The Influence of E-Service Quality and Service Recovery on Customer Loyalty in Tokopedia Online Marketplace

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Abstract. The digital transformation has significantly changed consumer behavior, particularly within the e-commerce ecosystem. Tokopedia, one of the largest online marketplaces in Indonesia, faces increasing challenges in retaining customer loyalty amid intense market competition. This study aims to examine the influence of e-service quality and service recovery on customer loyalty toward Tokopedia. A quantitative method was employed through an explanatory survey involving 150 active Tokopedia users in Indonesia. Data were collected using a 7-point Likert-scale questionnaire and analyzed using multiple linear regression. The results show that both e-service quality ($\beta = 0.352$; $p < 0.001$) and service recovery ($\beta = 0.410$; $p < 0.001$) have a positive and significant influence on customer loyalty. Interestingly, service recovery has a greater impact, indicating that how a company handles service failures plays a key role in customer retention. The practical implication suggests that e-commerce platforms should not only focus on technical and feature improvements but also on building responsive and empathetic service recovery systems. This study contributes to the literature on digital consumer behavior and service management, especially in the Indonesian marketplace context.

Keywords: E-Service Quality, Service Recovery, Customer Loyalty, E-Commerce

1 Introduction

The development of digital technology has had a significant impact on the global business ecosystem, including in Indonesia. This shift has changed consumer behavior, where previously, needs were fulfilled conventionally, consumers have now begun turning to digital platforms for shopping, seeking in-formation, and lodging complaints [1]. This transformation was further accelerated by the COVID-19 pandemic, which forced society to minimize physical contact and rely more heavily on online services for daily activities, including purchase transactions [2].

This situation has indirectly spurred the accelera-tion of digital transformation across various sectors, especially in e-commerce. According to the economy SEA 2023 report released by Google, Temasek, and Bain & Company, Indonesia holds the highest position in terms of e-commerce transaction value in Southeast Asia, with the market projected to reach USD 95 billion by 2025 [3].

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This phenomenon indicates that the e-commerce industry holds substantial growth potential, but it also faces significant challenges in maintaining customer trust and loyalty amid increasing expectations for the quality of digital services [4].

Tokopedia, as one of the largest marketplaces in Indonesia, plays a vital role in promoting digital inclusion. The platform offers easy access to products, various payment methods, fast delivery, and direct communication features with sellers. On the other hand, the rising expectations of customers for convenience and digital service reliability require Tokopedia to continuously improve its service quality and responsiveness to complaints.

Several innovations have been implemented, such as the development of Tokopedia Care, an automatic refund system, compensation in the form of vouchers, and improvements to a more responsive and user-friendly interface.

Although Tokopedia has made various innovations to enhance its service quality, the challenge of maintaining customer loyalty remains. Based on the Top Brand Index 2024 published by Frontier Research, Tokopedia experienced a drop in ranking in the e-commerce category compared to previous years, losing out to platforms like Shopee, which continues to dominate the market [5].

In addition, data from SimilarWeb and iPrice also show that Tokopedia's web traffic has been on a declining trend since 2022. This indicates a shift in customer interest, where users have become more critical of their online shopping experiences and are more inclined to switch to platforms perceived as faster or more personally beneficial. This phenomenon signals a decline in Tokopedia's customer loyalty, despite being one of the most established players in Indonesia's e-commerce industry.

In digital marketing literature, e-service quality is defined as the extent to which a digital platform is able to provide reliable, accessible, secure, responsive, and empathetic services that meet users' needs [6]. Meanwhile, service recovery refers to the company's efforts to correct and compensate for service failures through prompt resolution, fair compensation, and satisfactory handling of complaints [7]. Both are con-sidered crucial elements influencing customer loyalty, especially in digital service environments with minimal physical interaction.

