalty. The study conducted by Angraini and Budiarti (2020) contradicts the findings of Cardia et al. (2019), who concluded that service quality had no substantial impact on consumer loyalty. The aforementioned studies indicate that investigating the impact of service quality and price on customer loyalty is a compelling research topic. While there are various factors that influence customer loyalty, it is undeniable that service quality and price play significant roles in shaping customer loyalty.

While earlier research has explored the impact of service quality and pricing on customer loyalty in other situations, no study has precisely investigated the influence of service quality and price on customer loyalty in the specific context of the KRL Commuter Line Solo - Jogja route. Hence, it is vital to address this lack of information and comprehend the impact of service quality and price on client loyalty in this particular route.

METHODOLOGY

This study employs quantitative data. Numerical data is directly derived from numbers. The objective of this research is to analyze a predicament that arises within an organization by formulating a theory that pertains to the existing phenomena. The target demographic for this study comprises individuals who utilize the KRL Commuter Line on the Solo - Jogja route at each station along the route. Malhotra (2006: 291) states that the sample size should be a minimum of four to six times the number of questions in the study. In this context, there are 20 question indicators, and the minimum sample size required is derived by multiplying the number of indicators by six. Based on this computation, it was determined that a minimum sample size of 120 respondents is necessary for this investigation. The sample is the part taken from the whole population. This study involved 20 questions. In the sampling process, this study used purposive sampling technique, a method chosen to take samples in accordance with predetermined criteria. In this context, the criteria set by researchers are people who use the KRL *Commuter Line on the Solo-Jogja* route.

The data gathering approach employed in this study was the utilization of a questionnaire. The data was collected from individuals who willingly and voluntarily supplied responses to the questionnaire, without any external influence or coercion. Hence, the data collected yields an unadulterated depiction of the perspectives and sentiments of the participants. The measurement process employed in this study utilizes a scale, wherein respondents are requested to provide their evaluation by selecting one of the five available alternatives on the scale. The scale is composed of the following values: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).

The data analysis method used in this research is SPSS. The research instrument test model uses validity and reliability tests, while the classical assumption test uses normality, multicollinearity, and heteroscedasticity tests. While the hypothesis test is multiple linear regression analysis test, t test, f test, and determination test or R².

RESULT AND ANALYSIS

Based on table 1, it can be concluded that the results of the validity test can be concluded that the variables of Service Quality (X1), Price (X2), and Customer Loyalty (Y) can be said to be valid, because the validity test results are valid.

$r_{hitung} > r_{tabel}$ so that it can be stated that all statement items are valid. Below are the loading factors resulting from SPSS algorithm testing.



Table 1. Validity Test

No	Variables	Item Code	rcount	Conditions	rtabel	Description
1.	Service Quality (X1)	X1.1	0,467	>	0,1793	Valid
		X1.2	0,618	>	0,1793	Valid
		X1.3	0,467	>	0,1793	Valid
		X1.4	0,619	>	0,1793	Valid
		X1.5	0,525	>	0,1793	Valid
		X1.6	0,650	>	0,1793	Valid
		X1.7	0,528	>	0,1793	Valid
2.	Price (X2)	X2.1	0,339	>	0,1793	Valid
		X2.2	0,394	>	0,1793	Valid
		X2.3	0,329	>	0,1793	Valid
		X2.4	0,374	>	0,1793	Valid
		X2.5	0,497	>	0,1793	Valid
		X2.6	0,273	>	0,1793	Valid
3.	Customer Loyalty (Y)	Y1	0,854	>	0,1793	Valid
		Y2	0,815	>	0,1793	Valid
		Y3	0,746	>	0,1793	Valid
		Y4	0,723	>	0,1793	Valid
		Y5	0,827	>	0,1793	Valid
		Y6	0,854	>	0,1793	Valid
		Y7	0,686	>	0,1793	Valid

Source: SPSS 22 Output Data (2023)

According to Table 2, it can be seen that the variables of service quality, price, and loyalty all have Cronbach Alpha values above 0.6. Therefore, the reliability assessment results for all variables are reliable.

Table 2. Reliability Test

Variables	Cronbach's Alpha	Description
Service Quality (X1)	0,618	Reliable
Price (X2)	0,830	Reliable
Customer Loyalty (Y)	0,643	Reliable

Source: SPSS 22 Output Data (2023)

Based on table 3 shows that Unstandardized Residual has a p-value of 0.200, which is greater than the significance level α (0.05). This indicates that the data follows a normal distribution.

Table 3. Normality Test

Variables	Sig (2-tailed)	p-value	Description
Unstandardized Residual	0,200	P > 0,05	Normal

Source: SPSS 22 Output Data (2023)



Table 3. Multicollinearity Test

Variabel	Tolerance	VIF	Description
Service Quality	0,584	1,714	No multicollinierity
Price	0,584	1,714	No multicollinierity

Source: SPSS 22 Output Data (2023)

The table shows that there is no multicollinearity since the VIF is less than 10 and the Tolerance is more than 0.10.

Table 4. Heteroscedasticity Test

Variables	Significance level	Sig.	Conclusion
Service Quality	0,05	0,552	Heteroscedasticity Free
Price	0,05	0,198	Heteroscedasticity Free

Source: SPSS 22 Output Data (2023)

From the table above, it can be seen that the probability value > 0.05 means free from heteroscedasticity.

