



(MUDIMA)



The Effect of Service Quality on User Loyalty Through Trust and Satisfaction as Intervening Variables of Livin' by Mandiri Mobile Banking Users at PT. Bank Mandiri KCP Jakarta Pejaten

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ARTICLE INFO

Keywords: Service Quality, Trust, Satisfaction, Loyalty, Mobile Banking, Livin' by Mandiri

Received : 2 March

Revised : 24 April

Accepted : 25 May

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ABSTRACT

This study aims to examine the effect of service quality on user loyalty in Livin' by Mandiri mobile banking services through trust and satisfaction as intervening variables. The study was motivated by the increasing competition in digital banking services and the inconsistency of previous research findings related to the relationship between service quality, trust, satisfaction, and customer loyalty. This research applied a quantitative approach using explanatory research design. Data were collected through questionnaires distributed to 200 respondents who actively use Livin' by Mandiri mobile banking services at PT Bank Mandiri KCP Jakarta Pejaten. The collected data were analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) with SmartPLS 4 software. The findings indicate that service quality has a positive and significant effect on satisfaction and loyalty, but does not significantly affect trust. Furthermore, trust and satisfaction positively influence customer loyalty. The mediation analysis also demonstrates that satisfaction significantly mediates the relationship between service quality and loyalty, while trust does not significantly mediate the relationship. The study concludes that customer satisfaction is the most influential factor in strengthening loyalty among mobile banking users. Therefore, improving service quality, especially in terms of system reliability, responsiveness, security, and application stability, is important to increase customer satisfaction and maintain long-term loyalty.

INTRODUCTION

The advancement of digital technology has significantly transformed the banking industry worldwide. Banking institutions are increasingly shifting from conventional services toward digital-based services through the integration of information technology. One of the most widely used digital banking services is mobile banking, which enables customers to conduct financial transactions more efficiently, quickly, and flexibly without being limited by time and location.

In Indonesia, the development of mobile banking services continues to increase along with the growing penetration of internet access and smartphone usage. This condition encourages banks to compete not only in attracting new users but also in improving service quality to maintain customer trust, satisfaction, and loyalty. In the digital banking industry, service quality becomes an essential factor because customers expect applications to provide secure, reliable, responsive, and user-friendly services (Cuesta-Valiño et al., 2021).

Bank Mandiri, as one of Indonesia's largest state-owned banks, continuously strengthens its digital transformation strategy through the development of Livin' by Mandiri mobile banking services. According to PT Bank Mandiri (Persero) Tbk (2024), the number of Livin' by Mandiri users increased by 29% year-on-year to 29.3 million users

in December 2024. In addition, transaction frequency reached 3.9 billion transactions, with transaction values increasing to IDR 4,027 trillion.

Although the number of users continues to increase, transaction values during 2024-2025 showed fluctuations. This condition indicates that the growth in application users does not necessarily reflect strong customer loyalty. Some customers may only use the application occasionally without maintaining continuous transaction activities.

Furthermore, preliminary survey results conducted by the researcher revealed several issues related to the quality of Livin' by Mandiri services. System reliability obtained a score of 72%, application stability scored 70%, while customer service responsiveness achieved the lowest score at 68%. These findings indicate that users still experience several technical and service-related problems, such as delayed transaction processing, application errors, system instability, and slow responses in handling customer complaints.

In addition, the relationship between trust, satisfaction, and loyalty shows that although trust reached 75% and satisfaction reached 73%, customer loyalty remained relatively lower at 70%. This phenomenon suggests that trust and satisfaction may play important roles as mediating variables in the relationship between service quality and customer loyalty.



Figure 1. Perceived Service Quality Indications of Livin' by Mandiri

Source: Research Data, 2026.

Previous studies have reported inconsistent findings regarding the relationship between service quality, trust, satisfaction, and loyalty in digital banking services. Several studies concluded that service quality directly affects customer loyalty, while other studies found that the relationship occurs indirectly through mediating variables such as trust and satisfaction (Al-Hawari & Alhumaid, 2022).

