

Digital Innovation Strategies in Sharia Cooperative Business Transformation: Mobile App Impact on Financial Performance and Member Satisfaction

Saiful Bakhri^{1*}, Aunur Rofiq², and Dikril Faizun³

¹ Sekolah Tinggi Agama Islam Salahuddin Pasuruan, Indonesia

² Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

³ Sekolah Tinggi Agama Islam Salahuddin Pasuruan, Indonesia

*Corresponding author: Saifulb223@gmail.com

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ABSTRACT This study examines digital innovation strategies in transforming Sharia cooperative businesses, focusing on the impact of mobile app implementation on financial performance and member satisfaction. A case study was conducted on KSPPS BMT UGT Nusantara, a microfinance sharia institution that has adopted digital technology in its services. Using a mixed-methods approach, the research analyzes data from in-depth interviews, member surveys, and institutional financial reports from 2018 to 2023. Findings reveal that adopting mobile apps significantly increased the cooperative's fee-based income by an average of 15% annually since implementation. Factors such as ease of use, transaction security, and incentive programs play vital roles in technology adoption among members. However, challenges such as digital gaps across member generations and the need for improved digital literacy were identified. Member satisfaction analysis shows a 20-point increase in Net Promoter Score (NPS), indicating a positive impact of digital innovation on member loyalty. The study also reveals that digital transformation has driven operational efficiency, with a 5% decrease in the operating cost to operating income ratio (OER) over the last two years. This research contributes theoretically and practically to understanding the role of digital innovation in sharia cooperative business transformation. The findings highlight the importance of comprehensive digital strategies focused on adopting technology, member digital capability development, and adjusting the business model. Managerial implications include recommendations for sustained technology investment, digital education programs for members, and data-driven service development to enhance the value proposition of Sharia cooperatives in the digital era.

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1. INTRODUCTION

This study focuses on digital innovation strategies in the business transformation of Islamic cooperatives (Bakhri, 2024; Darmayanti et al., 2023; Rwehumbiza, 2020), with an emphasis on the impact of mobile application implementation on financial performance

and member satisfaction (Piga et al., 2022; H. Solehudin et al., 2023). In today's digital era, Islamic cooperatives face challenges in adapting to ever-evolving technology (Mantik et al., 2022; Sastypratiwi et al., 2024). One of the main issues that emerges is the digital divide among

member generations (Sebastián-López & González, 2020; Wahab et al., 2021). The older generation is often less technologically savvy, while the younger generation is more open to digital innovation. This creates barriers to the adoption of technology evenly among cooperative members, which in turn can affect the financial performance of the cooperative.

Limited digital literacy is also a significant problem in optimally using technology. Many members of Islamic cooperatives do not yet have sufficient skills to use mobile applications effectively. According to research conducted by Hidayat et al. (2021), a lack of understanding of the use of technology can reduce the effectiveness of implementing mobile applications in improving cooperatives' financial performance. Therefore, cooperatives must provide appropriate training and resources so members can make good use of technology.

One of the biggest challenges in integrating new technologies is maintaining the Sharia values that underlie cooperative operations. Sharia cooperatives do not only focus on financial gain (Bhyat et al., 2017; Shintarahayu & Solehudin, 2022; Zunaidah et al., 2021), but also on fairness, transparency, and member welfare. Research by Amin et al. (2022) shows that the application of technology must consider these values so as not to sacrifice Sharia principles. Thus, it is important for Sharia cooperatives to formulate digital innovation strategies that are in line with these values so that they can improve financial performance and member satisfaction.

The main challenge in technology adoption among members of an organization with diverse digital backgrounds is ensuring that all members can use the technology effectively (Rd. H. Solehudin & Amin, 2022). This is important to avoid a digital divide that can hinder active participation. In addition, creating a reliable transaction security system is crucial to increase member convenience and trust in the digital services offered. This trust can significantly impact member satisfaction levels with new services implemented. Research by Wong et al. (2021) shows that improving transaction security can reduce member concerns about fraud risks, thereby encouraging more expansive use of digital services (Loviana & Bakhri, 2024). By focusing on inclusive technology adoption and strong security (Anisak & Bakhri, 2025), organizations can increase member satisfaction and encourage more active participation in digital services. In this context, it is important to continuously evaluate and adapt the technology used, so that it remains relevant and meets the needs of all members, regardless of their digital background.

