



# Analysis of The Influence of Perceived Compatibility, Perceived Ease of Use and Perceived Usefulness on Intention to Use Mobile Banking Digital Transaction Services of Banking Customers

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## Abstract

Among Asian nations, Indonesia is ranked fifteenth for internet usage. There are currently over two million mobile application subscribers of the bank taken in this study, a 80% rise since the beginning of 2021. The purpose of this study is to ascertain the degree to which consumer decisions about mobile banking are influenced by the Technology Acceptance Model (TAM) hypothesis. Descriptive analysis with a quantitative approach is used in this study. Utilizing the dimensions and indicators of each variable, data analysis is performed by determining the degree to which the independent variables—perceived ease of use, perceived usefulness, perceived risk, and perceived compatibility—have an impact on the dependent variable, or consumer decisions. Multiple regression analysis is used in this work. Because of the study's noteworthy findings,  $H_a$  is accepted and  $H_0$  is denied. The findings indicated that the decision to utilize mobile banking is somewhat influenced by perceived ease of use. The decision to adopt mobile banking is influenced in part by perceived utility. One factor influencing the choice to adopt mobile banking is perceived risk. The choice to utilize mobile banking is somewhat influenced by perceived compatibility. The choice to utilize mobile banking is simultaneously influenced by perceptions of compatibility, risk, utility, and convenience of use.

**Keywords:** Perceive Easy Of Use, Perceive Usefulness, Perceive Risk, Perceive Compatibility, Mobile Application.

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## 1. Introduction

One of the sectors of the Indonesian economy that has great promise for the future is Islamic banking, which is also seen to be developing at a very quick pace right now. The current state of Islamic banking growth is not without difficulties and roadblocks. There are several hazards associated with the quick development that must be taken. Islamic banking needs to be distinct from traditional banking since it was designed with an alternate mindset. Not only does the system employ different terminology, but it also handles client security promises differently. Therefore, adding the sharia label essentially has some serious ramifications, necessitating tightening the supervisory method to preserve consumer confidence. The theoretical foundation of this study is the Technology Acceptance Model (TAM) [1]. TAM was developed to evaluate the degree to which people embrace and enjoy the advantages of technology. Four perceptions—perceived usefulness, perceived convenience, perceived danger, and compatibility with mobile banking applications—reflect the study's pattern of technological adoption [2]. Indonesia's Islamic banking industry has expanded quickly over time. As a result, with the passage of Law Number 21 concerning Islamic Banks, a legislative framework was established to govern the tenets of the Islamic banking system functioning in Indonesia. The MUI, which is in charge of providing fatwas for Islamic transactions, supports the Islamic banking system in addition to rules and regulations [3].

As stated by Kusnandar in the katadata.id post, 80% of Indonesians had access to the internet as of the end of 2022. Data from Internetworldstats indicates that there were more 200 million internet users in the nation, out of an estimated 260 million people overall [4] [5]. With this accomplishment, Indonesia is ranked 15th out of all Asian nations. Indonesia is positioned above Vietnam and below Kazakhstan [6]. Indonesia's penetration rate is higher than both the global average of 66% of the projected 8 billion people worldwide and the average for Asia, which is 64% of a population of 4 billion [7]. As of 2022, there were more than 3 million Mobile Bank Meger members, up 80% from the start of the year [8] [9]. Active user growth has reached more than 1 million users, up 93% from the previous year. Transactions through mobile banking account for the majority of fee-based revenue [10].

Regarding the fee-based performance of mobile banking, there has been a rise of IDR 13 billion, or 72%, year over year since the start of 2022 [11].

The development of the digital ecosystem of mobile banking goods and services will continue in order to boost the utility to bank clients [12]. It is anticipated that in the near future, consumers and the general public will be able to access financing through mobile banking. As a super app, mobile banking offers activities relevant to users' everyday lives in addition to banking services and financial transactions, which can make digital transactions more convenient for users [13]. Additionally, the number of digital bank transactions is rising. The total transaction value through the bank's digital channels in 2022 was IDR 95 trillion. The biggest contribution, at 84% annually, came from transactions made through mobile banking services [14]. As to Davis's definition in Romadloniyah and Prayitno, the concept of Ease of Use refers to an individual's perception of how simple and low-effort using information technology may be [15]. If it is relevant to the context of mobile banking, this is how the flexibility, ease, clarity of appearance, and internal operations of the mobile banking application may be quickly learnt [16]. Rogers defines compatibility as a user's evaluation of a new technology that will be compatible with needs, habits, prior experiences, held values, and personal views. If it has to do with mobile banking, it has to do with how well the application will fit and align with users' requirements, routines, values, and beliefs. Research on the evolution of mobile banking usage is consistently fascinating. Purchasing decision behavior can be interpreted as the final purchasing behavior of consumers, both individuals and households who buy goods and services for personal consumption [17]. Consumer buyer behavior refers to the buying behavior of final consumers - individuals and households that buy goods and services for personal consumption, according to this understanding. In Tajudin and Mulazid, Kotler and Keller assert that customers make selections about what to buy based on their desire to purchase the brand that they find most appealing [18]. This study aims to determine the effect of perceived usefulness, perceived ease of use, perceived risk, and perceived compatibility on customer decisions to use mobile banking.

