

THE EFFECT OF EASE OF USE OF MOBILE BANKING APPLICATIONS ON USER SATISFACTION

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ABSTRACT

This study aims to analyse the effect of ease of use of mobile banking applications on user satisfaction. Using quantitative methods with data collection techniques through questionnaires distributed to 116 mobile banking user respondents. Data analysis using descriptive statistics and regression tests with the help of SPSS. The results showed that there is a positive and significant influence between the ease of use of mobile banking applications on user satisfaction, as evidenced by the t-count value (10.028) > t-table (1.988) with a significance of $0.000 < 0.05$. Ease of use of applications which include aspects of flexibility, clarity, and ease of operation contribute to increasing user satisfaction. This finding indicates that the easier it is to use the mobile banking application, the higher the level of user satisfaction.

Keywords: ease of use, mobile banking, user satisfaction.

INTRODUCTION

The development of technology has changed the way people conduct financial transactions, especially in the banking sector. Mobile banking emerged as one of the significant innovations that allows customers to conduct various banking transactions through internet-connected mobile devices. Bank Indonesia data shows a substantial increase in the use of digital banking services, with transaction value reaching Rp5,184.1 trillion in October 2022, an increase of 38.38% compared to the same period the previous year. This increase indicates the high adoption of digital banking services among the public, especially during the COVID-19 pandemic when social restrictions forced people to switch to digital services.

Mobile banking is a service facility that provides easy access and speed in obtaining up-to-date information and financial transactions in real time. Mobile Banking is a system that allows users to check their balance, financial activity, and payment history. Payment system technology allows cash to be converted into a more efficient and economical form of electronic payment (Hafizh et al., 2023). In line with that, Customers through M-Banking services Manage your finances more easily and flexibly through mobile devices such as tablet smartphones (Fantika Sari et al., 2024). Mobile banking is becoming increasingly attractive. Indonesian banking marketing Almost all of our customers have tried it. This app is used for commercial purposes. It is part of m banking. Digital banking transactions increased 158% the last five years. According to information <https://databoks.katadata.co.id/tags/mobile-banking> the transaction value from January 2022 to January 2023 with digital banking, was around 4-5 trillion (Riza et al., 2023).

In the context of ease of use, ease of use of digital services (Banking) is an indicator of public trust because the technology is easy to use. It will be an easy-to-use service. It has become

the most popular choice among users (Fantika Sari et al., 2024). According to (Lieny, 2021) in (Setyani et al., 2024). If anyone thinks mobile banking will be easier, Mobile banking is the best way to transact without spending money. Based on the definition of convenience, a mobile banking system is a system that is easy to use, people use it all the time.

User satisfaction is an important aspect in the adoption of banking technology. According to Lorenzi, N., & Sudjiman, L. S. in (Fantika Sari et al., 2024). User satisfaction is a guide to measuring the level of customer satisfaction with the services or products they receive. Customers who are satisfied with the use of M-Banking tend to continue to use it for every financial transaction. Easy access and simple features, which allow transactions to be carried out without obstacles, can increase customer satisfaction (Parera et al., 2021). while Sunyoto (2013) in Putra, (2020) User satisfaction is the level of individual feelings after comparing the performance or results they experience with the expectations they have. This expectation serves as a value based on estimates and beliefs about what they receive as a standard or reference. Thus, user satisfaction reflects the level of satisfaction that arises after comparing performance or results with expectations which are considered as values based on estimates and beliefs about what they accept as a reference (Romelus Anigomang et al., 2023).

Based on this phenomenon and literature review, and supported by statistical data showing high levels of acceptance and satisfaction, this study aims to analyse the effect of ease of use of mobile banking applications on user satisfaction. By using a quantitative approach involving 116 mobile banking user respondents, This research focuses on aspects of flexibility, clarity, and ease of operation that contribute to increasing user satisfaction with mobile banking services. The statistical test results show a positive and significant influence between the ease of use of mobile banking applications on user satisfaction, with a t-count value $(10.028) > t\text{-table} (1.988)$ and a significance of $0.000 < 0.05$.

RESEARCH METHODS

This study uses a quantitative approach with a casual research type to analyse the effect of ease of use of mobile banking applications on user satisfaction.

1. Place and Time of Research

This research was conducted by distributing questionnaires to mobile banking users in Pontianak. Data was collected in the period 2024-2025.

2. Population and Sample

- Population: All users of mobile banking applications in Pontianak who fill out questionnaires that have been distributed.
- Sample: 116 respondents who are active mobile banking users selected using purposive sampling technique.