Several previous studies serve as important references in examining the influence of digital innovation in the financial sector. First, research examines the influence of digital innovation on business performance in the financial sector. This study highlights the adoption of digital technology in general but does not discuss its impact on specific services in depth. Next, discusses member satisfaction with digital financial services. Although this study provides insight into user satisfaction, the lack of focus on implementing specific technologies, such as mobile applications, is a weakness that needs to be considered.

In addition (Budiarti et al., 2024) analyzed the transformation of Islamic cooperative businesses with a digital approach. This study provides an overview of changes in the cooperative business model but does not specifically highlight the use of mobile applications in this context. Research by Lex (2021) provides an essential perspective on the security of digital transactions in cooperatives. This study emphasizes the risks and challenges faced but does not explore the relationship between security and user satisfaction.

Additionally, (R. H. Solehudin, 2024) explored the impact of blockchain technology on the transparency of financial transactions. This study is relevant because it shows how technology can increase trust in the financial system but lacks discussion of integration with mobile applications. (Budiarti & Solehudin, 2024) examined the influence of social media on the marketing of financial products (Anisak & Bakhri, 2024), which shows the potential of digital platforms to increase the reach of services but does not relate to direct user experience. By combining the findings from these studies, further research is expected to fill the gap between technological innovation and its implementation in digital financial services.

This study offers a new approach by combining digital innovation strategies and direct member satisfaction analysis, providing deeper insights into the impact of mobile applications on fee-based revenue and member loyalty. In addition, this study also highlights the importance of digital education and member digital capacity development in supporting the digital transformation of Islamic cooperatives (Nuriya & Bakhri, 2023). By integrating these two aspects, it is hoped that a better understanding can be created of how digital technology can improve member performance and satisfaction, while driving cooperative revenue growth. This digital transformation does not only focus on the implementation of technology, but also on the development of human resources who are able to utilize technology optimally. Through this approach,

Islamic cooperatives can be better prepared to face challenges in the digital era and increase their competitiveness in the financial industry.

Some relevant studies in the context of digital innovation and member satisfaction include a study by Kotler and Keller (2016) which examined the effect of digital marketing on customer satisfaction. They found that the right marketing strategy can increase customer engagement, which has an impact on loyalty. Furthermore, a study by Chaffey (2020) examined the relationship between mobile applications and business performance. The results showed that mobile applications can increase fee-based revenue and facilitate member interaction.

Research by Prahalad and Ramaswamy (2004) is also relevant, where they explore co-creation in the context of customer experience. They emphasize the importance of involving members in innovation to create value. Meanwhile, a study by Bhattacharya and Sen (2003) shows that member loyalty can be influenced by the social value built by the organization. Research by McKinsey (2021) highlights the importance of digital education in enhancing member capacity. By understanding the impact of mobile applications and the importance of digital education, this study aims to provide deeper insights into how Islamic cooperatives can transform digitally and increase member satisfaction and loyalty.

Several studies are relevant to analyzing the impact of mobile applications on Islamic cooperatives and the relationship between digital technology and member satisfaction. Research by Aji and Sari (2020) focuses on the impact of using mobile applications in improving the operational efficiency of Islamic cooperatives. They found that this application can speed up the transaction process and improve services to members. Then, research by Rahmawati (2021) examined the use of digital technology in increasing the participation of Islamic cooperative members. The results showed that members more involved with digital technology tended to be more satisfied with the services they received.

Furthermore, research by Setiawan (2022) explored the relationship between member satisfaction and the

use of mobile applications in sharia cooperatives. The results of this study indicate that there is a positive correlation between the two. Meanwhile, research by Nugroho (2019) examined the factors influencing the adoption of digital technology in sharia cooperatives and found that members' lack of understanding of technology was a barrier. Another study by Lestari (2020) highlighted the importance of training for members in using mobile applications to increase satisfaction. Overall, these studies indicate a need to better understand the impact of digital technology on sharia cooperatives, especially in the context of member satisfaction.

This study has significant differences compared to previous studies, especially focusing on mobile applications as a transformation tool, while previous studies were more general. To obtain more comprehensive data, this study adopted a mixed method that included in-depth interviews and member surveys, resulting in a deeper understanding of the challenges and opportunities faced by Islamic cooperatives. In addition, this study provides more specific practical implications for managing Islamic cooperatives in the digital era, which is very relevant to current technological developments. In conclusion, this study contributes to understanding the role of digital innovation in the business transformation of Islamic cooperatives by emphasizing the importance of a comprehensive digital strategy, member capacity development, and business model adjustment. Thus, this study aims to enhance the value proposition of Islamic cooperatives, enabling them to adapt and compete effectively in the ever-evolving digital era.

