



Consumer Behavior and Usage Decisions of Mobile Banking in Indonesia

Eri Yunaidi¹

¹ Universitas Diponegoro, Semarang, Indonesia

Abstract

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The rapid digital transformation within the banking sector has significantly accelerated the adoption of Mobile banking (M-banking) services in Indonesia. This study aims to analyze customer behavior in deciding to use M-banking and to identify the most influential factors shaping adoption. Employing a qualitative approach, the research is conducted through a literature review of academic publications released last five years, focusing on consumer behavior, decision-making, and mobile banking adoption in the Indonesian context. The findings reveal that several core factors strongly determine adoption decisions, including trust, ease of use, service quality, user experience, and socio-cultural contexts such as generational differences and religious values. Trust in system security emerges as a critical driver for ensuring long-term customer loyalty, while perceived ease of use and high-quality digital services significantly enhance satisfaction levels. Furthermore, younger generations, particularly Gen Z and millennials, demonstrate greater adaptability toward M-banking compared to older groups. In addition, religiosity is shown to strengthen adoption intentions within Islamic banking. These findings highlight that M-banking development strategies in Indonesia must holistically address technological, psychological, social, and cultural-religious dimensions to foster sustainable customer satisfaction and loyalty.

*Corresponding author:
(Eri Yunaidi)



1. Introduction

The development of digital technology has brought major changes in the banking industry. Digital transformation through digital banking, fintech, and cashless payment systems (cashless society) has encouraged the emergence of Mobile banking (M-banking) services as one of the main innovations. In Indonesia, this trend is getting stronger along with the increasing penetration of the internet and smartphones which has made people more accustomed to digital transactions. Mobile banking is no longer seen as just a means of financial transactions, but also as part of the digital lifestyle of modern society (Adhitya & Sembel, 2020). The needs and expectations of modern customers have also shifted. If in the past customers assessed banking services, especially in terms of savings interest, deposits, or administrative fees, now they emphasize the aspects of speed, comfort, efficiency, security, and completeness of features.

The phenomenon of increasing use of M-banking, both at the global and national levels, shows a significant change in consumer behavior. This service supports the realization of a cashless society by allowing customers to carry out various financial activities, ranging from transfers, payments, to product purchases, only through mobile devices (Nugraha et al., 2022). The decision to use M-banking is closely related to consumer behavior. In the decision-making process, consumers go through stages ranging from recognizing needs, seeking information, evaluating alternatives, to making choices to use or not use services. Factors such as utility, efficiency, benefits, as well as risk perception play an important role in shaping those decisions.

Previous research confirms that trust and security perception are the main keys in encouraging consumers to adopt M-banking, followed by ease of use and quality of digital services (Junaidi et al., 2023). Nonetheless, the adoption of M-banking also has its challenges. Risks related to data security, system errors, and cybercrime threats can reduce consumer interest. This is especially affecting the generation group that is less familiar with digital technology. On the other hand, younger generations such as Gen Z and millennials tend to be more adaptive and quick to accept digital services. This difference in generational preferences emphasizes the need for different communication and education strategies from banks in order to reach all levels of society.

In addition to the generational factor, religious aspects also play a role in the adoption of M-banking in Indonesia. Islamic banks, for example, add Islamic features such as zakat payments, qibla directions, and digital Qur'an. These features are not only an added value, but also strengthen the loyalty of Muslim customers. Recent research found that religiosity and belief in sharia principles have a significant influence on the intention to use M-banking in Islamic bank customers (Sudarsono et al., 2022). Seeing this phenomenon, this study is relevant to examine more deeply customer behavior in deciding on the use of M-banking. There is still a research gap, particularly regarding the relationship between trust, convenience, and security and user satisfaction and loyalty.

In addition, research on differences in preferences between generations in the adoption of M-banking in Indonesia is also limited. Therefore, this study aims to analyze the factors that influence customer decisions in using M-banking, as well

as evaluate the role of service quality, convenience, and trust in user satisfaction and loyalty in the digital banking era. Technological developments have made M-banking a crucial element in banking business strategy. However, the optimal use of M-banking requires an in-depth understanding of the factors that influence consumer behavior (Abu-Taieh et al., 2022). The need for speed and convenience has made M-banking an essential tool for the modern consumer, while banks see it as an opportunity to reduce operational costs and increase efficiency.

