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The Effect Of Service Quality On Customer Loyalty With Customer Satisfaction As A Mediating Variable Among Kuala Stabas Train Passengers In Regional Division IV Tanjungkarang

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Abstract

This study examines the relationship between service quality and customer loyalty among Kuala Stabas Train passengers in Regional Division IV Tanjungkarang, with customer satisfaction serving as a mediating variable. A quantitative approach with an explanatory research design was employed. Data were collected from 130 respondents selected using purposive sampling through a Likert-scale questionnaire. The data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4. The results indicate that service quality has a positive and significant effect on customer satisfaction (β = 0.883; t = 34.536; p < 0.001). Customer satisfaction also has a positive and significant effect on customer loyalty (β = 0.677; t = 3.477; p = 0.001). In contrast, service quality has no significant direct effect on customer loyalty (β = 0.034; t = 0.156; p = 0.876). However, the indirect effect of service quality on customer loyalty through customer satisfaction is positive and significant (β = 0.597; t = 3.541; p < 0.001). These findings indicate that customer satisfaction fully mediates the relationship between service quality and customer loyalty. Therefore, improving service quality with a focus on customer satisfaction is essential for strengthening customer loyalty among Kuala Stabas Train passengers.

Keywords: Service Quality; Customer Satisfaction; Customer Loyalty; Mediation; SEM-PLS.

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INTRODUCING

The transportation sector in Lampung Province is becoming increasingly competitive as public mobility needs continue to grow and transportation alternatives become more diverse. These alternatives include interprovincial buses, travel services, private vehicles, and app-based transportation services (Badriyah & Kuswanto, 2023). Such conditions require transportation service providers not only to ensure safety and comfort but also to continuously enhance service quality in order to meet customer expectations and sustain long-term relationships in an increasingly competitive market (Kurniawan et al., 2024). As a provider of rail-based transportation services, PT Kereta Api Indonesia (Persero) contributes to supporting public mobility through various services, including the Kuala Stabas Train operated by Regional Division IV Tanjungkarang. Serving the Tanjungkarang–Baturaja route, the Kuala Stabas Train is one of the transportation alternatives for the public, offering relatively affordable fares along with safety and comfort during the journey. Nevertheless, the growing utilization of the service does not necessarily reflect a strong level of customer loyalty (Hidayat et al., 2024). Customers have various alternative transportation options that may be chosen based on their individual travel needs and preferences. Consequently, enhancing service quality is crucial for PT Kereta Api Indonesia (Persero) Regional Division IV Tanjungkarang to retain customers and foster stronger customer loyalty.

The phenomenon of service quality and customer loyalty among Kuala Stabas Train passengers can be observed through an initial survey of 30 customers. The survey revealed several aspects of the service that still need improvement to better meet customer expectations. Half of the respondents (50%) reported difficulties in obtaining travel information and purchasing tickets. In addition, 56.7% of respondents perceived that the service they received did not fully meet their expectations. Regarding customer satisfaction, 36.7% stated that the available facilities did not meet their expectations. Meanwhile, in terms of loyalty, only 36.7% of respondents indicated that they would continue choosing the Kuala Stabas Train when alternative modes of transportation were available. These findings indicate that service quality, customer satisfaction, and customer loyalty remain areas requiring further attention. The number of Kuala Stabas Train passengers has also increased over the past three years. In 2023, the number of passengers reached 590,871, increasing to 686,425 in 2024 and further to 724,971 in 2025, with an average of 667,422 passengers per year. This growth indicates an increasing utilization of the Kuala Stabas Train service. However, the rise in passenger numbers does not necessarily indicate that strong customer loyalty has been established. Service usage may also be influenced by situational factors,

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such as ticket prices, specific travel needs, and the limited availability of alternative transportation options. (Kalhoro et al., 2025). Therefore, a high number of passengers cannot be regarded as the sole indicator of customer loyalty. Loyalty is more closely associated with customers' willingness to reuse the service, maintain their preference, and resist switching to alternative modes of transportation. This condition highlights the importance of identifying the factors that contribute to customer loyalty, particularly service quality and customer satisfaction (King'ola et al., 2026). Therefore, the increase in Kuala Stabas Train passengers needs to be accompanied by efforts to sustain customer satisfaction and loyalty by providing services that are aligned with their expectations.

Theoretically, service quality represents an important determinant of customer satisfaction and loyalty. When service performance meets or exceeds customer expectations, it can generate a positive experience throughout the customer's service journey (Mittal et al., 2023). Service quality can also be evaluated based on a company's ability to meet customer expectations through the actual service delivered. When the service provided aligns with customer expectations, customers are more likely to experience satisfaction. Such satisfaction may subsequently encourage customers to maintain their relationship with the service provider. In the transportation sector, service quality is particularly important because customers' experiences during service use can influence their decision to use the service again (Nurani et al., 2022). Accordingly, service quality and customer satisfaction are important factors to consider in efforts to build and maintain customer loyalty.