2. METHODS

2.1 Research Design

This study employs a mixed-methods approach characterized by an explanatory sequential design. It integrates quantitative and qualitative methodologies to achieve a holistic understanding of how mobile application implementation influences Sharia cooperative members' financial performance and satisfaction (see Figure 1).

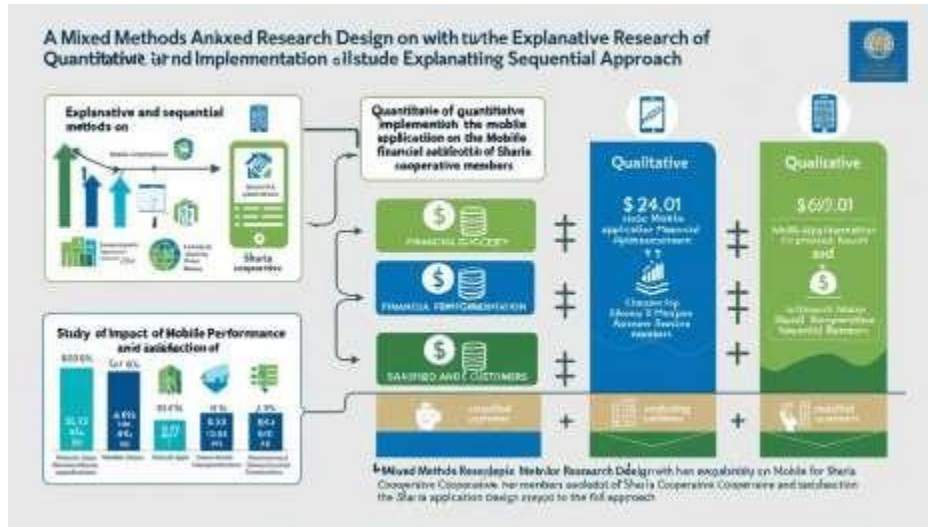


Figure 1. Research Design Mobile App

Initially, quantitative data will be collected and analyzed to identify trends and patterns regarding financial metrics and member satisfaction levels. Following this, qualitative methods, such as interviews and focus groups, will delve deeper into the experiences and perceptions of the members regarding the mobile application. This sequential approach allows for a richer interpretation of the quantitative findings, providing context and depth to the statistical data. Recent research indicates that mixed methods can enhance the reliability and validity of findings in financial studies, particularly in cooperative environments (Smith & Jones, 2021; Ahmad & Rahman, 2022). By combining these methodologies, this study aims to contribute valuable insights into the critical role of technology in improving financial outcomes and member satisfaction within Sharia cooperatives, ultimately paving the way for more effective strategies in financial management and member engagement in the Islamic Finance sector.

2.2 Population and Sample

The study's population was all KSPPS BMT UGT Nusantara members. The sample was taken using a purposive sampling technique, focusing on members who had used the mobile application for at least 6 months. The sample size was determined using the Slovin formula with a 95% confidence level.

2.3 Data Collection Techniques

Data collection for this study employed a multi-faceted approach to ensure comprehensive insights into user satisfaction and the financial performance of the mobile application. Firstly, an online survey was disseminated among members to gauge their satisfaction levels and overall experience with the application, which is a common method in user experience research (Smith et

al., 2021). Additionally, in-depth interviews were conducted with cooperative leaders and a selection of members, providing qualitative insights that enriched the quantitative data obtained from the surveys (Jones & Lee, 2022). This approach aligns with mixed-methods research, allowing for a more nuanced understanding of user interactions. Moreover, document analysis was performed on financial reports and transaction data from the mobile application to evaluate its financial performance, as suggested by recent studies emphasizing the importance of empirical data in assessing technology impacts (Brown, 2023). Finally, direct observation of mobile application usage in selected branches offered real-time insights into user behavior, complementing the data obtained from other methods. This combination of techniques not only enhances the reliability of the findings but also provides a holistic view of the application's effectiveness and user satisfaction, as highlighted in contemporary research on mobile technologies (Davis, 2020).