Although this topic has been extensively studied in the global context, research specifically examining the influence of e-service quality and service recovery on customer loyalty in Indonesian marketplaces, such as Tokopedia, remains limited. Previous studies have primarily focused on customer satisfaction or have examined only one of the service variables in isolation. Therefore, this study aims to fill the gap by providing empirical evidence on the simultaneous in-fluence of e-service quality and service recovery on Tokopedia customer loyalty.

The findings of this study are expected not only to enrich academic literature but also to offer practical implications for developing customer service strategies in Indonesia's e-commerce industry

2 Methodology

This study is a quantitative research using an explanatory survey approach that aims to examine the influence of e-service quality and service recovery on Tokopedia customer loyalty. The unit of analysis is individual active users of Tokopedia who reside in Indonesia and have transactional experience, whether smooth or problematic.

Samples were collected using purposive sampling with the following criteria: minimum age of 17 years, having made a transaction in the past three months, and having service experience. The number of respondents was set at 150 people, based on the recommendations of [8] for multiple linear regression analysis.

The questionnaire instrument consisted of 20 items, each representing three main variables. Eight items measured e-service quality (dimensions of efficiency, fulfillment, system availability, and privacy), six items measured service recovery (distributive, procedural, and interactional justice), and the remaining six items measured customer loyalty (repeat purchase, referral to others, immunity, and cross-product line purchases). All items were measured using a Likert scale of 1 to 7.

The data were analyzed using multiple linear regression with the help of SPSS version 24.0. Before the analysis, validity, reliability, and classical assumption tests were conducted to ensure the model's feasibility.

3 Results and Discussion

Result

Data analysis was conducted to examine the influence of e-service quality and service recovery on customer loyalty toward Tokopedia. Prior to conducting the multiple linear regression, tests for validity, reliability, and classical assumptions were carried out to ensure the model's adequacy.

The reliability test using Cronbach's Alpha indicated that all constructs had alpha values greater than 0.7, indicating that the instruments were reliable. E-service quality had an alpha of 0.887, service recovery 0.864, and customer loyalty 0.901. This result demonstrates strong internal consistency for each variable's indicators.

Table 1. Reliability Test

Construct	Cronbach's Alph
E-Service Quality	0.887
Service Recovery	0.864
Customer Loyalty	0.901

Source: Data processing results, 2025

Furthermore, a descriptive analysis was conducted to observe the mean scores of each construct. Results show that customer loyalty had the highest average (mean = 5.96), followed by e-service quality (mean = 5.91), and service recovery (mean = 5.78), based on a Likert scale ranging from 1 to 7.

Table 2. Descriptive Statistics of Research Variables

Variable	N	Mean	Std. Deviation	Min	Max

E-Service Quality	150	5.91	0.63	4.0	7.0
Service Recovery	150	5.78	0.69	3.0	7.0
Customer Loyalty	150	5.96	0.71	3.0	7.0

Source: Data processing results, 2025

To validate the regression model, classical assump-tion tests were performed. The normality test using Kolmogorov-Smirnov indicated a significance value of 0.000, suggesting that the residuals were not nor-mally distributed. However, as the sample size was large enough (n = 150), the model was still considered valid for further analysis [9]. The multi-collinearity test showed that each independent variable had a Tolerance value of 0.536 and a VIF value of 1.865, which indicates the absence of multicollinear-ity in the regression model.

Table 3. Multicollinearity Test

Variable	Tolerance	VIF
E-Service Quality	0.536	1.865
Service Recovery	0.536	1.865

Source: Data processing results, 2025

After confirming the model's adequacy, a multiple linear regression analysis was conducted to test the effect of e-service quality and service recovery on customer loyalty. The results indicated that both variables had a positive and significant effect, both simultaneously and partially. The R Square value of 0.608 indicated that 60.8% of the variation in customer loyalty was explained by the two independent variables. Partially, e-service quality showed a significant influence with a coefficient $\beta = 0.352$ ($p < 0.05$), and service recovery also had a significant effect with $\beta = 0.410$ ($p < 0.05$).

