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The Influence of Information Availability and Service Quality on Customer Satisfaction in Commuter Line Users (Study On Jabodetabek Commuter Line Train Customers)

Doni Wihartika, Ade Yuliana Sahfitri & Salmah

Pakuan University, Bogor, West Java, Indonesia

Email: wihartika@unpak.ac.id

Abstract

This study aims to determine the effect of information availability and service quality on customer satisfaction of Commuter Line users. The findings of this study could lead to significant improvements in the quality of services provided to commuter line users, thereby enhancing their overall experience. The researchers decided to use the commuter line as the research material because it is one of the transportation methods used for commuting. Not only that, the author also sees that there are still many things that need to be improved by the company in terms of the quality of facilities and infrastructure, one of which is complaints about queues and delays in KRL, KRL AC, KRL signaling disturbances, KRL cracked rail disturbances, PT KCI C-Access application, KRL station facilities, KCI station lift facilities and other complaints. This study uses a quantitative method. In addition, researchers distributed questionnaires to find the required data; questionnaires were distributed in various ways, one of which was by distributing form links on social media and finding respondents according to the required criteria. The population in this study consisted of commuter line users, while the sample used was comprised of commuter line users in area in Jakarta, Bogor, Depok, Tangerang and Bekasi (Jabodetabek), with a sample size of 100 respondents. Data processing analysis in this study used the help of SPSS version 24. The results of the study showed that the variables in the study, namely the availability of information, had a positive and significant effect on customer satisfaction variables, service quality had a positive and significant effect on customer satisfaction variables, and finally, the availability of information and service quality together had a positive and significant effect on customer satisfaction.

Keywords: Information Availability, Service Quality, and Customer Satisfaction.

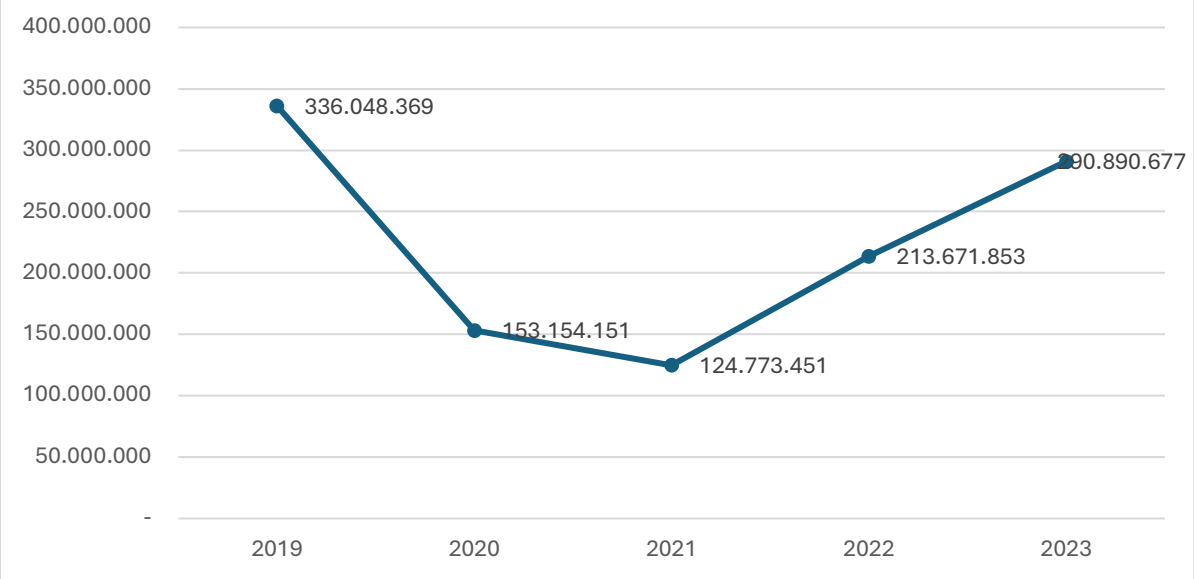
1. Introduction

Jakarta still dominates Indonesia's economic activities. These activities involve many individuals who are not domiciled in Jakarta alone but from various surrounding areas who can do activities in the capital city of Jakarta. Providing transportation services to help workers outside the Jakarta area do activities is essential. Several alternatives, including the most popular one currently, the commuter line transportation, can be used. PT Kereta Api Commuter Indonesia is a railway company operating in Jabodetabek and surrounding areas. The number of train users on the commuter line has also changed over the past 5 years. This research is crucial as it provides insights