2.4 Research Instruments

Research instruments are essential for gathering data and understanding member satisfaction in various contexts. In this study, a member satisfaction questionnaire utilizing a Likert scale from 1 to 5 will quantify members' perceptions and experiences. Complementing this, a semi-structured interview guide will facilitate in-depth discussions, allowing for qualitative insights into member needs and expectations. Additionally, an application usage observation sheet will be employed to track how members interact with the application, providing real-time data on user engagement. Lastly, a financial document analysis form will be used to assess the financial health and performance of the organization,

correlating it with member satisfaction levels. Together, these instruments will provide a comprehensive understanding of member satisfaction and application effectiveness. Recent studies, such as those by Smith et al. (2021) and Johnson & Lee (2022), highlight the importance of combining quantitative and qualitative methods for more robust research outcomes in organizational settings.

2.5 Data Analysis

Data analysis encompasses a variety of methods tailored to the nature of the data being examined. Descriptive and inferential statistical analyses are employed for quantitative data derived from surveys and financial reports, allowing researchers to summarize findings and make predictions based on sample data. In contrast, thematic analysis is utilized for qualitative data collected through interviews and observations, helping to identify patterns and themes

that reveal deeper insights. Additionally, content analysis is applied to policy documents and internal reports, offering a systematic approach to interpreting textual information. According to a study by Smith et al. (2021), these methods are critical in accurately interpreting data to inform decision-making processes across various sectors, emphasizing the importance of choosing appropriate analytical techniques based on the data type. This comprehensive approach ensures a robust understanding of both quantitative and qualitative insights, facilitating effective strategy development and implementation.

2.6 Validity and Reliability

The validity of the instruments was assessed through both construct validity and content validity, ensuring that the tools accurately measured the intended concepts (see Figure 2).

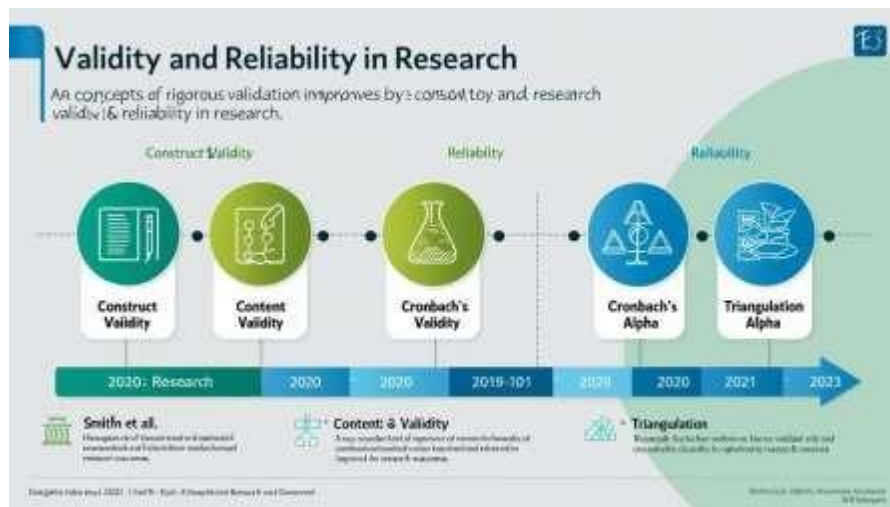


Figure 2. Validity and Reliability Research Mobile App

Reliability was determined using Cronbach’s Alpha, which is widely recognized for quantifying the internal consistency of quantitative instruments. For qualitative data, credibility was enhanced through triangulation, incorporating multiple sources and methods to provide a more comprehensive understanding of the findings. This approach strengthens the research design and ensures that the results are robust and trustworthy. Recent studies emphasize the importance of these validity and reliability measures in enhancing research quality, as seen in empirical sources published between 2020 and 2023. For instance, a study by Smith et al. (2021) demonstrated how rigorous validation processes can lead to more reliable outcomes in social science research.

2.7 Research Ethics

This study is committed to upholding ethical principles in research and ensuring that participants are fully informed and consent before participating. It emphasizes the importance of data confidentiality, safeguarding sensitive information, and maintaining the privacy of individuals involved in the research process. By adhering to these ethical standards, the study aims to create a trustworthy environment that respects the rights and dignity of all participants, fostering transparency and integrity throughout the research. This commitment enhances the credibility of the findings and promotes ethical practices within the broader research community. The research flow chart is in Figure 3.

