

The Effect of Staff Helpfulness and Communication on Customer Loyalty Through Passenger Satisfaction at PT. Dharma Lautan Utama, Perak Branch, Surabaya (KM. Dharma Kencana VII)

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Customer loyalty is a critical factor for sea transportation service companies in retaining customers amid increasingly intense competition. This study aims to analyze the effect of staff helpfulness and communication on customer loyalty through passenger satisfaction at PT. Dharma Lautan Utama, Perak Branch, Surabaya (KM. Dharma Kencana VII). A quantitative approach was employed with a sample of 384 respondents determined using the Lemeshow formula and selected through purposive sampling. Data were analyzed using Partial Least Square-Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS 4. The results show that communication has a significant effect on passenger satisfaction ($t = 10.668$; $p = 0.000$), but has an insignificant direct effect on customer loyalty ($t = 0.619$; $p = 0.268$). Staff helpfulness has a significant effect on both passenger satisfaction ($t = 2.310$; $p = 0.010$) and customer loyalty ($t = 3.059$; $p = 0.001$). Passenger satisfaction is also shown to significantly affect customer loyalty ($t = 15.275$; $p = 0.000$) and mediates the effect of staff helpfulness ($t = 2.444$; $p = 0.007$) and communication ($t = 7.489$; $p = 0.000$) on customer loyalty. These findings confirm that passenger satisfaction serves as an important pathway linking the quality of staff interaction with the formation of customer loyalty in sea transportation services.

Keywords: Staff Helpfulness; Communication; Passenger Satisfaction; Customer Loyalty; PLS-SEM

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1. Introduction

Customer loyalty refers to customers' attachment to a service provider that leads them to continue using or repeatedly purchasing a service because of a positive impression of a brand. Customer loyalty is reflected in customers' repeated use of the same service as a result of positive past experiences (Danurdara & Masatif, 2025) and is measured through repurchase intention and sustained actual purchasing behavior (Gül et al., 2023). In the sea transportation service industry, passenger loyalty serves as an indicator of a company's success in building long-term relationships with its customers.

Data from Statistics Indonesia (BPS) indicate a declining trend in domestic sea passenger departures, while data on the 2026 Eid homecoming and return flows at Tanjung Perak Port, Surabaya, show that sea passenger movements reached 132,154 people, with PT. Dharma Lautan Utama (DLU) accounting for the largest share, approximately 55.21% of the total (Radarsurabaya, 2026). However, this high passenger volume does not necessarily reflect actual levels of customer satisfaction and loyalty; therefore, the quality of service interactions remains an important concern for the company.

Staff helpfulness and communication are two frontline service aspects that play an important role in the continuity of company operations. Empathetic, friendly, and responsive staff who readily assist passengers can create a positive service experience, whereas low responsiveness may reduce passenger satisfaction (Safitri Firdaus & Youmil Abrian, 2025). Effective communication between staff and passengers also helps

determine the level of satisfaction, as limited service time may result in suboptimal interactions and potentially lead to dissatisfaction (Citra, 2025).

Based on observations of embarkation operations at PT. Dharma Lautan Utama, Perak Branch, Surabaya, several indications of suboptimal staff-passenger interaction were identified, including limited staff initiative and readiness to provide assistance and insufficient communication regarding delays in ship departure schedules. These conditions provide the basis for this study to analyze the effect of staff helpfulness and communication on customer loyalty through passenger satisfaction, drawing on the Service Dominant Logic perspective as a foundation for value co-creation among the company, employees, and customers (Phuong Nguyen, 2022). This study extends and adapts the studies of Danurdara and Masatif (2025) and Citra (2025) to the operational context of KM. Dharma Kencana VII.

Based on the preceding discussion, this study was formulated to address seven research questions: (1) does staff helpfulness have a significant effect on passenger satisfaction; (2) does communication have a significant effect on passenger satisfaction; (3) does staff helpfulness have a significant effect on customer loyalty; (4) does communication have a significant effect on customer loyalty; (5) does passenger satisfaction have a significant effect on customer loyalty; (6) does staff helpfulness have a significant effect on customer loyalty through passenger satisfaction; and (7) does communication have a significant effect on customer loyalty through passenger satisfaction?