The security factor, which is a major concern for customers, must be taken seriously through a reliable and transparent system. Banks should continue to invest in data protection technology and educate customers about cyber risks. In addition, banks need to adapt their strategies to the demographic characteristics of customers, as different generational preferences require different approaches. For example, marketing campaigns that appeal to Gen Z and Millennials may be less effective for older generations who need more education and security assurance. The religious aspect also cannot be ignored, especially in the context of Islamic banking, where Islamic features are the main attraction and strengthen customer loyalty. By understanding and integrating all these technological, psychological, social, and religious factors, banks can develop effective strategies to increase customer adoption, satisfaction, and loyalty to M-banking services, ensuring business sustainability in the digital age.

2. Literature Review

2.1 Consumer Behavior in the Context of Digital Banking

Consumer behavior is an important study in understanding how individuals make decisions to use technology-based services, including mobile banking. In the literature, consumer behavior is defined as a process that involves the search for information, the evaluation of alternatives, as well as the final decision to use a product or service. In the context of digital banking, consumers no longer judge services only by interest rates or administrative costs, but by more complex aspects such as efficiency, convenience, security, and added value. Research in Indonesia shows a significant shift in consumer behavior towards preference for digital services. Customers are more interested in application features, transaction speed, and interface quality than traditional offerings (Makmuriyah & Vanni, 2020).

In addition, the adoption of digital banking is also influenced by lifestyle changes. The COVID-19 pandemic accelerated the shift of people's behavior to digital services due to limited mobility. A case study in Indonesia shows that consumers are increasingly accustomed to using digital payments and mobile banking to meet their daily transaction needs. The increase in the intensity of M-banking use during the pandemic confirms that consumer behavior can change rapidly when influenced by significant external factors (Sunarjo & Nurhayati, 2021). Thus, consumer behavior in digital banking is influenced by a combination of internal and external factors that shape the pattern of technology adoption.

2.2. Mobile Banking Usage Decisions

The decision to use mobile banking is the result of the process of evaluating consumers on the benefits and risks of a service. The literature confirms that these decisions are not only driven by rational factors such as utility, efficiency, and cost, but also by psychological factors such as trust and risk perception. A study on the adoption of mobile banking in Indonesia shows that trust and service quality are the main keys that affect customer satisfaction and loyalty. With increasing trust in security systems and the reliability of applications, consumers are more likely to decide to use M-banking on a sustainable basis (Sebayang et al., 2023).

However, the decision to use M-banking also faces obstacles, especially related to security risks and technological complexity. Risk perception of potential data theft, fraud, and transaction errors is often a barrier factor. Research using the UTAUT (Unified Theory of Acceptance and Use of Technology) model found that the ease of use and perception of the usability of applications had a significant effect on adoption intentions, especially among the younger generation. On the other hand, the generation that is less accustomed to digital technology is more cautious and needs further education. This shows that the decision to use M-banking is influenced by a combination of different cognitive and affective factors in each demographic group (Ramadhan & Priyono, 2022).

2.3. Factors Influencing the Adoption of Mobile Banking in Indonesia

The adoption of mobile banking in Indonesia is influenced by various interrelated factors. Several studies emphasize that trust in security systems, ease of use of applications, and quality of digital services are the main determinants of

customer decisions. In the context of Islamic banking, religiosity also plays an important role. Muslim customers show a greater tendency to adopt M-banking when service features are in accordance with sharia principles, such as the payment of zakat or other Islamic features. This factor shows that cultural aspects and religious values cannot be ignored in digital banking strategies in Indonesia (Sudarsono et al., 2022).

In addition to religiosity, user experience is also a key factor. Recent research highlights that the quality of the app's interface, easy navigation, and speed of access have contributed greatly to increasing the adoption of M-banking. Consumers who feel positive experiences tend to be more satisfied and loyal to the service. Conversely, technical failures or applications that are not user-friendly will reduce consumer interest in using them. Studies in Indonesia confirm that the success of mobile banking development lies not only in technological innovation, but also in a deep understanding of users' emotional and cognitive needs (Iman et al., 2023). Thus, the factors of M-banking adoption in Indonesia include technical, social, psychological, and cultural dimensions.

