

---

## Analysis of the Influence of Trust, Service Quality and Customer Satisfaction on Customer Loyalty of Mobile Banking Users

Siti Janette Ramadhini Simamora<sup>1\*</sup>, Harjanto Sutedjo<sup>2</sup>, & Renny<sup>3</sup>

<sup>1</sup>Department of Management, Gunadarma University, Indonesia

<sup>2</sup>Department of Management, Gunadarma University, Indonesia

<sup>3</sup>Department of Management, Gunadarma University, Indonesia

DOI - <http://doi.org/10.37502/IJSMR.2024.7105>

---

### Abstract

This study aims to determine the effect of trust, customer satisfaction, and service quality on customer loyalty of mobile banking users. This study used primary data. The population in this study is customers who use mobile banking. Random sampling of the population is known. Data collection method using questionnaires. Data analysis techniques use validity, reliability, classical assumption test, multiple linear analysis, determination test, t and f test.

The result showed that trust did not affect customer loyalty, customer satisfaction affected customer loyalty. Then simultaneously, trust, customer satisfaction, and service quality had a significant effect.

**Keywords:** Trust, Service quality, Customer satisfaction, Loyalty

---

### 1. Introduction

Development progress technology has capable make mobility activity man become easier and faster. One of type companies experiencing change enough drastic because progress technology is banking.

In the era of globalization, the world of banking sued for showing better performance and good service. This matter is something a must challenge faced and handled by all company banking. The level of bank competition is not only conventional banks but also Islamic banks. Demands facility technology all round information advanced in the present and the future become challenge banking for provide service best to public.

Currently, banks have utilise development technology information in service banking with launch service media transaction banking based technology information namely mobile banking. Mobile banking is one of them innovation technology cellular in the sector purposeful finance for make it easier customers in access transaction his finances as well as get service mark plus.

Almost all banking, especially in Indonesia already implement mobile banking for can give the best service for satisfying customers. Each bank operates displays his own performance as good

as maybe so you can seize market share among customers. But no all-bank customers have the same loyalty to a bank.

## **2. Literature**

### **2.1 Trust**

Trust is important component in online activities (Ventre & Kolbe, 2020). In online services, trust can help consumer or customer in face challenge purchase product or service from the seller is not known more relevant because impersonal nature of online services (Ventre & Kolbe, 2020). Trust is a confidence from parties certain against other parties in relationship between the second split parties based on confidence that trusted party will meet everything obligations as expected.

### **2.2 Service Quality**

According to Kotler and Keller (2012:43) Services or service is all action or possible performance offered One party to the other party in essence No tangible and not produce ownership whatever. Superiority something product service depends from uniqueness and quality demonstrated by services the as well as suitability between hope with desire customer.

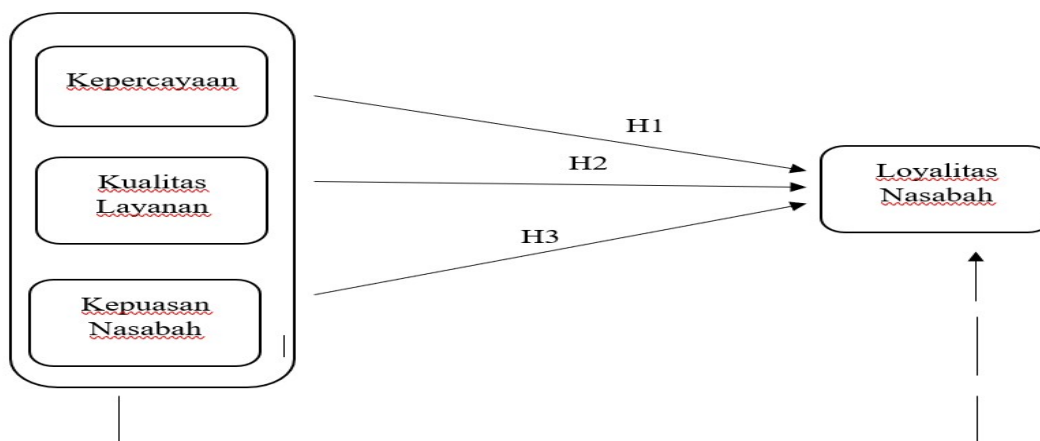
### **2.3 Customer Satisfaction**

According to Kotler&Keller (2015) understanding satisfaction customer or satisfaction bank customers are level circumstances feeling someone who is results comparison between evaluation performance / results end product in relationship with hope customer. Companies need measure Satisfaction customer to use see bait come back nor possible input taken by the company for development and implementation of improvement strategies satisfaction customer.