2. Literature Review And Hypothesis Development

Service Dominant Logic

Service Dominant Logic (SDL) emphasizes that service constitutes the fundamental basis of every economic exchange process. Introduced by Vargo and Lusch (2004), this theory views value as value-in-use, which is formed through interaction and collaboration among the actors involved in service delivery, namely companies, employees, and customers (Phuong Nguyen, 2022). Within the SDL framework, communication quality and human resource capabilities determine the service value perceived by customers; therefore, staff helpfulness and communication are regarded as service capabilities that can enhance passenger satisfaction.

Staff Helpfulness

Staff helpfulness refers to staff attitudes and behaviors in providing assistance to consumers and reflects their willingness and ability to meet customer needs during the service process (Safitri Firdaus & Youmil Abrian, 2025). Staff members who demonstrate interpersonal concern and empathy can create positive emotional impressions and adapt their service behavior to the needs of individual customers (Hielvita, 2022). The indicators of staff helpfulness in this study include willingness to help, a high level of care and attention, initiative in offering assistance, the ability to help passengers overcome difficulties, and an understanding of consumer needs.

Communication

Communication is the process of conveying information between staff and customers with the aim of facilitating understanding of the procedures and services provided. Clear and open communication can reduce misunderstandings during the service process (Fina Sunardiyah, Pawito, 2022). The communication indicators used in this study include information clarity, empathy, active listening, two-way communication, and the ability to convey information clearly and in an easily understood manner (Citra, 2025).

Passenger Satisfaction

Satisfaction is a customer evaluation that reflects feelings of pleasure or disappointment arising from a comparison between expectations and the experience received when using a service (Ma & Ma, 2022). The indicators of passenger satisfaction include impressions formed at each stage of the service process, perceptions of the service environment, perceived value, and emotional responses that arise during or after service use (Usman et al., 2023).

Customer Loyalty

Customer loyalty is a deeply held commitment to consistently continue using a preferred product or service in the future despite competing marketing influences (Oliver, 1999). Loyalty develops through cognitive, affective, conative, and action stages, culminating in actual repeated use. The indicators of customer loyalty in this study include repeat purchase, recommendations to others through word of mouth, and customer commitment to the company (Siti Fatimah et al., 2022).

Hypothesis Development

Previous studies have shown that staff assistance and concern have a significant effect on customer satisfaction (Adi et al., 2023; Setiono & Hidayat, 2022), while effective staff communication also increases passenger satisfaction (Sorso, 2024). Staff service quality and interpersonal communication have also been shown to influence customer loyalty (Shibeika, 2025; Irwanda, 2024; Citra, 2025). Meanwhile, customer satisfaction has consistently been found to influence loyalty (Karuniawan & Santika, 2023; Yum & Yoo, 2023) and to serve as a mediating variable between service quality and customer loyalty (Saputra & Sugianti, 2023; Setyadi et al., 2023). Based on this discussion, the research hypotheses are formulated as follows:

H1: Staff helpfulness has a significant effect on passenger satisfaction. H2: Communication has a significant effect on passenger satisfaction. H3: Staff helpfulness has a significant effect on customer loyalty. H4: Communication has a significant effect on customer loyalty. H5: Passenger satisfaction has a significant effect on customer loyalty. H6: Staff helpfulness has a significant effect on customer loyalty through passenger satisfaction. H7: Communication has a significant effect on customer loyalty through passenger satisfaction.

3. Research Methods

This study employed a quantitative survey approach and was conducted at PT. Dharma Lautan Utama, Perak Branch, Surabaya. The study population comprised passengers of KM. Dharma Kencana VII. Respondents were required to have used the service at least once, to have experienced service interactions with staff, and to be at least 17 years old. The sample size was determined using the Lemeshow formula because the population size was not known with certainty. With a 95% confidence level ($Z = 1.96$), a proportion of 0.5, and a 5% margin of error, the calculated sample size was 384.16, which was rounded to 384 respondents. Purposive sampling was used to select the respondents.

Data were collected using a 1-5 Likert-scale questionnaire (strongly disagree to strongly agree), supported by field observations and a literature review. The research variables consisted of staff helpfulness (X1) and communication (X2) as exogenous variables, passenger satisfaction (Z) as the mediating variable, and customer loyalty (Y) as the endogenous variable. Data were analyzed using Partial Least Square-Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The analysis included measurement model (outer model) evaluation through convergent and discriminant validity tests and composite reliability, as well as structural model (inner model) evaluation using R-square values, path coefficients, multicollinearity tests (VIF), and

mediation testing through bootstrapping. A hypothesis was accepted when the t-statistic was greater than 1.96 or the p-value was less than 0.05 (Hatta Setiabudhi et al., 2024).

