

THE EFFECT OF SERVICE QUALITY, PERCEIVED EASE OF USE, AND PERCEIVED USEFULNESS ON USER SATISFACTION OF BCA MOBILE BANKING APPLICATION IN SURABAYA



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Abstract

Advances in technology have made various aspects of human life easier, with mobile banking being one of the most widely adopted innovations. BCA Mobile stands out as one of the leading mobile banking applications, competing closely with other platforms to maintain its position in the market. The objective of this study is to examine the impact service quality on user satisfaction with BCA Mobile in Surabaya. It also examines the influence of perceived ease of use and perceived usefulness on user satisfaction on BCA Mobile in Surabaya. The sample consists of 112 respondents who meet the criteria of being at least 17 years old and having used the BCA Mobile application at minimum once. The selection of participants was done using a purposive sampling technique, and data were collected through a use of structured questionnaire. The data analysis was conducted using the Partial Least Squares (PLS) method. The result suggest that service quality, perceived ease of use, and perceived usefulness all have a positive and significant impact on the satisfaction of BCA Mobile users in Surabaya.

Keywords: Service Quality, Perceived Ease Of Use, Perceived Usefulness, User Satisfaction

INTRODUCTION

Technology is a form of information advancement that facilitates all individual activities in completing work (Veonnita & Rojuaniah, 2022). One of the most influential forms of technological development is the internet. One of the impacts of the increasing use of the internet is the development of digital finance. Ease of access and time efficiency make many individuals switch from conventional transactions to digital-based services, such as fintech, internet banking, and mobile banking (Fauzi et al., 2023)

Tabel 1
Top Brand Index Mobile Banking 2021-2025

Brand	2021	2022	2023	2024	2025
BCA Mobile	47.50%	47.40%	47.90%	52.20%	51.00%
BRImo	17.00%	19.40%	19.80%	18.50%	20.70%
Livin' by Mandiri	12.90%	12.90%	13.00%	11.50%	7.50%
BNI mobile banking	14.00%	11.20%	11.30%	9.40%	12.10%

Sumber : Top Brand Award (2025)

One bank that has implemented mobile banking is Bank Central Asia (BCA) through BCA mobile. BCA is one of the leading banking companies in Indonesia which occupies the first position as the strongest bank brand in the world in 2024 with a brand rating of AAA + which is categorized as perfect (GoodStats, 2024). In addition, the results of the Top Brand index BCA mobile is a mobile banking application with the highest percentage index and has been the flagship for 5 consecutive years, although it shows a fluctuating trend, BCA mobile is able to maintain its position in first place.

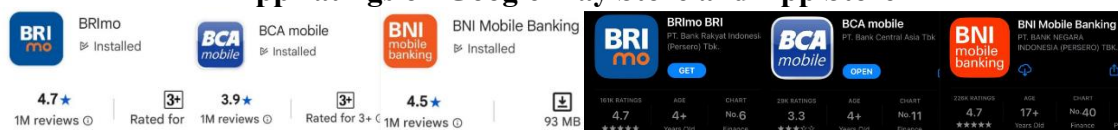
Table 2
Growth in the Number of Mobile Banking Users and Transaction Value

Aplikasi and Website	Number of Users (Million)	User Growth (%)	Transaction Value (Trillion)	Transaction Value Growth (%)
BRImo	33,5	30,3	Rp1.251,1	41,8
m-BCA dan Klik BCA	30,8	9	Rp6.586	12
Livin' by Mandiri	24	39	Rp921	27,4
BNI mobile banking	16,9	18,5	Rp347	35,9

Source : CNBC Indonesia, 2024

Despite this, the fact is that BCA's user growth and transaction value do not match its ranking. This is because the growth of BCA mobile is still far behind BRImo, which is superior in terms of the number of users and transaction value. Based on data from CNBC Indonesia, BRImo has the highest number of users of 33.5 million with user growth of 30.3% and a transaction value of Rp1,251.1 trillion. Meanwhile, m-BCA and Klik BCA have 30.8 million users, but the user growth rate is only 9%, much lower than other applications with the largest transaction value of Rp6,586 trillion (CNBC Indonesia, 2024).

Figure 1
App ratings on Google Play Store and App Store



This is also supported by the app's rating on the Google Play Store and App Store, which found that BCA mobile's rating is much lower than other banking apps, BCA mobile on the App Store received a rating of 3.3 while BRImo and BNI mobile Banking received a rating of 4.7, as well as BCA mobile's rating on the Google Play Store which received a rating of 3.9 while Brimo and BNI mobile banking received ratings above 4. There are also many bad comments and complaints in the BCA mobile comment section on the App Store and Google Play Store, which on average complain about the application that often crashes, often fails transactions, is difficult to use for transactions, the length of time customer service takes to handle and resolve problems, unfriendly service, and unhelpful service.