Previous research has examined the interrelationships among service quality, customer satisfaction, and customer loyalty, with several studies confirming the positive effect of service quality on customer satisfaction (Badriyah & Kuswanto, 2023). Consistent findings indicate that service quality contributes positively to customer satisfaction (Putra & Barusman, 2024). These findings suggest that service quality contributes to higher customer satisfaction. The link between customer satisfaction and customer loyalty is further supported by previous studies (Mittal et al., 2023). (King'ola et al., 2026) (Putra & Barusman, 2024) Previous research has shown that customer satisfaction positively influences customer loyalty, suggesting that satisfied customers are more likely to maintain stronger relationships with service providers. In addition to direct effects, several studies have examined customer satisfaction as a mediating variable. (Tedjokusumo & Murhadi, 2023) Customer satisfaction serves as the mechanism through which service quality influences customer loyalty. Similar findings were reported by (Rahmi & Ridhaningsi, 2026) and (King'ola et al., 2026), which highlights the mediating role of customer satisfaction in this

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relationship. (Hidayat et al., 2024) Previous findings indicate that service quality can influence customer loyalty through customer satisfaction. Overall, these three variables are interrelated in shaping customer behavior. However, previous studies have not produced fully consistent findings across the relationships among these variables. These differences provide an important basis for further examining the relationships among service quality, customer satisfaction, and customer loyalty in the context of the Kuala Stabas Train service in Regional Division IV Tanjungkarang.

Although previous studies have identified positive relationships among service quality, customer satisfaction, and customer loyalty, their findings have not been entirely consistent. (Rahmi & Ridhaningsi, 2026) Previous studies have shown that service quality does not have a direct effect on customer loyalty. This finding suggests that a positive perception of service quality may not be sufficient to encourage customers to continue using a service. On the other hand, (Purnama et al., 2025) Several studies have shown that customer satisfaction does not always mediate the relationship between service quality and customer loyalty, whereas other studies have identified a mediating role of customer satisfaction. These differences in findings indicate a research gap concerning the relationships among service quality, customer satisfaction, and customer loyalty. Therefore, further investigation is needed to provide empirical evidence regarding these relationships in the context of railway transportation services. This study is important because customer loyalty is closely related to the continued use of a service. Loyal customers tend to reuse the service and recommend it to others. They are also less likely to switch to alternative services when other options are available. This issue is particularly relevant to the Kuala Stabas Train service, given the continued increase in the number of passengers, while the initial survey still identified aspects of service quality and customer loyalty that require attention. The selection of the Kuala Stabas Train as the research object is also based on its role as one of the transportation options available to the people of Lampung Province. This study is expected to provide empirical evidence regarding the effect of service quality on customer loyalty and the role of customer satisfaction in this relationship. Based on the foregoing discussion, service quality is conceptually considered an important factor in determining customer satisfaction and loyalty among Kuala Stabas Train passengers at PT Kereta Api Indonesia (Persero) Regional Division IV Tanjungkarang.

LITERATURE REVIEW

Service Quality

In service businesses, customers' perceptions of service quality provide an important basis

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for evaluating a company's performance. Such perceptions are shaped by customers' experiences when receiving a service and comparing those experiences with their prior expectations. (Lovelock & Wirtz, 2004) Service quality reflects the extent to which a company is able to meet customer expectations through consistent service delivery. In line with this perspective, (Kotler & Keller, 2022) Service quality can be viewed as a characteristic of a service that influences a company's ability to meet customer needs. Customers' evaluations of a service are also shaped by the experiences they have throughout their interactions with the service provider. Thus, service quality can be understood as customers' perceptions of the extent to which the service received corresponds to their expectations.

The concept of service quality in this study is based on the Service Quality (SERVQUAL) model developed by (Armstrong & Taylor, 2023). The model conceptualizes service quality as the result of comparing customer expectations with their perceptions of the service received. When service performance meets or exceeds customer expectations, customers are more likely to perceive the service quality positively, whereas performance below expectations may lead to less favorable evaluations. (Lovelock & Wirtz, 2004) The model explains service quality as encompassing the entire interaction process between customers and the company. SERVQUAL assesses service quality through five dimensions: *tangibles, reliability, responsiveness, assurance,* and *empathy*. In the context of the Kuala Stabas Train service, these dimensions relate to the condition of facilities, service reliability, promptness in assisting customers, safety assurance and staff competence, as well as attention to customer needs. The relationship between service quality and customer satisfaction has also been supported by several previous studies. Badriyah dan Kuswanto (2023) Previous research found that service quality had a positive and significant effect on customer satisfaction at PT Kereta Api Indonesia. The findings (Putra & Barusman, 2024) also reported a positive relationship between service quality and satisfaction among public service users. Furthermore, (Hidayat et al., 2024) also reported that service quality positively influences customer satisfaction and loyalty, indicating that higher service quality is associated with greater customer satisfaction.