Table 4. Multiple Linear Regression Analysis

Variabel	Coefficient (B)	Std. Error	t-Value	Sig.
(Constant)	4.530	1.973	2.296	0.023
E-Service Quality	0.352	0.056	6.226	0.000
Service Recovery	0.410	0.070	5.829	0.000

Source: Data processing results, 2025

Discussion

The regression analysis shows that e-service qual-ity and service recovery have a positive and signifi-cant effect on customer loyalty toward Tokopedia. These findings reinforce existing theories and previous research suggesting that digital service quality and service recovery strategies are critical factors in building customer loyalty in e-commerce platforms.

First, the e-service quality variable significantly in-fluences customer loyalty ($\beta = 0.352$, $p < 0.001$). This indicates that the higher the customer's perception of Tokopedia's digital service quality, the higher their loyalty. This supports the onetail model developed by [10], which emphasizes that efficiency, system reliability, service fulfillment, and privacy are key dimensions in generating satisfaction and loyalty in digital environments. Similarly, [6] found that high-quality electronic services increase trust and repeat purchase intentions on e-commerce platforms.

Second, the service recovery variable also signifi-cantly affects customer loyalty ($\beta = 0.410$, $p < 0.001$), with a larger coefficient than e-service quality. This means Tokopedia's ability to address customer com-plaints quickly, fairly, and empathetically plays a critical role in determining whether customers remain loyal or switch platforms. This finding aligns with the Justice Theory [7], which divides service recovery justice into three dimensions: distributive justice (fair compensation), procedural jutice (transparent and flexible resolution process), and interactional justice (polite and empathetic communication). [11] also showed that effective service recovery enhances customers' brand percep-tion and encourages long-term retention.

Interestingly, the influence of service recovery on loyalty is greater than that of e-service quality in this study. This suggests that in the highly competitive In-donesian e-commerce landscape, such as Tokopedia vs. Shopee vs. TikTok Shop service failure recovery experience can become a key differentiator in maintaining customer loyalty. Modern customers have high expectations for swift responses, reasonable compensation, and human-centered service, not just technical solutions [12].

From a managerial perspective, these findings highlight that Tokopedia should not only focus on improving app interfaces, payment systems, and shopping features, but also strengthen its complaint-handling mechanisms. Strategies such as adaptive chatbots, frontliner empathy training, and data-driven compensation evaluations could be effective ap-proaches to retain customer loyalty.

Thus, this study provides empirical evidence that customer loyalty in e-commerce is strongly influenced by a combination of digital service quality and complaint recovery effectiveness. Both must be man-aged simultaneously and continuously to create sus-tainable competitive advantages in a rapidly evolving digital market.

4 Conclusion

This study aims to analyze the impact of e-service quality and service recovery on Tokopedia customer loyalty amid the increasingly intense e-commerce industry competition. Based on a multiple linear regression analysis of data from 150 active Tokopedia users, it was found that both independent variables had a positive and significant effect on customer loyalty.

The findings confirm that digital service quality, which includes efficiency, service fulfillment, system reliability, and privacy, plays a crucial role in building customer loyalty. However, the results also show that service recovery has an even greater influence than e-service quality. This suggests that how companies handle customer complaints or service failures can be the primary determinant of ongoing customer relationships, even more so than regular service experiences.

Theoretically, this research enriches the literature in marketing management and digital consumer behavior by providing empirical evidence from Indonesia, particularly on major marketplace platforms like Tokopedia. Practically, the findings offer strategic insights for e-commerce businesses to not only focus on technical and feature improvements, but also on building a responsive, fair, and empathetic service recovery system.

This study has limitations, such as its cross-sectional design and the limited scope to only one platform. Therefore, future research is encouraged to adopt longitudinal approaches, expand the platform types and user population, and include other variables such as price perception, brand image, or mobile UI experience, to gain a more comprehensive under-standing of customer loyalty formation in the dy-namic digital ecosystem.

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