3. Methods

This study uses a qualitative approach with the literature review method as the main strategy. This method was chosen because the purpose of the research is to understand in depth the phenomenon of consumer behavior in the use of mobile banking in Indonesia, not just quantitatively. The qualitative approach allows researchers to interpret, compare, and review previous findings from various

sources, both in the form of scientific journals, research articles, and other academic publications. Thus, the results of this study are expected to provide a comprehensive picture of the factors that influence customers' decisions to adopt mobile banking.

The data collection technique was carried out by literature study. Data sources were obtained through searching indexed journals, both international and national, especially those available on Google Scholar and other reliable academic databases. The literature selection criteria include: (1) publications relevant to the topic of consumer behavior, usage decisions, and mobile banking adoption in Indonesia; (2) the time span of publication is the last five years, to ensure the novelty of the information; and (3) research that contains variables related to trust, convenience, service quality, risk, and user loyalty. Data analysis was carried out using content analysis techniques. Each article reviewed is read thoroughly to identify key themes related to consumer behavior and mobile banking adoption.

These themes are then grouped into several categories, such as trust factors, ease of use, risk perception, user experience, and the influence of cultural and generational contexts. After that, a comparison of findings between studies was carried out to find patterns, similarities, and differences. This analysis also pays attention to research gaps that have not been widely discussed in the previous literature, especially related to the influence of digital service quality on customer satisfaction and loyalty. In maintaining validity, this study uses the principle of source triangulation by comparing findings from several journals that have similar themes. This aims to ensure that the conclusions drawn do not come from a single study, but are the result of convergence from various studies.

In addition, the researcher also conducted a critical evaluation of the methodology used in previous research, so that it could provide context for the limitations of each study. By using this qualitative method based on literature review, the research is expected to answer research questions regarding consumer behavior, factors determining usage decisions, and the relationship between service quality, convenience, and trust in the satisfaction and loyalty of mobile banking users. The results of this study are also expected to make a practical contribution to the digital banking industry in Indonesia in developing a more effective strategy in increasing customer adoption and loyalty to M-banking services.

4. Results

The results of this research were obtained through a literature review from various scientific journals that discuss consumer behavior and mobile banking use decisions in Indonesia. Based on a literature review, it was found that the phenomenon of using M-banking in Indonesia is not only influenced by technological aspects, but also by social, psychological, and customer trust in the system used. The key findings in these results are divided into several key themes: trust and security factors, ease of use, quality of service, generational preferences, user experience, and the influence of religious context.

First, trust and security factors are fundamental aspects in the adoption of M-banking. Customers will be more likely to use digital banking services if they feel that the system is safe from the risk of data theft, fraud, or transaction errors. This trust is formed through the bank's reputation, policy transparency, and the quality of the

security system offered. A study found that trust plays a significant role in determining the intention of Muslim customers to use Islamic M-banking services. Security in accordance with sharia principles is an added value for Islamic banks in Indonesia in building user loyalty (Kartika et al., 2020). These findings show that the security aspect is not only concerned with data protection, but also with regard to religious beliefs and adherence to social norms. Vulnerabilities to cyberattacks, such as phishing and malware, can undermine customer trust and hinder widespread adoption of M-banking.

Therefore, financial institutions should invest heavily in advanced security technologies, such as data encryption and multi-factor authentication, as well as actively educate customers on ways to keep their accounts secure. Transparency in handling security incidents is also important to maintain public trust. Customers want to know that their bank has a clear plan in place to respond to threats and that their data is well protected. Second, the ease of use factor has been proven to have a great influence on customer decisions. Modern consumers tend to choose applications that are simple, user-friendly, and do not require a complicated process in making transactions. Research using the Unified Theory of Acceptance and Use of Technology (UTAUT) model in Indonesia shows that the perception of ease and usefulness of M-banking applications influences the intention and behavior of use, especially among the younger generation (Abu-Taieh et al., 2022).