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

into the factors influencing customer satisfaction in commuter line users, which can help improve service quality. The following graph in the image presents user data:

Figure 1. Data on the Number of Jabodetabek Commuter Line Train Passengers 2019 – 2023



Source: https://kip.kci.id (April 19, 2024)

Based on the data listed above, there is an increase in the number of passengers every year. The number of passengers 2019 using the commuter line in Jabodetabek was 336,048,369 million people, but from 2022 to 2023, it only reached 290,890,677 million people. Commuter line train users declined significantly, with a drastic drop occurring in 2020. This decline was primarily due to a presidential policy that classified the spread of COVID-19 as a non-natural national disaster. The government implemented several measures to curb the virus's spread, including the Large-Scale Social Restrictions (PSBB) strategy, as outlined in Government Regulation No. 21 of 2020. C-Access is a widely downloaded application among commuter line users, primarily assisting customers in quickly accessing information provided by PT Kereta Commuter Indonesia, which contains train schedules, train positions, fares, train routes, station information, nearest stations, and news—updated, for example, news about problems that occur on commuter lines and others.

According to data obtained from Google Playstore in 2024, Over one million users have downloaded C-Access, and it holds a 3.0 out of 5-star rating, according to data from Google Play Store. This rating reflects numerous user complaints, with many expressing disappointment due to

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

frequent system errors, inaccurate train schedules, and application malfunctions. Consequently, PT Kereta Commuter Indonesia (KCI) must conduct further evaluations and improve the C-Access application.

Theoretical differences, real-world phenomena, and prior research findings—some of which present contrasting results—highlight the need for further investigation. Therefore, this study aims to explore these issues in greater depth. The specific objectives of this research are as follows: (1) The first objective of this study is to test whether information availability influences customer satisfaction among Commuter Line users. (2) This highlights the importance of providing comprehensive and accurate information to customers, which could enhance their satisfaction. (3) This study confirms that service quality significantly contributes to customer satisfaction among Commuter Line users. (4) This finding reassures us that improving service quality can enhance customer satisfaction. (5) To test whether or not information availability and service quality influence customer satisfaction among Commuter Line users.

2. Literature Review

Availability of Information. According to Koniyo and Kusrini (Romadhon, 2019), the availability of information is data that has been processed that can be useful for users, help them make decisions, or support information sources. Meanwhile, according to (Donna, 2023), the opinion that the availability of information is a collection of units that work together to unite, process, store, and distribute information to help management and business decision-making.

H1: The availability of information has a positive effect on commuter customer satisfaction.

Quality of Service. Service Quality measures how a company understands and meets customer expectations. The primary step towards the growth of any business is understanding how to improve the quality of product service. According to (Laksana, 2019), service quality is a dynamic state related to products, services, human resources, processes, and the environment that can meet or exceed the expected service quality. Meanwhile, according to Tjiptono (2019), service quality reflects the quality of service the company provides compared to customer expectations.

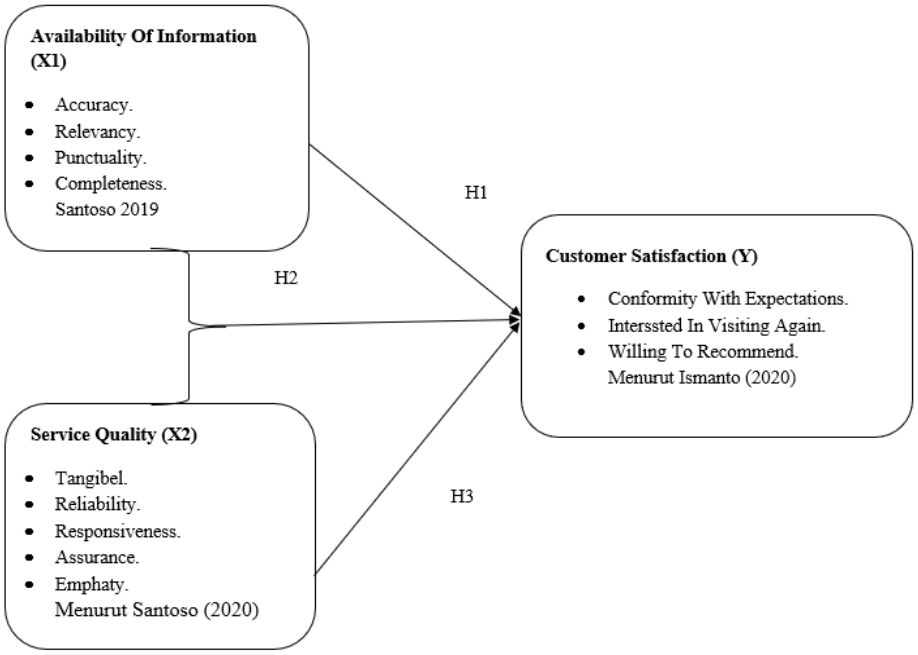
H2: Service quality has a positive effect on commuter line customer satisfaction.