Based on this phenomenon, BCA needs to improve services to restore user satisfaction that has been disappointed. In this case, there are several factors that can affect user satisfaction in using technology, namely service quality, perceived usefulness, and perceived ease of use (Putra & Raharjo, 2022).

Perceived usefulness is that users feel that using the application increases the effectiveness and efficiency of conducting financial transactions (Safari & Riyanti, 2024). The perceived ease of use refers to individuals believing the technology can be used without difficulty (Wicaksono, 2022). According to Novitasari et al., (2021), service quality is the level of excellence expected and its management to ensure the fulfillment of customer needs and expectations. These three aspects need to be analyzed to see their effect on user satisfaction which has an impact on retention and loyalty to the BCA mobile application.

REVIEW OF LITERATURE

Service Quality

Service quality is a concept that describes the extent to which a service provided by a service provider can meet or even exceed customer expectations. As stated by Lewis & Booms in Tjiptono & Chandra, (2016) service quality is gauge of how good the level of service strived for can meet and match customer expectations. According to Parasuraman in Saputra et al., (2023) service quality can be measured through five main dimensions, namely tangibility (physical evidence), reliability, responsiveness, assurance, and empathy.

Perceived Ease of Use

According to Wicaksono (2022) perceived ease of use is defined as individual beliefs about how easy or efficient a technology can be used. This perception arises from a

person's beliefs that allow them to consider the actions to be taken against a system or technology. This perceived ease of use is basically the belief that a computer system does not necessitate a lot of effort and can be used easily (Akob & Sukarno, 2022). The perceived ease of use indicators used according to Agustino et al., (2021) are easy to learn, easy to obtain, easy to operate.

Perceived Usefulness

Perceived usefulness is an individual's evaluation of how certain technology can help them in completing tasks or achieving desired goals, factors that influence perceived usefulness include the advantage of technology and its ability to meet user needs (Wicaksono, 2022). Davis in Deliyana et al., (2021) explains that perceived usefulness is the extent to which an information technology can provide real benefits to its users. Indicators for measuring perceived usefulness adapted from Khoiriyah et al., (2023) research are the process of fast payment transactions, increasing productivity, and effective work.

User Satisfaction

According to Kotler & Armstrong (2018), satisfaction may be said as a individual's feeling of joy or displeasure with the reality of performance compared to expected expectations. According to customer satisfaction is the level of individual feelings after assessing the difference in product performance or perceived results with their expectations. In other words, satisfaction is the result of a comparison between customer expectations before using a product or service and the actual performance they feel after using it. The indicators used in user satisfaction taken from Tjiptono in Indrasari (2019) are alignment with expectations, the propensity to return, and willingness to recommend to others.

RESEARCH METHOD

The population in this study were BCA customers in Surabaya City. This study took a sample of 112 BCA customers in Surabaya, using a non-probability sampling method with purposive sampling technique. Respondent criteria are at least 17 years old and have used BCA mobile at least once. questionnaire distributed using Google Forms was the data collection technique used in this study. Structured Equation Modeling (SEM) analysis based on Partial Least Squares (PLS) with the help of SmartPLS software version 3.0 was used in the analysis of this study.

RESULTS AND DISCUSSION

Respondent Characteristic

Based on age, the most respondents were aged 17-28 years, representing generation Z (1997-2012) at 66.96%. This is because younger generations such as generation Z and millennials grow up in an age that is accustomed to technology and the internet. Respondents with student status (36.6%) dominate BCA mobile users in Surabaya. This is consistent with the majority of BCA mobile users aged 17-28 years, so the majority of respondents' occupations are students who tend to make non-cash transactions. The dominant income of respondents is >Rp 3,000,000 (40.1%). Respondents most often use BCA mobile 1-3 times a day (45.45%). Students transact a lot for food, college/school needs or entertainment, so they will use BCA mobile 1-3 times a day.