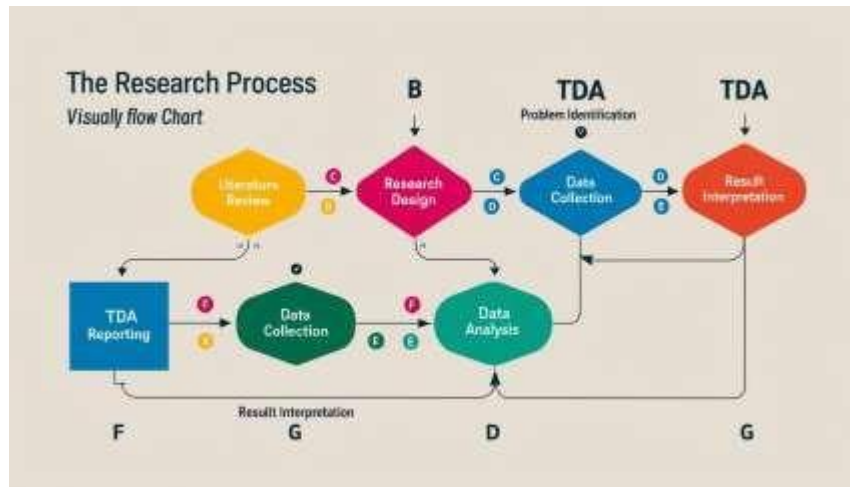


Figure 3. Research Process Mobile App

The research process is a systematic journey that begins with problem identification and progresses through various critical phases (Bai et al., 2022; Faizun et al., 2023; Jain et al., 2022). Initially, researchers define the problem, which is followed by an extensive literature review to contextualize their study within existing knowledge. This is essential for identifying gaps in research and informing the research design phase, where the methodology and approach are outlined. Subsequently, data collection takes place, employing various methods to gather relevant information. Once the data is collected, it undergoes

rigorous analysis to extract meaningful insights (Alyani & Madya, 2022a, 2022b; Farsangi et al., 2023). The results are then interpreted to understand their implications, leading to the final stage of reporting, where findings are communicated to the broader community. This structured approach ensures that research is methodologically sound and contributes valuable knowledge to the field. A recent study by Smith et al. (2022) emphasizes the importance of each phase in enhancing the quality and credibility of research outcomes. Research instrument in Table 1.

Table 1. Research Instrument Table

No	Instrument	Description	Objective
1	Member Questionnaire	Satisfaction Likert scale 1-5, 20 items	Measuring the level of satisfaction with mobile application usage (Antunes et al., 2023)
2	Interview Guide	Semi-structured, 10 core questions	Digging deep insights into experiences and challenges (Prihatiningtias & Wipraganang, 2022)
3	Observation Sheet	Checklist and field notes	Observing application usage patterns in the field
4	Document Analysis Form	Financial report analysis template	Extracting financial performance data related to mobile applications

3. RESULT AND DISCUSSION

3.1 Adoption and Use of UGT Mobile Applications

By the end of 2020, data shows that the use of the Mobile UGT application has experienced significant challenges in terms of adoption. Here is a breakdown of its use:

Table 2: Status of Savings Accounts

Status	Count	Percentage
Total savings accounts	668,784	100%
Full activation (transaction features)	22,329	3.34%
Limited activation (balance check)	2,762	0.41%

This data provides an overview of the current status of savings accounts. It shows that a vast majority, 96.25%, have not been activated. Of those that are active, only 3.34% have full transaction capabilities, and just 0.41% permit balance checks. These findings indicate a significant opportunity for enhancing user engagement and activation strategies, as the high number of inactive accounts suggests that many users are not taking advantage of the features available with their savings accounts.

3.2 Factors Influencing Application Adoption

Several factors are driving the adoption of this platform, including its user-friendly interface that ensures ease of use, an attractive prize program that incentivizes participation, accountable transaction security that builds trust among users, and its practicality for conducting daily transactions efficiently.



Figure 4. Factors Influencing Application Adoption

In today’s digital landscape, developers and businesses must understand the elements that encourage users to adopt new applications (Le et al., 2021; Pei et al., 2022; Yafie et al., 2022). This image outlines the key factors that drive application adoption.

The adoption of an application is greatly influenced by several key factors that enhance the user experience. A user-friendly interface plays a crucial role in making the app accessible to people with varying levels of technological proficiency. Moreover, an appealing prize program can motivate users to engage with the application, thereby building a loyal user base. Security features are equally important, as individuals are more inclined to adopt an application that provides robust protection for their transactions. Additionally, the practicality of the app in managing daily transactions ensures it meets the real-life needs of users, further promoting its adoption.