Customer Satisfaction

Customer satisfaction represents the outcome of customers' evaluation of their service experience based on a comparison between their expectations prior to service use and the actual experience received. Thus, customer satisfaction can be understood as an evaluation of the service experience resulting from the degree of alignment between customer expectations and

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perceived service performance. Satisfaction tends to increase when the service provided meets or exceeds customer expectations. The concept of customer satisfaction in this study is based on the *Expectation Confirmation Theory*. According to (Kotler & Keller, 2022), The theory explains that customer satisfaction is formed through a comparison between customers' expectations before using a service and their actual performance or experience after receiving the service. When service performance meets or exceeds expectations, customers experience confirmation, which leads to satisfaction. Conversely, when the perceived performance falls below expectations, customers are more likely to experience dissatisfaction. In the context of transportation services, this evaluation may involve customers' experiences with staff service, facilities, ease of accessing information, and comfort during the journey. Therefore, customer satisfaction is an important aspect in developing positive evaluations of the services used. Previous studies have also indicated a relationship between customer satisfaction and loyalty. (Putra & Barusman, 2024) Research has shown that services that meet customer needs can contribute to higher customer satisfaction. (King'ola et al., 2026) reported a positive and significant relationship between customer satisfaction and customer loyalty in the railway transportation sector. Furthermore, (Rahmi & Ridhaningsi, 2026) Research has demonstrated the mediating role of customer satisfaction between service quality and customer loyalty, indicating that satisfaction not only results from the service experience but also encourages customers to continue using the service.

Customer Loyalty

Customer loyalty can be reflected in repeated service use, positive recommendations, and customers' tendency to maintain their relationship with a service provider. Thus, customer loyalty can be understood as customers' commitment and willingness to continue using a service, recommend it to others, and remain less inclined to switch to competing alternatives. In this study, customer loyalty is measured through several indicators that reflect customers' behavior in maintaining their relationship with the service provider. These indicators include *repeat purchase*, referring to the tendency to reuse the service; *retention*, referring to the willingness to continue choosing the service despite the availability of alternatives; *recommendation*, referring to the willingness to recommend the service to others; and *commitment*, referring to the commitment to continue using the service in the long term. In the context of the Kuala Stabas Train service, these indicators are reflected in customers' willingness to reuse the service, choose it despite the availability of other transportation modes, recommend it to others, and continue using the service in the future.

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Prior research has indicated a strong relationship between customer loyalty, customer satisfaction, and service quality. (King'ola et al., 2026) reported a positive relationship between customer satisfaction and customer loyalty in the railway transportation sector (Rahmi & Ridhaningsi, 2026) Research has shown that service quality and customer satisfaction play important roles in fostering customer loyalty in railway transportation. Furthermore, (Kalhoro et al., 2025) Research has demonstrated that customer satisfaction mediates the relationship between service quality and customer loyalty, suggesting that positive service experiences and customer satisfaction contribute to the development of customer loyalty.

