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The Role of Service Quality, System Quality, and Customer Experience on Customer Loyalty in Digital Banking with Customer Satisfaction as an Intervening Variable (Case Study on Digital Bank Users in Jakarta)



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ABSTRACT: This study aims to analyze the role of Service Quality, System Quality, and Customer Experience on Customer Loyalty in Digital Banking, with Customer Satisfaction as an intervening variable. This study focuses on digital bank users in Jakart a. A quantitative approach with a survey method was used. The analysis technique employed was Structural Equation Modeling (SEM) to test the relationships among the studied variables. The sample size used in this study was 110 respondents. The findings show that Service Quality (X1) influences Customer Satisfaction (Z), but does not affect Loyalty (Y). Customer Satisfaction (Z) does not influence Loyalty (Y). System Quality (X2) does not affect Customer Satisfaction (Z). Customer Experience (X3) affects Customer Satisfaction (Z) and Customer Loyalty (Y). However, Service Quality (X1) through Customer Satisfaction (Z) does not impact Loyalty (Y). Similarly, System Quality (X2) through Customer Satisfaction (Z) does not affect Loyalty (Y), and Customer Experience (X3) through Customer Satisfaction (Z) does not influence Loyalty (Y).

KEYWORDS: Service Quality, System Quality, Customer Experience, Customer Loyalty, Customer Satisfaction, Digital Bank Users.

I. INTRODUCTION

The rapid development of information technology has ushered the global community into a new era, often referred to as the Fourth Industrial Revolution. This era is marked by the advancement of various technologies such as the Internet of Things (IoT), Cloud Computing, Artificial Intelligence (AI), and Machine Learning. The adoption of these technologies in financial services has significantly transformed the banking industry. The shift in consumer behavior towards digital transactions has accelerated the transformation of the banking sector toward digital banking. Globally, digital transactions grew by 118% from USD 3.09 trillion in 2017 to USD 6.75 trillion in 2021 (Statista, 2021). In Indonesia, digital transactions experienced an even higher growth of 1,556% between 2017 and 2020. Electronic money transactions reached IDR 786.35 trillion in 2021, a 55.73% increase from IDR 504.96 trillion in the previous year (Bank Indonesia, 2021). Digital transactions include e-commerce transactions, digital banking transactions, and electronic money transactions (OJK, 2022), as shown in Figure 1.1.





Based on Figure 1.1, according to the report from Bank Indonesia (BI), the transaction value of electronic money and digital banking grew significantly in April 2022, in line with the continuous growth of the digital economy during the COVID-19 pandemic. The electronic money transaction value increased by 50.3% year-on-year (YoY) to IDR 34.3 trillion in April 2022 compared to the previous year. Similarly, the digital banking transaction value also grew by 71.4% (YoY) to IDR 5.33 quadrillion during the same period. This indicates that digital economic and financial transactions have expanded rapidly, driven by increasing public acceptance and preference for online shopping, the expansion and convenience of digital payment systems, and the acceleration of digital banking. The increasing factors driving digitalization have accelerated the rapid and significant growth of digital banks in Indonesia. Digital banks now serve not only as providers of more accessible financial services but also as key drivers of financial inclusion in Indonesia, particularly in reaching communities that previously had limited access to conventional banking services. According to the Financial Services Authority (OJK, 2022), various digital banks in Indonesia have made efforts to expand their services and features to meet the increasingly diverse needs of customers. The ease of access, service speed, and continuous innovation in digital banking features have become the main attractions driving the growing number of digital bank users. Additionally, the transformation of conventional banks into digital banking models has further enriched Indonesia's digital banking ecosystem, with an increasing number of collaborations between banks and financial technology (fintech) companies in creating innovative and easily accessible financial solutions.