### **2.4 Loyalty**

According to Kotler and Keller (2015) loyalty is commitment customers endure in a way deep for subscribe return or do purchase repeat product / service selected in a way consistent in the future coming, though influence situations and efforts marketing have potency for cause behavior customer switch.

Framework thinking in study this can see in the picture below



Source: The data is processed by researchers (2023)

Proposed hypothesis researcher that is:

H1: Influence trust to loyalty customers mobile banking users.

H2: Influence quality service to loyalty customers mobile banking users.

H3: Influence satisfaction customers to loyalty customers mobile banking users.

H4: Influence trust, service quality, and customers satisfaction to loyalty mobile banking users.

### 3. Methods

#### 3.1 Likert Scale

A Likert scale was used for measure attitudes, opinions, and perceptions somebody or a group of people about phenomenon social. Respondents were asked to complete a questionnaire that required them to indicate their level of agreement with a series of statements.

#### 3.2 Validity test

Test the validity of research data determined by an accurate measurement process. Valid means instrument the can used for measure what do you want be measured. Whereas results valid research is when there is similarity between the collected data with real data occurs in the object under study.

#### 3.3 Reliability Test

Reliability Testing is very important in something study. Test reliability is tool for measure something the questionnaire is indicator from variable. Something questionnaire stated reliable or reliable If answer somebody to statement is consistent or stable from time to time.

#### 3.4 Normality Test

Normality test is a test for know what empirical data were obtained from field That Alone in accordance with distribution theoretical certain or for see is residual values are normally distributed or no. good regression model is own residual values are normally distributed. So, test for normality No carried out on each variable but on the value the residual.

#### 3.5 Multicollinearity Test

In the use of analytical models' multiple linear regression if happen violation to assumption classic, then in study will be repaired with use testing multicollinearity that is purposeful testing for know what is each variable explainer each other relate linearly in use linear regression.

### 3.6 Heteroscedasticity Test

Heteroscedasticity test is for see is there is inequality variance from residual One to observation to other observations. Detection heteroscedasticity can done with method scatter plots with plot ZPRED value (value prediction) with SRESID (value residual).

### 3.7 Analysis Multiple Linear Regression

Analysis regression multiple is analysis for measure big influence between two or more variable independent to One variable dependent and predictive variable dependent with use variable independent. Equality multiple linear regression with 3 variables independent is as following:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

### 3.8 Coefficient Analysis Determination ( $R^2$ )

Coefficient determination ( $R^2$ ) in essence measure how much Far deep model capabilities explained variation variable dependent. Coefficient value determination is between zero and one. The smallest ( $R^2$ ) means ability variables independent in explain variation variable dependent very limited.

### 3.9 Partial Test (t Test)

Partial Test or t test basically used for show There is or not influence variable independent in a way Partial or separated to variable dependent.

### 3.10 Simultaneous Test (F Test)

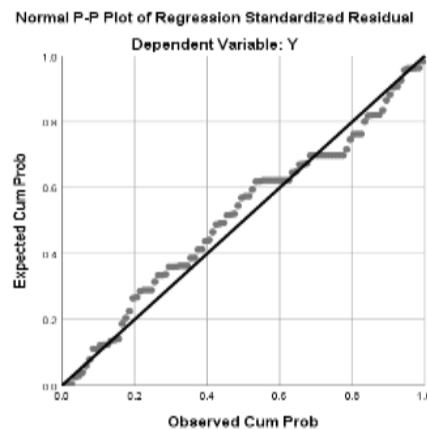
Simultaneous Test (F Test) was used for prove truth hypothesis and knowing the extent to which variables are used capable explain variable bound.

## 4. Research Results

### 4.1 Normality Test

Normal distribution will be determine the diagonal straight line, and plotting the residual data will be compared to with diagonal lines. If the residual data distribution is normal, then the line depicts the actual data will follow the diagonal line.

### Normality Test Results



**Source:** The data is processed by researchers (2023)

On picture above, yes seen that in normal probability plot of standardized regression graph seen point spread around the diagonal line, and the spread No too Far or widened. So you can concluded from chart this, that regression model in accordance assumption normality and worthiness used.

#### 4.2 Multicollinearity Test

Good regression model should No happen correlation between variable independent. For detect There is or not multicollinearity within \_ regression so can see from mark tolerance and variance inflation factor (VIF). Low tolerance value \_ The same with high VIF value (because  $VIF = 1 / \text{Tolerance}$ ). Common cut off values used for showing level multicollinearity is mark tolerance  $\leq 0.10$  or the same with value  $\geq 10$ .