## **2. Research Methods**

This study uses an associative research design, a quantitative methodology, and empirical data. The study's population included of all users of Islamic merger banks' mobile banking services, and a purposive sample of 100 participants was selected using the Cochran's method. There are two types of data used in this study: primary data and secondary data. A validity and reliability test was conducted on a questionnaire that was disseminated using Google Form before being used to collect primary data for this study. Data is shared through social networking platforms like WhatsApp chats, which direct users to GForm. Journals, books, and other sources that corroborate the study's findings serve as secondary sources of data. Using the SPSS V.25 program, multiple linear regression techniques were used to analyze the data in this study. Next, the data is shown in a descriptive manner.

## **3. Results and Discussion**

The normalcy test is the first test and first structure that is performed in the standard assumption test series. Asymp. Sig. (2-tailed) of 0.162, the findings of the Kolmogorov-Smirnov test normalcy test. The normalcy test is the second test and second structure that is performed in the standard assumption test series. Asymp. Sig. (2-tailed) of 0.5, the findings of the Kolmogorov-Smirnov test normalcy test. The result is larger than 0.05, as indicated by this value, suggesting that the data is regularly distributed. The tolerance value of all independent variables more than 0.1 and the VIF value of all independent variables 10 are known properties based on multicollinearity. Thus, it can be inferred from the preceding computations' findings that the regression equation model is suitable for application in this investigation and does not have a multicollinearity issue. The heteroscedasticity test then reveals that no discernible pattern forms and that the dots are dispersed above and below the 0 on the Y axis, leading to the conclusion that heteroscedasticity is not present.

It is possible to get the regression equation  $Y = -0.36 + 0.04X_1 + 0.8X_2 + 0.6X_3 + 0.04X_4$  from the regression calculation results shown in the above table. With a coefficient value of 0.04, the preceding equation indicates that usefulness has a favorable impact on the choice to use. This implies that for every contribution provided by the variable Perceived Usefulness, such as based on how beneficial the mobile banking app is to customers' decisions to use it, so much more can be said about it. Perceived Risk, with a coefficient value of 0.6, has a favorable impact on the choice to utilize. This implies that the Perceived Risk variable's contribution, such as having a highly secure system and safe features or goods, might affect customers' decisions to utilize mobile banking. Perceived The choice to utilize is positively impacted by compatibility, with a coefficient value of 0.04. This implies that the customer's decision to utilize mobile banking may be influenced by any contribution provided by the Perceived Compatibility variable, such as a system that fits their circumstances.

The results found that perceived ease of use partially has an influence on the decision to use mobile banking with a significance that is less than 0.05. Perceived Usefulness, or perceived usefulness, plays an important role in influencing the decision to use mobile banking applications. As a key concept in Technology Acceptance Theory, Perceived Usefulness reflects the extent to which users believe that the use of technology, in this case mobile

banking applications, will improve the performance of their desired tasks. Users will tend to adopt a mobile banking application if they believe that its use will improve the efficiency and effectiveness of performing banking activities, such as transferring funds, paying bills, or even investing. If users perceive that the app provides concrete benefits and helps simplify their financial processes, they are more likely to actively use the app.

It is important to understand that perceived ease of use includes the extent to which individuals perceive that the use of the technology does not require excessive effort or high technical skills. In the context of mobile banking, if people perceive that a mobile banking application or platform is easy to access, intuitive, and does not require significant learning effort, then they are more likely to adopt and use the service. Perceived ease of use of mobile banking can influence several aspects of people's decision to adopt this service. Ease of use can increase users' level of trust in the technology. People are more likely to try and adopt mobile banking if they believe that they can easily understand how to use it. In addition, perceived ease of use can also shape positive perceptions regarding the efficiency and convenience of using mobile banking services. If users feel that they can quickly and easily complete their financial transactions through mobile devices, this can be a positive impetus for mobile banking adoption.

Perceived usefulness partially has an influence on the decision to use mobile banking with a significance of less than 0.05. This concept, which is also a key element in Technology Acceptance Theory, highlights the extent to which users believe that using a technology application, in this case a mobile banking application, can be done easily and without significant difficulty. Ease of use of an application is a key factor in driving adoption. Users tend to prefer using applications that are considered easy to understand and operate. Intuitive interfaces, simple navigation, and uncomplicated processes will increase the perception that using a mobile banking application is an easy and accessible task for anyone. The importance of perceived ease of use is also closely related to user experience. If a user feels that learning to use a mobile banking app does not require excessive effort or time, then they are more likely to stick with the app. Smooth and non-confusing use will create a level of comfort, which in turn, reinforces the perception that the app is easy to use.

