Maritime Technology and Society
Vol. 5(1): 1-7, February 2026
https://doi.org/10.62012/mp.vi.46644

Regular Research Article

The Effect of Service Quality, Trust, and Corporate Image on Passenger Satisfaction of the Bawean Island Ferry Operated under the Port Authority and Harbormaster Office (KSOP) Class II Gresik

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Abstract: This study aims to analyze the influence of service quality, trust, and corporate image on customer satisfaction of the Bawean Island ferry service managed by the Port Authority and Harbormaster Office (KSOP) Class II Gresik. Using a quantitative approach with survey methods, primary data was obtained from 100 respondents of KM Express Bahari 3F and KM Express Bahari 6F passengers. The data were analyzed using multiple linear regression with SPSS. The results indicate that service quality and corporate image significantly affect customer satisfaction, while trust does not have a significant effect. Corporate image is the most dominant variable. Simultaneously, the three variables significantly affect customer satisfaction with an Adjusted R^2 of 0.742. This means that 74.2% of the variation in customer satisfaction can be explained by service quality, trust, and corporate image. The findings imply that service quality and a strong corporate image are essential for enhancing customer satisfaction, while trust needs to be strengthened through transparent communication and consistent operational reliability.

Keywords: Service Quality, Trust, Corporate Image, Customer Satisfaction, Ferry Service, KSOP Gresik

1. Introduction

Maritime transport has long been recognized as the backbone of global trade and mobility, connecting people, goods, and economies across vast geographical boundaries [1], [2]. In archipelagic countries such as Indonesia, the importance of maritime transport is even more evident, as it serves as the primary means of connectivity between islands. For remote island communities, ferry services are not merely a mode of transportation but also a lifeline that sustains socio economic activities, education, healthcare, and trade [1], [2].

Within this context, the Gresik–Bawean route plays a pivotal role in linking Bawean Island located approximately 120 kilometers north of Gresik, East Java to the mainland. The route is actively served by KM Express Bahari 3F and KM Express Bahari 6F under the supervision of the Port Authority and Harbormaster Office (KSOP) Class II Gresik [14]. KSOP is mandated not only to regulate maritime safety and enforce national and international laws but also to oversee service delivery and ensure passenger satisfaction. As a government authority, KSOP Class II Gresik carries a dual responsibility: maintaining safety and efficiency on one hand, while safeguarding service quality and public trust on the other [3], [15].

Ferry passengers, as key stakeholders, evaluate the service experience through multiple aspects such as punctuality, comfort, safety, staff attitude, and the overall image of the operator and regulatory body. However,

Received: 2025-08-27; Accepted: 2026-12-30

ferry operations on the Gresik–Bawean route often face challenges that may undermine satisfaction. Issues such as schedule delays, safety concerns, and limited onboard facilities are recurrent. In addition, weather conditions frequently disrupt sailing, causing delays or cancellations that affect passengers' travel plans. For example, in December 2024, KM Express Bahari 6F was forced to return to Gresik due to high waves [14]. These disruptions raise concerns not only about operational reliability but also about passengers' trust and the overall image of the service [2], [6], [7].

Theoretically, customer satisfaction is shaped by a combination of tangible and intangible factors. Kotler and Keller [1] identify five service quality dimension's reliability, responsiveness, assurance, empathy, and tangibles that directly affect customer evaluation. In the ferry context, these dimensions are reflected in punctual schedules, responsive handling of complaints, assurance of safety, empathetic treatment of passengers, and comfortable facilities [5], [8]. Haralambides [4] emphasizes that service quality is often the most decisive factor in determining satisfaction within service industries.

Trust is another determinant of satisfaction and long-term loyalty [9], [10]. It involves perceptions of honesty, reliability, and consistency of service providers. In ferry transport, trust reflects passengers' confidence in the operator's ability to provide safe and reliable services despite challenges such as weather disruptions. However, trust is fragile and can be easily undermined when passengers experience repeated delays or safety incidents. Some studies [6], [7] indicate that while trust is the foundation of loyalty, its direct effect on satisfaction is often less significant than service quality.

Corporate image, meanwhile, reflects the overall reputation and public perception of an organization [3], [13]. It plays a critical role in shaping retention and satisfaction, particularly in service industries where intangible experiences dominate. For ferry passengers, the image of KSOP Gresik and the ferry operators is shaped not only by service delivery but also by crisis response, public communication, and management of peak demand [15]. For instance, during the 2025 Eid holiday season, KSOP Gresik successfully added extra ferry schedules to anticipate passenger surges, strengthening its image as a responsive and capable authority [15].