3. Research Variables

- a) Independent Variable (X): The ease of use of the Mobile Banking Application is measured by 9 question indicators (X1.3-X1.11): Ease of Access, Operational Ease, User Flexibility, System Clarity

Dependent Variable (Y): User Satisfaction is measured by 10 question indicators (X2.1-X2.10): Service Satisfaction Level, Conformity to Needs, Benefits Received

4. Data Collection Technique

Primary Data: Questionnaire with 4-point Likert scale:

- STS (Strongly Disagree) 1=
- TS (Disagree)= 2
- S (Agree)= 3
- SS (Strongly Agree) 4=

5. Data Analysis Method

Data analysis used descriptive and inferential statistics:

a. Descriptive Analysis



Based on SPSS Output:

Statistik Deskriptif Output SPSS

Statistik	Variabel X	Variabel Y
Mean	4,16 - 4,46	3,72 - 4,34
Standar Deviasi	0,641 - 0,851	0,618 - 0,967

b. Inferential Analysis:

Hasil Analisis Inferensial (Uji t)

Parameter	Hasil
t-hitung vs t-tabel	10,028 > 1,988
Nilai Signifikansi	0,000 < 0,05

Conclusion: The test results showed a significant difference ($p < 0.05$)

6. Analysis Tool

SPSS version 20 software for statistical data processing and analysis.

This method is designed to be able to measure and analyse the effect of ease of use on mobile banking user satisfaction accurately and systematically, with results that can be scientifically accounted for.

RESULTS AND DISCUSSION

Research Results

This study aims to analyse the effect of ease of use of mobile banking applications on user satisfaction. Data was collected through a questionnaire distributed to 116 respondents who used mobile banking. Data analysis was carried out using SPSS with descriptive and regression statistical methods.

Validity and Reliability Test

The validity test results show that all question items in the questionnaire are valid, with a correlation value above 0.3. The reliability test using Cronbach's Alpha shows that all variables have a value above 0.7, which indicates that this research instrument is reliable.

Vaable	Mean	Std Dev	Valid
X1.3	4,18	0,851	116
X1.4	4,23	0,75	116
X1.5	4,26	0,687	116
x1.	4,27	0,69	116
x1.7	4,46	0,61	116
X1.8	4,24	0,753	116
X1.9	4,16	0,851	116
X1.10	4,24	0,641	116
X1.11	4,32	0,667	116
X2j	4,29	0,698	116
X2.2	4,34	0,618	116
X2.3	4,3	0,649	116
X2.4	4,16	0,776	116
X2.5	4,22	0,674	116
X2.b	4,24	0,654	116
X2.7	4,2	0,649	116
X2.8	3,72	0,967	116
X2.9	4,09	0,78	116
X2.10	4,34	0,724	116

Validity test table

Description:

This table presents descriptive statistical data for two groups of variables, namely **X1** and **X2**, which includes the mean value (Mean), standard deviation (Std Dev), and the number of valid respondents (Valid) for each variable.

Columns in a Table:

1. **Variable:** Indicates the name or code of each variable being measured. This variable divided into two groups, X1 and X2.
2. **Mean:** The average score of the respondents for each variable. This value provides an overview of how high or low the respondent's perception of the variable is.
 - o Example: Variable X1.7 has an average of 4.46, indicating that respondents tend to give a positive assessment of this variable.
 - o **Std Dev (Standard Deviation):** Measures the spread or variation of respondents' values. The smaller the standard deviation value, the more consistent the respondents are in giving judgements. Example: Variable X2.8 has a standard deviation of 0.967, indicating that there is considerable variation in respondents' assessment of this variable.
3. **Valid:** Indicates the number of valid respondents for each variable, which is

116 for all variables in this table. This indicates that all the data used in the analysis came from valid respondents.

Variabel	Cronbach's Alpha	Keterangan
Kemudahan Penggunaan	0.916	Handal
Kepuasan Pengguna	0.875	Handal

Reliability Table

Description:

This table presents information about the reliability of the two variables measured in the study, namely **Ease of Use** and **User Satisfaction**. Reliability is measured using the Cronbach's Alpha value, which is an indicator of how consistent the items in a measurement scale are.

