p–ISSN: 2723 - 6609 e-ISSN: 2745-5254
Vol. 5, No. 2 February 2024 http://jist.publikasiindonesia.id/

THE EFFECT OF EASE OF USE AND SERVICE QUALITY ON CUSTOMER LOYALTY WITH SATISFACTION AS AN INTERVENING VARIABLE

Sarintan Abdul Kadir[1*], Ratna Roostika[2]
Universitas Islam Indonesia Yogyakarta, Indonesia
Email: sarintankadir@gmail.com[1*], ratna.roostika@uii.ac.id[2]

*Correspondence

Keywords: Ease of Use; Service Quality; Customer Loyalty; Satisfaction.

ABSTRACT

This research examines the effect of ease of use and service quality on customer loyalty, with satisfaction as an intervening variable using mobile banking applications in Indonesia. The method used is quantitative descriptive with a purposive sampling technique. The sample for this research was 210 respondents. The data analysis method uses structural equation modelling SEM (Structural Equation Modeling) assisted by the AMOS version 25 and SPSS version 26 programs. This research shows that ease of use and service quality influence customer loyalty, ease of use and service quality influence satisfaction, and Satisfaction influences customer loyalty. Based on the research and data analysis results, it can be concluded that the ease of use and quality of m-banking services in Indonesia positively and significantly affect customer satisfaction, increasing customer loyalty to using m-banking applications.

Introduction

Digital business development today has provided changes in lifestyles and business patterns for companies, including banks that have implemented digital technology; its development has a fast impact and penetrates almost all sectors (Fallahi, Mahnam, & Niaki, 2022). Banks have done various ways to utilise business developments, such as innovating by utilising communication technology (Susanti & Parera, 2021). Digital banking services are one of the services bank customers provide to obtain information, communicate, and transact through electronic media. In addition, its services are developed through data to help customers more quickly and efficiently and can be used for attention to security aspects. Financial Services Author et al. (Mwiya et al., 2022) said, "Banks have embraced internet technology to bring online banking, which has become an important tool for electronic commerce, namely e-commerce". Banking digitalisation is presented to provide offers to customers without needing to come directly to the bank office. Electronic banking includes computer banking (PC), online banking, ATMs, home banking, mobile banking, and virtual banking. The demand for digital bankingisation is strengthened by various factors driving the development of digital banks in Indonesia, considering that the Indonesian economy has great potential for absorbing digitalisation flows (Saputri & Sukresna, 2022).

Based on a study that identifies factors that influence the intention to accept mobile banking, namely the technology acceptance model (TAM), where customers who choose to use mobile banking first consider security, ease of use, and convenience as necessary

(Oh & Kim, 2022). The differences in the growth of mobile banking transactions in several central banks are illustrated in the table as follows:

Table 1
Growth of Mobile Banking Transactions in Indonesia in 2022

No	Year	Bank	Sum	Percentage (%)
1	2022	PT. Bank Central Asia Tbk	Rp 5.460 trillion	34,08%
2	2022	PT. Bank Mandiri (Persero) Tbk	Rp 2.435 trillion	49,02%
3	2022	PT. Bank Negara Indonesia (Persero) Tbk	Rp 802 trilliun	30,04%
4	2022	PT. Bank Rakyat Indonesia (Persero) Tbk	Rp 2.669 trillion	99,07%
5	2022	PT. Bank Syariah Indonesia (Persero) Tbk	Rp 52.5 trillion	28,72%

Based on the data in Table 1, it can be seen that the trend of using mobile banking every year has increased in line with the high public awareness of ease and comfort in carrying out financial activities in the era of digital technology. This can be seen from mobile banking transactions at several large banks, starting from PT. Bank Central Asia Tbk, which recorded a growth of 34.8 from IDR 4,049 trillion and increased in 2022 to IDR 5,460 trillion. The most significant growth in mobile banking transaction users was felt by PT. Bank Rakyat Indonesia, which grew by 99.07% from Rp 1,345 trillion to Rp 2,669 trillion, where user growth increased by almost 100%. This phenomenon is influenced by several factors, including meeting service needs and the level of customer financial security that is more effective, efficient, and integrated by the digital literacy journey of the Indonesian people, in this case, which can affect customer loyalty (El Fikri, 2018).