In processing research data this, researcher use help SPSS 25 software for get results as following:

**Table 1: Multicollinearity Test**

Variable	Tolerance	VIF
Trust ( $X_1$ )	0.399	2.506
Service Quality ( $X_2$ )	0.217	4.608
Customer Satisfaction ( $X_3$ )	0.249	4.015

**Source:** The data is processed by researchers (2023)

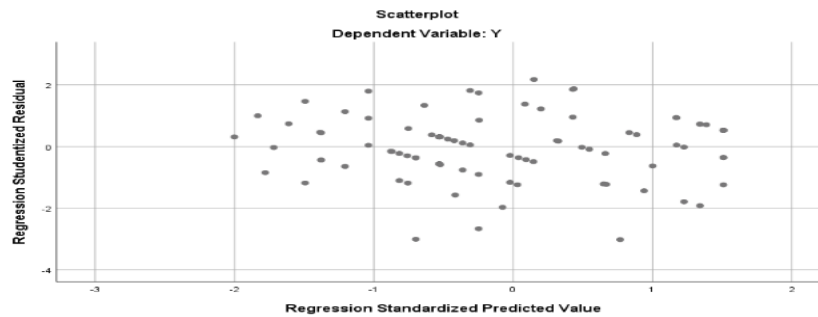
Result of table calculation above, value Variance Inflation Factor (VIF) shows VIF value does not There is variable independent who owns more VIF value out of 10. So got it concluded that no there is multicollinearity between variable independent in the regression model. The calculation results also show mark tolerance on variables independent who owns mark less tolerance from 0.10. So, obey mark tolerance no happen multicollinearity in the regression model in the research this.

#### 4.3 Heteroscedasticity Test

Good regression model is the one that doesn't happen heteroscedasticity. Detection There is or not heteroscedasticity can done with see There is or not pattern specific on the scatterplot graph between SRESID and ZPRED where the Y axis is Y which has been predicted, and the X axis is the residual (predicted Y – actual Y) that has been studentized.

On calculations research data results, author use help SPSS 25 software, which produces picture as following:

**Results Heteroscedasticity Test**



**Source:** The data is processed by researchers (2023)

Based on picture chart scatterplots seen that No There is clear pattern \_ as well as dot, dot, dot spread in a way random as well as spread well above \_ or below \_ number 0 on the Y axis. So can concluded that No happen heteroscedasticity in the regression model, so that the regression model worthy used For predicting the dependent variable that is loyalty customers based on input variable independent writer that is trust, quality service, and satisfaction customers

**4.4 Analysis multiple linear regression**

**Table 2: Multiple linear regression**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.594	1.908		.541	.590
	Trust	-.072	.108	-.069	-.670	.505
	Service Quality	.228	.109	.293	2.082	.040
	Customer Satisfaction	.460	.109	.552	4.204	.000

a. Dependent Variable: y

**Source:** The data is processed by researchers (2023)

From the results processing the data above, obtained equality regression as following:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

$$Y = 0.594 -0.072 T + 0.228 SQ + 0.460 CS$$

From Eq on can is known that:

1. From Eq the so can interpreted mark from variable X 1 (Trust) is -0.072, X 2 (Service Quality) of 0.228, X 3 and (Customer Satisfaction) of 0.460 then big loyalty customers mobile banking users amounted to -0.594.
2. Coefficient value variable Trust ( $b^1$ ) is valuable negative, namely -0.072 so can said that the more tall level trust, no means will the more loyalty is high customers.
3. Coefficient value variable Service Quality ( $b^2$ ) is worth positive, namely 0.228. It means if There is enhancement quality service so will the more loyalty is high customers.
4. Coefficient value variable Customer Satisfaction ( $b^3$ ) is valuable positive , namely 0 , 460. That is if the more tall level satisfaction customers so the more loyalty is high customers.

#### 4.5 Test Coefficient Determination ( $R^2$ )

**Table 3: Test Coefficient Determination ( $R^2$ )**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.766	.587	.575	1.152
a. Predictors: (Constant), X3, X1, X2				
b. Dependent Variable: Y				

**Source:** The data is processed by researchers (2023)

Based on table on can is known positive R value that is of 0.766 which means mark from variable trust, service quality, and customers satisfaction own strength moderate (strong) relationship. Then exists The R Square value is 0.587 which is matter This signifies variables free that is trust, service quality, and customers satisfaction only can explain its influence amounting to 0.587 or 58.7% against variable bound that is loyalty customers and the rest namely 0.413 or 41.3% explained by influence or other variables do not used in study this and the error value.