The growing interest of users in digital banking services in Indonesia reflects a significant shift in consumer behavior in this digital era. According to a survey conducted by the Financial Services Authority (OJK, 2022), an increasing number of people, particularly young generations and urban communities, are switching to digital banks due to the ease of access and the speed of services offered. This trend is closely linked to user preferences that increasingly favor digital transactions, which can be conducted anytime and anywhere. The high interest in digital banking is also driven by attractive promotions, such as cashback programs, low transaction fees, and other benefits that successfully capture new users' attention. Furthermore, the rising level of digital literacy among the public has played a crucial role in encouraging the adoption of these services, as more people feel comfortable using mobile applications to manage their finances. This trend is illustrated in Figure 2 below.



Based on Figure 1.2, digital banks have continued to emerge in recent years. According to a survey conducted by Populix, the most popular digital banking application in May 2022 was Bank Jago, with 46% of respondents using the app. Meanwhile, 40% of respondents used NeoBank. Jenius, one of Indonesia's pioneering digital banks, was used by only 32% of respondents. Additionally, SeaBank, which is part of the Shopee group, was used by 27% of respondents, while Blu, a digital bank owned by BCA, was used by 25% of respondents. These findings indicate that digital banks are gaining increasing popularity in line with rapid technological advancements. This trend is supported by data from Bank Indonesia (BI), which shows that digital banking transactions reached IDR 52.245 trillion in 2022. According to Katadata, this figure represents an annual increase of 22.13% (year-on-year/yoy). BI also projects that digital banking transactions will continue to grow at an estimated rate of around 22%. The increasing public interest in digital banking has the potential to strengthen customer loyalty, especially when accompanied by high service quality, system

quality, and positive customer experiences (Griffin, 2020).

II. LITERATURE REVIEW

Digital Banking

According to Wibowo and Santoso (2023), digital banking is a modern banking model that utilizes internet-based technology and mobile applications to provide more efficient, faster, and cost-effective financial services.

Customer Loyalty

Nursiana (2021) defines customer loyalty as a continuous commitment from customers to keep using a specific bank's services despite the availability of numerous alternative options.

Service Quality

Prisanti, Suyadi, & Arifin (2017) explain that service quality refers to the extent to which a service facilitates users in conducting transactions easily, effectively, and efficiently.

System Quality

Zuci Systems (2020) states that in the context of digital banking, system quality encompasses speed, stability, and security, especially amid the increasing adoption of modern technologies such as artificial intelligence and data analytics.

Customer Experience

Kokins, Straujuma, and Lapina (2021) assert that Customer Experience (CX) focuses on the customer journey, encompassing all interactions and guiding company innovations to enhance customer loyalty and satisfaction.

Customer Satisfaction

Nguyen, Simkin, & Canhoto (2023) state that customer satisfaction results from the comparison between customer expectations and the actual performance of a product or service received by the customer.

Conceptual Framework

The conceptual framework is a preliminary explanation of the concept regarding the relationship between theories and the factors identified as research problems, as illustrated in the conceptual framework diagram below.



Figure 2 Conceptual Framework

Source: Ul Haq and Awan (2020), Silviana, Rofiaty, & Puspaningrum, (2022), Al Amin, Muzareba, Chowdhury, & Khondkar, (2024)

Hypothesis Development

The Effect of Service Quality on Customer Satisfaction

Research by Lee and Kim (2021) indicates that high service quality plays a direct role in increasing customer satisfaction. Based on the explanation above, the hypothesis in this study is formulated as follows: H1: Service Quality influences Customer Satisfaction.

The Effect of System Quality on Customer Satisfaction

Wang and Chen (2023) provide evidence that system quality significantly affects customer satisfaction, especially in technology-based services. Based on the explanation above, the hypothesis in this study is formulated as follows: H2: System Quality influences Customer Satisfaction.

The Effect of Customer Experience on Customer Satisfaction

Wang et al. (2023) highlight the crucial role of customer experience in shaping satisfaction in digital services. Customers who have a seamless and enjoyable experience are more satisfied with the services provided. Based on the explanation above, the hypothesis in this study is formulated as follows:

H3: Customer Experience influences Customer Satisfaction.