Loyalty generally means an attitude in assessing services, products, or some aspects included in the association. Loyalty is the main thing in marketing planning for various reasons, including global competition, market saturation, technological developments, and customer awareness. Based on the fact that long-term success does not only focus on price but also the quality of products and services and is customer-oriented, which is the main factor in achieving long-term success and retaining customers (Rasheed et al., 2015). Loyalty is developed through an approach that reinforces and develops a positive state of mind and behaviour. One of the keys to loyalty is the exchange of information between the state of mind and behaviour; known loyal customers tend to provide information to service providers. Controlling loyalty is considered vital because it means not only controlling behaviour but also a state of mind.

Customer loyalty is a valuable factor that the company should maintain for its survival and maximise good bonds for companies that sell services to their customers. Loyal customers provide direct feedback to the company regarding introducing products

and services felt by their families and colleagues (Batubara et al., 2023). Customer loyalty is a reflection of the customer's desire to provide good things related to the services they receive to prospective customers in the future. Loyalty can also refer to the extent to which customers will remain on a particular service or product within the deadline. This can also provide a view of customers' satisfaction with the services received from banks (Shahid, Islam, Malik, & Hasan, 2022). Customer loyalty is also a type of customer's unique attitude towards the association and future forecasts regarding the intention to remain loyal to the company.

Based on the formulation of the problem, the objectives of this study are as follows:

1. To analyse the effect of ease of use on customer loyalty.
2. To analyse the influence of ease of use on satisfaction
3. To analyse the effect of service quality on customer loyalty
4. To analyse the effect of service quality on satisfaction
5. To analyse the effect of satisfaction on customer loyalty

Research Methods

This study explains the method that researchers will use. The study used quantitative descriptive methods. Quantitative methods use data in the form of numbers, and the collected data is analysed using statistical formulas. This study analyses the relationship between variables with one another using statistical data. In this correlational study, there are three parts of variables, namely independent variables (free) whose existence affects other variables or is not influenced by other variables, dependent variables (bound) whose existence is influenced by independent variables, and intervening variables (linking) which strengthens or weakens the relationship between one variable and another.

Populasi dan Sampel

1. Populasi

The population combines all elements in the form of events or people with similar characteristics and becomes the centre of a researcher's attention (Haryono, 2017). This study's population is all users with experience using mobile banking applications in Indonesia.

2. Sample

The sample is a member of the population. This study uses analysis using the Structural Equation Model (SEM). The determination of the minimum amount for SEM, according to Haryono (2017), is (number of indicators = number of latent variables) x (5 to 10 times). Based on the guideline method, the maximum number of samples for this study is.

Minimum sample = (16 +5) x 5)
= 105
Number of samples as many as 220
Maximum sample = (16 +5) x 10)
= 210

From the sample calculation above, the research needs to reach a minimum of 105 respondents and a maximum target of 210.

The sampling technique in this study used purposive sampling techniques. Purposive sampling is a technique based on specific considerations to solve research problems. Based on this method, to determine the sample based on the following characteristics:

1. Respondents who use mobile banking applications (BCA Mobile, Livin' by Mandiri, BRImo, BNI Mobile Banking, and BSI Mobile).
2. Respondents who have transacted with mobile banking applications (BCA Mobile, Livin' by Mandiri, BRImo, BNI Mobile Banking, and BSI Mobile).

Data Types and Data Collection Techniques

This study used primary and secondary data. Primary data is data obtained directly from respondents or research objects. The primary data in this study is questionnaires from respondents conducted through direct surveys by sharing a list of statements through electronic social media and with statements compiled through Google Forms.

Variable Operational Definition

This study has three independent variables, namely Ease of Use (KP) and Service Quality (KPN); one intervening variable is Satisfaction (K), and a dependent variable is Customer Loyalty (LN).

Validity Test

The validity test is commonly used to measure the validity or absence of questionnaire question items. (Pamungkas, Ghozali, Achmad, Khaddafi, and it is explained that it is valid if the questions in the questionnaire can reveal something that the questionnaire will measure. Respondents were used in this study to test their validity.

Reliability Test

According to (Musfar, Nabilla, and Jushermi, 2023), a questionnaire is said to be reliable or reliable if the respondent's answers to statements are consistent or stable. The testing criteria in this study were with the Cronbach Alpha (α) statistical test.