#### 4.6 Partial Test (t Test)

**Table 4: T Test**

Model		T	Sig.
1	(Constant)	.541	.590
	Trust	-.670	.505
	Service Quality	2.082	.040
	Customers Satisfaction	4.204	.000

**Source:** The data is processed by researchers (2023)

The results of the t test analysis are as following:

1. Calculated t-value on the variable Trust (X 1) is of -0.670 with level significance 0.505. This matter significance that Sig value.  $0.505 > 0.05$  which means that on research Ho is accepted and Ha is rejected. It means variable trust No influential to loyalty customers user mobile banking. Although customers user mobile banking own trust with do transaction, then the bank can help difficulty as well as believe in features application mobile banking the standard one but No join in as well as influence loyalty customers mobile banking users.
2. Calculated t-value on the variable Quality Service (X 2) is amounting to 2,082 with level significance 0.040. This matter signifies that Sig value.  $0.040 < 0.05$  which means that on research Ho is rejected and Ha is accepted. It means variable quality service influential to loyalty customers mobile banking users. With exists feature application Accurate and relevant mobile banking, indeed renewal in a way periodically, giving fast service, as well safe and save time in transact make customers mobile banking users feel get quality good service \_ from mobile banking application used
3. Calculated t-value on the variable Customer Satisfaction (X 3) is as big as 4,204 with level significance 0.000. This matter significance that Sig value.  $0.000 < 0.05$  which means that on research Ho is rejected and Ha is accepted. It means variable satisfaction customers influential to loyalty customers mobile banking users. Complete mobile banking services and convenience \_ in the transaction process so that make customers user mobile banking feel satisfied in use mobile banking.

#### 4.7 Simultaneous Test Results (F Test)

**Table 5: F Test**

<u>ANOVA<sup>a</sup></u>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	181.532	3	60.511	<b>45.558</b>	.000 <sup>b</sup>
	Residual	127.508	96	1.328		
	Total	309.040	99			
a. Dependent Variable: y						
b. Predictors: (Constant), X <sub>3</sub> , X <sub>1</sub> , X <sub>2</sub>						

**Source:** The data is processed by researchers (2023)

Based on table above, the calculated F is obtained amounting to 45,558 with level significance 0.000. This matter signifies that Sig value.  $0.000 < 0.05$  which means that on research Ha is accepted and Ho is rejected. It means there is significant influence \_ between trust, service quality, and customers satisfaction in a way simultaneous to variable bound that is loyalty customers.

#### 5. Conclusion

1. Trust no influential to loyalty customers user mobile banking. This result prove that the more big trust customer at a time technology specifically mobile banking No means will the more there is also great loyalty customer at a bank.



2. Service quality influential to loyalty customers user mobile banking. This result prove that the more there is enhancement service quality so will the more loyalty is high customer at a bank.
3. Customers satisfaction influential to loyalty customers user mobile banking. This result prove that the more tall level satisfaction customers so the more loyalty is high customers.
4. Trust, service quality, and customers satisfaction in a way simultaneous influential to loyalty customers user mobile banking.