4. Results and Discussion

Respondent Characteristics

The study involved 384 respondents who were passengers of KM. Dharma Kencana VII. By gender, 51.6% of the respondents were female and 48.4% were male. By age, most respondents were 17-30 years old (59.1%), followed by those aged 31-45 years (28.6%) and 46-60 years (12.2%). In terms of service-use frequency, most respondents had used the service 2-3 times (46.9%), followed by 4-5 times (38%), more than 5 times (12.8%), and once (2.3%). This respondent profile indicates that most service users were repeat passengers of productive age.

Measurement Model Evaluation (Outer Model)

The test results show that all indicators for staff helpfulness, communication, passenger satisfaction, and customer loyalty had outer loading values above 0.70 with significant t-statistics; therefore, all indicators were declared valid. The average variance extracted (AVE) value for each variable was also above the 0.50 threshold, while the composite reliability values for all variables exceeded 0.70, indicating that the research instrument had good consistency and reliability (Hatta Setiabudhi et al., 2024).

Structural Model Evaluation (Inner Model)

The R-square values show that staff helpfulness and communication explained 83.0% of the variance in passenger satisfaction ($R^2 = 0.830$), while staff helpfulness, communication, and passenger satisfaction jointly explained 85.7% of the variance in customer loyalty ($R^2 = 0.857$). Both values fall within the strong (substantial) category.

Table 1. R-Square Test Results

Variable	R-Square	Adjusted R-Square	Category
Passenger Satisfaction	0.830	0.829	Strong (Substantial)
Customer Loyalty	0.857	0.856	Strong (Substantial)

Source: Data processed by the researchers (2026)

Table 2. Path Coefficient Test Results

Effect Path	Path Coefficient	p-values	Result
Communication → Passenger Satisfaction	0.750	0.000	Significant
Communication → Customer Loyalty	-0.051	0.268	Not Significant
Passenger Satisfaction → Customer Loyalty	0.763	0.000	Significant
Staff Helpfulness → Passenger Satisfaction	0.176	0.010	Significant
Staff Helpfulness → Customer Loyalty	0.238	0.001	Significant

Source: Data processed by the researchers (2026)

The multicollinearity test (VIF) results for all indicators were below 10, indicating that there were no serious multicollinearity problems among the independent variables in the research model.

Hypothesis Testing and Mediation Analysis

Hypothesis testing was conducted using the bootstrapping procedure, with the acceptance criteria of t-statistic > 1.96 or p-value < 0.05.

Table 3. Summary of Hypothesis Testing Results

Hyp.	Effect Path	t-statistic	p-value	Result
H1	Staff Helpfulness → Passenger Satisfaction	2.310	0.010	Accepted
H2	Communication → Passenger Satisfaction	10.668	0.000	Accepted
H3	Staff Helpfulness → Customer Loyalty	3.059	0.001	Accepted
H4	Communication → Customer Loyalty	0.619	0.268	Rejected
H5	Passenger Satisfaction → Customer Loyalty	15.275	0.000	Accepted
H6	Staff Helpfulness → Customer Loyalty (through Passenger Satisfaction)	2.444	0.007	Accepted
H7	Communication → Customer Loyalty (through Passenger Satisfaction)	7.489	0.000	Accepted

Source: Data processed by the researchers (2026)

Discussion

Staff helpfulness was found to have a significant effect on passenger satisfaction (H1 accepted), consistent with the findings of Adi et al. (2023), which indicate that the better the staff are at assisting customers, the higher the level of satisfaction experienced by customers. Communication also had a significant effect on passenger satisfaction, with the highest path coefficient (0.750; H2 accepted), reinforcing Sorso's (2024) finding that effective staff communication during service delivery increases passenger satisfaction.

Staff helpfulness had a significant effect on customer loyalty (H3 accepted), consistent with Shibeika (2025), who stated that personal attention and staff responsiveness play an important role in building loyalty. In contrast, communication was found to have an effect on customer loyalty, but the direct effect was not statistically significant (H4 rejected), indicating that communication alone may not be sufficient to build loyalty unless it is accompanied by an adequate level of satisfaction. This finding differs from Citra (2025) and suggests that, in the context of sea transportation services, the role of communication in customer loyalty is primarily indirect.