Table 5. Multiple Linear Regression Analysis

Model	Unstandardized B	Coefficients Std Error	Standardized Coefficients Beta	t	Sig.
(Constant)	5.428	2.428		2.642	0,009
Service Quality	0,769	0,091	0,721	8.470	0,000
Price	-0,18	0,095	-0,016	-0,185	0,854

Source: SPSS 22 Output Data (2023)

Based on the table above, the following equation can be formed:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + e$$

$$Y = 5.428 + 0,769 X_1 - 0,018 X_2 + e$$

Where:

Y = Customer loyalty

A = Constant

$\beta_1 \beta_2$ = Regression coefficient

X1 = Service quality

X2 = Price

e = Error

The following regression equation was derived from the data collected using SPSS 22: X1 represents service quality and its effect on customer loyalty (Y) is 0.769, while X2 represents pricing and its effect on customer loyalty (Y) is -0.018. The price variable is moving in the opposite way. For one thing, the Commuter Line KRL is always bustling with activity, especially during rush hour, when workers are getting off and on the clock. Customers become less loyal as a result of pricing that are out of reach for some groups. In contrast, consumer loyalty is positively correlated with service quality.



Table 6. The t-test

Variables	t count	r table	Sig.	Description
Service QualityPrice	8,470	0,1793	0,000	Significant
	-0,185	-0,1793	0,854	Not Significant

Source: SPSS 22 Output Data (2023)

Table 6 shows the results of the t-test for calculating the regression coefficient, which lead to the following conclusions:

- a. The t-value for X1 (service quality) was 8.470, which is significantly higher than the r-table value of 0.1793 ($8.470 > 0.1793$) at the 0.000 level of significance. The significance value is less than the 5% level, which means that H_a is accepted and H_o is rejected, according to a significance limit of 0.05. This proves the first hypothesis, which states that X1, service quality, has a positive and statistically significant effect on customer loyalty.
- b. At the 0.854 level of significance, the t-value of -0.185 for variable X2 (price) is less than the r-table value of -0.1793, indicating that -0.185 is less than -0.1793. The significance value is greater than the 5% level when employing a significance criterion of 0.05, which means that H_o is accepted and H_a is rejected. Therefore, the study's second hypothesis, that price (X2) has no substantial effect on customer loyalty, remains unproven.

Table 7. Test f

F count	F table	Description
59,767	3.07	H_o is rejected

Source: SPSS 22 Output Data (2023)

Based on the results of the output table 7 above, the value is obtained F_{hitung} amounting to 59.767, then this value will be compared with the value of F_{tabel} with a significance level of 5%, obtained F_{hitung} greater than F_{tabel} ($59.767 > 3.07$) so H_o is rejected and H_a is accepted, meaning that there is a significant influence between service quality (X1) price (X2) on customer loyalty (Y).

Table 8. Coefficient of Determination

Model	R	R Square
1	0,711	0,505

Source: SPSS 22 Output Data (2023)

From the table above, it is obtained that the correlation coefficient between the service quality factor (X1) and price (X2) with customer loyalty (Y) simultaneously is 0.505, which means that the effect of the independent variable (X) on the dependent variable (Y) is 50.5%.

The results of this study based on hypothesis testing are as follows:

1. The Effect of Service Quality on Customer Loyalty

Customer loyalty is strongly influenced by service, with service quality playing a pivotal role in this relationship. A business or organization's capacity to compete hinges on the quality and quantity of the service it offers. Having a clear and precise grasp of service quality is crucial for achieving customer pleasure and loyalty. The service quality of KRL Commuter Line has been satisfactory, therefore it follows that there is room for improvement, which should lead to increased customer loyalty.

It follows that high-quality service significantly influences consumer loyalty in a good way. According to the study's findings, customer satisfaction and loyalty are both influenced by how well a company meets consumer requirements and how much emphasis it places on quality. Consistent with other studies by Shen & Yahya (2021), Alya Insani & Nina Madiawati (2020), Thungasal & Siagian (2019), Sugiarsih Duki Saputri (2019), Martua & Djati (2018), Maharani Purnama (2019), and Angraini & Budiarti (2020), this study's findings are convincing.



2. The Effect of Price on Customer Loyalty

Price does not significantly affect consumer loyalty, according to the overall findings. This study's findings on the ineffectiveness of price on customer loyalty support the perspective put forth by Anggraeni et al. (2023), according to which peak commuting hours on the KRL Commuter Line make tickets expensive for everyone, which in turn reduces customer loyalty. Bikes are more popular among students, who make up the bulk of the study's respondents. Factors that shape client loyalty include affordable rates that are in line with maximum facilities and service quality.

Therefore, consumers anticipate pricing, which encompasses features such as affordability, suitability with offered facilities, and ideal service quality. It is believed that price, as a measure of value, influences market demand. Prior research by Maharani Purnama (2019) is bolstered and validated by the outcomes of this study.

3. Service quality and price have a simultaneous effect on customer loyalty

The results show that pricing and service quality are the two most important factors in determining consumer loyalty. Customer loyalty will increase as a result of KRL Commuter Line's efforts to improve service quality and handle better costs, as demonstrated by the existence of a combined influence. The results of the study by Alya Insani and Nina Madiawati (2020) are supported and reinforced by these findings.

CONCLUSIONS

Based on the results of the discussion carried out in this study, the following conclusions can be drawn:

1. Customer loyalty is positively and significantly impacted by service quality. According to the findings, customer loyalty can be achieved by improving the service quality offered by KRL Commuter Line Solo-Jogja Route.
2. Customers are loyal regardless of price. Customer loyalty was not significantly related to product pricing, according to the results. Why? Because the KRL Commuter Line is always bustling with people, especially while they're getting off work and on their way back. Customers become less loyal as a result of pricing that are out of reach for some groups.
3. The price and quality of the service both have an impact on how loyal customers are. Customer loyalty increased as KRL Commuter Line's service quality and prices improved, according to the data.

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