The Effect of Service Quality on Customer Loyalty

Research by Lee and Kim (2021) found that superior service quality has a direct impact on customer loyalty. Customers who experience satisfaction from fast, responsive, and reliable services are more likely to continue using and recommending the service, thereby strengthening overall loyalty. Based on the explanation above, the hypothesis in this study is formulated as follows:

H4: Service Quality influences Customer Loyalty.

The Effect of Customer Satisfaction on Customer Loyalty

Huang and Hsu (2021) reveal that a high level of satisfaction leads customers to remain loyal, increase repeat purchases, and develop an emotional connection with the company, making them less likely to switch to competitors. Based on the explanation above, the hypothesis in this study is formulated as follows:

H5: Customer Satisfaction influences Customer Loyalty.

The Effect of Customer Experience on Customer Loyalty

Lee and Kim (2021) found that a positive and consistent customer experience significantly enhances customer loyalty. Customers who have a smooth and enjoyable interaction with a service are more likely to continue using it, even when alternative options are available. This study shows that customer loyalty is built through deep satisfaction with the overall interaction experience. Based on the explanation above, the hypothesis in this study is formulated as follows:

H6: Customer Experience influences Customer Loyalty.

The Effect of Service Quality on Customer Loyalty through Customer Satisfaction

Chen et al. (2023) support these findings by affirming that in digital services, high service quality directly increases customer satisfaction, which ultimately leads to loyalty. Based on the explanation above, the hypothesis in this study is formulated as follows:

H7: Service Quality influences Customer Loyalty through Customer Satisfaction.

The Effect of System Quality on Customer Loyalty through Customer Satisfaction

According to research by Wang and Xu (2021), a reliable and responsive system can enhance user satisfaction, which subsequently impacts customer loyalty. This study demonstrates that satisfied customers with system quality will continue using the service and develop long-term engagement, particularly in digital services. Based on the explanation above, the hypothesis in this study is formulated as follows:

H8: System Quality influences Customer Loyalty through Customer Satisfaction.

The Effect of Customer Experience on Customer Loyalty through Customer Satisfaction

Wang et al. (2023) support these findings by confirming that customer experience serves as a strong mediator in building loyalty. Their research suggests that when customers are satisfied with a personalized and intuitive experience, their loyalty to the service increases. Based on the explanation above, the hypothesis in this study is formulated as follows:

H9: Customer Experience influences Customer Loyalty through Customer Satisfaction.

III RESEARCH METHOD

This study focuses on digital bank users in Jakarta. A quantitative approach with a survey method was used. The analysis technique employed was Structural Equation Modeling (SEM) to test the relationships among the studied variables. The sample size used in this study was 110 respondents.

IV RESULT AND DISCUSSION

Customer Characteristics

This study involves respondents who are digital bank users in Indonesia. The researcher selected 110 respondents, assuming that this sample size is representative of the overall population. The characteristics of the respondents include gender, age, educational background, occupation, income, and domicile. To provide a clearer understanding of the respondent characteristics, the following table presents the respondent data:

Table 4.1 Customer Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	49	49%
	Female	61	61%
Age	< 20 years	8	8%
	21 - 25 years	63	63%
	26 - 30 years	27	27%
	31 - 35 years	12	12%
	36 – 40 years	0	0%
	41 - 45 years	0	0%
	> 45 years	0	0%
	Primary School	0	0%
	Junior High School	0	0%
Latest Education	High School	9	9%
	Diploma	31	31%
	Bachelor	57	57%
	Postgraduate	13	13%
	Formal Sector (Government Employees, Military/Police, Private	51	51%
	Employees, State-		
	Owned Enterprises)		
	Professional Sector (Doctors, Lawyers, Accountants,	32	32%
	Lecturers, Architects)		
	Industrial Sector (Technicians, Programmers, Digital	16	16%
	Marketers, Graphic Designers)		
Occupation	Education Sector (Students,	11	11%
	Teachers, Researchers)		
	Domestic Sector (Housewives, Social Workers)	0	0%
	Retirees and Unemployed	0	0%
	Others	0	0%
	< 4.000.000	0	0%
	5.000.000 - 6.000.000	14	14%
Income (IDR)	6.000.000 - 7.000.000	35	35%
	7.000.000 - 8.000.000	61	61%
	9.000.000 - 10.000.000	0	0%
	> 10.000.000	0	0%
	Western Jakarta	27	27%
	Central Jakarta	18	18%
Domicile	Southern Jakarta	36	36%
	Eastern Jakarta	13	9%
	Northern Jakarta	16	16%
	Bank Jago	14	14%
	Blu by BCA Digital	29	29%
	Jenius	6	6%
	SeaBank	21	21%
Digital Banking Services Used	Bank Neo Commerce (BNC)	0	0%
	Allo Bank	11	11%
	Line Bank	7	7%
	TMRW by UOB	8	8%
	'	L	1