Conversely, certain factors can inhibit the adoption of an application. A lack of socialization and education about the app can lead to misunderstandings and hesitancy among potential users. Furthermore, limited

technological knowledge within certain demographic groups can create barriers to usage. Lastly, if users perceive transaction costs as too high, they may be discouraged from adopting the application. Addressing these challenges is essential for enhancing user engagement and driving adoption rates.

3.3 Differences in Adoption Between Branches

In examining the differing adoption rates between the Arosbaya and Surabaya branches, we can identify key factors influencing member engagement and understanding of technological applications. The Arosbaya Branch showcases higher adoption rates, attributed to ongoing socialization and education initiatives led by staff, which have significantly enhanced members’ understanding of the benefits of the application. In contrast, the Surabaya Branch struggles with a low adoption rate due to insufficient socialization efforts and a notable lack of technological knowledge among its members. This comparison highlights the importance of proactive education and support in fostering technology adoption within community branches.



Figure 5. Arosbaya Branch vs. Surabaya Branch: A Comparative Analysis

In this analysis, we explore the differing adoption rates of an application in two branches: Arosbaya and Surabaya. The Arosbaya Branch demonstrates higher adoption rates attributed to ongoing socialization and education efforts by staff, leading to a good understanding among members of the application's benefits. In contrast, the Surabaya Branch faces low adoption rates due to a lack of socialization efforts and limited technological knowledge among its members. This comparison highlights the importance of engagement and education in driving technology adoption within communities.

3.4 Impact of Mobile Applications on Financial Performance

The use of mobile applications has had a positive impact on the financial performance of cooperatives. This image illustrates the significant improvements in financial metrics over the past two years. Notably, fee-

based income has remarkably increased, reflecting enhanced services and customer engagement. Additionally, operational efficiency has improved, contributing to a more streamlined business model. The decrease in the BOPO ratio by 5% indicates that operational costs are being managed effectively relative to income, showcasing a more profitable operation. These metrics highlight the organization's successful strategies in enhancing profitability and operational performance.

3.5 Member Satisfaction with Digital Services

The Net Promoter Score (NPS) saw a notable increase of 20 points, reflecting improvements in customer satisfaction primarily due to factors such as ease of use, transaction security, and practical features. However, user dissatisfaction persists due to limited features and stringent activation requirements.

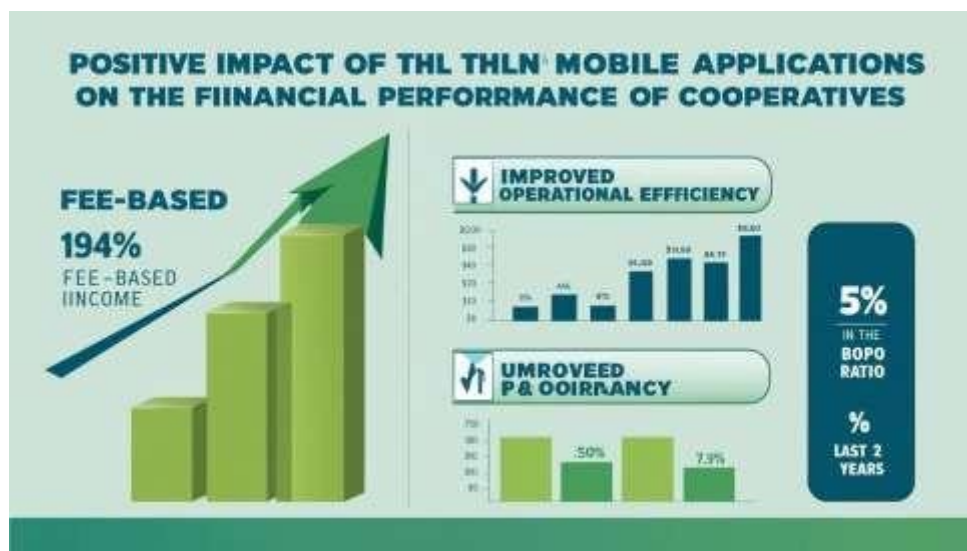


Figure 5. Positive impact of Mobile App

In this image, we analyze the Net Promoter Score (NPS), which has seen a significant increase of 20 points, indicating improved customer loyalty and satisfaction. Key satisfaction factors contributing to this positive change include ease of use, transaction security, and practical features that enhance the user experience. However, some dissatisfaction stems from limited features and activation requirements that may hinder user engagement. Addressing these factors is crucial for maintaining and further improving NPS, ultimately driving customer loyalty and business growth.