Customer Satisfaction. According to Tjiptono (2020), customer satisfaction is a feeling of pleasure or disappointment that arises after comparing their perception of the performance or results of a product with their expectations. So, customer satisfaction is a high standard for various marketing needs and general business goals. Meanwhile, according to (Arif, 2023), customer satisfaction is one of the reasons customers decide to shop at a particular location.

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

H3: Information and service quality together positively affect commuter line customer satisfaction. Positive towards commuter line customer satisfaction.

Figure 2. Thinking Framework



3. Research Method

The sampling technique used in this study is non-probability sampling. According to Sugiyono (2019), non-probability sampling is a sampling technique that does not provide an equal opportunity for each member of a population to be selected as a sample member because specific criteria are selected. This study employs purposive sampling as the sampling method, which involves selecting samples based on specific criteria and considerations. (2019). In this study, the population comprises respondents who use commuter line train transportation and respondents who know about commuter line train transportation; this study sample comprises commuter line users in Jabodetabek, totaling 100 people. One of the initial ways the author collects data is by distributing questionnaires to commuter line users and asking several questions related to the existing variables users. In addition, the researcher used a Likert scale to measure the respondents' perceptions in the questionnaire. The author conducted various tests, such as validity and

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

Reliability, to test the existing questions. A classical assumption test and multiple linear regression test were then used to determine the influence of each existing variable.

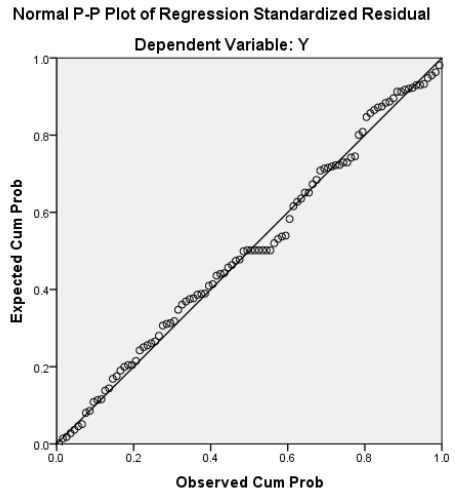
4. Finding and Discussion

Data Presentation. When conducting the test, the author used 100 data to conduct various tests to support the results of this study. The following are the results of the tests that the author has conducted.

Classical Assumption Test. When conducting the classical assumption test, the author conducted tests in various statistical tests such as normality tests, multicollinearity tests, and heteroscedasticity tests to see whether the data obtained was data that was used properly or not; the following are the results that the researcher obtained:

Normality Test

Figure 3. Normal PP Plot Graph



The image above illustrates that the data follows a normal distribution, as the points align along the diagonal line. In addition to utilizing probability plots, normality can be assessed through the Kolmogorov-Smirnov test. This test confirms normal distribution when the Sig (2-tailed) value exceeds the 0.05 significance level in the One-Sample Kolmogorov-Smirnov test. Using SPSS version 24, the Kolmogorov-Smirnov test produced the following results:

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

Table 1. Kolmogorov-Nov Test One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.92567618
Most Extreme Differences	Absolute	.060
	Positive	.060
	Negative	-.049
Test Statistic		.060
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Based on the table, the results of the Kolmogorov-Smirnov Test show that the A Sig (2-tailed) value of 0.200 > 0.05 significance level indicates that the data follows a normal distribution.

Multicollinearity Test.