Results and Discussion

Statistical Descriptive Analysis

This analysis provides an overview of the respondents' identity and describes research variable data from ease of use, service quality, satisfaction, and customer loyalty.

Descriptive Respondent Identity

A complete description of the respondent's identity to customers using mobile banking applications will be explained as follows:

1. Characteristics of respondents by gender

Collect answers from 210 respondents, then obtain data on customers' gender using mobile banking applications. The characteristics of respondents by sex can be observed in Table 1 as follows:

Table 1
Characteristics of respondents by gender

Gender	Number of Respondents	
	Frequency	**Presented**
Man	66	31.4
Woman	144	68.6
Total	**210**	**100.0**

Data from Table 1 shows that of the 210 male respondents, as many as 66 people (31.4%) and respondents who were female, as many as 144 people (68.6%). The data shows that customers using m-banking applications are dominated by women. Based on this, it can be identified that there are differences in the results of the influence between satisfaction and customer loyalty, including differences in customer characteristics, including gender, age, last education, occupation, length of use of the m-banking application, and m-banking application.

Table 2
Characteristics of respondents by age

Age	Number of Respondents	
	Frequency	Presented
< 20 the	18	8.6
21- 30 th	161	76.7
31- 40 th	14	6.7
> 41 the	17	8.1
Total	210	100.0

Based on Table 2, it can be seen that of the 210 respondents based on age, namely < 20 years old are 18 people (8.6%), between 21-30 years old are 161 people (76.6%), between 31-40 years old are as many as 14 people (6.7%) and > 41 years old are as many as 17 people (8.1%). This shows that most customers using m-banking applications are aged between 21 and 30 years and 161 people (76.7%). In this case, it can be proven that most m-banking application users are between 31 and 40 years old, including productive ages.

2. Characteristics of respondents based on recent education

Researchers collected questionnaires from 210 respondents and obtained data on the last education of customers using m-banking applications. The characteristics of respondents based on their last education can be seen in Table 3 as follows:

Table 3
Characteristics of respondents based on recent education

Recent Education	Number of Respondents	
	Frequency	**Presented**
SMP	5	2.4
SMA	61	29.0
S1 (Bachelor)	135	64.3
S2 (Magister)	9	4.3
Total	**210**	**100.0**

Based on Table 3, it can be seen that the last level of education for customers using m-banking applications is junior high school, which is five people (2.4%), high school is 61 people (29.0%), S1 (Bachelor) is 135 people (64.3%), and S2 (Masters) is nine people (94.3%). The majority of the last education level of customers using m-banking applications is S1 (Bachelor), as many as 135 people (64.3%). The information found that customers who use m-banking applications are the majority of S1 (Bachelor); in this case, customers who use m-banking applications have an excellent educational background. A good education will determine the influence between satisfaction and customer loyalty.

Table 4
Characteristics of Respondents Based on the Length of Use of m-banking Applications

Duration of Use of *M-banking*	Number of Respondents	
	Frequency	**Presented**
< 1 the	66	31.4
1-3 the	81	38.6
> 3 the	63	30.0
Total	**210**	**100.0**

Based on Table 4, it can be seen that of the 210 respondents with a length of use of m-banking applications between < 1 year, 66 people (31.4%), between 1-3 years, 81 people (38.6%), and between > 3 years were 63 people (39.0%). The data above shows that most m-banking application users between 1 and 3 years are as many as 81 people (38.6%).

3. Characteristics of Respondents Based on m-banking Applications

Table 5
Characteristics of Respondents Based on m-banking Applications

m-banking *application*	Number of Respondents	
	Frequency	**Presented**
BCA *Mobile Banking*	42	20.0
Livin' by Mandiri	32	15.2
BRImo	101	48.1
BNI *Mobile Banking*	28	13.3
BSI *Mobile*	7	3.3
Total	**210**	**100.0**

Based on the table above, it can be seen that from 210 respondents, there are various kinds of m-banking applications, namely BCA Mobile Banking is 42 people (20.0%), Livin' by Mandiri is 32 people (15.2%), BRImob is 101 people (48.1%), BNI Mobile Banking is 38 people (13.3%), and BSI Mobile is seven people (3.3%). The data above shows that most customers using the BRImob m-banking application are as many as 101 people (48.1%).