Moreover, most previous studies examined mobile banking services in general and did not specifically focus on Livin' by Mandiri users in Indonesia. Therefore, this study aims to fill the existing research gap by analyzing the effect of service quality on user loyalty through trust and satisfaction as intervening variables among Livin' by Mandiri users at PT Bank Mandiri KCP Jakarta Pejaten.

METHODS

This research employed a quantitative method using an explanatory research approach to examine the relationship among variables.

The population in this study consisted of Livin' by Mandiri users at PT Bank Mandiri KCP Jakarta

Pejaten. The sample included 200 respondents selected through purposive sampling techniques. Respondents were required to be active users of Livin' by Mandiri mobile banking services.

Data were collected using structured questionnaires distributed to respondents. The questionnaire used a five-point Likert scale ranging from strongly disagree to strongly agree.

The variables used in this study consisted of:

1. Independent Variable: Service Quality
2. Intervening Variables: Trust & Satisfaction
3. Dependent Variable: Loyalty

The collected data were analyzed using Structural Equation Modeling based on Partial Least Squares (SEM-PLS) with the assistance of SmartPLS 4 software. SEM-PLS analysis is considered appropriate for predictive and exploratory research models (Hair et al., 2022).

The analysis process included:

1. Outer Model Evaluation: Convergent validity, Discriminant validity & Reliability test
2. Inner Model Evaluation: R-square analysis & Hypothesis testing

RESULTS AND DISCUSSION

Outer Model Evaluation

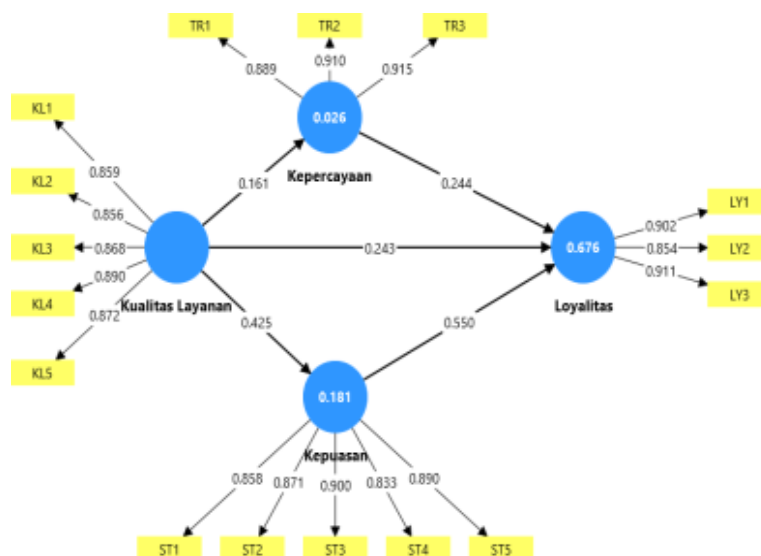


Figure 2. Outer Model
Source: SmartPLS 4 (2026)

Table 1. Convergent Validity Test

Indikator	Kepercayaan	Kepuasan	Kualitas Layanan	Loyalitas
LY1	0,476	0,687	0,489	0,902
LY2	0,517	0,664	0,429	0,854
LY3	0,431	0,687	0,459	0,911
KL1	0,093	0,356	0,859	0,421
KL2	0,201	0,313	0,856	0,487
KL3	0,151	0,385	0,868	0,455
KL4	0,134	0,414	0,890	0,473
KL5	0,116	0,376	0,872	0,400
ST1	0,411	0,858	0,365	0,717
ST2	0,386	0,871	0,356	0,686
ST3	0,432	0,900	0,401	0,682
ST4	0,376	0,833	0,362	0,591
ST5	0,370	0,890	0,365	0,640
TR1	0,889	0,427	0,187	0,467
TR2	0,910	0,417	0,130	0,489
TR3	0,915	0,391	0,121	0,492

Source: SmartPLS 4 (2026)