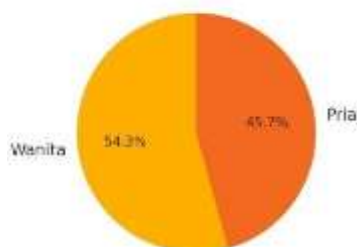
Columns in a Table:

1. **Variable:** Indicates the name of the variable being measured.
 - o **Ease of Use:** Refers to how easily users can use a system or product.
 - o **User Satisfaction:** Refers to the level of user satisfaction with the system or product in use.
2. **Cronbach's Alpha:** A value that indicates the level of reliability of each variable.
 - o **Ease of Use:** Has a Cronbach's Alpha value of **0.916**, which indicates that this variable is highly reliable. Values above 0.9 indicate excellent consistency.
 - o **User satisfaction:** has a Cronbach's Alpha value of **0.875**, which also indicates that this variable is reliable. Values above 0.8 indicate good consistency.
3. **Description:** Provides additional information on the level of reliability.
 - o Both variables are declared **reliable**, which means that the measurement instruments used to assess the two variables are reliable and provide consistent results.

Descriptive Analysis

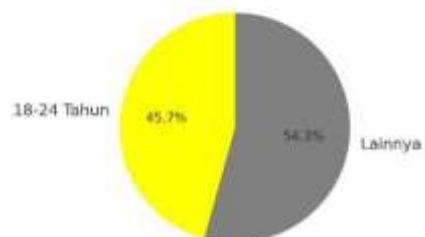
Of the 116 respondents, the majority were female (54.3%) and aged between 18-24 years old (45.7%). The user satisfaction level of the BSI Mobile application shows that 51.7% of respondents are satisfied with the application.

Distribusi Gender Responden



Gender Distribution Diagram of Respondents

Distribusi Usia Responden



Age Distribution Diagram of Respondents

Hypothesis Test

The hypothesis test results show that:

- **Ease Use** has an effect positive and significant effect on **User Satisfaction** (t-count = 10.028, p-value = 0.000).



Graph of Hypothesis Test Results (t-count)



Graph of Hypothesis Test Results (p-value)

DISCUSSION

The Effect of Convenience on Satisfaction

The results showed that the ease of use of mobile banking applications has a significant effect on user satisfaction. This is in line with previous research which states that ease of use contributes to user satisfaction (Krisna & Gunawan, 2022). Users feel more comfortable and satisfied when the application is easy to use, which encourages them to continue using the service.

Effect of Service Quality on Satisfaction

In contrast, service quality does not show a significant effect on user satisfaction. This may be due to the fact that users feel safe and do not experience significant problems when using the BSI Mobile application. This research is different from previous findings which show that service quality can affect satisfaction (436616360- *Effect-of-Service-Quality-and-Technology-Utilisation-on-Satisfaction-and-Loyalty-of-Gojek-Customers*, n.d.).

Strengths and Uniqueness of the Research

This research has several advantages and uniqueness compared to other studies:

Focus on Young Users: This research targets young users, particularly university

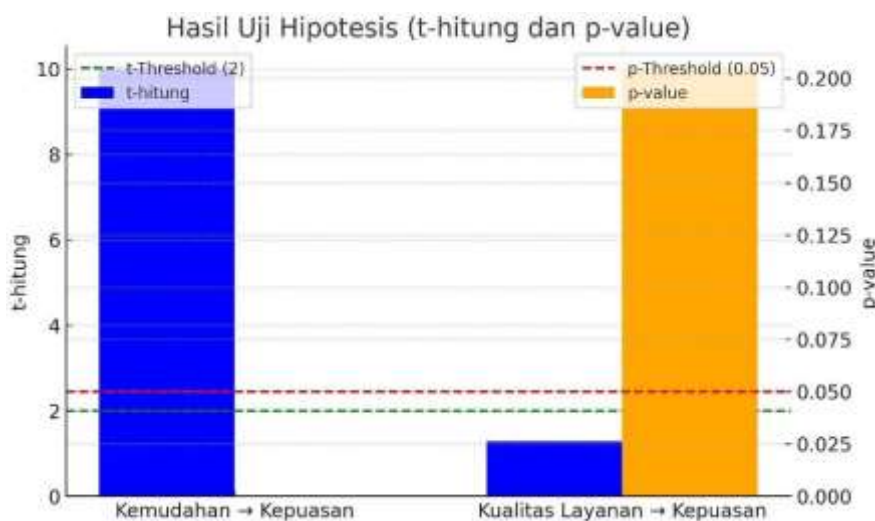
students, who are a rapidly growing market segment in mobile banking usage.

Robust Quantitative Methods: The use of quantitative methods with in-depth statistical analyses provides more objective and reliable results.

Local Context: This research was conducted in Pontianak, providing insights into user behaviour in the area that may differ from previous research conducted in other areas.