	Digibank	9	9%
	PermataMe	5	5%
	< 6 month.	29	29%
Duration of Use	6 month – 1 years	63	63%
	1 years – 3 years	18	18%
	> 3 years	0	0%
Usage Frequency	1-3 time per month	19	19%
	1-3 time per week	24	24%
	> 3 time per week	30	30%
	Daily	37	37%
	Fund Transfers (interbank or intra-bank)	12	12%
	Bill Payments (electricity, water, phone, internet)	19	19%
	Purchases (e-wallet top-ups, tickets, online shopping)	42	42%
Type of Transactions	Investment or Savings (mutual funds, deposits, stocks)	21	21%
	Credit Services (loans, credit cards, installments)	16	16%

Source: Processed Data, 2024

Analysis Structural Equation Modeling (SEM) Outer Model (Measurement Model)

The measurement of a construct's validity was conducted through an evaluation of Convergent Validity: factor loading and Average Variance Extracted (AVE). Additionally, Discriminant Validity: Cross Loading and Fornell-Larcker Criterion were assessed, as shown in Table:

Convergent Validity

Table 4.2 Loading Factor

	KL (X1)	KS (X2)	PN (X3)	LN (Y)	KN (Z)
X1.1	0.810				
X1.2	0.758				
X1.3	0.766				
X1.4	0.809				
X1.5	0.778				
X2.1		0.859			
X2.2		0.844			
X2.3		0.771			
X2.4		0.828			
X2.5		0.723			
X3.1			0.793		
X3.2			0.787		
X3.3			0.787		
X3.4			0.792		
Y.1				0.835	
Y.2				0.769	
Y.3				0.814	
Y.4				0.761	
Z.1					0.850
Z.2					0.844
Z.3					0.838
Z.4					0.840

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.2, all tested instrument values meet the criteria of > 0.7, indicating that the loading factor has met the convergent validity criteria and can be considered valid.

	Cronbach's alpha	Composite	Composite relial	bility Average
		reliat	oilit (rho_c)	varian
		y (rho_a)		ce extracted (AVE)
KL (X1)	0.844	0.854	0.889	0.615
KS (X2)	0.868	0.892	0.903	0.651
PN (X3)	0.801	0.802	0.869	0.624
LN (Y)	0.807	0.813	0.873	0.633
KN (Z)	0.865	0.872	0.908	0.711

Table 4.3 Average Variance Extracted (AVE)

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.3, the overall AVE test results indicate that all latent variables have values greater than 0.5, meaning that the tested research model demonstrates good convergent validity. This confirms that the indicators used to measure each construct are valid and accurately represent the intended constructs.

Discriminant Validity

Table 4.4 Fornell-Larcker Criterion

	KL (X1)	KN (Z)	KS (X2)	LN (Y)	PN (X3)
KL (X1)	0.784				
KN (Z)	0.453	0.843			
KS (X2)	0.548	0.350	0.807		
LN (Y)	0.322	0.342	0.528	0.795	
PN (X3)	0.398	0.629	0.554	0.429	0.790

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.4, the diagonal values represent the square root of AVE, while the other values indicate correlations between variables. The Fornell-Larcker criterion shows that the square root of AVE for each variable is greater than the correlations between variables, confirming that the Fornell-Larcker test is satisfied. Discriminant validity can also be evaluated using the Cross Loadings criterion. This criterion examines the loading (factor weight) of an indicator on its own construct compared to its loading on other constructs. Discriminant validity is achieved if the loading of an indicator on its own construct is higher than its loading on other constructs. The Cross Loadings can be seen in Table 4.5 as follows.

