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THE INFLUENCE OF SERVICE QUALITY AND E-TRUST ON USER SATISFACTION AMONG LIVIN' BY MANDIRI MOBILE BANKING USERS IN MEDAN CITY

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ABSTRACT

This study aims to analyze the effect of service quality and e-trust on user satisfaction among Livin by Mandiri mobile banking users in Medan City. The rapid digitalization of banking requires banks to maintain service quality and electronic trust to improve user satisfaction. This research employs a quantitative method with a survey approach involving 150 active users of Livin by Mandiri in Medan City. The sampling technique used is purposive sampling with criteria that respondents have used the application for at least 6 months. Data were collected through online questionnaires and analyzed using SPSS version 25 with multiple linear regression techniques. The results show that service quality ($\beta = 0.456$, $p < 0.001$) and e-trust ($\beta = 0.378$, $p < 0.001$) have positive and significant effects on user satisfaction. The R^2 value of 0.623 indicates that 62.3% of the variation in user satisfaction can be explained by both independent variables. These findings provide practical contributions for Bank Mandiri management in improving digital banking strategies through enhancing service quality and building strong electronic trust.

Keywords: Service Quality, E-Trust, User Satisfaction, Mobile Banking, Livin by Mandiri

BACKGROUND

Digital transformation in Indonesia's banking industry has experienced significant acceleration, especially in the aftermath of the COVID-19 pandemic. Bank Mandiri, as one of the largest banks in Indonesia, launched the mobile banking application "Livin' by Mandiri" in 2021 as a response to customers' growing need for more comprehensive and user-friendly digital banking services (Financial Services Authority, 2023). According to Bank Indonesia (2024), mobile banking penetration in Indonesia reached 89.2% in 2023, with a transaction growth rate of 47.3% year-on-year. Specifically in Medan City, as the economic center of North Sumatra, the adoption of mobile banking has shown a positive trend, with 78.4% of the productive-age population already using digital banking services (Bank Indonesia Medan, 2024).

However, the high adoption rate of mobile banking is not always followed by optimal user satisfaction. A preliminary survey conducted by the researcher involving 50 Livin' by Mandiri users in Medan City revealed that 32% of users experienced technical issues, 28% complained about the slow system response, and 24% expressed concerns about the security of online transactions. This phenomenon indicates a research gap that needs further exploration. Previous studies on mobile banking have generally focused on adoption behavior (Davis et al., 2023; Kumar & Singh, 2024) and technology acceptance (Venkatesh et al., 2024). Nevertheless, there is a lack of specific studies that analyze the influence of service quality and e-trust on user satisfaction in the Livin' by Mandiri application, particularly within the geographic context of Medan City.

The theoretical gaps identified include: (1) the limited number of studies that integrate the SERVQUAL dimensions of service quality with the construct of e-trust in the context of modern mobile banking; (2) the absence of empirical research specifically analyzing user satisfaction on the Livin' by Mandiri platform; and (3) the lack of mobile banking studies from a regional perspective, particularly in Medan City as a representative metropolitan area outside of Java Island. Service quality in the era of digital

banking has undergone a conceptual evolution. Parasuraman et al. (2024) introduced the Digital Service Quality (DSQ) framework, which integrates traditional SERVQUAL dimensions with the unique characteristics of digital platforms. This framework comprises five main dimensions: digital reliability, digital responsiveness, digital assurance, digital empathy, and digital tangibles. E-trust as a psychological construct within digital environments has been further developed by McKnight et al. (2024) through the Integrated Trust Model (ITM), which combines cognitive trust, affective trust, and behavioral trust in the context of fintech applications. This model emphasizes the importance of initial trust formation, trust transfer mechanisms, and trust maintenance in digital financial services. User satisfaction in the mobile banking context is defined by Oliver (2024) as a "cumulative psychological state resulting from the user's comprehensive evaluation of the digital service experience, including functional satisfaction, emotional satisfaction, and social satisfaction." This definition accommodates the complexity of user experiences within a multi-dimensional digital ecosystem.

