

Service Quality and Customer Loyalty: The Mediating Role of Customer Satisfaction and Perceived Value in Investment Platforms

Nathanael Felix Theodore, Rodhiah*

Tarumanagara University

Correspondence Email: rodhiah@fe.untar.ac.id*

Abstract

This study examines how service quality impacts customer loyalty among users of the XYZ investment application in Indonesia. Customer satisfaction and perceived value are the mediating variables. The study employs a quantitative, descriptive, cross-sectional design. The sample consists of 204 active XYZ application users who were selected through purposive sampling. Data were obtained via structured online questionnaires and analyzed using partial least squares–structural equation modeling (PLS-SEM) with SmartPLS version 4. The results reveal the following: Service quality positively and significantly affects customer loyalty; service quality positively and significantly influences customer satisfaction; service quality significantly enhances perceived value; customer satisfaction significantly affects customer loyalty; perceived value significantly influences customer loyalty; customer satisfaction partially mediates the relationship between service quality and customer loyalty; and perceived value likewise partially mediates the effect of service quality on customer loyalty. These findings suggest that improving service performance can increase perceived value and customer satisfaction, thereby strengthening user loyalty toward digital investment platforms.

Keywords: service quality, customer satisfaction, perceived value, customer loyalty, fintech.

INTRODUCTION

The rapid development of the digital era has transformed the landscape of investment activities. Investment, which was once associated with complex processes and accessible only to certain groups, can now be carried out easily through simple and practical digital applications. Economic information has also become more accessible, contributing to the significant increase in the number of stock investors in Indonesia. According to data released by the Indonesia Stock Exchange (IDX), as of April 2025, the number of capital market investors has reached 16.2 million SID, an increase of 1,345,305 SID compared to the end of 2024. Of this figure, approximately 7 million are stock investors, indicating a positive development in public awareness and participation in investment.

This growth is further supported by digital investment platforms that offer education and user-friendly UI/UX for beginners. One such platform widely known among novice investors is the XYZ Investment App, which provides several competitive advantages including no minimum deposit, lower transaction fees, an AI-based screening tool, and comprehensive educational resources delivered by professionals. Despite these strengths and features designed to enrich the user experience, many users have reported system errors, bugs, slow performance, and unresponsive customer service. These issues indicate that user

satisfaction is not yet evenly achieved. In addition, increasing competition among brokerage firms offering similar services presents further challenges for XYZ Investment App in developing strong customer loyalty.

Data from KSEI shows that the platform recorded 6.9 million registered users (SID) as of April 2025, with approximately 80% of them being under 40 years old, representing a predominantly young investor base. However, based on transaction frequency in April 2025, only 4,682,261 transactions were conducted through XYZ Investment App. When estimating that each user performs 5–10 buy or sell transactions per month, this translates to roughly 468,226–936,452 active users monthly. These figures reveal that only around 6.79%–13.57% of the 6.9 million registered users are active each month. This demonstrates that the majority of users do not actively engage in trading through the platform.

20 Most Active Brokerage Houses by Total Frequency - April 2025 Unduh +

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No.	Code	Brokerage Firm	Regular			Non Regular			Total		
			Reguler Vol. saham	Reguler Val. IDR	Reguler Freq.	Non Reguler Vol. saham	Non Reguler Val. IDR	Non Reguler Freq.	Total Vol. saham	Total Val. IDR	Total Freq.
1	IS	Indosat Sekuritas Digital	81,260	14,308	6,478,373	5,000	51	4,888	86,260	14,359	6,483,261
2	YP	Mitra Ajaib Sekuritas Indonesia	57,088	23,821	3,342,619	455	224	452	57,543	23,846	3,343,071
3	CE	Mandiri Sekuritas	45,191	52,488	3,527,889	2,016	2,890	1,530	47,207	55,378	3,529,419
4	AK	IRIS Sekuritas Indonesia	28,735	52,214	2,882,311	1,079	2,983	985	29,814	55,197	2,883,296
5	PD	Indo Premier Sekuritas	22,360	13,900	2,824,888	430	659	3,217	22,790	14,559	2,828,105
6	SC	Ajib Sekuritas Asia	13,788	10,327	2,278,589	4	1	7	13,792	10,328	2,278,596