This can prove that customers feel the ease of use on BRImob and provide quality features. It is known that BRImob presents more complete and different features among other m-banking applications, such as printing bank statements (statements) available in the mutation menu section without visiting a branch bank. In addition, some features can block or activate cards, toll-free services, financial records (PFM) features that make it easy to control finances while using the PRImo application and will provide information in the form of what percentage of expenses compared to funds stored in savings accounts daily, and international transfers (outgoing remittance) is a feature of extending the BRIFast Remittance application platform system services that provide access for customers to send funds abroad through all global networks owned by BRI.

It can be concluded that customer satisfaction and loyalty of m-banking application users are characterised by ease of use and quality of service obtained when using the application.

Description of Research Variables

This analysis describes the research variable data from ease of use, quality, satisfaction, and customer loyalty. The description of the research variable is a summary of respondents' responses to questions from ease of use, quality of service, satisfaction, and customer loyalty of m-banking application users consisting of several question items with a scale of strongly disagree (STS), disagree (TS), somewhat disagree (AS), agree (S), strongly agree (SS). The following is a description of respondents' assessment of each research variable item obtained by calculating the interval as follows:

The calculation of the criteria is as follows:

$\frac{BMax-Bmin}{KI}$ =*I*

Lowest score (*BMax)* =1

Top marks (*BMin*) = 6

ntixsixval (*I*oonee $\frac{6-1}{6}$

= 0,83

Then, the assessment of variables is calculated based on the average of each variable as follows:

Table 6
Assessment Interval

Interval	Category
1,00 – 1,83	Strongly Disagree
1,84 – 2,66	Disagree
2,67 – 3,49	Somewhat disapproving
3,50 – 4,32	Somewhat Agree
4,33 – 5,15	Agree
5,16 – 6,00	Agree

Furthermore, in this study, there were four variables with 16 indicators. The ease of use variable consists of 5 indicators, the service quality variable consists of 5 indicators, satisfaction consists of 3 indicators, and customer loyalty consists of 3. Then, an analysis of the average indicators and variables of the study was carried out to determine the respondents' assessment.

4. Descriptive Statistics of Ease of Use Variables

The ease-of-use variable consists of 5 statement indicators that are used to represent research variables with the following results:

Table 7
Descriptive Statistics of Ease of Use Variables

No	Indicator	Average	Criterion
1	It does not take long to understand the use of *mobile banking applications*	4.43	Agree
2	Mobile *banking apps are* easy to use because they are fully featured and clear	4.43	Agree
3	Using mobile banking *apps* can save time	4.44	Agree

4	Mobile banking *applications* are beneficial when it comes to completing any form of payment transaction	4.40	Agree
5	Mobile *banking applications* are straightforward to operate	4.40	Agree
Average		4,42	Agree

Based on Table 7, the respondents' assessment of the Ease of Use variable showed an average of 4.42 (agree). The third indicator states, "Using mobile banking applications can save time, " with an average value of 4.44, the highest assessment is found in the third indicator. The fourth and fifth indicators found the lowest ratings, which stated, "Mobile banking applications are beneficial in completing all forms of payment transactions" and "Mobile banking applications are straightforward to operate", with an average value of 4.40.

Normality Test Results

The normality test shows the distribution of the research data used. Normality testing in this study was carried out by comparing critical ratio (CR) values in assessing the normality table in the AMOS program based on a critical number of ± 2.56 at the level of 0.01. If the critical ratio value obtained for multivariate shows a value between -2.58 and +2.58, then the data is declared normally distributed. The results of data normality testing are presented as follows:

Table 8
Normality Test Results

Variable	Min	max	skew	c.r.	kurtosis	c.r.
LN3	2.000	6.000	-.276	-1.635	-.045	-.134
LN2	1.000	6.000	-.468	-2.766	.532	1.574
LN1	2.000	6.000	-.636	-3.763	.484	1.433
KA3	1.000	6.000	-.698	-4.127	.772	2.284
KA2	1.000	6.000	-.232	-1.372	-.099	-.294
KA1	1.000	6.000	-.808	-4.777	1.618	4.785
KP5	1.000	6.000	-.690	-4.080	.696	2.057
KP4	1.000	6.000	-.599	-3.546	1.109	3.282
KP3	2.000	6.000	-.375	-2.219	-.602	-1.779
KP2	1.000	6.000	-.884	-5.232	2.075	6.138
KP1	1.000	6.000	-.885	-5.237	1.620	4.793
KPN5	2.000	6.000	-.338	-2.001	.090	.266
KPN4	1.000	6.000	-.515	-3.048	.999	2.956
KPN3	2.000	6.000	-.570	-3.373	.279	.824
KPN2	1.000	6.000	-.723	-4.278	1.139	3.368
KPN1	2.000	6.000	-.318	-1.880	-.007	-.021
Multivariate					-.420	-.127