Outer Model

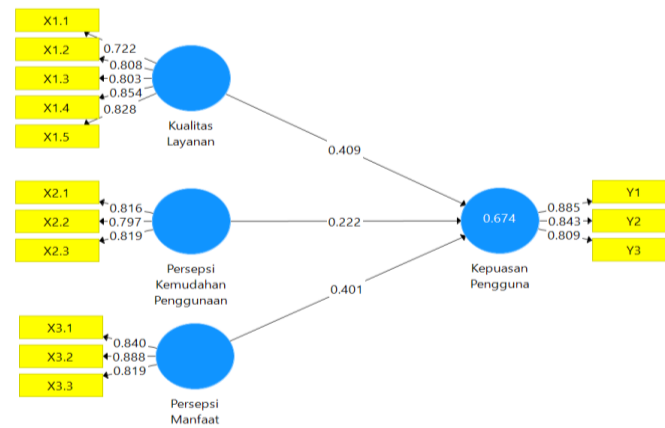


Figure 3
Outer Model

Source: Research Data (2025)

The figure above shows the PLS output. The factor loading value for each indicator is displayed above the line connecting the variable to its respective indicator. The Path Coefficients value can be obtained from the position above the arrow line connecting the exogenous variables with the endogenous variables. Meanwhile, the amount of R-Square value is usually displayed in a circle that represents endogenous variables, such as the user satisfaction variable.

Outer Loading

Tabel 3
Outer Loadings (Mean, STDEV, T-Values)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
X1.1 ← X1	0.722	0.718	0.056	12.925
X1.2 ← X1	0.808	0.803	0.051	15.872
X1.3 ← X1	0.803	0.785	0.067	12.019
X1.4 ← X1	0.854	0.844	0.041	20.935
X1.5 ← X1	0.828	0.816	0.054	15.291
X2.1 ← X2	0.816	0.809	0.067	12.216
X2.2 ← X2	0.797	0.796	0.045	17.786
X2.3 ← X2	0.819	0.816	0.043	18.952
X3.1 ← X3	0.840	0.834	0.044	18.992
X3.2 ← X3	0.888	0.888	0.024	37.020
X3.3 ← X3	0.819	0.814	0.041	19.903
Y1.1 ← Y	0.885	0.878	0.035	25.080
Y1.2 ← Y	0.843	0.839	0.036	23.727
Y1.3 ← Y	0.809	0.794	0.058	14.071

Source: Researcher Data (2025)

The Outer Loading results in the table above show that all reflective indicators on the service quality variable (X1), perceived ease of use (X2) and perceived usefulnesss (X3), and user satisfaction (Y) Factor Loading (Original Sample) values are greater than 0.7 and or

significant. It is evident that the estimation results for all indicators fulfill the criteria for Convergent Validity, indicating strong validity.

Cross Loading

Tabel 4
Cross Loading

	Service Quality (X1)	Perceive Ease Of Use (X2)	Perceived Usefulness (X3)	User Satisfaction (Y)
X1.1	0,722	0,346	0,288	0,506
X1.2	0,808	0,390	0,401	0,580
X1.3	0,803	0,269	0,389	0,500
X1.4	0,854	0,390	0,443	0,600
X1.5	0,828	0,315	0,351	0,583
X2.1	0,363	0,816	0,247	0,417
X2.2	0,304	0,797	0,289	0,435
X2.3	0,372	0,819	0,352	0,469
X3.1	0,441	0,342	0,840	0,544
X3.2	0,380	0,305	0,888	0,526
X3.3	0,371	0,289	0,819	0,631
Y1	0,671	0,469	0,571	0,885
Y2	0,567	0,549	0,583	0,843
Y3	0,508	0,351	0,558	0,809

Source: Research Data, 2025

It is found that Cross Loading all Factor Loading values in each indicator on all both independent and dependent variables show a Factor Loading value greater than Factor Loading on other indicators, so it can be concluded that all indicators in this study have met the validity requirements or have good validity.

Validity Test and Reliability Tes

Tabel 5
AVE and Composite Reliability

No	Variabel	Composite Realibility
1.	Service Quality (X1)	0,901
2.	Perceived Ease Of Use (X2)	0,852
3.	Perceived Usefulness (X3)	0,886
4.	User Satisfaction (Y)	0,883

Source: Research Data, 2025

These results show all variables has the composite reliability value > 0.7, so it can be stated that all variables in this study are reliable. It was also found that the AVE test results of the three variables that is in accordance with the requirements > 0.5, so it can be stated that all variables in this study have good validity.

R-Square

**Tabel 6
 R-Square**

	R-Square
User Satisfaction	0,674

Source: Research Data, 2025

The R² value obtained is 0.674. It is apparent that the model effectively explain the phenomenon of user satisfaction as influenced by variable service quality, perceived ease of use, and perceived usefulness with a variance of 67.4%, so the remaining 32.6% is attributable to variables outside the scope of this research such as variables of trust, security and system quality.