This confirms that the easier the application is to use, the more likely it is for customers to adopt it sustainably (Purwanto & Loisa, 2020). Intuitive interface design and seamless user experience are essential to ensure customers can complete

transactions quickly and seamlessly. Clear menus, a concise login process, and informative notifications all contribute to the perception of ease of use. If the M-banking application feels complicated or difficult to navigate, customers will tend to revert to conventional banking methods. Banks must continuously conduct user research and testing to identify bottlenecks and improve their application design. A focus on simplifying processes is key to driving wider adoption, especially for new users or those less familiar with the technology.

Third, the quality of digital services is also a determining factor. The study found that consumers judge M-banking services not only by transaction functionality, but also by access speed, system reliability, and feature completeness. In the Indonesian context, research confirms that good service quality can increase customer satisfaction and loyalty to digital banks. In other words, the higher the perceived quality of service, the more likely customers are to continue using the application (Sebayang et al., 2023). This shows that M-banking is no longer just a transaction tool, but has become part of the financial lifestyle of modern society. System reliability, such as minimal downtime and technical errors, is crucial. Customers rely on M-banking for important transactions, and system failures can lead to financial losses and frustration.

In addition, complete features, such as digital wallet top-up, bill payment, and investment, make M-banking a one-stop solution for customers' financial needs. Banks that want to maintain dominance in the digital age must ensure their infrastructure can support fast, reliable, and comprehensive services. In addition, there were also differences in preferences between generations. Generation Z and

millennials are more open to using M-banking because they are used to digital technology. On the other hand, the baby boomer generation tends to be more cautious due to risk perception and lack of digital literacy. Recent research shows that digital banking strategies need to pay attention to generational segmentation to be more effective in increasing the adoption of M-banking (Makmuriyah & Vanni, 2020). As such, banks need to adjust their communication strategies to reach different generational groups.

For example, banks may target millennials with features that are innovative and relevant to their lifestyle, while for older generations, a more educational approach and accessible customer support may be more effective. Digital literacy training for older customers can also help reduce fear and increase their confidence in M-banking services. The literature also highlights the importance of user experience. Customers will be more satisfied if the M-banking application has an attractive design, easy navigation, and integration of features that are relevant to their needs. A study on the user experience of M-banking applications in Indonesia shows that interface design and access speed factors play an important role in shaping user satisfaction. This implies that banks need to pay attention to the aesthetic and technical aspects of the application in order to be able to compete in the increasingly competitive digital banking industry (Iman et al., 2023). A positive user experience not only increases satisfaction but also encourages customers to recommend the service to others. Therefore, investing in a quality UX/UI design team and conducting user testing on an ongoing basis is a very worthwhile investment.

Furthermore, the study also found the influence of religious context in the adoption of M-banking, especially in Islamic banking. Additional features such as zakat payments, qibla direction, and digital Qur'an are not only added value, but also increase the loyalty of Muslim customers. Research confirms that the religiosity factor is the differentiator between conventional and sharia M-banking in Indonesia. Thus, Islamic banks need to take advantage of this aspect to strengthen the attractiveness of their services amid competition in the digital banking industry (Kartika et al., 2020). Islamic banks can create a strong niche market by highlighting religious values in their digital services, which can build a deeper emotional bond with customers.

On the other hand, the literature also notes the impact of M-banking adoption on bank performance. A study found that the adoption of M-banking technology was able to improve the financial performance and stocks of large banks in Indonesia. This shows that the benefits of M-banking are not only felt by consumers, but also make a real contribution to the efficiency and profitability of banks (Adhitya & Sembel, 2020). Thus, investment in the development of M-banking applications is an important strategy for banks to strengthen their competitive position. M-banking can reduce operational costs, speed up the transaction process, and open up new revenue opportunities through value-added services.

Finally, the context of the COVID-19 pandemic has also accelerated the adoption of M-banking in Indonesia. Limited physical mobility makes people rely more on digital services to meet their daily banking needs. The study found that the pandemic has become a momentum to accelerate the use of digital services,

including mobile banking and mobile payments, because people are required to make transactions remotely (Sunarjo & Nurhayati, 2021). These findings confirm that external factors can accelerate digital transformation, so banks must be adaptive in responding to these changes. The pandemic served as a catalyst, forcing banks and customers to adapt quickly. Banks that were able to adapt quickly and provide strong digital services during times of crisis managed to win customer trust and strengthen their market position.