Table 2. Multicollinearity Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	12.533	3.328		3.766	.000		
	Information Availability (X1)	.235	.123	.220	1.919	.058	.433	2.309

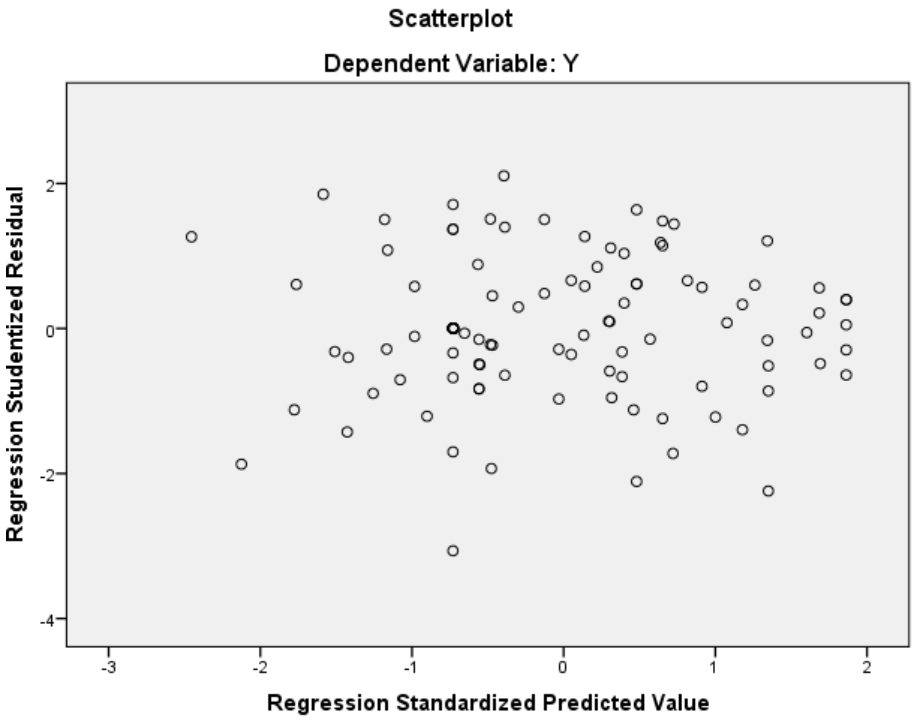
e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

Service Quality (X2)	.453	.106	.490	4.283	.000	.433	2.309

a. Dependent Variable: Y

Based on the calculation results, the VIF value for Information Availability is 2.309 < 10, and the tolerance value is 0.433 > 0.1, so it concluded that the regression is free from multicollinearity. Heteroscedasticity Test.

Figure 4. Scatter Plots Graph



The scatter plots graph shows that the points are spread randomly, both above and below zero on the Y-axis, and do not form a particular pattern. These results indicate the absence of heteroscedasticity in the regression model, confirming its suitability for analysis.

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

Multiple Regression Analysis

Table 3. Multiple Regression Test Coefficient

\Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.533	3.328		3.766	.000
	Value for Information Availability (X1)	.235	.123	.220	1.919	.058
	Service Quality (X2)	.453	.106	.490	4.283	.000

a. Dependent Variable: Y

Based on the table above, there is a regression coefficient value based on the results in the table. Coefficients in the unstandardized column in column B, in the sub-column, there is a constant value, with a constant value of 12.533, while the regression coefficient value for Information Availability (X1) = 0.235 and for Service Quality (X2) = 0.453. Based on these results, a multiple regression equation model can be formulated in this study, which will then be analyzed and interpreted based on the regression equation model.

Table 4. Analysis of Determination Coefficient (R)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.671	.450	.439	2.95568

a. Predictors: (Constant), Service Quality (X2), Availability of Information (X1)
b. Dependent Variable: Customer Satisfaction (Y)

Based on the SPSS output table above, it can be seen that the correlation coefficient (R) is 0.671, which means that the correlation between the variables of information availability, service quality,

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

and customer satisfaction is robust, this shows that if the availability of information and service quality is good, customer satisfaction will increase.

Hypothesis Testing

Table 5. Partial T Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.533	3.328		3.766	.000
	Information Availability (X1)	.235	.123	.220	1.919	.058
	Service Quality (X2)	.453	.106	.490	4.283	.000

Dependent Variable: Customer satisfaction (Y)

The output results of the SPSS 24 partial test (t-test) can explained as follows: It can be seen from the SPSS output that the significance value is more than 0.05, which is 0.058. So, the Availability of Information does not affect Customer Satisfaction. 2. t-test (Service Quality). From the SPSS output, the significance value is less than 0.05, which is 0.000. So, Service Quality has a positive and significant effect on Customer Satisfaction.

Table 6. F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	693.961	2	346.981	39.718	.000[b]
	Residual	847.399	97	8.736		
	Total	1541.360	99			

a. Dependent Variable: Customer satisfaction (Y)
b. Predictors: (Constant), Service Quality (X2), Availability of Information(X1)

The influence of independent variables on the dependent variable was tested simultaneously using the f-test. The results of statistical calculations show the calculated F value = 39.718 > F table 3.09

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

and significant at 0.000 < 0.05. Information availability and service quality variables influence customer satisfaction simultaneously and significantly.