## References

- 1) Adiwijaya Putra. 2018. Kemudahan penggunaan, tingkat keberhasilan transaksi
- 2) kemampuan sistem teknologi, kepercayaan dan minat bertransaksi menggunakan
- 3) mobile banking. Bali: Jurnal Manajemen dan Bisnis, Vol.15 No.3
- 4) Al Hawary, Hussien. 2017. The impact of electronic banking services on the customers
- 5) loyalty of commercial banks in Jordan. *International Journal of Academic*
- 6) *Research in Accounting, Finance and Management Sciences*. Vol. 7(1), 50-63
- 7) Arcand, PromTep, Burn, Rajaobelina. 2017. Mobile banking service quality and
- customer relationships. *International Journal of Bank Marketing* Vol. 35 No. 7
- 8) Ayswarya, Sarala, Muralidharan, Ilankadhir. 2019. Service quality of mobile banking
- 9) services in ICICI Bank Limited. *Journal of Service Science and Management*, 12,
- 10) 649-664
- 11) Jahan, Shahria. 2022. Factors effecting customer satisfaction of mobile banking in
- 12) Bangladesh: a study on young users' perspective. *South Asian Journal of Marketing*
- Vol. 3 No. 1
- 13) Kotler, Philip dan Gray Amstrong. (2012). *Priciples of marketing*. 7th ed. Prentice Hall. USA.
- 14) Kotler, P., dan Keller, K.L. *Manajemen Pemasaran*, Edisi 12. Jakarta: Erlangga. 2012
- 15) Lupiyoadi, R., *Manajemen Pemasaran Jasa*. Jakarta: Salemba Empat, Edisi 3, 2013. h. 232
- 16) Marliyah, Ridwan, Sari. 2021. The effect of e-service quality on satisfaction and its
- impact on customer loyalty of mobile banking users (case study of bank syariah mandiri
- 17) KCP Belawan). Budapest: Budapest International Research and Critics Institute-
- 18) *Journal (BIRCI-Journal)* Volume 4, No 2
- 19) Mostafa B. 2020. Mobile banking service quality: a new avenue for customer value co-creation. *International Journal of Bank Marketing* Vol. 38 No. 5
- 20) Nurdin, Musyawarah, Nurfitriani, Jalil. 2020. Pengaruh pelayanan mobile banking terhadap kepuasan nasabah (studi pada mahasiswa perbankan syariah IAIN Palu). Palu:
- 21) *Jurnal Ilmu Perbankan dan Keuangan Syariah*, Vol.2 No.1
- 22) Nursiah, Ferils, Kamarudin. 2022. Analisis minat menggunakan mobile banking. *Jurnal Akuntansi dan Keuangan* Vol. 19 (1) 91-100
- 23) Oliver, R. L. (1995). Attribute need fulfillment in product usage satisfaction. *Psychology & Marketing*, 12(1), 1-17.

- 24) Pranoto, Setianegara. 2020. Analisis pengaruh persepsi manfaat, persepsi kemudahan dan keamanan terhadap minat nasabah menggunakan mobile banking (studi kasus pada
- 25) PT Bank Rakyat Indonesia (Persero) Tbk Kantor Cabang Semarang Pandanaran).
- 26) Semarang: Keunis Majalah Ilmiah, Vol.8 No.1
- 27) Putro, Thamrin, Samsudin. 2021. Pengaruh kualitas pelayanan mobile banking terhadap kepuasan nasabah pengguna mobile banking PT. Bank Negara Indonesia TBKDI KCP Buaran Jakarta. Jakarta: Jurnal Administrasi Bisnis, Vol.1(2) 48-56
- 28) Rizal Syamsul, Munawir. 2017. Pengaruh kepuasan nasabah terhadap menggunakan
- 29) mobile banking (m-banking) pada bank BCA Cabang Banda Aceh. Aceh: Jurnal
- 30) Ekonomi dan Manajemen Teknologi, Vol.1(2) 68-78
- 31) Rhamdhani Muliana. 2020. Pengaruh kepuasan, kepercayaan, dan continuance intention terhadap loyalitas pada pengguna mobile banking. Kebumen: Jurnal Ilmiah
- 32) Manajemen, Vol.8 No. 2
- 33) Ronny, Ilfitriah, Nurhadi. 2021. Analisis pengaruh kualitas layanan terhadap kepuasan nasabah menggunakan electronic banking. Surabaya: Jurnal Ekonomi dan Keuangan. Vol.5 No.3
- 34) Rosyid, Ariyanty, Kusumahadi. 2019. Pengaruh e-servqual dan kepuasan pengguna mobile banking(m-banking) terhadap loyalitas nasabah pada Bank BCA di Bandung. Bandung: Jurnal Manajemen, Vol.6 No.3
- 35) Sari Kartika. 2022. Internet Banking. Perilaku pencarian variasi dan loyalitas nasabah. Cetakan Pertama. Penerbit: Feniks Muda Sejahtera – Bandung
- 36) Shankar, Jebarajakirthy. 2018. The influence of e-banking service quality on customer
- 37) loyalty. *International Journal of Bank Marketing*.
- 38) Shinan Bank. 2017. Mobile Banking. Retrieved from [www.shinhan.co.id](http://www.shinhan.co.id)
- 39) Suhartanto, D., Gan, C., Sarah, I. S., & Setiawan, S. (2019). Loyalty towards Islamic banking: service quality, emotional or religious driven? *Journal of Islamic Marketing*.
- 40) Sugiyono. 2017. *Statistika Untuk Penelitian*. Bandung: Alfabeta
- 41) Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model. *Industrial Management and Data Systems*, 116(3), 508–525.
- 42) Tjiptono, Fandy, (2012) *Prinsip-prinsip Total Quality Service*, Andi Offset, Yogyakarta.
- 44) Ventre, I., & Kolbe, D. (2020). The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *Journal of International Consumer Marketing*, 1–13.