Framework

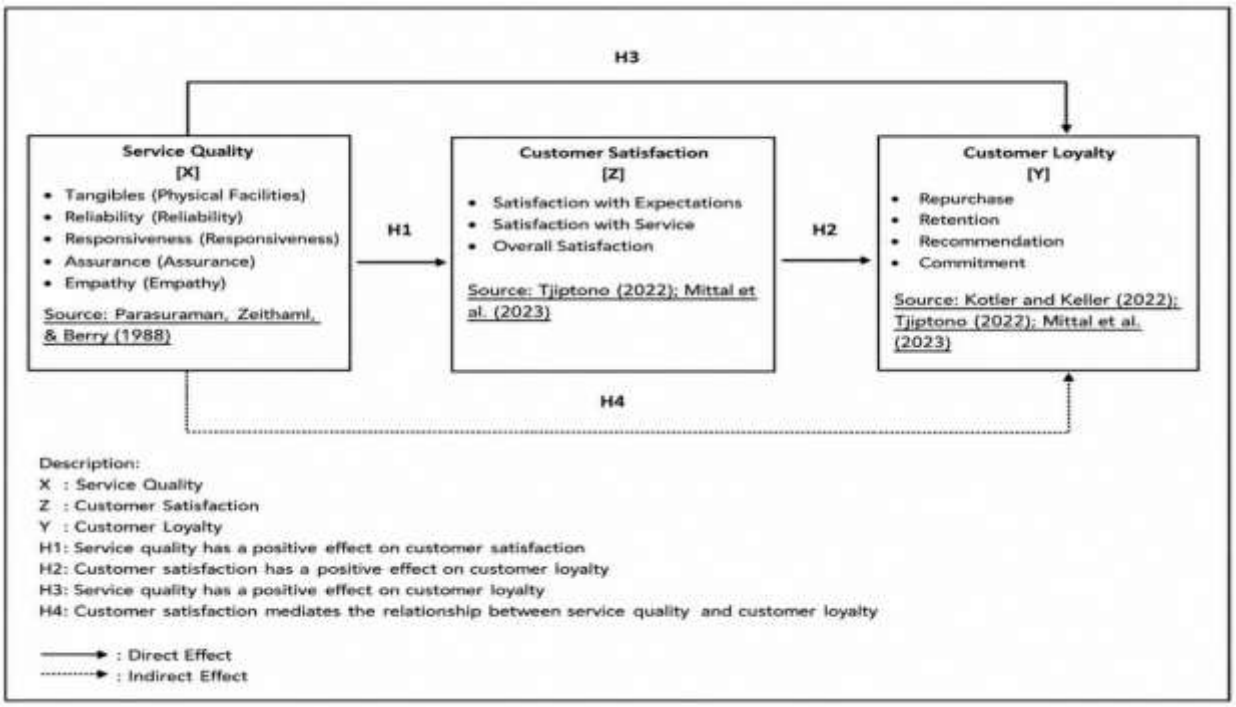


Figure 1. Framework

RESEARCH METHOD

This study employed a quantitative approach with an explanatory research design and a cross-sectional design. Data were collected through a five-point Likert-scale questionnaire administered to 130 Kuala Stabas Train passengers in Regional Division IV Tanjungkarang who were selected using purposive sampling. Respondents were required to have used the Kuala Stabas Train service at least once, be at least 17 years old, be able to complete the questionnaire

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independently, and voluntarily participate in the study. The study included service quality as the independent variable, customer satisfaction as the mediating variable, and customer loyalty as the dependent variable. The research instrument consisted of 26 indicators covering five dimensions of service quality, three dimensions of customer satisfaction, and four dimensions of customer loyalty.

The data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4. The measurement model (outer model) was evaluated to assess the validity and reliability of the research instrument, while the structural model (inner model) was assessed to examine the relationships among the variables. Hypothesis testing was conducted using the bootstrapping procedure, with *t*-statistics > 1.96 and *p*-value < 0.05 as the decision criteria. The mediating effect was assessed through the *specific indirect effects* procedure to determine the role of customer satisfaction in the relationship between service quality and customer loyalty.

Table 1. Research Instrument Grid

Variable	Dimension	Indicator	Item Number
Service Quality (X)	*Tangibles*	Condition of station facilities	X1
		Condition of train facilities	X2
		Cleanliness of station facilities	X3
		Cleanliness of train facilities	X4
	Reliability	Punctuality of departure schedule	X5
		Punctuality of arrival schedule	X6
		Ease of obtaining tickets	X7
	Responsiveness	Promptness of staff service	X8
		Ease of obtaining assistance	X9
	Assurance	Staff competence	X10
		Sense of safety during the journey	X11
	Empathy	Attention to customer needs	X12
		Staff concern for customers	X13

Source: Processed data, 2026.

RESULTS AND DISCUSSION

Table 2. Outer Loading Test Results

Construct	Number of Indicators	Outer Loading Range
Service Quality	13	0.496–0.878
Customer Satisfaction	6	0.843–0.930

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Customer Loyalty	7	0.747–0.855

Source: Processed data, 2026.

The outer loading results show that most indicators have values above 0.70. All indicators for customer satisfaction and customer loyalty meet this criterion, while two indicators of service quality have outer loading values below 0.70, namely X6 (0.496) and X7 (0.508). These indicators were retained because they remain substantively relevant for measuring service quality and are supported by an AVE value of 0.593 and Composite Reliability of 0.949.

Table 3. Average Variance Extracted (AVE) Test Results

Construct	AVE Value	Criterion	Result
Service Quality	0.593	> 0.50	Meets the criterion
Customer Satisfaction	0.777	> 0.50	Meets the criterion
Customer Loyalty	0.635	> 0.50	Meets the criterion

Source: Processed data, 2026.