First hypothesis: The effect of information availability on customer satisfaction. Based on the total value of respondents' responses, the value is 80% -100%, so the availability of information for Commuter Line Train users in Jabodetabek is excellent. This is indicated by the many good responses from respondents regarding the indicators of accuracy, relevance, timeliness, and completeness. Based on the results above, the average value for the accuracy indicator is 84%, relevance is 85%, timeliness is 85%, and completeness is 84%. The highest response result on the accuracy indicator is 86% with the instrument "The information provided by customer service officers at the station is always accurate and helpful." The slightest response, namely on the accuracy indicator of 82% with the instrument "The information you receive about delays or schedule changes is always timely and accurate." This shows that the accuracy indicator with the instrument of the question of the information you receive about delays or schedule changes is not always timely and accurate. Therefore, PT Kereta Commuter Line must pay more attention in the future so that the information provided by the company is accurate and timely so that customers feel satisfied.

Second hypothesis: The influence of service quality on customer satisfaction. Based on the total value of the respondents' responses, the value is in the interval of 80% -100 %, so the quality of service for Commuter Line Train users in Jabodetabek is said to be very good. This is indicated by the many good responses from respondents regarding the Tangible indicator. (Tangible), Reliability(Reliability),Responsiveness (Responsiveness), Guarantee(Assurance), Empathy(Empathy).Based on the results above, the average value for the Tangible indicator(Tangible) is 86%, Reliability(Reliability) is 86%, Responsiveness(Responsiveness) is 84%, Guarantee(Assurance)which is 85% and Empathy (Empathy)which is 85% The highest response result for the Tangible indicator(Tangible)by 87% with the instrument "Facilities in the train are used as needed" and the Reliability indicator(Reliability)by 87% with the instrument "Duration of Commuter Line train travel according to passenger estimates (in hours)" and for the smallest response, namely the Responsiveness indicator(Responsiveness)by 83% with the instrument "Officers respond quickly to customer complaints." This shows that the responsiveness indicator(Responsiveness)with the instrument of questions, the officers do not respond quickly to customer complaints. Therefore, PT Kereta Commuter Line must pay more attention in the future so that the services provided by the company care more about what customers want and feel satisfied.

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

Third hypothesis: The availability of information and service quality simultaneously have a significant effect on commuter line customer satisfaction. Based on the total value of the respondents' responses, the value is in the interval of 80% -100 %, so customer satisfaction among Commuter Line Train users in Jabodetabek is said to be very good. This is indicated by the many good responses from respondents regarding the indicators of conformity to expectations, interest in returning to visit, and willingness to recommend. Based on the results above, the average value for the expectation conformity indicator is 85%, the interest in reusing is 83%, and the willingness to recommend is 82%. The highest response result for the expectation conformity indicator is 87% with the instrument "The quality of service offered by the Commuter Line train is in accordance with what was promised," and for the slightest response, namely the indicator of interest in using again by 81% with the instrument "Commuter Line Trains are the main choice when traveling." This shows that the indicator of interest in using again with the instrument of the commuter line train question does not guarantee to be the leading choice when traveling. Therefore, PT Kereta Commuter Line must pay more attention to the future so that the satisfaction provided by the company is satisfied and customers want to use the Commuter Line Train public transportation service again when traveling.

5. Conclusion

Based on the total value of respondents' responses, the value is in the interval of 80% -100%, so it can be concluded that the availability of information for Commuter Line Train users in Jabodetabek is excellent. This is indicated by the many good responses from respondents regarding accuracy, relevance, timeliness, and completeness indicators. Based on the results above, the average value for the accuracy indicator is 84%, relevance is 85%, timeliness is 85%, and completeness is 84%. The highest response result on the accuracy indicator is 86% with the instrument "Information provided by customer service officers at the station is always accurate and helpful." The minor response, namely on the accuracy indicator of 82% with the instrument "The information you receive about delays or schedule changes is always timely and accurate."

Based on the total value of the respondents' responses, the value is 80% -100 %, so it concluded that the quality of service for Commuter Line Train users in Jabodetabek is excellent. This is indicated by the many good responses from respondents regarding the tangible indicator, which includes Reliability, Responsiveness, Guarantee, and Empathy. Based on the results above, the average value for the Tangible indicator is 86%, Reliability is 86%, Responsiveness is 84%, Guarantee is 85%, and Empathy is 85%. The highest response result for the Tangible indicator by 87% with the instrument "Facilities in the train are used as needed," and the Reliability indicator by 87% with the instrument "Duration of Commuter Line train travel according to passenger

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

estimates (in hours)" and for the slightest response, namely the Responsiveness indicator by 83% with the instrument "Officers respond quickly to customer complaints."