Tables and Graphs

The following tables and graphs support the research results:



Description:

The figure above shows the results of a hypothesis test comparing two variables: **Convenience** and **Service Quality** to **Satisfaction**. The following are explanation of the elements in the graph:

1. **Y-axis:** Displays two metrics, the **t-count** (in blue) and the **p-value** (in orange).
2. **t-count:** This is the statistical value resulting from the hypothesis test. In the graph, it can be seen that the t-count value for **Convenience** is much higher than that of **Service Quality**, indicating that convenience has a greater influence on satisfaction.
3. **p-value:** This indicates the probability that the observed results occurred by chance. The p-value for **Service Quality** is close to 0.2, which is higher than the threshold of 0.05 (indicated by the dashed red line). This indicates that there is insufficient evidence to reject the null hypothesis for **Service Quality**.
4. **t-Threshold and p-Threshold:** The dashed green line indicates the threshold for t-count (2), while the dotted red line indicates the threshold for p-value (0.05). Only the t-count value for **Convenience** exceeds the threshold, indicating that there is a significant relationship between convenience and satisfaction.

Overall, this graph shows that **Convenience** has a significant effect on **Satisfaction**, while **Service Quality** shows no significant effect.

CONCLUSIONS

This study aims to analyse the effect of ease of use of mobile banking applications on user satisfaction. Through quantitative methods involving 116

respondents of mobile banking users in Pontianak, the results showed that the ease of use of the application has a positive and significant influence on user satisfaction. This is evidenced by the t-count value of 10.028, which is greater than the t-table of 1.988, as well as a significance value of 0.000 which indicates that the research hypothesis is accepted.

Aspects of ease of use that include flexibility, clarity, and ease of operation contribute significantly to increased user satisfaction. Users feel more comfortable and satisfied when the application is easy to use, which encourages them to continue using the service. However, this study also found that service quality did not show a significant effect on user satisfaction. This may be due to the comfort of users who feel safe and do not experience significant problems when using the BSI Mobile application.

The findings provide important insights into the factors that influence user satisfaction in the context of mobile banking applications, as well as highlighting the importance of ease of use as a key element in improving user experience. This study is unique in focusing on young users in Pontianak, which is a rapidly growing market segment in the use of mobile banking. Thus, the results of this study are expected to be a reference for mobile banking application developers to improve service quality and user experience.

LITERATURE

- 436616360-Effect-of-Service-Quality-and-Technology-Utilisation-on-Customer Satisfaction-and-Loyalty-Gojek. (n.d.).
- Fantika Sari, P., Dellia, P., Fauzan Azizi, A., Ayu Mashitoh, P., Dwi Putra Iriansyah, M., & Sa'adah, L. (2024). Analysis of the Level of User Satisfaction of the Brimo M-Banking Application for Trunojoyo Madura University Students Using End User Computing Satisfaction (Eucs). *JATI (Journal of Informatics Engineering Students)*, 8(4), 7608-7614. <https://doi.org/10.36040/jati.v8i4.10309>
- Hafizh, A., Inda, T., Rahma, F., & Jannah, N. (2023). The Effect of Service Quality and Convenience on BSI Mobile Banking Customer Loyalty with Satisfaction as an Intervening Variable. *September*, 427-440. <https://doi.org/10.30868/ad.v7i02.5133>
- Krisna, D., & Gunawan, S. (2022). Technology Acceptance Model to Measure Customer Satisfaction in Using Hijab.Id Website. *Journal of Informatics & Computing*, 16(01), 26-35.
- Parera, N. O., Susanti, E., & Management, P. S. (2021). CUSTOMER LOYALTY FROM EASE OF USE OF MOBILE. 2(1), 42-52.
- Riza, A., Niaga, J. T., & Lhokseumawe, P. N. (2023). ANALYSIS OF CONVENIENCE AND RISK PERCEPTION AND IMPACT ON. 2, 202-208.
- Romelus Anigomang, F., Aristarchus Tang, S., Maruli, E., Economics of Tribuana University Kalabahi, F., & Abstract, N. (2023). The Effect of Service Quality Dimensions on Service User Satisfaction. *Scientific Journal of Wahana Pendidikan*, January, 2023(1), 698-709. <https://doi.org/10.5281/zenodo.7639297>
- Setyani, I., Farida, U., & Rapini, T. (2024). The Effect of Ease of Access and Application Benefits on Loyalty Through Customer Satisfaction as an Intervening Variable in Using the BRI Mobile Banking Application in Ponorogo. 4, 3581-3600.