Path Coefficient Result

**Table 7
 Path Coefficients (Mean, STEDEV, T-Values)**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Service Quality → User Satisfaction	0,409	0,412	0,066	6,181	0,000
Perceived Ease Of Use → User Satisfaction	0,222	0,223	0,070	3,196	0,001
Perceived Usefulness → User Satisfaction	0,401	0,400	0,054	7,461	0,000

Source: Research Data, 2025

The Effect of Service Quality on User Satisfaction

The results of the research indicate that service quality variables have a positive and significant effect on BCA mobile user satisfaction in Surabaya. with a Path Coefficients value of 0.409 and a P-Value of 0.000 < 0.5, so the first hypothesis can be accepted. The service quality variable contributes to BCA mobile user satisfaction in Surabaya. So that the better the quality of service provided and meeting user expectations will affect the level of user satisfaction (Asep, 2023). Therefore, it is important that the company pays more attention and cares about the wants and needs of users by providing the best service.

The indicator that has the most influence on user satisfaction is empathy. BCA Mobile shows this concern by responding to input, complaints, and criticism from users through performance improvements and regular application updates. These actions reflect BCA's commitment to providing better and more relevant services, so that the application can continue to evolve according to the expectations and needs of its users.

The increase in BCA Mobile's rating on Google Playstore is an indicator of improved user satisfaction. Based on the reviews listed in the comments section, there are many positive responses from users regarding improvements made by BCA Mobile. This shows that BCA Mobile actively responds to user complaints and strives to provide services that are in line with their needs and expectations. The results of this study are in accordance with research by Rahayu & Widiati (2024) and Berlianne et al., (2020).

The Effect of Perceived Ease of Use on User Satisfaction

The results of the research indicate that perceived ease of use variables have a positive and significant effect on BCA mobile user satisfaction in Surabaya. with a Path Coefficients value of 0.202 and a P-Value of $0.001 < 0.5$, so the second hypothesis can be accepted. The perceived ease of use variable contributes to BCA mobile user satisfaction in Surabaya, so that the more users find it easy when using the application, it will affect the level of user satisfaction. Therefore, it is important for companies to make applications contain features that are easy for users to understand, learn and operate.

The indicator that has the most influence on user satisfaction is easy to operate. The majority of BCA mobile application users find it easy to operate the application without any obstacles when using it. Users realize that the ease of operating the application smoothly and responsively will make it easier for users to make transactions anytime and anywhere.

Despite the app's low rating, users feel that BCA mobile provides enough convenience to encourage their satisfaction when using the app, such as ease of access anywhere and anytime, does not require a lot of time to learn features, and smooth daily use. The simple appearance of the application and easy features make users more comfortable and easy to use this application (Hayat & Hidayat, 2024), and the lightweight application when used also makes users satisfied with the ease of using the application. The results of this study are in accordance with research by Juan & Indrawati (2023) and Susila et al., (2023).

The Effect of Perceived Usefulness on User Satisfaction

The results of the research indicate that perceived usefulness variables have a positive and significant effect on BCA mobile user satisfaction in Surabaya. with a Path Coefficients value of 0.401 and a P-Value of $0.000 < 0.5$, so the third hypothesis can be accepted. The perceived benefit variable contributes to BCA mobile user satisfaction in Surabaya, so that the more perceived benefits provided and meeting user expectations will affect the level of user satisfaction. Therefore, it is important for the company to make the application contain features that accelerate user performance and productivity in transaction.

The indicator that has the most influence on user satisfaction is increasing productivity. The majority of BCA mobile application users feel the advantage of increasing user productivity such as being able to make faster, more efficient and effective transactions through one banking application. Such as the BCA keyboard feature, which is only owned by BCA mobile, which allows users to make transfers, check balances and mutations without opening the application.

Despite the app's low rating, users feel that BCA mobile provides benefits that are enough to encourage their satisfaction when using the app, such as helping to complete transactions faster, being able to do many transactions in a short time, and helping to avoid mistakes in transactions. BCA mobile features are considered useful for users, such as BCA keyboard, Flazz, QRIS, and Lifestyle which allow users to make payments, transactions, purchases and top ups more effectively, efficiently and quickly, so users feel that the overall benefits provided by BCA mobile are satisfying (Veonnita & Rojuaniah, 2022). The results of this study are also in accordance with research by Panjaitan et al., (2025) and Artina (2021).

CONCLUSION

It can be concluded from the research results that the three variables have a positive and significant effect on BCA mobile user satisfaction in Surabaya. Perceived usefulness contribute to user satisfaction with the BCA mobile application in Surabaya, so that the more users feel many advantages when transacting using BCA mobile, the higher the level of user satisfaction when using the application. Service quality contributes to user satisfaction with the BCA mobile application in Surabaya, so that the better and higher the quality of service provided to users, the higher user satisfaction when using the application. Perceived ease of use contributes to user satisfaction with the BCA mobile application in Surabaya, so that the more users find it easy to use and operate the application for transactions, the higher the level of user satisfaction when using the application.

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