The measurement model was evaluated to assess the validity and reliability of the research constructs. The convergent validity results show that all constructs have Average Variance Extracted (AVE) values above 0.50, namely 0.593 for service quality, 0.777 for customer satisfaction, and 0.635 for customer loyalty. These results indicate that the indicators of each construct adequately represent the variables being measured and meet the criteria for convergent validity.

Table 4. Results of Construct Reliability Test

Construct	*Cronbach's Alpha*	*Composite Reliability (rho_A)*	*Composite Reliability (rho_C)*	Result
Service Quality	0.940	0.951	0.949	Reliable
Customer Satisfaction	0.942	0.943	0.954	Reliable
Customer Loyalty	0.905	0.916	0.924	Reliable

Source: Primary data processed by the researcher, 2026.

The reliability test results indicate that all constructs have Cronbach's Alpha and Composite Reliability values above 0.70. Service quality has a Cronbach's Alpha value of 0.940 and Composite

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Reliability of 0.949, while customer satisfaction has values of 0.942 and 0.954, respectively. Meanwhile, customer loyalty has a Cronbach's Alpha value of 0.905 and Composite Reliability of 0.924. Therefore, all constructs are considered reliable and demonstrate good internal consistency.

Table 5. Heterotrait-Monotrait Ratio (HTMT) Results

Construct Relationship	HTMT Value	Criterion	Result
Service Quality ↔ Customer Satisfaction	0.932	< 0.90	Does not meet the criterion
Service Quality ↔ Customer Loyalty	0.659	< 0.90	Meets the criterion
Customer Satisfaction ↔ Customer Loyalty	0.741	< 0.90	Meets the criterion

Source: Primary data processed by the researcher, 2026.

Based on Table 5, the HTMT values between service quality and customer loyalty (0.659) and between customer satisfaction and customer loyalty (0.741) meet the discriminant validity criterion, as both values are below 0.90. However, the HTMT value between service quality and customer satisfaction is 0.932, indicating that discriminant validity between these two constructs is not fully established. This finding suggests a relatively high empirical proximity between service quality and customer satisfaction, although the two constructs have different measurement focuses. Therefore, discriminant validity in the research model is only partially established, and the relationship between service quality and customer satisfaction should be interpreted with caution.

Table 6. Structural Model Multicollinearity Test Results

Relationship Between Variables	VIF Value	Criterion	Result
Service Quality → Customer Satisfaction	1.000	< 5.00	No multicollinearity
Service Quality → Customer Loyalty	4.525	< 5.00	No multicollinearity
Customer Satisfaction → Customer Loyalty	4.525	< 5.00	No multicollinearity

Source: Primary data processed by the researcher, 2026.

Based on Table 6, the VIF value for service quality in relation to customer satisfaction is 1.000, while the VIF values for service quality and customer satisfaction in relation to customer loyalty are both 4.525. All values are below the threshold of 5.00, indicating that the model does

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not exhibit multicollinearity issues. However, the VIF value of 4.525, which is relatively close to the maximum threshold, suggests a fairly strong relationship between service quality and customer satisfaction in explaining customer loyalty. Therefore, the effects of these two variables on customer loyalty should be interpreted with caution.

Table 7. Coefficient of Determination Results

Endogenous Variable	*R-Square*	*R-Square Adjusted*	Category
Customer Satisfaction	0.779	0.777	Strong
Customer Loyalty	0.500	0.492	Moderate

Source: Primary data processed by the researcher, 2026.

Based on Table 7, the R-Square value for customer satisfaction is 0.779, indicating that service quality explains 77.9% of the variance in customer satisfaction, while the remaining 22.1% is explained by factors outside the model. This value falls within the strong category. Meanwhile, the R-Square value for customer loyalty is 0.500, indicating that service quality and customer satisfaction jointly explain 50.0% of the variance in customer loyalty, while the remaining 50.0% is attributable to factors outside the model. Thus, the model demonstrates strong explanatory power for customer satisfaction and moderate explanatory power for customer loyalty.

Table 8. Effect Size (f-Square/f^2) Results

Relationship Between Variables	f^2 Value	Category
Service Quality → Customer Satisfaction	3.525	Large
Service Quality → Customer Loyalty	0.001	Very Small
Customer Satisfaction → Customer Loyalty	0.203	Moderate

Source: Primary data processed by the researcher, 2026.

Based on Table 8, service quality has an f^2 value of 3.525 for customer satisfaction, which falls into the large-effect category, while its effect on customer loyalty is only 0.001, indicating a very small effect. Meanwhile, customer satisfaction has an f^2 value of 0.203 on customer loyalty, representing a moderate effect. These results indicate that service quality makes a stronger contribution to customer satisfaction, whereas customer satisfaction contributes more substantially to customer loyalty. Thus, the effect of service quality on customer loyalty tends to operate through customer satisfaction, which is further examined through the direct and indirect effects.