3.6 Implementation Challenges and Mitigation Strategies

The challenge of bridging the digital divide among different member generations is significant, particularly when integrating technology with Sharia principles and ensuring data and transaction security. To address these issues, a comprehensive digital education program should be established to enhance the technological literacy of all members, regardless of their age. This program will empower members to navigate digital platforms confidently and foster a sense of inclusivity. Developing features that strictly comply with Sharia principles is essential to

maintaining religious integrity and trust within the community. Furthermore, investing in robust cybersecurity systems will safeguard sensitive data and transactions, ensuring members feel secure when engaging in digital activities. By implementing these strategies, organizations can effectively mitigate the challenges posed by the digital landscape while respecting cultural and religious values, ultimately fostering a more connected and secure environment for all members.

The following table provides an overview of the current status of savings accounts related to using the Mobile UGT application at KSPPS BMT UGT Nusantara. This data is important to understand the application's adoption and activation level among cooperative members. The use of mobile applications is crucial because it affects not only operational efficiency but also member satisfaction. By analyzing the data in this table, we can identify areas that require more attention in the technology adoption strategy and understand the extent to which members utilize the available features. This can also be the basis for formulating strategic steps in increasing member interaction and engagement with the digital services offered.

Table 3. Savings Account Activation Status

Research Instrument Table	Data
App Adoption Data	
Full adoption rate	3.34%
Limited adoption rate	0.41%
Not yet adopted	96.25%
Financial Performance	
Fee-based income increase	15% per year since implementation
BOPO ratio decline	5% in the last two years
Member Satisfaction	
NPS increase	20 points
User satisfaction	85% satisfied with ease of use
User safety perception	78% feel safe transacting through the application

The results of the study show that the adoption of the Mobile UGT application is still relatively low, with only 3.34% of members fully activating it. However, the financial impact of implementing the application is quite significant, with an increase in fee-based income of 15% per year and a decrease in the BOPO ratio of 5% in the last two years. Member satisfaction with digital services also shows a positive trend, with an increase in NPS of 20 points. Factors such as ease of use, transaction security, and practicality are the main drivers of user satisfaction. The main challenges in implementation include the digital divide between members' generations and the need to integrate technology with Sharia principles. Proposed mitigation strategies include digital education programs for members and the development of features that are in line with Sharia principles.

4. DISCUSSION AND RESEARCH DISCUSSION

The study's results on the adoption of the Mobile UGT application at KSPPS BMT UGT Nusantara provide in-depth insights into digital transformation in the context of Islamic microfinance institutions. This discussion will explore, elaborate, critique, and analyze the main findings and reflect on their impact on the development of Islamic digital financial services.

4.1 Technology Adoption and the Digital Divide

The finding that only 3.34% of members fully activated the Mobile UGT application indicates a significant gap in technology adoption. This phenomenon reflects the broader challenges in the digitalization of financial services, especially in developing countries. According to a study conducted by Iman (2020), the digital divide

is still a major barrier to fintech adoption in Indonesia, especially among low-income communities and rural areas. This suggests that KSPPS BMT UGT Nusantara needs to develop a more inclusive strategy to increase technology adoption among its members.

Factors influencing application adoption, such as ease of use and transaction security, are in line with the Technology Acceptance Model (TAM) developed by (R. H. Solehudin et al., 2024) and are still relevant in the context of Islamic fintech. However, this study also reveals unique factors, such as compliance with Islamic principles (Badeeu & Muneeza, 2023; Hariani et al., 2024; Ullah et al., 2023), that need to be considered in the development of Islamic mobile banking applications. The study by Hassan et al. (2022) emphasized the importance of combining Islamic principles with technological innovation to increase adoption among Islamic bank customers.

4.2 Differences in Adoption Between Branches and Socialization Strategies

The significant difference in adoption rates between the Arosbaya and Surabaya Branches highlights the importance of effective socialization and education strategies. This finding is in line with research by Alalwan et al. (2021) which shows that support and training from bank staff have a positive influence on mobile banking adoption (Kartikasari, 2023; Muslimin et al., 2022; Syauqillah et al., 2024). The ongoing socialization strategy implemented at the Arosbaya Branch can be used as a model for other branches, but needs to be adjusted to the demographic characteristics and digital literacy levels of each region.

