

Digital Transformation in Sharia Cooperative Management: Implementation, Opportunities, and Challenges in the Modern Digital Era

Fitri Nur Latifah¹, Franciska Marta Oftariana², Kafita Luluk Anjani³,
^{1,2,3}Muhammadiyah University of Sidoarjo, Sidoarjo, Indonesia



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ABSTRACT

Objective: This study examines the implementation, opportunities, and challenges of digital transformation in the management of sharia cooperatives, aiming to enhance their relevance and competitiveness in the modern digital era. Digitalization is essential for improving financial services, operational efficiency, and member engagement while maintaining compliance with sharia principles. **Method:** A qualitative approach was employed, utilizing literature reviews and case studies to analyze digital transformation initiatives within sharia cooperatives. The study explored the integration of sharia-based financial applications, online member management systems, and collaborations with sharia fintech as key aspects of digital adoption. **Results:** The findings indicate that digital transformation in sharia cooperatives offers significant opportunities, including improved financial inclusion, service innovation, and enhanced competitiveness. However, challenges such as limited technological infrastructure, low digital literacy, high investment costs, and data security risks pose significant barriers to implementation. Strategic planning, human resource development, and multi-stakeholder collaboration are critical to overcoming these obstacles. **Novelty:** This study highlights the intersection of digital transformation and Islamic financial principles, emphasizing a strategic framework for integrating digital tools while maintaining sharia compliance. The research contributes to the discourse on Islamic financial digitalization by proposing an adaptive model that aligns technological advancements with ethical and religious considerations, ensuring sustainable growth for sharia cooperatives.

INTRODUCTION

Sharia cooperatives are one of the community-based economic entities grounded in Islamic sharia principles. As part of the sharia economic system, this cooperative plays an important role in supporting economic empowerment, especially for small and medium enterprises (SMEs) [1]. With the concept prioritizing the principles of justice, cooperation, and transparency, Islamic cooperatives have become an effective instrument for promoting community-based economic growth [2]. However, the rapid development of digital technology in the modern era brings new challenges and opportunities for sharia cooperatives. On one hand, digital transformation allows Islamic cooperatives to improve operational efficiency, expand access to financial services, and provide services to their members more quickly and transparently [3]. On the other hand, sharia cooperatives also face various challenges, such as the readiness of human resources,

adaptation to technology, and the fulfillment of sharia principles in the implementation of digitalization.

Digitalization management in sharia cooperatives is a strategic effort to integrate technology into various operational aspects, ranging from financial management, member services, to marketing [4]. With digitalization, Islamic cooperatives can provide faster, more transparent, effective, and efficient services to their members. In addition, the application of technology can also help Islamic cooperatives expand their service reach, improve accountability, and ensure they continue to thrive amidst rapid market competition.

The digital era has changed the way various sectors operate, including financial institutions. The presence of technologies such as mobile applications, cloud-based platforms, artificial intelligence, and blockchain provides great opportunities to enhance the performance of Islamic cooperatives [5]. With this technology, cooperatives can manage member data more efficiently, provide digital-based financial services, and improve member accessibility in remote areas. However, the low digital literacy among cooperative managers and members often becomes the main obstacle in the implementation of this digital transformation. In addition, the digitalization of sharia cooperatives must also ensure compliance with sharia principles, such as the avoidance of *riba*, *gharar*, and *maisir*, which require a special approach in technology development. For example, Sharia-compliant financial applications must be designed in such a way that they meet Islamic legal standards, including in terms of transaction transparency, profit-sharing systems, and risk management. Sharia management must also be considered for its usefulness by looking at its characteristics as follows:

1. Based on Sharia Principles: Every decision and action in Sharia management must comply with Islamic law, avoiding practices of *riba*, *gharar* (uncertainty), and *maisir* (speculation) [6].
2. Oriented towards Spiritual and Social Values: Not only focused on economic profit, but also on community empowerment and maintaining environmental balance as well as spirituality.
3. Justice in Management: Sharia management emphasizes the fair distribution of benefits and responsibilities to all parties involved, whether they are owners, employees, or consumers.
4. Trust and Transparency: Resource management is conducted honestly, openly, and accountably, thereby creating trust among all parties.
5. Holistic Goals: Integrating worldly and spiritual (hereafter) goals by making the pleasure of Allah SWT the primary objective in every activity.