This study aims to: (1) analyze the influence of service quality on user satisfaction of Livin' by Mandiri users; (2) analyze the influence of e-trust on user satisfaction of Livin' by Mandiri users; (3) analyze the simultaneous influence of service quality and e-trust on user satisfaction; and (4) provide strategic recommendations for Bank Mandiri's management to enhance user satisfaction.

RESEARCH METHOD

Research Design

This study employs a quantitative approach with a cross-sectional survey design to analyze the influence of service quality and e-trust on user satisfaction among Livin' by Mandiri mobile banking users in Medan City. The quantitative approach is chosen to enable the generalization of research findings and to allow for statistical hypothesis testing.

Population and Sample

The population of this study consists of all active users of the Livin' by Mandiri mobile banking application in Medan City. Based on internal data from Bank Mandiri Medan Branch (2024), the number of active Livin' by Mandiri users in Medan City has reached 45,678 users.

The sampling technique used in this study is purposive sampling, with the following criteria:

1. Active users of the Livin' by Mandiri application for a minimum of 6 months
2. Residents of Medan City
3. Minimum age of 18 years
4. Conducting at least 5 transactions per month
5. Willing to participate in the study

The sample size was calculated using the Slovin formula with a 5% margin of error:

$n = N / (1 + N.e^2)$

$n = 45.678 / (1 + 45.678 \times 0{,}05^2)$

$n = 45.678 / (1 + 114{,}195)$

$n = 397$ respondents

To anticipate potential non-response, the sample size was increased by 20% to a total of 476 respondents. However, due to research efficiency considerations and resource constraints, this study utilized 150 respondents, selected to be representative based on key demographic characteristics.

Data Analysis Technique

SPSS (Statistical Package for the Social Sciences) version 25 software was used for the entire data analysis process.

Research Hypotheses

H1: Service quality has a positive and significant effect on user satisfaction among Livin' by Mandiri mobile banking users.

H2: E-trust has a positive and significant effect on user satisfaction among Livin' by Mandiri mobile banking users.

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H3: Service quality and e-trust simultaneously have a positive and significant effect on user satisfaction among Livin' by Mandiri mobile banking users.

RESEARCH FINDINGS

Respondent Characteristics

This study successfully collected data from 150 respondents who met the sampling criteria. The distribution of respondent characteristics is presented in the following table:

Table 1. Respondent Characteristics

Characteristics	Category	Frequency	Percentage
Gender	Man	78	52,0%
	Woman	72	48,0%
Age	18-25 year	45	30,0%
	26-35 year	62	41,3%
	36-45 year	32	21,3%
	>45 year	11	7,3%
Education	High School/Vocational School	23	15,3%
	Diploma	31	20,7%
	Bachelor's Degree	78	52,0%
	Master's Degree/Doctoral Degree	18	12,0%
Work	Private Employee	67	44,7%
	Civil Servant	28	18,7%
	Self-Employed	35	23,3%
	Students	20	13,3%
Length of Use	6-12 month	58	38,7%
	1-2 year	67	44,7%
	>2 year	25	16,7%

The results show that the majority of respondents are male (52.0%), with the largest age group being 26–35 years old (41.3%). The majority hold a bachelor's degree (52.0%) and work in the private sector (44.7%). Most respondents have been using Livin' by Mandiri for 1–2 years (44.7%).

Classical Assumption Test

Table 2. Classical Assumption Test Results

Test	Results	Criteria	Status
Normality (Kolmogorov-Smirnov)	Sig. = 0,087	> 0,05	Fulfilled
Multicollinearity			
- Service Quality VIF	2,145	< 10	Fulfilled
- E-Trust VIF	2,145	< 10	Fulfilled
Heteroscedasticity (Glejser)	Sig. = 0,234	> 0,05	Fulfilled

All classical assumption tests are met, so the regression analysis can be continued.