Figure 1. Active Brokers in April 2025

Source: IDX Website

This behavior suggests that client loyalty to the XYZ Investment App is rather low. According to Kotler and Keller (2016), customer loyalty is the commitment of customers to stick with a preferred product or service in the future, independent of other possibilities or outside forces. Oliver (1999) defines loyalty as a strong commitment to consistently repurchase or subscribe to a chosen good or service, even in situations when marketing or external factors aim to encourage switching behavior. This is especially significant given the Indonesia Stock Exchange's 92 authorized brokerage firms, which provide users with a wide range of options. Despite the fact that the XYZ Investment App is one of the most popular platforms among retail investors and newbies, maintaining user loyalty in the face of so many options remains difficult.

To set itself apart from competition, delivering high-quality service is crucial. Service quality is described as a service provider's capacity to continuously meet or exceed client expectations, laying the groundwork for satisfaction and loyalty (Kotler & Keller, 2016). This is reinforced by the findings of Le et al. (2025), who discovered that Service Quality strongly increases Customer Loyalty. The significance of service quality in the context of XYZ Investment App is especially important because the platform not only provides educational content and market information, but also serves as a direct middleman in managing users' financial assets and supporting their investment decisions.

Furthermore, perceived value may have an impact on customer loyalty. Kotler and Keller (2016) define perceived value as the difference between a customer's overall perception of advantages and the whole cost of an item when compared to other alternatives. In the instance of XYZ Investment App, perceived value may be shown in users' assessments of the

platform's analytical tools, discussion forums, comprehensive educational resources, and UI/UX benefits over competing investment platforms. Higher perceived value is likely to improve user loyalty. Doosik Min (2022) supports this viewpoint, stating that perceived value has a favorable and considerable influence on customer loyalty. These findings suggest that customers who perceive greater value from a service or platform are more likely to become loyal.

Customer Satisfaction is widely acknowledged as a vital precursor to loyalty. As defined by Kotler and Keller (2016), satisfaction arises when a customer's expectations align with or are exceeded by the actual performance experienced. Empirical research has largely supported this link, with studies by Ruslim et al. (2020) and Lukito et al. (2024) both confirming a significant positive relationship between satisfaction and customer loyalty. Collectively, this body of work suggests that positive user experiences lead to higher satisfaction, which, in turn, strengthens loyalty. However, the empirical evidence is not entirely consistent. For instance, while Doosik Min (2022) found a strong correlation, Salim and Rodhiah (2022) reported that Customer Satisfaction did not significantly influence Customer Loyalty. This disparity in findings highlights the complexity of the relationships among Service Quality, Perceived Value, Customer Satisfaction, and Customer Loyalty, indicating a need for further investigation. Therefore, the present study aims to analyze the interplay among these variables to better understand their combined contribution to the development of Customer Loyalty. A more comprehensive understanding of these dynamics is expected to equip businesses with insights to enhance user experiences and secure a sustainable competitive advantage.

METHOD

This study is using a quantitative research design, with the research population defined as all users of the XYZ Investment App who actively engage in investment and trading activities on the platform. The sample consists of 204 respondents, selected using purposive sampling based on the following criteria: (1) participants are officially registered users of the XYZ Investment App, (2) participants conduct stock trading transactions at least once per month, and (3) participants have used the application for a period considered adequate to evaluate its service quality. Primary data were collected using structured online questionnaires disseminated through Google Forms. All research variables, service quality, perceived value, customer satisfaction, and customer loyalty were measured using a five-point Likert scale.

The data were analyzed using structural equation modeling–partial least squares (SEM-PLS), implemented through SmartPLS version 4. According to Hair et al. (2021), SEM-PLS is ideal for studies focusing on prediction, theory development, and complex modeling structures, particularly when the sample size is moderate and normality assumptions are not strictly necessary. In addition, Henseler, Ringle, and Sinkovics emphasize that PLS-SEM is appropriate for exploratory and behavioral research because it simultaneously evaluates the measurement model, including reliability and validity, and the structural model, covering path significance, effect sizes, and predictive relevance. Consequently, this analytical approach offers a comprehensive and robust framework for assessing both direct and indirect relationships, thereby ensuring that the results accurately represent users' perceptions as well as their behavioral intentions toward the XYZ Investment App. The specification of the PLS model is as follows:

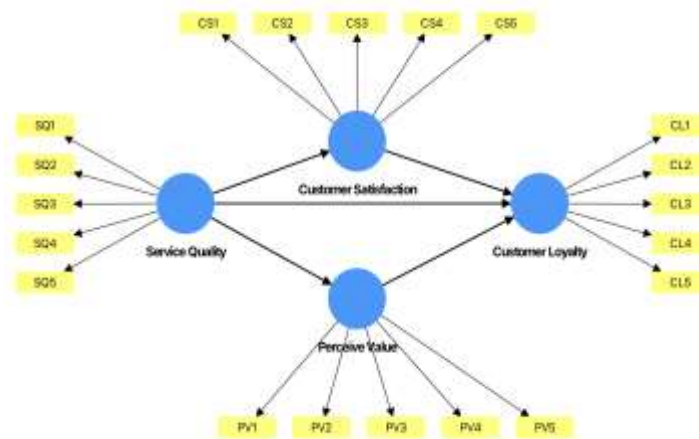


Figure 2. Research Model Specifications

RESULT AND DISCUSSION

Respondent Description

This study involved 204 respondents who are active users of the XYZ Investment App in Indonesia. Respondents were gathered through an online questionnaire distributed over 20 days, from 16 October 2025 to 4 November 2025. The respondent profiles are summarized as follows: By Gender: The sample consisted of 68.1% male respondents (139 individuals) and 31.9% female respondents (65 individuals). This indicates that the majority of users participating in this study were male, reflecting a higher level of engagement among male investors on the platform. By Domicile: Most respondents (78.9%, or 161 individuals) reside on the island of Java, representing the dominant geographic group in the sample. In addition, 4.4% (9 respondents) came from Kalimantan, and an equal proportion (4.4%, or 9 respondents) originated from Sulawesi. Respondents from Sumatra accounted for 9.3% (19 individuals), while those from Papua and Bali each represented 1.5% (3 respondents) respectively. These findings illustrate that the majority of XYZ Investment App users in this study are concentrated in Java, with smaller yet diverse representation across other major Indonesian regions.

Outer Model

Table 1. Convergent Validity Analysis

	Average variance extracted (AVE)
Customer Loyalty	0,618
Customer Satisfaction	0,674
Perceived Value	0,642
Service Quality	0,523

Source: SmartPLS Processing

From the table 1, that include the AVE value, the result shows that the value are above 0.50, which mean that the value are fulfill the requirements and can continue to the next step.

Table 2. Internal Consistency Reliability Analysis

	Cronbach's Alpha	Composite Reliability
Customer Loyalty	0,841	0,855
Customer Satisfaction	0,879	0,879
Perceive Value	0,860	0,861
Service Quality	0,768	0,787

Source: SmartPLS Processing

From the table above, each variables have composite reliability and Cronbach's alpha >0.60, which mean each item are reliable.

Inner Model

Table 3. Coefficient of Determination (R-Square)

	R-Square	R-Square Adjusted
Customer Loyalty	0,590	0,584
Customer Satisfaction	0,544	0,542
Perceived Value	0,471	0,468

Source: SmartPLS Processing

The analysis revealed that the independent variables, service quality and perceived value, explain 55.3% of the variation in customer satisfaction, as indicated by an R-squared value of 0.553. The remaining 44.7% is due to additional factors not considered in this study. According to Hair et al.'s classification, an R-square value near 0.55 is considered moderate, indicating that the model has a relatively strong explanatory ability and is acceptable in capturing the construct's behavior.

In comparison, the R-squared value for Customer Loyalty is 0.602, indicating that Customer Satisfaction and Perceived Value account for 60.2% of the variation in Customer Loyalty. Since this value exceeds 0.60, it is classified within the strong category, suggesting that the model exhibits substantial predictive strength in explaining users' loyalty toward the XYZ application. Overall, the R-Square values for both dependent variables indicate that the structural model in this research has an adequate level of explanatory strength. Customer Satisfaction is explained moderately well by the variables included, while Customer Loyalty is explained strongly. Thus, the variables included in your model are effective in predicting and explaining user behavioral responses within the context of XYZ application.