In starting a transaction or initiating an activity, it is advisable for the community to always understand the form of Sharia cooperative management around them by comprehending several aspects related to the transactions being conducted, including knowing the types of contracts in Sharia Cooperatives [7]. Here are the types of contracts in a sharia cooperative:

1. Murabahah
Buying and selling goods with an agreed profit margin.
2. Mudharabah
Cooperation between capital owners (cooperatives) and business managers (members) with a profit-sharing system.
3. Musyarakah
A business partnership where each party contributes capital and profits are shared according to the agreement.
4. Ijarah
The rental agreement used to provide benefits of goods to members.
5. Wadiah
A secure and fee-free fund deposit system.

RESEARCH METHOD

This research uses a descriptive approach to analyze digital transformation in the management of sharia cooperatives, focusing on the opportunities and challenges that arise in the modern digital era.

The descriptive approach was chosen because it allows researchers to systematically and deeply describe the ongoing phenomenon of digital transformation. This research identifies the problems that arise and occur in reality among the community in the modern era today. The data used includes related literature, such as journals, as well as government policies on digitalization and sharia cooperatives.

RESULTS AND DISCUSSION

Implementation

Implementation of digital transformation in sharia cooperative management the research results show that sharia cooperatives are beginning to adopt digital technology to improve efficiency and service quality to members. This implementation includes the use of mobile-based applications for financial recording, digital-based transactions such as QRIS (Quick Response Code Indonesian Standard), and an online member management system [8]. In addition, several cooperatives have utilized social media (medsos) and other digital platforms to promote products and services to the wider community. However, the level of technology adoption varies depending on the readiness of human resources, technological infrastructure, and available funds.

The research also found that the use of digital technology can enhance transparency, facilitate the monitoring of Sharia compliance, and accelerate decision-making in the management of Sharia cooperatives. However, the success of digital transformation implementation requires intensive training for managers and cooperative members so that they can understand and optimally utilize the technology.

1. Digitalization of the Financial System

Sharia cooperatives adopt digital technology to manage financial transactions, such as recording financing, savings, and Sharia-based investments. Application-based digital financial systems allow members to monitor their transactions in real-time, make payments through digital platforms (such as QRIS), and apply for financing without having to visit the cooperative office in person. Example: The use of cloud-based information systems to record sharia contracts such as murabahah and mudharabah.

2. Digital Member Management

The digitization of member data is carried out to facilitate membership management. Application-based systems allow cooperatives to store personal data, transaction records, and member contribution reports in an organized and integrated manner. This also supports transparency in the management of cooperatives. Example: A cooperative application that allows members to independently access information about profit-sharing.

3. Technology-Based Financing and Savings Services

Sharia cooperatives in the digital era offer financing and savings services through online platforms [9]. This provides easy access for members, especially those in remote areas. Technology also enables more accurate financing risk analysis through a credit scoring system. Example: Application-based microfinance for MSME members with terms that comply with Sharia principles.

4. Using Social Media and Digital Platforms as a Means of Promotion

In the digital era, Islamic cooperatives use social media and other digital platforms to promote their products and services. This helps cooperatives reach a wider target market, especially the younger generation who are more familiar with technology [10]. Contoh: Kampanye pemasaran layanan koperasi melalui Instagram, Facebook, dan WhatsApp Business.

5. Development of a Data-Driven Decision-Making System

The management of sharia cooperatives in the digital era also involves the use of analytical technology to support strategic decision-making. This system allows cooperatives to analyze transaction data, member preferences, and market trends to design services that better meet their needs. Example: The use of big data to predict the financing needs of members in specific sectors.

6. Digital Literacy Training for Managers and Members

Digital transformation requires the readiness of human resources, both managers and members [11]. Therefore, sharia cooperatives need to conduct digital literacy training regularly so that all parties can understand and utilize the applied technology. Example: Workshop on the use of cooperative applications and introduction to digital-based sharia financial systems.

7. Partnership with Sharia Fintech

To support the implementation of digital technology, sharia cooperatives can collaborate with sharia fintech companies [12]. This partnership allows cooperatives to

leverage existing digital infrastructure without having to develop their own system from scratch. Example: Integration of cooperative services with digital payment applications or Sharia-based financing platforms.

