Research Article

Analysis of Customer Perceptions of Security and Ease of Transactions Using the BRImo Application at the BRI Nunukan Branch

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Abstract. This study examines users' perceptions of security and convenience in using the BRImo mobile banking application at BRI Nunukan Branch, a digital financial service increasingly relied upon for daily transactions. Despite rapid digitalization in the banking sector, many users still express concerns regarding data protection, transaction safety, and the reliability of mobile banking features. Therefore, this research aims to explore in depth how BRImo users evaluate the security and convenience of the application, and what factors influence their overall experience. This study employs a qualitative case study approach involving 30 active BRImo users selected using purposive sampling. Data were collected through in-depth interviews, direct observation of application usage, and documentation, then analyzed using the Miles and Huberman model, consisting of data reduction, data display, and conclusion drawing. The findings indicate that BRImo is generally perceived as secure due to layered security features such as PIN, password, OTP, and fingerprint authentication, supported by BRI's internal monitoring system for suspicious transactions. However, some users still experience minor issues such as delayed OTP or temporary account blocking. In terms of convenience, the majority of respondents consider BRImo easy to use, with intuitive menus and fast transaction processes, although challenges remain among new users and those facing unstable internet connections. These findings demonstrate that both security and convenience significantly shape user trust and satisfaction. This research contributes to a deeper understanding of digital banking adoption in non-urban settings, emphasizing the role of user experience in strengthening digital service engagement. The study concludes that BRImo provides adequate security and high convenience, while recommending continuous system improvement and customer education to enhance digital transaction safety and usability.

Keywords: BRI Nunukan Branch**;** BRImo; Convenience; Digital Banking; Security

1. Introduction

The development of digital technology has driven significant transformation in the banking industry, particularly through the presence of mobile banking services that enable customers to conduct transactions quickly, securely, and flexibly (Handayani & Anisa, 2023). One such service is BRImo, a mobile banking application developed by PT Bank Rakyat Indonesia (Persero) Tbk., which offers various features such as biometric authentication, PIN, and One-Time Password (OTP) to enhance transaction security (Heriani, 2023).

However, despite the implementation of these security technologies, previous studies have shown that customer understanding and trust in mobile banking still vary widely (Usbach, 2020). Furthermore, the risk of digital crime also influences user perceptions of transaction security (Mukhtisar et al., 2021). Conversely, ease of use has been shown to positively influence customer satisfaction and interest in utilizing digital banking services (Musrifa,

2023). This ease of use includes ease of learning the application, clarity of menus, and efficiency of the transaction process (Sholeh et al., 2021).

Previous research on BRImo has largely focused on general perceptions of security and convenience, or been conducted in urban contexts (Zebua et al., 2022; Lutfiani, 2024; Ahmad, 2023). Few studies have specifically explored the experiences of BRImo users in border areas like Nunukan Regency, which have distinct geographic, social, and digital infrastructure characteristics than urban areas. Furthermore, most previous studies have used a quantitative approach, thus lacking an in-depth description of users' subjective experiences.

Based on this gap, this study focuses on the perceptions of active BRImo users at the BRI Nunukan Branch Office regarding security and ease of transactions, using a qualitative approach to explore user experiences more comprehensively. This study addresses two main issues: first, how do people perceive the security of digital transactions using BRImo; and how do they perceive the ease of digital transactions using BRImo. As a solution, this study offers a qualitative descriptive approach through interviews, observations, and documentation to obtain a concrete picture of user experiences in the context of their daily lives.

2. Literature Review
Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is the most influential theory in explaining technology acceptance by users. According to Jogiyanto (2008), TAM explains that individual acceptance of a system is influenced by two main constructs:Perceived usefulness and perceived ease of use. These two constructs shape users' attitudes and intentions in using a technology. The TAM model itself is adopted from the Theory of Reasoned Action (TRA), which asserts that human behavior is influenced by their reactions and perceptions of an object. In the context of digital banking such as BRImo, TAM serves as an appropriate theoretical foundation for assessing user perceptions of the application's ease and usefulness in conducting digital transactions.