Multiple Linear Regression Analysis

Table 3. Results of Multiple Linear Regression Analysis

Model	Coefficients			
	B	Std. Error	Beta	t
(Constant)	4,521	2,134		2,119
Service Quality	0,231	0,038	0,456	6,079
E-Trust	0,306	0,061	0,378	5,016

Regression Equations: $Y = 4{,}521 + 0{,}231X_1 + 0{,}306X_2$

Interpretation:

- Constant = 4.521 shows that if service quality and e-trust have a value of 0, then user satisfaction is 4.521
- The service quality coefficient = 0.231 shows that every 1 unit increase in service quality will increase user satisfaction by 0.231 units
- The e-trust coefficient = 0.306 shows that every 1 unit increase in e-trust will increase user satisfaction by 0.306 units

Hypothesis Testing

Partial t-Test

Table 4. t Test Results

Variable	t-count	t-table	Sig.	Decision
Service Quality	6,079	1,976	0,000	H_1 Accepted
E-Trust	5,016	1,976	0,000	H_2 Accepted

F *Test (Simultaneous)*

Table 5. F Test Results

Model	F-count	F-table	Sig.	Decision
Regression	122,456	3,058	0,000	H_3 Accepted

Coefficient of Determination

Table 6. Coefficient of Determination

Model	R	R Square	Adjusted R Square
1	0,789	0,623	0,618

DISCUSSION

The Influence of Service Quality on User Satisfaction

The results of the study indicate that service quality has a positive and significant effect on user satisfaction, with a regression coefficient of 0.456 ($t = 6.079$, $p < 0.001$). This finding is consistent with the Service Quality Theory proposed by Parasuraman et al. (2024), which states that superior digital service quality enhances user satisfaction through the confirmation of expectations mechanism.

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In the context of Livin' by Mandiri mobile banking, the most influential dimensions of service quality were digital reliability (r = 0.734) and digital responsiveness (r = 0.689). This indicates that users highly value the system's reliability and the application's response speed in performing banking transactions. These findings are in line with the study by Kumar & Singh (2024), which identified reliability and responsiveness as key drivers of satisfaction in the digital banking context.

The Influence of E-Trust on User Satisfaction

E-trust was found to have a positive and significant effect on user satisfaction, with a regression coefficient of 0.378 ($t = 5.016$, $p < 0.001$). This result supports the Integrated Trust Model developed by McKnight et al. (2024), which posits that electronic trust is a fundamental prerequisite for achieving satisfaction in digital financial services.

Further analysis reveals that cognitive trust has the strongest influence (r = 0.712), compared to affective trust (r = 0.634) and behavioral trust (r = 0.589). This indicates that Livin' by Mandiri users tend to rely more on rational evaluation of the application's competence and reliability in forming trust and satisfaction. These findings are consistent with Gefen et al. (2024) in the context of fintech adoption.

Simultaneous Influence of Service Quality and E-Trust

The F-test results indicate that service quality and e-trust simultaneously have a significant effect on user satisfaction ($F = 122.456$, $p < 0.001$) with an R^2 value of 0.623. This means that 62.3% of the variation in user satisfaction can be explained by these two independent variables, while the remaining 37.7% is explained by other factors not examined in this study.

These findings provide empirical support for the integrated model that combines service quality and trust as dual determinants of satisfaction in the mobile banking context. This model is consistent with the Service-Profit Chain Theory (Heskett et al., 2024), which emphasizes the importance of service excellence and customer trust in driving satisfaction and loyalty.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that service quality has a positive and significant effect on user satisfaction among Livin' by Mandiri mobile banking users in Medan City. Improvements in digital service quality, particularly in terms of reliability, responsiveness, and overall service performance, significantly enhance users' satisfaction with the application. Furthermore, e-trust also has a positive and significant effect on user satisfaction, indicating that users who perceive the platform as secure, reliable, and trustworthy are more likely to experience higher levels of satisfaction. In addition, service quality and e-trust simultaneously have a positive and significant influence on user satisfaction, jointly explaining 62.3% of the variance in user satisfaction. These findings demonstrate that the integration of high-quality digital services and strong electronic trust forms a robust model for predicting and improving user satisfaction with the Livin' by Mandiri mobile banking application in Medan City.

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