Inner Model Testing

The inner model testing in this study is conducted to evaluate the structural relationships among the latent constructs proposed in the research model. This analysis aims to assess the magnitude and statistical significance of the hypothesized causal relationships. A bootstrapping procedure is employed as a non-parametric resampling technique that enables the estimation of path coefficients, t-statistics, and p-values without requiring the assumption of data normality. The results of the inner model evaluation provide empirical evidence regarding the validity of the proposed hypotheses.

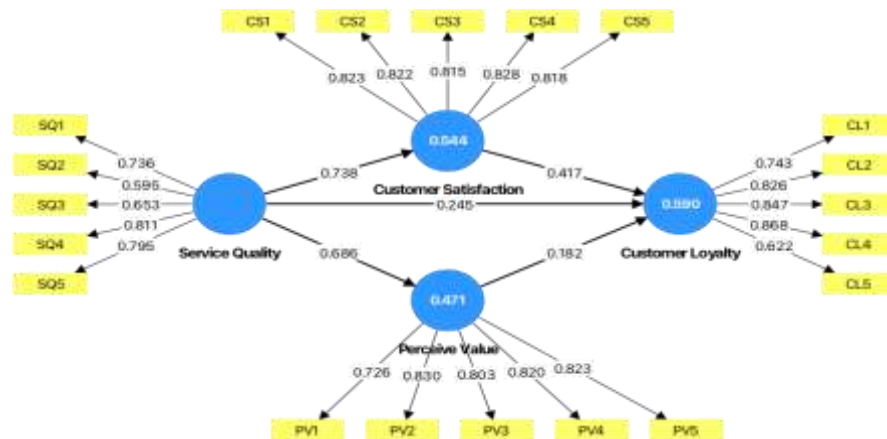


Figure 3. Bootstrapping Test Result

Table 4. Indirect Effect Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Service Quality -> Perceived Value -> Customer Loyalty	0,125	0,122	0,054	2,307	0,021
Service Quality -> Customer Satisfaction -> Customer Loyalty	0,308	0,299	0,078	3,952	0,000

The mediation analysis in table 3 confirms significant indirect effects for both proposed mechanisms. The first mediation path, demonstrating that Service Quality indirectly affects Customer Loyalty via Perceived Value, yielded a positive indirect effect of 0.125. Since this p-value is below the 0.05 significance level, the statistical validity of the mediation is confirmed, suggesting that Perceived Value effectively mediates the relationship between Service Quality and Customer Loyalty.

The indirect impact of Service Quality on Customer Loyalty, as mediated by Customer Satisfaction, was observed to be particularly robust, evidenced by an indirect coefficient of 0.308. These results indicate a substantial mediating role for Customer Satisfaction, emphasizing its power to enhance the influence of Service Quality on Customer Loyalty. Overall, the findings establish both Perceived Value and Customer Satisfaction as crucial mediators, with Customer Satisfaction exhibiting the more dominant mediating influence. This means that improvements in service quality shape customer loyalty not only through direct pathways but also indirectly by elevating users' perceived value and feelings of satisfaction. These mediating variables therefore play a crucial role in shaping loyal behavior among users of the XYZ application.

Table 5. Path Coefficient Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Customer Satisfaction -> Customer Loyalty	0,417	0,410	0,092	4,549	0,000
Perceive Value -> Customer Loyalty	0,182	0,181	0,077	2,350	0,019
Service Quality -> Customer Loyalty	0,245	0,247	0,073	3,374	0,001
Service Quality -> Customer Satisfaction	0,738	0,728	0,071	10,436	0,000
Service Quality -> Perceive Value	0,686	0,678	0,075	9,093	0,000

The empirical findings validate all of the presented hypotheses. The first hypothesis demonstrates that service quality has a statistically significant effect on customer loyalty ($p = 0.001$). Furthermore, the research yielded a positive path coefficient of 0.245, demonstrating a direct and beneficial association between service quality and customer satisfaction. Thus, the second hypothesis is accepted, as service quality is found to be a significant predictor of customer satisfaction ($p = 0.000$). The reasonably high path coefficient of 0.738 indicates that improvements in the quality of services supplied by the XYZ app platform are strongly linked to higher levels of user satisfaction.