The results of the study show that consumer behavior in the use of M-banking in Indonesia is influenced by a combination of trust, convenience, service quality, user experience, generational preferences, and religious and external contexts. These factors are interrelated and shape customers' decisions in adopting digital banking services. Banks that are able to understand and accommodate these needs have a great opportunity to increase satisfaction, loyalty, and sustainability in the use of M-banking services. Building a successful M-banking strategy requires a comprehensive approach, focusing not only on technology but also on a deep understanding of customer needs and motivations.

5. Discussion

The results of the literature review show that the decision to use mobile banking in Indonesia is influenced by a combination of technological, psychological, social, and even religious factors. This shows that consumer behavior in the context of digital services cannot be understood from just one dimension, but is the result of the interaction of various variables. The trust factor, for example, repeatedly

appears as a key element that determines the intentions and behaviors of the adoption. Trust includes the dimensions of technical security, data protection, and bank compliance with sharia principles for Muslim customers. The study found that the higher the consumer trust, the greater their tendency to use and remain loyal to M-banking services (Hafizh et al., 2023).

In addition to trust, ease of use and quality of service are also crucial factors. Customers want an application that is intuitive, fast, and has features that suit their daily needs. This is in line with the findings that the perception of ease and usability of applications affects the intention of use behavior, especially among the younger generation who are already accustomed to digital technology (Purwanto & Loisa, 2020). On the other hand, good service quality not only increases customer satisfaction, but also becomes the basis for long-term loyalty. This means that the success of M-banking adoption is not only determined by technological innovations, but also by how the service is able to provide a consistent and satisfying experience.

The factor of generational differences adds to the complexity of this phenomenon. Generation Z and millennials, who are relatively more adaptive to technology, are faster to accept M-banking services than baby boomers who still tend to be cautious. This indicates that digital banking marketing strategies need to be adjusted to demographic characteristics. For example, educational and socialization approaches can be improved for generations that are less familiar with technology, while younger generations can be targeted with digital lifestyle-based promotions. The research confirms that differences in generational preferences are

one of the research gaps that still need to be explored further in the context of Indonesian banking (Nugraha et al., 2022).

In addition, the discussion also showed that external factors such as the COVID-19 pandemic were able to accelerate the adoption of M-banking. The crisis situation encourages people to look for remote transaction solutions, so M-banking is the main choice. This phenomenon suggests that consumer behavior is influenced not only by internal factors, but also by external dynamics that force behavioral changes. Therefore, banks need to be adaptive in responding to changes in the external environment to remain relevant. Thus, it can be concluded that the adoption of M-banking in Indonesia is a multidimensional phenomenon influenced by trust, convenience, service quality, generation, and external factors. Banks that are able to manage all of these aspects holistically will be more successful in increasing customer adoption, satisfaction, and loyalty.

6. Conclusion

This study confirms that consumer behavior in deciding on the use of mobile banking in Indonesia is a complex and multidimensional phenomenon. The decision is influenced not only by technical factors such as the app's features and service quality, but also by psychological factors such as beliefs and risk perceptions, as well as socio-cultural factors that include generations and religious values. The development of digital technology has driven significant transformation in the banking sector, making mobile banking not just a means of transactions, but part of people's digital lifestyles. Trust, convenience, and quality of service are proving to

be the main factors driving the adoption of mobile banking. Customers tend to be loyal if they feel real benefits in the form of efficiency, comfort, and security.

On the other hand, inter-generational preferences as well as religious contexts add a new dimension to understanding consumer behavior. The younger generation is more adaptive to technology, while the older generation needs an educational approach and increased digital literacy. In addition, external factors such as the COVID-19 pandemic have also accelerated the adoption of digital services, showing that consumer behavior can change rapidly when influenced by certain situations. Therefore, banks need to be adaptive, innovative, and responsive in developing digital service strategies. The results of this study provide a basis for the development of digital banking policies and strategies in Indonesia, especially in increasing the satisfaction and loyalty of mobile banking customers.

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