In the context of mobile banking, perceived usefulness includes people's understanding of the benefits and added value provided by using the application or platform. If individuals believe that mobile banking can provide additional convenience, efficiency and accessibility in managing their finances, they are more likely to use the service. One of the most important aspects of perceived usefulness is the ability of mobile banking to provide quick and easy access to financial information. People tend to see positive value in the ability to view account balances, track transactions, and receive real-time financial notifications. The perception that mobile banking can provide a better understanding of personal financial situation may increase the willingness to adopt the technology. Security is also an important factor in perceived usefulness. If people feel that mobile banking provides an adequate level of security in conducting financial transactions, they are more likely to feel confident and comfortable using the service. Security features such as two-factor authentication, data encryption, and protection against unauthorized access can strengthen perceived usefulness.

Perceived risk partially has an influence on the decision to use mobile banking with a significance of less than 0.05. Perceived risk plays a crucial role in shaping the decision to use mobile banking applications. When an individual considers adopting and using a mobile banking application, they may perceive various potential risks associated with the security, privacy, and performance of the application. One of the main risks that users are often concerned about is security risk. Users are concerned that their personal financial information could be a potential target for online criminals. Low perception of security can be a major barrier, affecting users' decision to use mobile banking apps. In addition, privacy risk is also a serious consideration. Users tend to be concerned about how their personal data will be managed and protected by the app provider. Concerns about possible unauthorized access or use of personal information for unintended purposes may affect users' trust in the app.

One form of perceived risk that often arises is concerns about the security of financial data and information. People may be concerned that their personal data, such as bank account numbers and transaction information, may be vulnerable to unauthorized access or leakage. Security is a key factor that can affect people's comfort level and trust in mobile banking. The importance of effective security and risk management by mobile banking service providers is crucial in addressing this perceived risk. Data protection efforts, strong encryption, and implementation of advanced security features can help reduce people's fears and increase their level of trust in the service. In addition to security risk, privacy risk is also an important consideration. Users may be concerned that the use of mobile banking may reveal too much of their personal information. The public needs to be assured that their personal data will be properly safeguarded and only used in accordance with strict privacy policies.

Perceived Compatibility has a significant impact on mobile banking app usage decisions. When users consider adopting such apps, their perception of the extent to which the app matches their needs, values and preferences plays a major role in decision-making. In line with the principle that the continued use of a technology depends on the extent to which the technology matches individual habits and needs, Perceived Compatibility reflects the extent to which a mobile banking application can be integrated with the user's lifestyle and financial routine. If the app provides functionality that is in line with the way users manage their finances, then they are likely to perceive it as

appropriate and relevant. This perception also involves the extent to which the app can support users' financial values and goals. If the app offers solutions that are in line with the user's financial aspirations and needs, then the perception of suitability will increase, driving the likelihood of adoption.

When people feel that mobile banking is compatible with the way they manage their finances, compatibility itself can be a positive driving factor for the adoption of the technology. This compatibility can cover various aspects, including the availability of desirable features, an easy-to-use user interface, and smooth integration with daily financial habits. One of the key aspects of perceived compatibility is the extent to which mobile banking can fit into the modern mobility lifestyle. Active and frequent travelers may find that mobile banking provides convenience in accessing accounts and conducting transactions without having to visit a physical bank. The perception that the technology can be adapted to daily activities creates added value and increases user appeal. Additional features such as transaction notifications, budget monitoring, or even integration with third-party financial applications can increase the suitability of mobile banking to users' needs. The more mobile banking can meet individual expectations and needs, the more likely people will adopt it.

Perceived ease of use and perceived usefulness are interrelated and have a significant impact on user decisions. If people feel that using mobile banking is easy and does not require excessive effort, and they see concrete benefits in using it, they are more likely to adopt the service. Ease of use creates convenience, while usability creates added value, both of which can increase people's interest and motivation to use mobile banking. Perceived risk also plays a crucial role. When people have concerns about the security, privacy, or reliability of the technology, perceived risk can be a barrier to adoption. Service providers' efforts to manage and reduce perceived risk, such as through enhanced data security and information transparency, can help minimize people's fears and increase trust levels. Perceived compatibility ensures that mobile banking fits people's needs, values and lifestyles. If individuals feel that mobile banking can be well integrated into their financial routine, in line with their expectations and preferences, they are more likely to adopt and use the technology. When all these factors work together, they form the overall user experience and shape people's perception of mobile banking. For example, if a person feels that mobile banking is easy to use, provides significant benefits, has manageable risks, and fits into their daily lives, they are more likely to be willing to integrate the technology into their financial activities.

#### **4. Conclusion**

The purpose of the study is to ascertain how decisions to utilize mobile banking are influenced by perceptions of compatibility, perceived risk, perceived utility, and convenience of usage. The findings indicated that the decision to utilize mobile banking is somewhat influenced by perceived ease of use. The decision to adopt mobile banking is influenced in part by perceived utility. One factor influencing the choice to adopt mobile banking is perceived risk. The choice to utilize mobile banking is somewhat influenced by perceived compatibility. The choice to utilize mobile banking is simultaneously influenced by perceptions of compatibility, risk, utility, and convenience of use. Companies can improve user interfaces and user experiences which indirectly hold all the variables used in this study. System improvements can also be improved to increase the decision to use mobile banking.

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