Based on the results of the normality test in Table IV.12 show that the majority of univariate data distribution usually is distributed because the critical ratio (C.R) values for kurtosis (pointiness) and skewness (astonishment) are in the range of ± 2.58. In comparison, multivariate data meets average assumptions because the value of -0.127 is at ± 2.58.

Outlier Test Results

Outlier evaluation is used to determine whether there are data indicated to have unique characteristics that are very different and appear in extreme forms from other observations. Outlier testing is done by looking at the expensive distance value for each observation, which will show the distance of observation data against the average value of the analysis. The criteria used for the outlier test in this study were based on chi-squares on degrees of freedom at p level <0.001. In this study, the value of Mahalanobis distance was measured using the chi-square value at the degree of freedom of 16 indicators at p level < 0.001 using the formula X2 (16; 0.001). In this case, a value of 39.252 is obtained. This means that all data/cases greater than 39,252 are multivariate outliers. The results of the outlier analysis can be seen in the table below:

Table 9
Outlier Test Results

Observation number	Mahalanobis d-squared	p1	p2
144	33.869	.006	.696
208	33.252	.007	.421
201	33.158	.007	.185
119	30.765	.014	.359
147	30.313	.016	.265
45	30.285	.017	.138
125	29.640	.020	.130
193	29.482	.021	.075
65	27.328	.038	.404
68	26.047	.053	.688
139	26.003	.054	.584
189	25.287	.065	.716
153	24.116	.087	.927
142	24.010	.089	.902
129	23.551	.100	.937
127	23.393	.104	.927
126	23.387	.104	.888
132	23.256	.107	.869
194	23.009	.113	.880
130	22.574	.126	.928
34	22.525	.127	.903
111	22.525	.127	.860
183	22.525	.127	.805
124	22.439	.130	.774
120	22.428	.130	.710

Observation number	Mahalanobis d-squared	p1	p2
196	22.374	.132	.660
61	22.368	.132	.584

Based on Table 9 above, the outliers test results show the value of Mahalanobis Distance; from the processed data, no value greater than 39,252 was detected. Thus, it can be concluded that there are no data outliers and should be excluded from the study.

Factor Analysis Confirmatory Variable Ease of Use

Confirmatory analysis of ease-of-use variables consists of 5 indicator items. The results of the confirmatory analysis conducted on the ease-of-use variable are described in the results below:

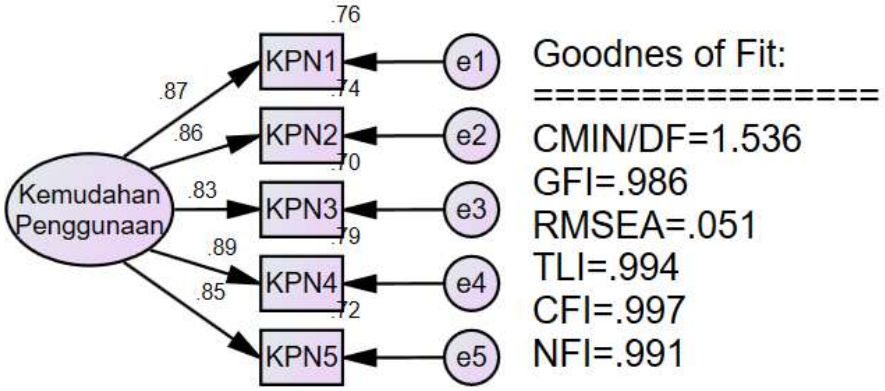

Figure 1
Results of Confirmatory Analysis of Ease of Use Variables

In the confirmatory analysis of ease of use variables, two basic tests are carried out: the goodness of fit test and the loading factor.