Passenger satisfaction had a significant effect on customer loyalty, with the largest path coefficient in the model (0.763; H5 accepted), consistent with Yum and Yoo (2023), who found that satisfaction arising from the alignment between expectations and service experiences encourages repeat use and customer commitment. The mediation test results show that passenger satisfaction significantly mediated the effect of staff helpfulness (H6 accepted) and communication (H7 accepted) on customer loyalty, consistent with Setyadi et al. (2023) and Kwik Cynthia Yuliani (2022). Thus, passenger satisfaction serves as the primary pathway linking the quality of staff interaction - whether through assistance or communication - to the formation of customer loyalty at PT. Dharma Lautan Utama, Perak Branch, Surabaya.

5. Conclusions

Staff helpfulness and communication each had a significant effect on passenger satisfaction. Staff helpfulness also had a significant effect on customer loyalty, whereas communication had a direct effect on customer loyalty that was not statistically significant. Passenger satisfaction had a significant effect on customer loyalty and was shown to significantly mediate the effects of both staff helpfulness and communication on customer loyalty. These findings confirm that customer loyalty in sea transportation services is formed more strongly through increased passenger satisfaction than through the direct effect of staff communication alone.

PT. Dharma Lautan Utama, Perak Branch, Surabaya, is advised to continue improving staff capabilities in providing prompt, friendly, and responsive service and to enhance communication quality by delivering clear and easily understood information, including through regular training in service delivery, empathy, and complaint handling. Service staff should maintain professional conduct and attentiveness to passenger needs in order to improve comfort and satisfaction. Future researchers are encouraged to include other variables, such as service quality, customer experience, trust, or corporate image, and to expand the research context to other shipping companies or transportation modes so that the findings can be compared more broadly.

6. References

- Adi, K., Safirin, M. T., & Rahadian, Y. R. (2023). Analysis of service quality on customer satisfaction and switching intention. *Journal La Sociale*, 4(3), 168–187. <https://doi.org/10.37899/journal-la-sociale.v4i3.1608>
- Citra. (2025). The influence of interpersonal communication and service quality of cardiologists on patient loyalty at Welas Asih Regional General Hospital. *Jurnal of Social Research*, 4. <https://doi.org/10.55324/josr.v4i11.2864>
- Danurdara, A. B., & Masatif, A. (2025). Assessing the customer experience quality and customer loyalty: The mediating role of customer satisfaction. *Innovative Marketing*, 21(2), 248–259. [https://doi.org/10.21511/im.21\(2\).2025.20](https://doi.org/10.21511/im.21(2).2025.20)
- Fina Sunardiyah, Pawito, A. M. I. N. (2022). Pengaruh komunikasi interpersonal, kampanye sosial media dan citra organisasi terhadap kepuasan konsumen di Bea Cukai Surakarta. *Jurnal Ilmu Komunikasi*, 20(2). <https://doi.org/10.31315/jik.v20i2.6615>
- Gianti, L. R., Syairozi, M. I., & Muhtarom, A. (2024). The Effect of Recruitment, Job Placement and Job Training on the Performance of Employees of the Personnel and Human Resource Development Agency of Lamongan Regency. *Jurnal Multidisiplin Sahombu*, 4(02), 308-314.
- Gül, İ., Helvacioğlu, E. T., & Saraçlı, S. (2023). Service quality, outpatient satisfaction and loyalty in community pharmacies in Turkey: A structural equation modeling approach. *Exploratory Research in Clinical and Social Pharmacy*, 12. <https://doi.org/10.1016/j.rcsop.2023.100361>
- Hatta Setiabudhi, Suwono, Yudi Agus Setiawan, & Syahrul Karim. (2024). Analisis data kuantitatif dengan SmartPLS 4. Borneo Novelty Publishing.
- Hielvita, L. (2022). Meningkatkan kepuasan pelanggan dengan peran komunikasi interpersonal yang tepat dan waktu tunggu. *Journal of Social Science*, 6(1).
- Irwanda, A. A. I. A. A. P. (2024). Pengaruh komunikasi interpersonal customer service terhadap loyalitas nasabah Bank Syariah Indonesia KCP Tanah Tinggi. 14(1). <https://doi.org/10.56745/statement.v14i1.329>
- Karuniawan, I. K. V. A., & Santika, I. W. (2023). Peran kepuasan pelanggan dalam memediasi pengaruh kualitas layanan terhadap loyalitas pelanggan. *E-Jurnal Manajemen Universitas Udayana*, 12(9), 995. <https://doi.org/10.24843/ejmunud.2023.v12.i09.p06>
- Kholifah, S., Syairozi, M. I., & Muhtarom, A. (2024). The Influence of Facilities, Quality, and Price on Consumer Satisfaction at Welijo Cafe and Freshmarket. *Jurnal Multidisiplin Sahombu*, 4(02), 340-348.
- Kwik Cynthia Yuliani, L. L. (2022). Pengaruh e-banking, kualitas pelayanan dan kualitas komunikasi terhadap loyalitas nasabah (Studi kasus nasabah Bank BCA Kota Semarang). <https://www.ejournal.stiepena.ac.id/index.php/fokusemba/article/view/630>