Table 4.5 Cross Loading

	KL (X1)	KN (Z)	KS (X2)	LN (Y)	PN (X3)
X1.1	0.810	0.310	0.360	0.280	0.349
X1.2	0.758	0.373	0.373	0.207	0.318
X1.3	0.766	0.304	0.511	0.238	0.329
X1.4	0.809	0.454	0.448	0.281	0.322
X1.5	0.778	0.303	0.465	0.252	0.239
X2.1	0.487	0.300	0.859	0.397	0.496

X2.2	0.495	0.302	0.844	0.342	0.455
X2.3	0.409	0.239	0.771	0.419	0.339
X2.4	0.399	0.346	0.828	0.542	0.516
X2.5	0.442	0.165	0.723	0.434	0.392
X3.1	0.350	0.401	0.648	0.408	0.793
X3.2	0.336	0.398	0.624	0.370	0.787
X3.3	0.278	0.559	0.334	0.304	0.787
X3.4	0.301	0.598	0.203	0.289	0.792
Y.1	0.314	0.362	0.472	0.835	0.341
Y.2	0.204	0.195	0.322	0.769	0.288
Y.3	0.312	0.214	0.456	0.814	0.335
Y.4	0.184	0.297	0.411	0.761	0.392
Z.1	0.497	0.850	0.340	0.334	0.575
Z.2	0.373	0.844	0.300	0.247	0.535
Z.3	0.306	0.838	0.273	0.295	0.463
Z.4	0.323	0.840	0.256	0.269	0.533

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.5, each variable exhibits a high correlation with its respective measured construct and low correlation with other variables. This confirms that the loading factor test for all variables in the research model is satisfied.

Inner Model (Structural Model) Variance Inflation Factor (VIF)

Table 4.6 Variance Inflation Factor (VIF)

	KL (X1)	KN (Z)	KS (X2)	LN (Y)	PN (X3)
KL (X1)		1.456		1.292	
KN (Z)				1.798	
KS (X2)		1.767			
LN (Y)					
PN (X3)		1.469		1.698	

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.6, the Variance Inflation Factor (VIF) values indicate that the Collinearity Statistics (VIF) are < 5. This suggests that the level of multicollinearity between variables is low. These results confirm that the parameter estimation in SmartPLS is unbiased.

R-Square

Table 4.7 R-Square

	R-square	R-square adjusted
KN (Z)	0.454	0.439
LN (Y)	0.214	0.192

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.7, the R-Square value for Customer Satisfaction KN (Z) is 0.454, indicating that 45.4% of the variance in the Customer Satisfaction variable can be explained by other variables in the model, while the remaining 54.6% is influenced by factors outside the model. Additionally, the R-Square value for Customer Loyalty LN (Y) is 0.214, meaning that 21.4% of the variance in the Customer Loyalty variable is explained by the model's variables, whereas the remaining 78.6% is attributed to external factors not included in the model.