Uji Kesesuaian (Goodness of Fit)

The results of the Goodness of Fit test on the confirmatory of the Ease of Use variable analysis factor can be shown in Table IV.14 below:

Table 10
Goodness of Fit Variable Ease of Use Results

Goodness of Fit Index	*Cut-off value*	Research Model	Information
CMIN/DF	≤ 2.00	1,536	Fit
GFI	≥ 0.90	0,986	Fit
RMSEA	≤ 0.08	0,051	Fit
TAG	≥ 0.90	0,994	Fit
CFI	≥ 0.90	0,997	Fit
NFI	≥ 0.90	0,991	Fit

The results of model conformity testing (Goodness of Fit) in Table IV.14 above show that all model criteria can be accepted (fit) to provide sufficient confirmation of the research model; thus, it can be said to be a fit model.

Uji Hypoplant

Hypothesis testing is carried out to prove the influence of causation according to the hypothesis proposed in this study. Hypothesis testing explains that positive or negative relationships between variables can be known based on standardised regression weight values. Significance can be achieved by looking at CR and P-value values. The statistical testing process on the relationship of research variables is declared significant if the critical ratio (C.R) value shows > 1.96 and the p-value < 0.05. The results of hypothesis testing conducted with AMOS version 25 can be seen in the table below:

Table 11
Hypothesis Test Results

Hipotesis	Standardised Regression	CR	p-value	Information
Ease of Use → Satisfaction	0,437	4,863	0,000	Accepted
Quality of Service → Satisfaction	0,480	5,333	0,000	Accepted
Ease of Use → Customer Loyalty	0,156	2,017	0,044	Accepted
Quality of Service → Customer Loyalty	0,201	2,512	0,012	Accepted
Customer Satisfaction → Loyalty	0,675	7,751	0,000	Accepted

Based on Table 11 above, the results of path analysis and hypothesis testing with standardised regression weight can be explained, which can explain the coefficient of the direction of the relationship between research variables and significance values to show significant influence.

The Effect of Ease of Use on Customer Loyalty

Based on the results of H1 testing in this study, ease of use positively and significantly affects customer loyalty to mobile banking applications in Indonesia. This is evidenced by the positive value of the path coefficient (standardised regression weight) of 0.156 with a CR value of 2.017 > 1.96 and a p-value of 0.044 < 0.05. Thus, it means that the ease of use that is felt to be better than the mobile banking application will be able to increase customer loyalty.

Ease of use is a condition where customers believe the technology can make it easier and not difficult to operate. Ease of use of a mobile banking application refers to the amount or absence of effort customers make in using it. Thus, technology is straightforward in transaction activities where customers tend to be loyal to mobile

banking application services that offer a smooth user experience, easy navigation, and quick response to their needs. Furthermore, the context of the customer's mobile banking application is assessed based on how easily the application can help meet customer needs (Sukresna, 2022).

The results of this study are in line with and supported by previous research conducted by (Anugrahwati and Hakim, 2019) that ease of use positively has a significant effect on loyalty. Meanwhile, according to (Susanti and Parera, 2021), it affects customer loyalty. Another study (Wafiyyah & Kusumadewi, 2021) also shows that ease of use significantly affects customer loyalty. The results showed that H1, which states that ease of use affects customer loyalty, is accepted and proven. This proves that the more accessible and less long it takes to use the mobile banking application, the more the customer will continue to use it when transacting digital payments. Thus, showing better ease of use in the mobile banking application will make customers not need to put more effort into using it and continuously use the mobile banking application.

Influence of Ease of Use on Satisfaction

Based on the results of H2 testing in this study show that ease of use has a positive and significant effect on satisfaction with mobile banking applications in Indonesia. This is evidenced by a positive standardised regression weight of 0.435 with a CR value of $4.863 > 1.96$ and a p-value of $0.000 < 0.05$. This means that the easier it is to use the mobile-banking application service, it will be able to increase customer satisfaction.

Ease of use is the extent to which customers feel confident using technology flexibly, easily understood, and operated (Wafiyyah & Kusumadewi, 2021). Ease of use in an application occurs with customer trust in the banking system through mobile banking, which can be operated easily and has good flexibility. A pleasant customer experience on its use, where they can efficiently operate the application through navigating the banking features provided. Furthermore, this ease of use will have an impact on customer behaviour; this is because the perception of ease of use is getting higher and provides feedback felt by customers, which will undoubtedly set the technology to be the first choice (Ashfaq, Yun, Waheed, Khan, & Farrukh, 2019).