Digital Banking

Digital banking is an electronic banking service that utilizes technology to facilitate customers in conducting various transactions without the need to visit a physical bank office. Based on POJK No. 12/POJK.03/2018, digital services are developed by optimizing customer data to provide an easy, fast, secure, and independent transaction experience. According to Nguyen (in Handayani & Anisa, 2023), digital banking digitizes all traditional banking services, allowing transactions such as withdrawals, transfers, payments, and product purchases to be conducted through mobile applications. The quality of digital services, such as security, convenience, and efficiency, has been proven to directly influence user satisfaction and retention. According to Arasu and Viswanathan in (Musrifa, 2023), security indicators include: Data confidentiality, security assurance

Digital Transaction Security

Security is a crucial factor in digital banking services. According to Mukhtisar et al. (2021), digital transaction security is a bank's ability to protect customers' personal information and transactions from unauthorized parties. In this study, security is measured by user perceptions of data protection, security features such as PINs, OTPs, and fingerprints, as well as experiences with security issues such as blocked accounts or suspicious notifications. Various cybercrime cases in the banking sector require banks to further strengthen their digital security layers. According to Arasu and Viswanathan (in Musrifa, 2023), security indicators include: Data confidentiality so that it is not shared with unauthorized individuals and security guarantees as a preventative measure against threats from irresponsible parties.

Ease of Transactions

Ease of transaction refers to the extent to which an application facilitates users' digital activities without significant effort. According to Davis (in Sholeh et al., 2021), ease of use is the perception that a system is free from difficulties. In BRImo, ease of use includes a simple interface, clear menu navigation, fast application response, and the ability to complete

transactions anytime and anywhere. This factor is a key determinant of technology acceptance and user satisfaction. According to Davis (in Musrifa, 2023), ease of use indicators include: easy to learn, controllable, easy to use, flexible, clear, and understandable.

3. Materials and Method
Research Approach

This research uses a descriptive qualitative approach with a case study method. This approach was chosen to obtain an in-depth overview of customer perceptions of the security and convenience of BRImo.

Research Subjects

The research subjects were 30 active BRImo users selected using purposive sampling techniques based on the following criteria:
1. Active BRI Nunukan customers.
2. Using BRImo for at least 3 months.
3. Have you ever made a digital transaction?
4. Willing to be interviewed.

Data Collection Techniques

The data collection techniques in this study utilized several methods to obtain accurate and in-depth information. First, interviews were conducted with 30 respondents who are active BRImo users. These interviews aimed to explore their experiences, opinions, and perceptions regarding the security and ease of use of the application. Second, researchers conducted direct observations of the use of BRImo features, such as the login process, fund transfers, bill payments, and the use of security features like PIN, OTP, and fingerprint. These observations helped researchers understand how the application is used in real-world situations. Third, researchers collected documentation in the form of application screenshots, photos of interview activities, and relevant transaction records as supporting evidence. Fourth, a literature review was conducted by reviewing scientific journals, books, official reports, and regulations related to digital banking to strengthen the theoretical foundation and support the research analysis.

Data Analysis Method

The data analysis in this study used the Miles & Huberman model, which consists of three stages. First, data reduction, which is the process of simplifying and selecting important data from interviews, observations, and documentation so that only relevant information is used in the study. Second, data presentation, which is organizing the reduced data into narratives, tables, and descriptions of findings to facilitate researchers in understanding patterns and relationships between information. Third, conclusion drawing, which is the stage when researchers interpret all the data to produce final findings regarding the perception of security and ease of transactions using BRImo at the BRI Nunukan Branch.

4. Results and Discussion
Security Perception

Research findings indicate that high security perceptions are influenced by customers' understanding of the application's protection features. This aligns with digital security theory, which states that security perceptions are shaped by data protection, authentication, and clarity of notifications. These results align with research by Musrifa (2023), which found that security significantly influences intention to use mobile banking.

The research results show that the majority of respondents have a high level of trust in the security of transactions on the BRImo app. Users considered the multi-layered authentication features, such as PIN, password, One-Time Password (OTP), and fingerprint, to be effective in protecting their accounts and personal data. All respondents also reported never experiencing serious security threats such as account breaches or unauthorized transactions, which ultimately reinforced their perception that BRImo is a secure platform for everyday digital transactions.

These field findings are reinforced by statements from internal informants at the BRI Nunukan Branch, who explained that BRImo's security relies not only on the app's features but also on

the bank's internal protection system. BRI implements a fraud monitoring system, automatic blocking of unusual activity, and regular customer education regarding personal data protection. This synergy between the app's features and the bank's internal policies adds legitimacy to the finding that BRImo's security is comprehensive.

These findings are consistent with those of Kholifa et al. (2023), who asserted that perceived security is a key determinant of user trust and loyalty in digital banking services. When users believe the system can maintain the confidentiality of their information, a sense of security is created and the likelihood of continuing to use the service increases. This research also aligns with the study by Lutfiani (2024), who stated that security is the primary reason customers maintain their use of mobile banking.