F-Square

Tabel 4.8 F-Square

	KL (X1)	KN (Z)	KS (X2)	LN (Y)	PN (X3)
KL (X1)		0.109		0.027	
KN (Z)				0.003	
KS (X2)		0.019			
LN (Y)					
PN (X3)		0.430		0.079	

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.8, the F-Square values indicate the effect size of each independent variable on the dependent variables:

- Effect of Service Quality KL (X1) on Customer Satisfaction KN (Z): The F-Square value of 0.109 suggests that Service Quality has a small effect on Customer Satisfaction.
- Effect of Service Quality KL (X1) on Customer Loyalty LN (Y): The F-Square value of 0.027 indicates that Service Quality has a very small effect on Customer Loyalty.
- Effect of Customer Satisfaction KN (Z) on Customer Loyalty LN (Y): The F-Square value of 0.003 shows that Customer Satisfaction has a very small effect on Customer Loyalty.
- Effect of System Quality KS (X2) on Customer Satisfaction KN (Z): The F-Square value of 0.019 reveals that System Quality has a very small effect on Customer Satisfaction.
- Effect of Customer Experience PN (X3) on Customer Satisfaction KN (Z): The F-Square value of 0.430 indicates that Customer Experience has a large effect on Customer Satisfaction.
- Effect of Customer Experience PN (X3) on Customer Loyalty LN (Y): The F-Square value of 0.079 suggests that Customer Experience has a small effect on Customer Loyalty.

Goodness of Fit (GoF)

Table 4.9 Goodness of Fit

	Saturated model	Estimated model
SRMR	0.099	0.107
d_ULS	2.468	2.909
d_G	2.314	2.345
Chi-square	869.257	880.340
NFI	0.537	0.531

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.9, the research model demonstrates a moderate fit with the empirical data. This is indicated by the SRMR (Standardized Root Mean Square Residual) value, which is slightly above 0.08, and the NFI (Normed Fit Index) value, which is around 0.5.

Hypothesis

Table 4.10 Path Coefficients (Mean, STDEV, t-Value)

	Original	Sample mean	Standard	T statistics	Р
	sample (O)	(M)	deviation (STDEV)	(O/STDEV)	values
KL (X1) -> KN (Z)	0.294	0.295	0.086	3.422	0.001
KL (X1) -> LN (Y)	0.165	0.180	0.118	1.398	0.162
KN (Z) -> LN (Y)	0.063	0.055	0.137	0.464	0.643
KS (X2) -> KN (Z)	-0.137	-0.122	0.094	1.454	0.146
PN (X3) -> KN (Z)	0.587	0.583	0.086	6.807	0.000
PN (X3) -> LN (Y)	0.324	0.324	0.139	2.325	0.020

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.10, the following findings are observed:

- Service Quality (X1) has a positive and significant effect on Customer Satisfaction (Z).
- Service Quality (X1) does not significantly affect Customer Loyalty (Y).
- Customer Satisfaction (Z) does not significantly affect Customer Loyalty (Y).
- System Quality (X2) does not significantly affect Customer Satisfaction (Z).
- Customer Experience (X3) has a positive and significant effect on Customer Satisfaction (Z).
- Customer Experience (X3) has a positive and significant effect on Customer Loyalty (Y).

Intervening Test

Table 4.11 Intervening Test

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
KL (X1) -> KN (Z) -> LN (Y)	0.019	0.016	0.042	0.443	0.658
KS (X2) -> KN (Z) -> LN (Y)	-0.009	-0.002	0.020	0.435	0.664
PN (X3) -> KN (Z) -> LN (Y)	0.037	0.029	0.079	0.471	0.638

Source: Processed Data from SmartPLS, 2025

Based on the data processing results in Table 4.11, the mediation test results are as follows:

- Service Quality (X1) does not significantly influence Loyalty (Y) through Customer Satisfaction (Z).
- System Quality (X2) does not significantly influence Loyalty (Y) through Customer Satisfaction (Z).
- Customer Experience (X3) does not significantly influence Loyalty (Y) through Customer Satisfaction (Z).

DISCUSSION

Effect of Service Quality (X1) on Satisfaction (Z)

Service Quality (X1) has a positive and significant influence on Satisfaction (Z), meaning that the higher the service quality, the higher the level of satisfaction. Good service quality in these aspects will increase customer satisfaction with digital banking. A digital banking application with an easy-to-understand design, transactions that are always successful as needed, responsive customer service, and guarantees of data security and privacy are the main factors in increasing satisfaction. A digital banking application that provides satisfactory service supports this finding. This result is consistent with the proposed hypothesis and is supported by the research conducted by Suhartini & Wahyono (2022), which states that good digital banking service quality is a crucial factor in customer satisfaction in Indonesia. This indicates that customers tend to be more satisfied and loyal when receiving responsive, secure, user-friendly services that meet their digital transaction needs.