The results of this study are in line with and supported by previous research conducted by {Formatting Citation}, who found that ease of use positively has a significant effect on customer satisfaction. In line with the statement of (Batubara et al., 2023), if a person's perception of the system's ease of use is higher, consumers will be more interested in using the technology. Mobile banking application services that are considered easy to use are also able to stimulate comfort and cause customer satisfaction in higher usage. The results of this study show that H2, which states that ease of use affects satisfaction, is accepted and proven. This identifies that the easier it is to operate, the more willing it will be to recommend the mobile banking application to friends and family. Thus, it shows that the higher the perception of ease of use, customers will continue to use mobile banking applications.

The Effect of Service Quality on Customer Loyalty

Based on the results of H3 testing in this study, service quality variables positively and significantly affect customer loyalty to mobile banking applications in Indonesia. This is evidenced by the positive value of the path coefficient (standardised regression weight) of 0.201 with a CR value of 2.512 > 1.96 and a p-value of 0.012 < 0.05. This means that the better the ease of use of the mobile banking application felt by customers, will be able to increase customer loyalty to keep using it.

Service quality is essential in generating profitable loyalty with permanent customers (Ashraf, Ilyas, Imtiaz, & Ahmad, 2018). The bank provides Lifestyle changes, namely digital banking services, to meet customers' expectations and facilitate daily transactions. According to Pasaribu et al. (2022), service quality is essential for companies to maintain trust and meet customer expectations. It can be concluded that the better the mobile banking application's serviceability to meet its customers' expectations and needs, it will increase loyalty.

The results of this study are supported by previous research conducted by Joudeh et al. (2018), who found that service quality has a significant positive effect on loyalty. However, another study by Pasaribu et al. (2022) showed different results where service quality did not significantly affect increasing loyalty. Service quality covers the overall ability of mobile banking application services to meet the banking needs of its customers. The results showed that H3, which states that the quality of service affects customer loyalty, is accepted and proven. Thus, fulfilling the needs and service expectations of the mobile banking application will increase loyalty even more.

The Effect of Service Quality on Satisfaction

Based on the results of H4 testing in this study, service quality variables positively and significantly affect satisfaction with mobile banking applications in Indonesia. This is evidenced by a positive standardised regression weight of 0.480 with a CR value of 5.333 > 1.96 and a p-value of 0.000 < 0.05. This means that the better the service quality of the mobile-banking application service by customer expectations will increase customer satisfaction.

Conclusion

Ease of Use positively and significantly affects Customer Loyalty in using m-banking in Indonesia. This means that the ease of use of the m-banking application is improving, and it will increase customer loyalty. Service quality positively and significantly affects customer loyalty when using m-banking in Indonesia. This means that better service quality in the m-banking application will be able to increase customer loyalty to its use. Service quality positively and significantly affects satisfaction with using m-banking in Indonesia. This means better service quality in the m-banking application will increase customer satisfaction.

Based on the research and data analysis results, it can be concluded that the ease of use and quality of m-banking services in Indonesia positively and significantly affect customer satisfaction, increasing customer loyalty to using m-banking applications.

Bibliography

Anugrahwati, Ria, & Hakim, Nuraini. (2019). Faktor-Faktor Yang Mempengaruhi Kepatuhan Perawat Dalam Melakukan Hand Hygiene Five Moments Di Rs. Hermina Jatinegara: Kepatuhan Perawat. *Jurnal Ilmiah Keperawatan Altruistik*, *2*(1), 41–48.

Ashfaq, Muhammad, Yun, Jiang, Waheed, Abdul, Khan, Muhammad S., & Farrukh, Muhammad. (2019). Customers' expectation, satisfaction, and repurchase intention of used products online: Empirical evidence from China. *Sage Open*, *9*(2), 2158244019846212.

Ashraf, Sarfraz, Ilyas, Rashid, Imtiaz, Majid, & Ahmad, Sajjad. (2018). Impact of service quality, corporate image and perceived value on brand loyalty with presence and absence of customer satisfaction: A study of four service sectors of Pakistan. *International Journal of Academic Research in Business and Social Sciences*, *8*(2), 452–474.