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Table 9. Predictive Relevance (Q^2predict) Results

Endogenous Variable	*Q^2predict*	*RMSE*	*MAE*	Result
Customer Satisfaction	0.760	0.498	0.305	Has predictive relevance
Customer Loyalty	0.348	0.830	0.593	Has predictive relevance

Source: Primary data processed by the researcher, 2026.

Based on Table 9, the Q^2predict values for customer satisfaction and customer loyalty are 0.760 and 0.348, respectively. Both values are greater than zero, indicating that the model has predictive relevance for the two endogenous variables. The higher Q^2predict value for customer satisfaction indicates that the model has stronger predictive performance for customer satisfaction than for customer loyalty. Furthermore, the CVPAT was conducted to provide additional evidence of the model's predictive capability by examining the average loss and *p*-value.

Table 10. Cross-Validated Predictive Ability Test (CVPAT) Results

Comparison	Variable	Average Loss Difference	*t-Statistics*	*p-Value*	Result
PLS-SEM with IA	Customer Satisfaction	−0.165	8.274	<0.001	Better and significant
	Customer Loyalty	−0.069	2.128	0.035	Better and significant
	Overall Model	−0.113	4.806	<0.001	Better and significant
PLS-SEM with LM	Customer Satisfaction	−0.031	2.823	0.006	Better and significant
	Customer Loyalty	−0.074	3.967	<0.001	Better and significant
	Overall Model	−0.054	4.286	<0.001	Better and significant

Source: SmartPLS 4 output, processed by the researcher, 2026.

Based on Table 4.20, all average loss differences are negative, with *p*-values below 0.05. These results indicate that the PLS-SEM model provides significantly better predictive performance for customer satisfaction and customer loyalty than predictions based on the indicator average (IA) and linear model (LM). Thus, the Q^2predict and CVPAT results demonstrate

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that the research model not only explains the relationships among the variables but also has predictive capability for customer satisfaction and customer loyalty among Kuala Stabas Train passengers.

Table 11. Direct Effect Testing Results

Hypothesis	Relationship Between Variables	Path Coefficient (β)	*STDEV*	*t-Statistics*	*p-Values*	Decision
H1	Service Quality → Customer Satisfaction	0.883	0.026	34.536	0.000	Accepted
H2	Customer Satisfaction → Customer Loyalty	0.677	0.195	3.477	0.001	Accepted
H3	Service Quality → Customer Loyalty	0.034	0.219	0.156	0.876	Rejected

Source: Primary data processed by the researcher, 2026.

The test results in Table 11 show that, of the three hypotheses regarding direct effects, two were accepted and one was rejected. The coefficient values, t-statistics, and p-values correspond



to the SmartPLS bootstrapping output used in the study.

Figure 2. Hypothesis Testing

H1: Service Quality - Customer Satisfaction. The results indicate that service quality has a positive and significant effect on customer satisfaction, with a path coefficient of 0.883, a *t*-statistic of 34.536, and a *p*-value < 0.001. Therefore, H1 is accepted.

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H2: Customer Satisfaction - Customer Loyalty. Customer satisfaction has a positive and significant effect on customer loyalty, with a path coefficient of 0.677, a *t*-statistic of 3.477, and a *p*-value of 0.001. Therefore, H2 is accepted.
H3: Service Quality - Customer Loyalty. Service quality does not have a significant direct effect on customer loyalty, with a path coefficient of 0.034, a *t*-statistic of 0.156, and a *p*-value of 0.876. Therefore, H3 is rejected.

Table 12. Indirect Effect Testing Results

Hypothesis	Indirect Relationship	Path Coefficient (β)	*STDEV*	*t-Statistics*	*p-Values*	Decision
H4	Service Quality → Customer Satisfaction → Customer Loyalty	0.597	0.169	3.541	0.000	Accepted

Source: Primary data processed by the researcher, 2026.

The results indicate that service quality has a positive and significant effect on customer loyalty through customer satisfaction, with a path coefficient of 0.597, a *t*-statistic of 3.541, and a *p*-value < 0.001. Therefore, H4 is accepted, indicating that customer satisfaction mediates the relationship between service quality and customer loyalty. This finding suggests that service quality can foster customer loyalty by generating customer satisfaction, which subsequently increases customers' tendency to reuse and recommend the Kuala Stabas Train service.

Table 13. Summary of Direct, Indirect, and Total Effects

Effect Component	Coefficient	*t-Statistics*	*p-Values*	Result
Service Quality → Customer Loyalty	0.034	0.156	0.876	Not significant
Service Quality → Customer Satisfaction → Customer Loyalty	0.597	3.541	<0.001	Significant
Total Effect of Service Quality → Customer Loyalty	0.632	7.964	<0.001	Significant

Source: SmartPLS 4 Bootstrapping output, processed by the researcher, 2026.