Effect of Service Quality (X1) on Loyalty (Y)

Service Quality (X1) does not affect Loyalty (Y). This indicates that service quality is not the main factor determining customer loyalty in digital banking. The lack of influence of service quality on loyalty can be attributed to the ease of access and features that have become standard in digital banking services, such as application response speed, feature flexibility, and the availability of services at any time. While customers appreciate good service quality, they also consider other factors before deciding to remain loyal to a digital bank, such as trust in system security, product innovation, and additional benefits like cashback and loyalty programs. This study's results do not align with the proposed hypothesis but support the findings of Wijaya & Setiawa n (2022), which state that service quality does not influence digital banking customer loyalty in Indonesia. This suggests that service quality alone is insufficient to build loyalty and must be supported by other aspects such as customer satisfaction, product excellence, and effective retention strategies.

Effect of Satisfaction (Z) on Loyalty (Y)

Satisfaction (Z) does not affect Loyalty (Y). This indicates that even though customers experience fast transaction processing in the digital banking application, high data security, and responsive customer service, these factors are insufficient to ensure customer loyalty. While customers are satisfied with their experience, they still consider other factors before deciding to continue using the service. The reason is the ease of access to various digital banking services, allowing customers to switch without significant obstacles. Additionally, customer loyalty is influenced by other factors that differentiate one digital bank from its competitors. This study's results do not align with the proposed hypothesis but are consistent with the findings of Rahman & Putri

(2023), which state that satisfaction does not influence digital banking customer loyalty in Indonesia. This suggests that satisfaction alone is insufficient to build long-term loyalty and must be supported by a more comprehensive strategy.

Effect of System Quality (X2) on Satisfaction (Z)

System Quality (X2) does not affect Satisfaction (Z). This indicates that even though customers feel that the digital banking application is reliable without technical issues, easy to use for all features, flexible according to user needs, and quickly responsive when used, these factors are insufficient to ensure customer satisfaction with the provided service quality. Digital banking features do not always lead to increased satisfaction. Customers may be satisfied with the available features but also consider other factors such as data security and privacy before deciding to trust a digital bank. Moreover, the reputation and image of a digital bank also play an important role in building satisfaction. Customers tend to trust digital banks with a go od reputation and positive public perception. These results do not align with the proposed hypothesis but are consistent with th e study by Suhartini & Wahyono (2022), which found that system quality does not affect customer satisfaction.

Effect of Customer Experience (X3) on Satisfaction (Z)

Customer Experience (X3) has a positive and significant influence on Satisfaction (Z). A positive customer experience, such as feeling comfortable using the digital banking application, having high-quality interactions with the service, gaining emotional satisfaction from using the application, and experiencing continuous innovation in features, increases customer satisfaction with digital banking. Customers with a good experience tend to have more trust in a digital bank. These results align with the proposed hypothesis and are supported by the study of Wijaya & Setiawan (2021), which found that customer experience satisfaction influences digital banking satisfaction. This suggests that a positive customer experience enhances satisfaction.

Effect of Customer Experience (X3) on Loyalty (Y)

Customer Experience (X3) has a positive and significant influence on Loyalty (Y). A positive customer experience, such as feeling comfortable using the digital banking application, high-quality interactions with the service, emotional satisfaction from using the application, and experiencing continuous innovation in features, directly increases customer loyalty to digital banking. Customers with a good experience tend to be more loyal and recommend the digital bank to others. This indicates that the positive experience customers gain while interacting with banking services encourages their commitment to continue using them. These results align with the proposed hypothesis and are supported by the research of Setiawan & Arifin (2024), which states that customer experience directly increases loyalty.