Table 2. Discriminant Validity Test

Indikator	Kepercayaan	Kepuasan	Kualitas Layanan	Loyalitas
LY1				0,902
LY2				0,854
LY3				0,911
KL1			0,859	
KL2			0,856	
KL3			0,868	
KL4			0,890	
KL5			0,872	
ST1		0,858		
ST2		0,871		
ST3		0,900		
ST4		0,833		
ST5		0,890		
TR1	0,889			
TR2	0,910			
TR3	0,915			

Source: SmartPLS 4 (2026)

Table 3. Average Variance Extracted test

Variabel	Average variance extracted (AVE)	Keterangan
Kepercayaan	0,819	Valid
Kepuasan	0,758	Valid
Kualitas Layanan	0,755	Valid
Loyalitas	0,791	Valid

Table 4. Reliability test

Variabel	Cronbach's alpha	Composite reliability (rho_a)	Keterangan
Kepercayaan	0,889	0,889	Reliabel
Kepuasan	0,920	0,922	Reliabel
Kualitas Layanan	0,919	0,921	Reliabel
Loyalitas	0,868	0,868	Reliabel

The outer model evaluation was conducted to determine the validity and reliability of the research indicators. The analysis results show that all indicators achieved loading factor values above 0.70, indicating that the indicators were valid in measuring their respective constructs.

Furthermore, the Average Variance Extracted (AVE) values for all variables exceeded

0.50, indicating adequate convergent validity.

The discriminant validity test also demonstrated that each construct was empirically distinct from other constructs.

The reliability test showed that all variables obtained Cronbach's Alpha and Composite Reliability values above 0.70. These findings confirm that all constructs used in this study were reliable and possessed strong internal consistency.

Inner Model Evaluation

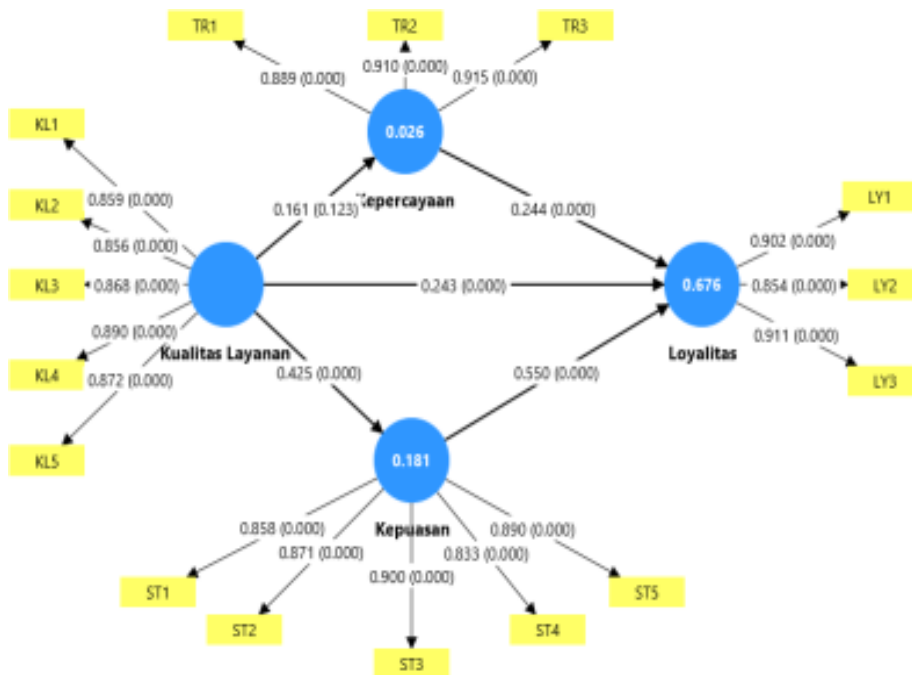


Figure 3. Inner Model
Source: SmartPLS 4 (2026)

R-square analysis

Table 5. R-square test

Variabel	R-square	R-square adjusted
Loyalitas	0,676	0,671

Source: SmartPLS 4 (2026)