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Based on Table 13, the direct effect of service quality on customer loyalty is not significant, whereas its indirect effect through customer satisfaction is significant. The total effect of service quality on customer loyalty is also significant, with a coefficient of 0.632. These findings indicate that customer satisfaction serves as a full mediator, meaning that the effect of service quality on customer loyalty operates through customer satisfaction rather than directly.

DISCUSSION

The Effect of Service Quality on Customer Satisfaction

The path coefficient of 0.883 indicates that service quality is a very strong factor in shaping customer satisfaction. These findings indicate that customer experience during service, travel timeliness, ease of ticketing, and staff service play a significant role in determining their evaluation of Kuala Stabas services. These assessments include facilities, cleanliness, punctuality, ease of ticketing, staff service, and safety during the trip. These results align with the SERVQUAL concept, which places tangibles, reliability, responsiveness, assurance, and empathy as dimensions of service quality. Furthermore, these findings support Expectation Confirmation Theory, which states that satisfaction is formed when the service experience meets or exceeds customer expectations. The research results are also consistent with (Badriyah & Kuswanto, 2023), (Nurani et al., 2022), with (Rahmi & Ridhaningsi, 2026) which demonstrates the positive influence of service quality on customer satisfaction in transportation services.

The Effect of Customer Satisfaction on Customer Loyalty

Customer satisfaction was found to have a positive and significant effect on customer loyalty ($\beta = 0.677$; $t = 3.477$; $p = 0.001$). This finding indicates that service experiences that meet customer expectations can encourage passengers to reuse the Kuala Stabas Train service, recommend it to others, and maintain their preference for the service. This result is consistent with the *Expectation Confirmation Theory*, which explains that satisfaction arising from the alignment between expectations and actual experiences can develop into post-use behavioral intentions. The findings of this study also support previous research (Mittal et al., 2023), (King'ola et al., 2026), and (Tedjokusumo & Murhadi, 2023) demonstrating that satisfaction plays a role in enhancing customer loyalty. Thus, maintaining a satisfying service experience is crucial for strengthening long-term relationships with customers.

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The Effect of Service Quality on Customer Loyalty

Unlike the two previous relationships, service quality was not found to have a significant direct effect on customer loyalty (β = 0.034; *t* = 0.156; *p* = 0.876). This finding indicates that a favorable assessment of service quality does not automatically lead to customer loyalty. The result is further supported by the f^2 value of 0.001, indicating that the direct contribution of service quality to customer loyalty is very small when customer satisfaction is included in the model. In the context of the Kuala Stabas Train service, customers' decisions to continue using the service may also be influenced by situational factors such as fares, routes, schedules, travel needs, and the availability of alternative modes of transportation. This finding is consistent with (Kalhoro et al., 2025) and (Kurniawan et al., 2024) but unlike (Nurani et al., 2022) which found a direct influence of service quality on loyalty. This difference indicates that the relationship between service quality and loyalty can vary depending on customer characteristics and the service context being studied.

The Role of Customer Satisfaction as a Mediator

Customer satisfaction was found to positively and significantly mediate the relationship between service quality and customer loyalty (β = 0.597; *t* = 3.541; *p* < 0.001). This finding indicates that service quality can enhance customer loyalty when the service experience first generates customer satisfaction. The non-significant direct effect of service quality on customer loyalty, combined with the significant indirect effect through customer satisfaction, indicates a full mediation pattern. This finding supports the *Expectation Confirmation Theory*, which suggests that customers evaluate their service experiences based on the extent to which they meet their expectations, after which the resulting satisfaction encourages repeat usage, recommendations, and commitment to the service. The findings of this study are consistent with (Kalhoro et al., 2025) and (Rahmi & Ridhaningsi, 2026) which highlights the mediating role of customer satisfaction in the relationship between service quality and customer loyalty. Therefore, strengthening customer loyalty among Kuala Stabas Train passengers requires more than simply improving service quality; it should also focus on creating service experiences that generate customer satisfaction.

CONCLUSIONS

1. Service quality has a positive and significant effect on customer satisfaction. This finding indicates that better service quality experienced by Kuala Stabas Train passengers leads to higher levels of customer satisfaction.

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2. Customer satisfaction has a positive and significant effect on customer loyalty, whereas service quality does not have a significant direct effect on loyalty. This finding suggests that high-quality service does not automatically generate customer loyalty without satisfaction arising from the service experience.
3. Customer satisfaction mediates the relationship between service quality and customer loyalty. The significant indirect effect indicates that service quality can strengthen customer loyalty through the formation of customer satisfaction. Therefore, efforts to enhance loyalty among Kuala Stabas Train passengers should focus on delivering service that meets or exceeds customer expectations, thereby fostering satisfaction and encouraging repeat usage, recommendations, and long-term customer relationships.