Previous studies on ferry passenger satisfaction in Indonesia [5], [12] have mostly focused on private operators and competitive environments. However, limited research has explored satisfaction in government regulated ferry services, such as those managed by KSOP, where accountability, safety, and regulatory oversight play central roles. This study addresses that gap by examining how service quality, trust, and corporate image influence passenger satisfaction within a public maritime governance framework.

The objective of this study is to analyze the effects of service quality, trust, and corporate image on passenger satisfaction with the Gresik–Bawean ferry service managed by KSOP Class II Gresik. Specifically, the study aims to determine the extent to which each variable independently and collectively influences satisfaction, and to identify the most dominant factor. By addressing these questions, the research seeks to provide practical recommendations for improving ferry services, enhancing regulatory effectiveness, and strengthening the public image of KSOP as a reliable maritime authority.

This paper is structured as follows. Section 2 describes the materials and methods, including data collection and analytical techniques. Section 3 presents the results of the statistical analysis, Section 4 discusses the findings in relation to existing theories and evidence, and Section 5 concludes with implications, recommendations, and suggestions for future research.

2. Materials and Methods

The study employed a quantitative approach using a survey method. Instrument validity was tested using Pearson's Product Moment correlation between item scores and total scores, where $r > 0.30$ indicated validity. Reliability was measured using Cronbach's

Alpha, with α > 0.60 considered acceptable (Nunnally, 1978). The population comprised passengers of KM Express Bahari 3F and KM Express Bahari 6F on the Gresik–Bawean route. A purposive sampling technique was applied, selecting passengers who had used the ferry service at least twice. The total sample of 100 respondents was determined using the Slovin formula with a 10% margin of error, considering the average monthly passenger volume of approximately X persons on the Gresik–Bawean route [15]. Respondents were selected using purposive sampling, targeting passengers who had experienced at least two round trips.

The research instrument was a structured questionnaire with a Likert scale (1–5). Variables included:

- Service Quality (X1): reliability, responsiveness, assurance, empathy, tangibles [1].
- Trust (X2): honesty, safety, consistency, responsibility [2].
- Corporate Image (X3): reputation, professionalism, public perception [3].
- Customer Satisfaction (Y): overall satisfaction, expectation confirmation, repurchase intention [4].

Data validity and reliability were tested before the main analysis. Multiple linear regression was used with SPSS, supported by classical assumption tests. Partial effects were assessed using t tests, simultaneous effects with F tests, and the model's explanatory power using Adjusted R^2.

3. Results

3.1. Reliability Test

The reliability test evaluated whether the questionnaire consistently measured each construct. A Cronbach's Alpha value greater than 0.60 indicates reliability.

Table 1 shows the results of the reliability test; each research instrument variable achieved a Cronbach's Alpha value above 0.60. Therefore, it can be concluded that the questionnaire used in the study was reliable.

Table 1. Reliability Test Results

Variable	Cronbach's Alpha	Status
Service Quality (X1)	0.661	Reliable
Customer Trust (X2)	0.722	Reliable
Corporate Image (X3)	0.807	Reliable
Customer Satisfaction (Y)	0.762	Reliable

3.1.1. Descriptive Statistics

Descriptive statistics summarize respondents' perceptions of each variable.

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.
Service Quality (X1)	16.72	1.82
Customer Trust (X2)	12.45	1.59
Corporate Image (X3)	12.06	1.64
Customer Satisfaction (Y)	12.22	1.59

Table 2 shows that service quality has the highest average score, indicating that service quality is the factor most perceived by respondents.

3.1.2. Classical Assumption Test

- Normal Test Results

Based on the output above, the plot points in Figure 1. Normal P Plot of Regression Standardized Residual always follow and approach the diagonal line. Therefore, it can be concluded that the residual values are normally distributed. Therefore, the normality of the residual values in the simple linear regression in this study is met.

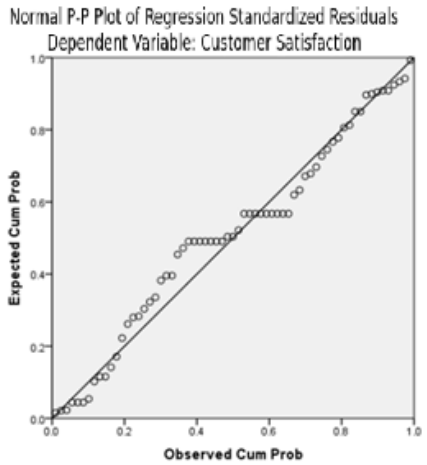

Figure 1. Normal P Plot of Regression

- Multicollinearity Test

The multicollinearity test is performed by comparing the tolerance value and variance factor (VIF) values with the required values. The required value for the tolerance value is greater than 0.01 and for the VIF value less than 10 (Nasution, 2020). The following is the calculation of the multicollinearity test.