From a security theory perspective, these results indicate that two key elements—data confidentiality and security assurance—are well met. Respondents assessed that BRImo's authentication mechanism effectively protects sensitive information such as account numbers, customer identities, and transaction data. Although a small number of users reported technical issues such as blocked accounts or delayed OTPs, they still considered BRImo a secure application due to the bank's prompt response to these issues.

Overall, BRImo's security system meets digital transaction security standards as outlined in the literature. However, ongoing education regarding cybercrime threats remains crucial to ensure that the minor concerns experienced by some respondents do not undermine trust in the app.

Perception of Ease of Use

The research results showed that the majority of respondents considered BRImo an easy-to-use application for various types of transactions, such as fund transfers, bill payments, and mobile phone credit purchases. Respondents emphasized that the simple interface, clear menu navigation, and well-structured transaction flow made the process easier, even for first-time users. However, a small number of respondents reported technical issues, particularly during initial use or when the internet connection was unstable.

These findings were corroborated by an internal informant from the BRI Nunukan branch, who explained that BRImo's design was developed to prioritize simplicity and readability. However, the main challenge lies not in the app's features, but rather in customers' digital literacy barriers and limited internet connectivity in some areas. Therefore, the bank regularly provides customer support, particularly during the initial activation process, to ensure effective adaptation.

These results are consistent with the theory of perceived ease of use proposed by Jogiyanto in Ashary et al. (2022), which refers to the belief that a system can be operated without significant effort. This perception is reflected in the experiences of the majority of respondents, including those who initially encountered difficulties but later found using BRImo increasingly intuitive with increasing experience. These findings suggest that ease of use is dynamic, formed through user familiarity with the application's features. This study also shows that BRImo meets the indicators of ease of digital transactions. Some respondents did experience confusion when first trying certain features—such as cardless cash deposits—but after understanding the process, they were able to use them smoothly. Respondents also found the application easy to control because each transaction provides automatic notifications, allowing users to verify the transaction's success in real time. Meanwhile, the clear and uncomplicated user interface makes BRImo fast and efficient to use.

These findings align with research by Lutfiani (2024), which states that ease of use is a crucial determinant in driving the adoption of mobile banking services. When an application is perceived as practical, user satisfaction and loyalty tend to increase. Although BRImo was generally considered easy to use, several respondents suggested that the application provide a brief initial guide to help new users understand the basic features. This suggests that education remains a crucial factor in optimizing the user experience.

Overall, ease of use is a critical factor in the adoption of digital banking technology. BRImo has met user expectations through its simple interface, clear transaction steps, and flexibility for anytime, anywhere use. However, improvements in customer education and support are still needed to minimize initial barriers and optimize the user experience.

5. Comparison

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This research makes several important contributions to the academic discussion on digital banking, particularly regarding the use of BRImo. First, it adds a qualitative perspective, which is still rarely used in mobile banking studies, providing a deeper understanding of the direct user experience, beyond mere statistical measurements. Second, it uncovers subjective factors influencing perceptions of security and convenience, such as prior experience, digital literacy levels, and internet network conditions, which have not been widely discussed in previous quantitative research. Third, it focuses on the context of a border region like Nunukan, producing a different picture than studies in urban areas and enriching the literature on digital banking in areas with unique geographic characteristics. Finally, it provides practical input for BRI in enhancing customer education and improving services, making this research not only a scientific contribution but also having a direct impact on the development of digital banking services in Indonesia.

6. Conclusion

This study shows that BRImo is considered safe and easy to use by the majority of users at the BRI Nunukan Branch. Evidence from interviews, observations, and documentation reveals that security features such as PIN, OTP, and fingerprint provide a sense of security for users, although there are minor concerns regarding fraud and technical issues such as blocked accounts. In terms of ease of use, users consider BRImo to have a simple interface, comprehensive features, and a fast and flexible transaction process, making the application very helpful in daily financial activities. These findings support the research objective of understanding customer perceptions of security and ease of transaction, and strengthen the theory that these two factors are important determinants of digital banking technology acceptance. Practically, this study has implications for banks to increase security education, improve notification systems, and ensure prompt service support to increase customer trust. However, this study has limitations because it was only conducted qualitatively with 30 respondents, so the results cannot be broadly generalized. Therefore, further research is recommended to use a mixed methods approach involving a larger sample to obtain more comprehensive and representative results.

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