Effect of Service Quality on Loyalty through Satisfaction

Service Quality does not affect Loyalty through Satisfaction. This indicates that even though customers feel that the digital banking application has an easy-to-understand design, transactions always succeed as needed, customer service is responsive, the application ensures security and privacy, and services are satisfying, these factors are insufficient to enhance satisfaction and subsequently influence loyalty to digital banking. These findings suggest that while service quality is important, other factors also contribute to customer loyalty. Therefore, digital banks need to consider other elements such as trust, perceived value, or emotional engagement to enhance customer loyalty effectively. These results do not align with the proposed hypothesis but are consistent with the research by Suhartini & Wahyono (2022), which found that Service Quality does not influence Loyalty through Satisfaction in Indonesia's digital banking sector.

Effect of System Quality on Loyalty through Satisfaction

System Quality does not affect Loyalty through Satisfaction. This indicates that even though customers feel that the digital banking application is reliable without technical issues, easy to use for all features, flexible according to user needs, quickly responsive when used, and always available when needed, these factors are insufficient to enhance satisfaction and subsequently influence loyalty to digital banking. These findings suggest that while system quality is important, other factors influence customer loyalty. Therefore, digital banks need to consider other elements such as trust, perceived value, or emotional engagement to enhance customer loyalty effectively. These results do not align with the proposed hypothesis but are consistent with the research by Pratama & Fadhlillah (2023), which found that System Quality does not influence Loyalty through Satisfaction in Indonesia's digital banking sector.

Effect of Customer Experience on Loyalty through Satisfaction

Customer Experience does not affect Loyalty through Satisfaction. This indicates that even though customers feel comfortable using the digital banking application, have high-quality interactions with the service, gain emotional satisfaction from using the application, and experience continuous innovation in features, these factors are insufficient to enhance satisfaction and subsequently influence loyalty to digital banking. This means that while customers have a good experience, it does not directly increase satisfaction, which then affects their loyalty to digital banking. These findings suggest that while customer experience is

important, other factors play a more significant role in shaping customer loyalty. Therefore, digital banks need to consider other elements such as trust, perceived value, or emotional engagement to enhance customer loyalty effectively. These results do not align with the proposed hypothesis but are consistent with the research by Setiawan & Arifi n (2024), which states that a personalized and relevant customer experience strongly influences digital banking customer loyalty in Indonesia.

CONCLUSIONS

This study examines the influence of Service Quality, System Quality, and Customer Experience on Customer Loyalty in Digital Banking, with Customer Satisfaction as an Intervening Variable (among Digital Banking Users in Indonesia). Based on the analysis and discussion presented in the previous chapter, the following conclusions can be drawn:

- Service Quality affects Customer Satisfaction.
- Service Quality does not affect Loyalty.
- Customer Satisfaction does not affect Loyalty.
- System Quality does not affect Customer Satisfaction.
- Customer Experience affects Customer Satisfaction.
- Customer Experience affects Loyalty.
- Service Quality through Customer Satisfaction does not affect Loyalty.
- System Quality through Customer Satisfaction does not affect Loyalty.
- Customer Experience through Customer Satisfaction does not affect Loyalty.

IMPLICATIONS

Based on the findings of this study, several implications can be drawn:

- Although service quality affects customer satisfaction, it does not directly impact loyalty. Therefore, digital banks should focus more on improving service quality by emphasizing personalization, response speed, and ease of access to enhance satisfaction, which may indirectly drive customer loyalty.
- Customer experience has been proven to influence both satisfaction and loyalty. Hence, digital banks should strive to create a better customer experience through feature innovation, user-friendly applications, and improved customer interactions.
- Customer satisfaction does not affect loyalty, digital banks need to develop more effective strategies, such as loyalty programs, transaction-based incentives, or exclusive services for loyal users, to retain customers in the long term.
- System quality does not influence customer satisfaction in this study, indicating that other factors play a more significant role in shaping customer experience. However, digital banks must still ensure a stable, fast, and secure system to provide a seamless and comfortable user experience.

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