Table 3. Multicollinearity Test Results

Variable	Tol.	VIF	Status
Service Quality (X1)	0.381	2.628	No multicollinearity
Customer Trust (X2)	0.422	2.370	No multicollinearity
Corporate Image (X3)	0.432	2.314	No multicollinearity

Based on table 3 showing the output coefficient in the Collinearity Statistics section, it is known that the Tolerance value for the Service Quality variable (X1) is 0.381, Trust (X2) is 0.422 and Corporate Image (X3) is 0.432 which is greater than 0.1. Meanwhile, the VIF value for variables (X1) 2.628, (X2) 2.370 and (X3) 2.314 is <10.00. Therefore, referring to the basis for decision making in the multicollinearity test, it can be concluded that there are no symptoms of multicollinearity in the regression model.

- Multiple Linear Regression Test

The analysis technique used next was multiple regression. Data processing was performed using SPSS 23, which yielded the following results:

Table 4. Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Sig.
	B	Std. Error	
(Constant)	0.759	0.980	0.442
Quality_X1	0.349	0.087	0.000
Trust_X2	0.165	0.112	0.148
Image_X3	0.421	0.082	0.000

Table 4 shows the multiple linear regression equation as follows:

Y = 0.759 + 0.349 X1 + 0.165 X2 + 0.421 X3

Explanation of Each Component:

1. The constant value of 0.759 indicates customer satisfaction (Y) when all independent variables (quality, trust, and image) are assumed to be zero.
2. The service quality coefficient value is 0.349, meaning that every 1 unit increase in service quality (X_1) will increase customer satisfaction (Y) by 0.349 units, assuming other variables remain constant. This coefficient is statistically significant because the significance value (Sig.) is 0.000 < 0.05.
3. The customer trust coefficient value is 0.165. This means that every 1 unit increase in trust (X_2) will increase customer satisfaction (Y) by 0.165 units, assuming other variables remain constant. However, the Sig. value = 0.148 > 0.05, indicating statistical insignificance. This means that trust has not been proven to have a significant direct effect on customer satisfaction in this model.
4. The coefficient value of the company's image is 0.421, meaning that every 1 unit increase in image (X_3) will increase customer satisfaction (Y) by 0.421 units, assuming other variables remain constant. This is the largest and most statistically significant coefficient (Sig. = 0.000), which indicates that image has the strongest influence on customer satisfaction in this model.

- Hypothesis Test

1. Partial Test Results (t test)

The t test is used to determine the dependent variable. Hypothesis testing in this

study uses SPPS software, which is conducted at a significant level of 0.05 (a = 5%). The decision-making criteria are as follows:

Table 5. Partial Test Results

Model	Standardized Coefficients Beta	t	Sig.
(Constant)		0 .774	0.442
Quality_X1	0.400	4.036	0.000
Trust_X2	0.165	1.467	0.148
Image_X3	0.435	5.147	0.000

The calculation results in table 5 can be explained as follows:

a. Service Quality Variable. The standardized Beta coefficient is 0.400, indicating a positive effect. Service quality has a value of 0.00, which is less than 0.05, indicating that service quality has a significant partial effect on customer satisfaction. The calculated T value for X1 is 4.036 > 2.000, indicating a significant effect.
b. Customer Trust Variable. The standardized Beta coefficient is 0.165, indicating a positive effect. Customer Trust has a significant value of 0.148, which is greater than 0.05, indicating that customer trust has an insignificant partial effect on customer satisfaction. The calculated T value for X2 is 1.467 < 2.000, indicating an insignificant effect.
c. Corporate Image Variable. The standardized Beta coefficient is 0.435, indicating a positive effect. Corporate image has a value of 0.00, which is less than 0.05, indicating that corporate image has a partial significant effect on customer satisfaction. The calculated T value for X3 is 5.147 >, indicating a significant effect.

2. F Test

F test was conducted to evaluate the simultaneous effect of the independent variables on the dependent variable within the proposed regression model. The F test serves as a statistical tool to assess whether Service Quality, Customer Trust, and Company Image collectively contribute to explaining variations in Learning Motivation. By examining the comparison between regression and residual variance, this test determines the overall feasibility and explanatory power of the model prior to interpreting individual parameter estimates.