Based on the total value of the respondents' responses, the value is 80%-100%. These findings suggest that customer satisfaction among Commuter Line Train users in Jabodetabek is highly positive. This conclusion is supported by numerous favorable responses from respondents regarding key indicators, including conformity to expectations, interest in future use, and willingness to provide recommendations. Based on the results above, the average value for the expectation conformity indicator is 85%, the interest in reuse is 83%, and the willingness to recommend is 82%. The highest response for the expectation conformity indicator is 87% with the instrument "The quality of service offered by the Commuter Line train is in accordance with what was promised." The slightest response for the indicator of interest in reuse is 81% with the instrument "The Commuter Line train is the main choice when traveling."

Based on the results of multiple linear regression test Y = 12.533 + 0.235 X1 + 0.453 X2, it can be seen that the constant value is 12.533 while the regression coefficient value for Information Availability (X1) = 0.235 and for Service Quality (X2) = 0.453. This shows that there is an influence between information availability and service quality on customer satisfaction. An F test was carried out based on the F test to determine the influence of the availability of information and service quality on customer satisfaction. This is to determine the influence of the availability of information. and the quality of service obtained an F value count= 39,718 > Ftable3.09 with a significance value of 0.000 < 0.05. These results simultaneously show that the variables of information availability (X1) and service quality (X2) have a positive effect on the variable of customer satisfaction (Y).

Acknowledgment. Based on the results of respondents' responses to the variables of information availability with indicators of accuracy, relevance, timeliness, and completeness. The lowest response value of respondents was on the accuracy indicator of 82% with the instrument "The information you receive about delays or schedule changes is always timely and accurate." This shows that the accuracy indicator with the information query instrument you receive about delays or schedule changes is not always timely and accurate. Therefore, PT Kereta Commuter Line must pay more attention in the future so that the information provided by the company is accurate and timely so that customers feel satisfied.

Based on the results of respondents' responses to the Service Quality Variable with indicators of Tangible, Reliability, Catch, Assurance, and Empathy. The lowest respondent response value was on the Responsiveness indicator of 83% with the instrument "Officers quickly respond to customer complaints." This shows that the response indicator with the officer's question instrument does not

e-ISSN: 3064-6030
FMI, Vol 2
15-17 July 2025

respond quickly to customer complaints. Therefore, PT Kereta Commuter Line must pay more attention in the future so that the services provided by the company care more about what customers want and feel satisfied.

Based on the respondents' responses to the Customer Satisfaction Variable with indicators of Expectation Matching, Return Visit Interest, and Willingness to Recommend. The respondent's response score was the lowest. The reuse interest indicator stands at 81%, based on the statement, 'Commuter Line trains are the primary choice for travel.' These findings highlight the need for the Commuter Line to enhance customer satisfaction. However, the results also indicate that a high reuse interest does not necessarily guarantee that Commuter Line trains will always be the first choice for travel. Therefore, PT Kereta Commuter Indonesia must improve service quality to strengthen customer satisfaction and encourage continued use of its public transportation services

Given the limitations of this study, future research should address these shortcomings by incorporating additional variables beyond information availability and service quality. Expanding the scope of research will offer a broader perspective on factors influencing Commuter Line customer satisfaction.

References

Arif, N. (2023). The Influence of Service Quality, Access, Price, and Employee Competence on Customer Satisfaction of PT Kereta Api Indonesia (Case Study of Malang Kota Baru Station). IMWI Repository Horizon,6(1), 420–442. https://doi.org/10.52851/cakrawala.v6i1.249.

Donna, B. (2023). The Influence of the Availability of KRL Access Information and Service Quality on KRL Commuter Line Customer Satisfaction in Jabodetabek.Journal of Business Administration Economics & Entrepreneurship,5(2), 93–102.

Laksana. (2019). Marketing is a place where sellers and buyers meet to make transactions. Product goods or services.Mirai Management Journal,8(1), 206–211. https://journal.stieamkop.ac.id/index.php/mirai/article/download/4054/2644.

Romadhon. (2019). Availability of information and availability of information on customer satisfaction on PT Kereta Api Indonesia (Persero) Daop 9 Jember) (1), 53–56.

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