The findings support the third hypothesis, demonstrating a significant positive effect of service quality on perceived value ($p = 0.000$; coefficient = 0.686). Furthermore, the fourth hypothesis is also supported, as perceived value positively influences customer loyalty ($p = 0.019$; coefficient = 0.182), suggesting that users who perceive higher value are more likely to remain loyal to the platform. Finally, the fifth hypothesis is confirmed, showing that customer satisfaction has a substantial positive effect on customer loyalty ($p = 0.000$; coefficient = 0.417), underscoring the vital role of satisfaction in fostering loyalty.

Overall, the findings demonstrate that all hypothesized relationships (H1-H7) are empirically supported, reflecting a theoretically sound and statistically robust model. The results highlight service quality as a key driver of customer satisfaction and perceived value, which lead to enhanced customer loyalty. These outcomes emphasize that the quality of services delivered by the XYZ App plays a pivotal role in shaping user experiences and sustaining long-term engagement. This includes aspects such as ease of use, reliability, responsiveness, and system performance. The positive and significant influence of service quality on customer satisfaction aligns with prior research by Doosik Min (2022), Le et al. (2025), and Jahmani et al. (2020), all of which emphasize that greater service performance leads

to higher satisfaction levels. Similarly, the substantial association between Service Quality and Perceived Value is similar with the findings of Slack et al. (2021) and Yum (2024), who found that users experience more value when services are supplied efficiently and consistently. The findings of the current study support these conclusions, demonstrating that XYZ App users rate the platform higher when its features and system performance satisfy their expectations.

Furthermore, Customer Satisfaction and Perceived Value were discovered to have strong direct effects on Customer Loyalty. These findings are congruent with those of Tuncer et al. (2020) and Doosik Min (2022), who discovered that users who are satisfied and feel high value are more likely to continue using digital services. In this study, XYZ App users are loyal when they believe the platform provides substantial benefits, supports their investment activities, and gives a dependable and easy user experience.

In addition to the direct impacts, the mediation hypotheses (H6 and H7) were also validated. Customer Satisfaction and Perceived Value were found to moderate the relationship between Service Quality and Customer Loyalty, implying that loyalty is influenced not just by service ratings but also by users' emotional and cognitive reactions to the service. These mediation findings are consistent with theoretical insights from Jahmani et al. (2020), Gulam et al. (2023), and Supriyanto et al. (2021), who argue that satisfaction and perceived value serve as psychological mechanisms that reinforce Service Quality's influence on loyalty intentions.

Overall, the findings from all investigated hypotheses show that Service Quality is a crucial factor of loyalty in the XYZ App, both directly and indirectly via Customer Satisfaction and Perceived Value. These findings strengthen prior empirical evidence and underline the importance of maintaining consistent service performance to preserve user loyalty in digital investment platforms. The harmony between this study's outcomes and previous research provides a robust empirical foundation for concluding that improving service quality is an effective approach to enhancing user evaluations, boosting satisfaction, and fostering long-term loyalty. These insights form the basis for the conclusions and recommendations discussed in the subsequent section.

CONCLUSION

This study looked at the impact of Service Quality on Customer Loyalty in the context of the XYZ App, with Customer Satisfaction and Perceived Value serving as mediating variables. The data demonstrate that Service Quality is an important factor in molding users' evaluations and behaviors. Higher service performance significantly enhances both Customer Satisfaction and Perceived Value, which subsequently strengthen Customer Loyalty. These results demonstrate that loyalty is not only driven by the technical aspects of the service but also by users' emotional and cognitive responses to the overall application experience.

Furthermore, both Customer Satisfaction and Perceived Value were discovered to be significant mediators, implying that the impact of Service Quality on loyalty occurs across several psychological pathways. This emphasizes the necessity of ensuring that service innovations result in positive user experiences and significant value perceptions. The study contributes to the literature by providing empirical evidence that consolidates the theoretical relationships among the four key constructs within digital investment platforms.

From a practical perspective, the results suggest that improving service reliability, responsiveness, interface quality, and feature usefulness can meaningfully increase user satisfaction and perceived value, ultimately fostering long-term loyalty. For practitioners, prioritizing user-centered service improvements should be viewed as a strategic approach to sustaining competitiveness in the growing digital investment industry.

Overall, this research underscores that Service Quality remains the most influential factor in driving loyalty within digital financial applications. Future studies may explore additional variables, alternative platforms, or longitudinal data to provide a deeper understanding of user loyalty formation in evolving digital investment environments.

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