Table 6. F Test Results

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	121.462	3	40.487	62.489	0.000[b]
Residual	39.522	61	0.648		
Total	160.985	64			

Based on table 6 above, the results of the F Test above show that simultaneously, Service Quality, Customer Trust and Company Image have a significant influence on Learning Motivation, with a significant value of 0.000 which is smaller than 0.05.

3. Coefficient of Determination Results

Analysis of the determination coefficient was conducted to measure the proportion of variance in the dependent variable that can be explained by the independent variables included in the regression model. The coefficient of determination (R^2) provides an overview of the model's explanatory power, indicating how well Service Quality, Customer Trust, and Company Image collectively account for variations in Customer Satisfaction. This analysis is essential to assess the overall effectiveness of the proposed model in explaining the observed data.

Table 7. Coefficient of Determination Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.869[a]	0.754	0.742	0.805

The test results in table 7 produce yield an R^2 value of 0.742, or 74.2%. This indicates that 74.2% of customer satisfaction is influenced by the independent variables, namely service quality, customer trust, and company image. Meanwhile, 25.8% of customer satisfaction is influenced by other variables outside the research model used in this study.

4. Discussion

The findings confirm that service quality significantly affects satisfaction, aligning with the SERVQUAL model [1]. In contrast, trust shows no significant effect. This may reflect contextual realities in the Gresik–Bawean route, where weather disruptions and limited operator alternatives reduce the role of trust as a differentiating factor. Passengers may perceive trust as an expectation rather than a performance indicator. Similar findings were reported by Zhang & Chen [6] in regulated ferry systems, where trust influences long term loyalty more than immediate satisfaction.

By contrast, trust does not have a significant effect. This result can be better explained by contextual factors. In the case of the Gresik–Bawean ferry service, passengers are aware that delays or cancellations are often due to uncontrollable external conditions, such as adverse weather and sea conditions. For example, in December 2024, KM Express Bahari F was forced to return to Gresik due to high waves [14]. Such events reduce passengers' perception of the operator's reliability, thereby weakening trust as a predictor of satisfaction. Moreover, since the ferry service operates in a regulated environment with limited competition, passengers may have lower expectations regarding trust and instead focus more on reaching their destination safely. This suggests that, in this context, trust may play a greater role in long term loyalty rather than immediate satisfaction, as also indicated by Zakaria and Ricky [2], and Zhang & Chen [6]. This result contrasts with Zhang & Chen [6], who found trust to be a significant determinant in competitive ferry markets. In the Gresik–Bawean context, passengers may have limited alternatives and therefore perceive trust as a baseline rather than a differentiating factor.

Corporate image emerges as the most dominant factor, underscoring the importance of public perception. KSOP Gresik's proactive measures during the 2025 Eid holiday, when additional ferry schedules were provided to accommodate passenger surges [15], strengthened its reputation and enhanced passenger satisfaction. This finding supports prior studies that emphasize the strong relationship between corporate image and customer satisfaction [3], [13]. Furthermore, the dominance of corporate image underscores the importance of public perception and institutional credibility. KSOP Gresik's ability to manage peak demand and maintain service continuity enhances its reputation and passenger confidence, consistent with Nguyen [14] and Widodo [8].

Taken together, the results demonstrate that service quality, trust, and corporate image simultaneously influence customer satisfaction. Nevertheless, other factors such as ticket prices, port facilities, and passengers' socio-economic conditions may also contribute, suggesting avenues for future research [5], [7], [12].

5. Conclusions

This study concludes that service quality and corporate image significantly influence passenger satisfaction, with corporate image being the strongest determinant. Trust, however, does not show a direct effect, likely due to external operational constraints such as weather disruptions and limited-service alternatives. Collectively, the three variables account for 74.2% of the variance in customer satisfaction.

For practical implications, KSOP Gresik should enhance real time communication systems during service disruptions, improve contingency planning for adverse weather, and maintain transparency to reinforce public trust. Ferry operators are also encouraged to upgrade on-board comfort and responsiveness to further enhance passenger satisfaction. Future research may include additional variables such as ticket pricing, digital service innovation, and environmental conditions to provide a more comprehensive model of passenger satisfaction in maritime transport services.

Author contributions: Designing the study, data collection, and data analysis: DM; Correction of data analysis and correction of writing language: DP; Conceptualization and correction of data analysis: WW

Acknowledgments: The author would like to express gratitude to the Research and Community Service Biro of Hang Tuah University, which has facilitated our research and encouraged us to publish in reputable journals, and to KSOP Class II Gresik and the passengers of KM Express Bahari 3F and 6F for their cooperation.

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