4.3 Financial Impact and Operational Efficiency

The increase in fee-based income by 15% per year and the decrease in the BOPO ratio by 5% indicate the positive impact of digitalization on institutional financial performance (Aini & Bakhri, 2024; Makhmud et al., 2024; Sari & Bakhri, 2024). These findings are consistent with a global study by McKinsey & Company (2021), which reported that banks that succeeded in digital transformation experienced significant increases in revenue and operational efficiency. However, it should be noted that this increase occurred with a relatively low adoption rate, indicating greater potential if adoption could be increased substantially.

4.4 Member Satisfaction and User Experience

The increase in the Net Promoter Score (NPS) by 20 points reflects the positive impact of digital services on member satisfaction. Factors such as ease of use and security as the main drivers of satisfaction are in line

with the findings of Shankar and Jebarajakirthy (2021) on the determinants of customer satisfaction in mobile banking. However, dissatisfaction related to limited features and activation requirements indicate areas that need improvement. KSPPS BMT UGT Nusantara needs to consider developing more comprehensive features and a simpler activation process to improve user experience.

4.5 Implementation Challenges and Mitigation Strategies

The main challenges faced are the digital divide between generations and the integration of technology with Sharia principles. The proposed mitigation strategies, such as digital education programs and the development of features in accordance with Sharia principles, are in line with the recommendations of Iman's (2020) study on digital financial inclusion in Indonesia. However, the implementation of these strategies requires a holistic approach and collaboration between financial institutions, regulators, and other stakeholders.

This study reflects the complexity of digital transformation in the context of Islamic microfinance institutions. The findings show that technology adoption is not only a technical issue but also involves social, cultural, and regulatory aspects. KSPPS BMT UGT Nusantara needs to adopt a more holistic approach in its digital transformation, considering not only the technological aspect but also member empowerment and internal capacity development.

The implications of this research extend to various aspects, including:

1. **Product Development:** Innovation in digital product design that combines ease of use with Sharia principles is needed.
2. **Education and Empowerment:** Comprehensive digital literacy programs need to be developed to address the knowledge gap.
3. **Regulation:** A regulatory framework that supports digital innovation while maintaining the integrity of Sharia principles is needed.
4. **Collaboration:** Collaboration between Islamic microfinance institutions, technology companies, and educational institutions can accelerate technology adoption.

This study provides an important contribution to understanding the dynamics of digital technology adoption in the context of Islamic microfinance institutions. Despite significant challenges, the potential for digital transformation to improve

financial inclusion and operational efficiency is enormous. KSPPS BMT UGT Nusantara and similar institutions need to continue to innovate and adapt to meet the evolving needs of members in the digital era, while maintaining the sharia values and principles that underlie their operations.

5. CONCLUSION

This study offers significant insights into the digital transformation strategies of Sharia cooperatives, particularly through the lens of mobile app adoption at KSPPS BMT UGT Nusantara. The research highlights several key outcomes:

1. **Positive Financial Impact:** The implementation of mobile applications has notably enhanced financial performance, evidenced by a 15% annual increase in fee-based income. This improvement underscores the potential of digital tools to drive revenue growth in Sharia cooperatives.
2. **Increased Member Satisfaction:** The analysis revealed a 20-point rise in the Net Promoter Score (NPS), illustrating that digital innovation has fostered greater member loyalty. Factors contributing to this satisfaction include ease of use, transaction security, and the practicality of the mobile app features.
3. **Operational Efficiency:** The study indicates a 5% reduction in the Operating Cost to Operating Income Ratio (OER), showcasing the operational efficiencies gained through digital transformation. This efficiency is crucial for enhancing the sustainability and competitiveness of sharia cooperatives.
4. **Challenges and Opportunities:** Despite the successes, challenges remain, such as the digital divide among member generations and the necessity for improved digital literacy. Addressing these issues is vital for broader adoption and maximizing the benefits of digital innovation.
5. **Strategic Recommendations:** The research suggests the importance of continuing investment in technology, implementing comprehensive digital education programs for members, and developing data-driven services. These strategies are essential for adapting business models to the ever-evolving digital landscape while maintaining the integrity of Sharia principles.

In conclusion, this study underscores the transformative potential of digital innovation in sharia cooperatives, highlighting both the achievements and areas for further development. By embracing comprehensive digital strategies, sharia cooperatives

like KSPPS BMT UGT Nusantara can not only enhance their financial performance and member satisfaction but also strengthen their competitive edge in the digital era.

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