- Ma, G., & Ma, J. (2022). The impact of airport facility service quality on brand experience and passenger satisfaction: Considering the mediating role of brand engagement. *Future Transportation*, 2(2), 501–521. <https://doi.org/10.3390/futuretransp2020028>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33–44.
- Phuong Nguyen. (2022). Service-dominant logic: A model of service satisfaction and its antecedents. <https://doi.org/10.24018/ejbmr.2022.7.3.1404>
- Radarsurabaya. (2026). Pelabuhan Tanjung Perak Surabaya catat 132 ribu penumpang saat mudik dan balik Lebaran, Balikpapan tertinggi.
- Safitri Firdaus, & Youmil Abrian. (2025). A quantitative study on the influence of authenticity and employee helpfulness on customer delight at The Balcone Hotel & Resort. *Journal of Multidimensional Management*, 2(1), 114–119. <https://doi.org/10.63076/jomm.v2i1.26>
- Saputra, K. A., & Sugiati, G. A. (2023). The role of customer satisfaction mediates the effect of service quality on customer loyalty in online transportation. *Jurnal Ekonomi & Bisnis JAGADITHA*, 10(2), 192–199. <https://doi.org/10.22225/jj.10.2.2023.192-199>
- Setiono, B. A., & Hidayat, S. (2022). Influence of service quality with the dimensions of reliability, responsiveness, assurance, empathy and tangibles on customer satisfaction. *International Journal of Economics, Business and Management Research*, 6(9), 330–341. <https://doi.org/10.51505/ijebmr.2022.6924>
- Setyadi, B., Helmi, S., & Syed Ismail bin Syed Mohamad. (2023). Customer satisfaction mediates the influence of service quality on customer loyalty in Islamic banks. *International Journal of Islamic Business and Economics (IJBEC)*, 7(1), 25–36. <https://doi.org/10.28918/ijibec.v7i1.6924>
- Shibeika, A. M. (2025). The effect of employee service quality on customer loyalty in the Saudi retail sector. *Journal of Service Science and Management*, 18(5), 350–372. <https://doi.org/10.4236/jssm.2025.185023>
- Siti Fatimah, Mukhammad Idrus, Afiah Mukhtar, Karta Negara Salam, & Ismawati Ismawati. (2022). Study on service quality on customer satisfaction and loyalty. *Jurnal Manajemen*, 26(3), 512–532. <https://doi.org/10.24912/jm.v26i3.938>
- Situmorang, I. R. G. V. M. W. (2025). The impact of service quality and price on customer loyalty in Medan City for Wendy's Medan products. *Jurnal Manajemen Bisnis Eka Prasetya*, 11.
- Sorso, H. (2024). Staff responsiveness and communication on passenger satisfaction: Bases for passenger service satisfaction framework. *Journal of Interdisciplinary Perspectives*, 2(7). <https://doi.org/10.69569/jip.2024.0211>
- Usman, A., Azis, Y., Harsanto, B., & Azis, A. M. (2023). The impact of service orientation and airport service quality on passenger satisfaction and image: Evidence from Indonesia. *Logistics*, 7(4). <https://doi.org/10.3390/logistics7040102>
- Yum, K., & Yoo, B. (2023). The impact of service quality on customer loyalty through customer satisfaction in mobile social media. *Sustainability*, 15(14). <https://doi.org/10.3390/su151411214>