Batubara, Maryam, Jannah, Nurul, & Ritonga, Annisa Lestari. (2023). The Effect Of Perceived Usefulness, Ease Of Use And Security On Interest In Using Bsi Mobile Services With Trust As Intervening Variable (Case Study On Uinsu Medan Students). *International Journal of Economics, Business and Accounting Research (IJEBAR)*, *7*(1).

El Fikri, Miftah. (2018). Dampak strategi pemasaran terhadap keputusan berkunjung dan kepuasan wisatawan ke bumi perkemahan Sibolangit. *Jumant*, *8*(2), 58–67.

Fallahi, Ali, Mahnam, Mehdi, & Niaki, Seyed Taghi Akhavan. (2022). Direct aperture optimisation for intensity modulated radiation therapy: Two calibrated metaheuristics and liver cancer case study. *International Journal of Industrial Engineering and Production Research*, *33*(2), 1–14.

Musfar, Tengku Firli, Nabilla, Mutiya, & Jushermi, Jushermi. (2023). The Effect of Ease of Use and Customer Trust Toward Customer Satisfaction and Customer Loyalty in Using the Shopee PayLater Feature in Pekanbaru City. *Dinasti International Journal of Digital Business Management*, *4*(3), 456–470.

Mwiya, Bruce, Katai, Mathew, Bwalya, Justice, Kayekesi, Maidah, Kaonga, Sekela, Kasanda, Edwin, Munyonzwe, Christopher, Kaulungombe, Bernadette, Sakala, Eledy, & Muyenga, Alexinah. (2022). Examining the effects of electronic service quality on online banking customer satisfaction: Evidence from Zambia. *Cogent Business & Management*, *9*(1), 2143017. https://doi.org/10.1080/23311975.2022.2143017

Oh, Yun Kyung, & Kim, Jung Min. (2022). What improves customer satisfaction in mobile banking apps? An application of text mining analysis. *Asia Marketing Journal*, *23*(4), 3. https://doi.org/10.53728/2765-6500.1581

Pamungkas, Imang Dapit, Ghozali, Imam, Achmad, Tarmizi, Khaddafi, Muammar, & Hidayah, Retnoningrum. (2018). Corporate governance mechanisms in preventing accounting fraud: A study of fraud pentagon model. *Journal of Applied Economic Sciences*, *13*(2), 549–560.

Rasheed, Hafiz Muhammad Wasif, Khalid, J., Khizar, H. M. U., Sajid, M., Shahid, M. N., Ahmad, M., & Khan, Waseem Ahmad. (2015). Factors affecting customer loyalty in banking sector: A study on Bahawalpur (Pakistan) banks. *International Journal of Accounting and Financial Reporting*, *5*(1), 239–254.

Saputri, Fanny Setiyo, & Sukresna, I. Made. (2022). Pengaruh Kualitas Layanan Website, Kemudahan Penggunaan Website, Keamanan Website, Dan Kepuasan Terhadap Loyalitas Pelanggan (Studi pada e-commerce shopee). *Jurnal Akuntansi Dan Pajak*, *23*(2). https://doi.org/10.29040/jap.v23i2.6468

Shahid, Shadma, Islam, Jamid Ul, Malik, Shehla, & Hasan, Uzma. (2022). Examining consumer experience using m-banking apps: A study of its antecedents and outcomes. *Journal of Retailing and Consumer Services*, *65*, 102870. https://doi.org/10.1016/j.jretconser.2021.102870

Susanti, Evi, & Parera, Novita Oktavianti. (2021). Loyalitas Nasabah Dari Kemudahan Penggunaan Mobile Banking. *International Journal of Digital Entrepreneurship and Business*, *2*(1), 39–48. https://doi.org/10.52238/ideb.v2i1.37

Wafiyyah, Rafa Sayyidatul, & Kusumadewi, Ni Made Wulandari. (2021). The effect of perceived usefulness, perceived ease of use, and trust on repurchase intention on E-commerce Shopee. *IJISET-International Journal of Innovative Science, Engineering & Technology*, *8*(7), 428–434. https://doi.org/10.31933/dijdbm.v4i3.1784