SUGGESTIONS

1. For PT Kereta Api Indonesia (Persero) Regional Division IV Tanjungkarang, improving service quality should focus on creating customer satisfaction as a foundation for building loyalty. The company is advised to improve the convenience of ticket purchasing and payment, arrival punctuality, facility cleanliness, and the delivery of information in the event of service disruptions. In addition, staff competence, friendliness, and concern for customers should be maintained through regular training and service evaluations.
2. The company should evaluate service performance based on customers' experiences, rather than relying solely on the achievement of operational standards. Customer satisfaction surveys can be conducted periodically to identify areas requiring improvement, including the speed and clarity of complaint handling and the provision of information needed by passengers during their journey.
3. For future researchers, it is recommended to incorporate other variables that may influence customer loyalty, such as price perception, customer value, trust, corporate image, accessibility, digital service quality, and schedule suitability. Future studies may also expand the research context to different routes, types of railway services, or operational regions to provide broader insights into the relationships among service quality, customer satisfaction, and customer loyalty.

REFERENCES

Armstrong, M., & Taylor, S. (2023). Armstrong's handbook of human resource management practice: A guide to the theory and practice of people management. Kogan Page Publishers.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Badriyah, N., & Kuswanto, A. (2023). Pengaruh Kualitas Layanan, Akses, Harga, dan Kompetensi Karyawan Terhadap Kepuasan Pelanggan PT Kereta Api Indonesia. Cakrawala Repositori IMWI, 6(1), 420–442.

Hidayat, M. A., Rasyid, A., & Pasolo, F. (2024). Service quality on customer loyalty: Mediation of customer satisfaction. Advances in Business & Industrial Marketing Research, 2(3), 150–163.

Kalhoro, M., Yong, H. N. A., & SPR, C. R. (2025). From service quality to loyalty: understanding rail commuter satisfaction in Greater Kuala Lumpur. Transportation Development Research, 3(2), 9–28.

King'ola, A. M., Njeru, W. G., Kibera, F. N., & Musyoka, R. M. (2026). The influence of customer satisfaction on loyalty among passengers of railway transport services in kenya. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 11(4), 1.

Kotler, P., & Keller, K. (2022). Marketing Management, Global Edition, 16/E.

Kurniawan, S. R., Selfiana, S., & Jati, P. (2024). Pengaruh Kualitas Pelayanan dan Kepuasan Pelanggan Terhadap Loyalitas Pelanggan PT Mass Rapid Transit Jakarta (Perseroda). Jurnal Manajemen, 11(3), 175–182.

Lovelock, C., & Wirtz, J. (2004). Services marketing: people, technology, strategy. Journal of Services Marketing, 18(5), 413–414.

Mittal, V., Han, K., Frennea, C., Blut, M., Shaik, M., Bosukonda, N., & Sridhar, S. (2023). Customer satisfaction, loyalty behaviors, and firm financial performance: what 40 years of research tells us. Marketing Letters, 34(2), 171–187.

Nurani, K., Widianita, R., & Anisah, A. (2022). THE EFFECT OF SERVICE QUALITY AND PRICE ON CUSTOMER SATISFACTION AND ITS IMPACT ON THE LOYALTY OF SIANTAR EXPRESS TRAIN CUSTOMERS. Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA), 6(3), 2220–2237.

Purnama, C., Rahmah, M., Fatmah, D., Hasani, S., Rahmah, Y., & Rahmah, Z. Z. (2025). Customer Satisfaction as a Mediator between Service Quality and Customer Loyalty: Evidence from Islamic Banks in Indonesia. Journal of Economic Cooperation & Development, 46(3), 175–206.

Putra, K. P., & Barusman, T. M. (2024). The Effect of Using the PLN Mobile Application on PLN Customer Satisfaction (Case Study at PT PLN ULP Teluk Betung). Formosa Journal of Multidisciplinary Research, 3(3), 643–652.

Rahmi, N. A., & Ridhaningsi, F. (2026). Service quality and innovation as drivers of customer loyalty: The mediating role of customer satisfaction in the context of Indonesian railways. Golden

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Ratio of Marketing and Applied Psychology of Business, 6(1), 202–216.

Tedjokusumo, C., & Murhadi, W. R. (2023). Customer satisfaction as a mediator between service quality and customer loyalty: a case study of Bank Central Asia. Jurnal Siasat Bisnis, 27(2), 156–170.

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