Hypothesis testing

Table 6. Direct Path Test

Hubungan	O	M	STDEV	T	P Value	Keterangan
KL → TR	0,161	0,165	0,105	1,542	0,1231540444	Ditolak
KL → ST	0,425	0,428	0,099	4,295	0,0000178055	Diterima
KL → LY	0,243	0,246	0,063	3,863	0,0001134871	Diterima
TR → LY	0,244	0,248	0,056	4,364	0,0000130367	Diterima
ST → LY	0,550	0,540	0,092	5,987	0,0000000023	Diterima

Source: SmartPLS 4 (2026)

Table 7. Indirect Path Test

Hubungan	O	M	STDEV	T Statistics	P Value	Keterangan
KL → TR → LY	0,039	0,043	0,031	1,254	0,20976	Ditolak
KL → ST → LY	0,234	0,231	0,064	3,634	0,00028	Diterima

Source: SmartPLS 4 (2026)

R-Square Analysis

The R-square analysis was conducted to evaluate the predictive capability of the structural model used in this study. The results indicate that service quality contributes to explaining the variance in trust, satisfaction, and customer loyalty among Livin' by Mandiri users. In addition, the independent variables included in the model are able to explain the dependent variables adequately. Therefore, the structural model used in this research demonstrates acceptable predictive relevance and is considered appropriate for hypothesis testing.

Hypothesis Testing

The hypothesis testing results reveal that service quality has a positive and significant effect on customer satisfaction and loyalty. However, service quality does not significantly influence trust among Livin' by Mandiri users. Furthermore, both

trust and satisfaction positively and significantly affect customer loyalty.

The mediation analysis also indicates that satisfaction successfully mediates the relationship between service quality and customer loyalty. Meanwhile, trust does not significantly mediate the relationship between service quality and loyalty. These findings suggest that customer satisfaction plays a more dominant role in strengthening customer loyalty toward Livin' by Mandiri mobile banking services.

The findings support the Expectation Confirmation Theory proposed by Oliver (1980), which explains that customer satisfaction is formed when service performance meets or exceeds customer expectations.

In the context of digital banking services, factors such as application reliability, responsiveness, transaction security, system

stability, and ease of use significantly contribute to customer satisfaction and long-term customer loyalty.

The findings of this study are consistent with previous studies conducted by Hapsari et al. (2023) and Rather (2021), which found that customer satisfaction significantly influences customer loyalty in digital service industries. These studies emphasize that satisfied customers tend to maintain long-term relationships with service providers and are more likely to continue using digital services consistently.

In addition, the results of this study also support previous research conducted by Saputra and Wahyuni (2025), which explained that service quality plays an important role in improving customer trust and loyalty in digital banking services. High-quality services, reliable systems, and responsive customer support can strengthen customer confidence and encourage sustainable loyalty toward mobile banking applications.

CONCLUSION

This study demonstrates that service quality plays an important role in influencing customer satisfaction and loyalty among Livin' by Mandiri users at PT Bank Mandiri KCP Jakarta Pejaten. The findings also reveal that both trust and customer satisfaction significantly contribute to strengthening customer loyalty. However, the direct relationship between service quality and trust was found to be insignificant.

In addition, the mediation analysis confirms that customer satisfaction successfully mediates the effect of service quality on loyalty. On the other hand, trust was not proven to significantly mediate the relationship between service quality and customer loyalty. These results suggest that customer satisfaction is the most influential factor in encouraging long-term loyalty in digital banking services.

Therefore, maintaining and improving service quality remains essential for increasing customer satisfaction and building sustainable customer loyalty toward Livin' by Mandiri mobile banking services.

Suggestions

For practitioners, PT Bank Mandiri is encouraged to continuously enhance the quality of Livin' by Mandiri services, particularly in terms of application stability, transaction security, system reliability, and responsiveness in handling customer complaints. Improvements in these areas are expected to provide better user experiences, increase customer satisfaction, and strengthen customer loyalty over time.

For future researchers, it is recommended to broaden the scope of the study by involving a larger number of respondents and incorporating additional variables such as customer experience, perceived value, electronic word of mouth, and brand image. Future studies may also compare mobile banking services across different banking institutions to gain deeper insights into customer loyalty behavior in digital banking services.

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