Opportunities for Digital Transformation in Sharia Cooperative Management

Digitalization opens up many opportunities for Islamic cooperatives to grow. One of the biggest opportunities is the increase in financial inclusion, especially among communities that have not yet been reached by banking services. With digital technology, sharia cooperatives can reach more members, including those in remote areas. In addition, digitalization allows cooperatives to offer more innovative sharia products and services, such as digital savings based on wadiah contracts and micro financing based on murabahah contracts. Another opportunity is the increased competitiveness of sharia cooperatives in facing other financial institutions. With faster, more transparent, and integrated services, sharia cooperatives can attract the younger generation who are more familiar with technology. In addition, digitalization also supports the diversification of cooperative income sources through collaboration with sharia fintech and e-commerce platforms.

1. Improvement of Operational Efficiency

With digitalization, manual processes such as transaction recording, member management, and financial administration can be automated, thereby reducing time and operational costs.

2. Broader Access

Digital technology allows Islamic cooperatives to reach more members, including communities in remote areas that were previously difficult to access through traditional systems.

3. Innovation of Sharia Products and Services

Digitalization supports the development of innovative sharia financial products, such as digital savings based on wadiah contracts, microfinancing through applications, and sharia marketplaces for members.

4. Transparency and Accountability

Digital systems help improve the transparency of cooperative financial management. Members can monitor financial reports in real-time, thereby increasing trust in the cooperative's management.

5. Collaboration with Sharia Fintech

Digital transformation opens up opportunities to collaborate with sharia fintech, allowing cooperatives to leverage existing technological infrastructure to expand their services.

6. Improvement of Financial Inclusion

Digitalization supports the mission of sharia cooperatives to enhance financial inclusion in society, especially for those who are not yet served by conventional financial institutions.

7. Higher Competitiveness

With technology, sharia cooperatives can compete with other financial institutions, both sharia and conventional, by offering faster, more flexible, and technology-based services.

Challenges of Digital Transformation in Sharia Cooperative Management

Despite having many opportunities, sharia cooperatives also face a number of challenges in the digitalization process. The main challenge is the limited technological infrastructure, especially in rural or remote areas, which hinders internet access and the use of digital-based applications. Additionally, the lack of digital literacy among managers and cooperative members often becomes an obstacle in adopting new technology. Another challenge is the relatively high initial investment cost to build a digital system that complies with Sharia principles. The cooperative must also ensure that the implementation of digital technology does not violate Sharia principles, such as the prohibition of *riba* and *gharar*. Additionally, data security risks are a major concern, as cooperatives must maintain the confidentiality and integrity of member data. To address this challenge, sharia cooperatives need to establish partnerships with parties that have technological expertise, such as IT companies and sharia fintech, as well as strengthen human resource training [13].

1. Limitations of Technology Infrastructure

In many areas, especially in rural regions, limited internet access and technological infrastructure still pose major obstacles to the implementation of cooperative digitalization.

2. Lack of Digital Literacy

The low level of digital literacy, both among managers and cooperative members, hinders the adoption of new technology. This requires intensive training that demands additional time and costs.

3. Technology Investment Costs

The implementation of digital systems requires a significant initial investment for the procurement of software, hardware, and human resources training.

4. Compliance with Sharia Principles

Digital systems must be designed to comply with Sharia principles, such as the prohibition of *riba*, *gharar*, and *maysir*. This requires special consultation with Sharia experts and complex technical adjustments.

5. Data Security and Privacy

Digital transformation brings risks to the security of member data and the privacy of financial information. Cooperatives must ensure adequate data protection to prevent data breaches or misuse.

6. Resistance to Change

Some managers and members of the cooperative may resist change because they are already accustomed to the manual system. This can hinder the digital transformation process.

7. Regulatory Complexity

Digitalization in the sharia cooperative sector must comply with applicable regulations, both in terms of cooperative management and technology implementation. Sometimes, regulations that are not adaptive to technological developments become a challenge in themselves.

8. Continuity and System Maintenance

After the digital system is implemented, the cooperative must ensure the sustainability of its operations, including device maintenance and system updates. This requires a budget and a competent team.

Digital Transformation Solutions in Sharia Cooperative Management

To face the opportunities and challenges of digital transformation in the modern era, sharia cooperatives need a well-planned and adaptive strategy that remains grounded in sharia principles [14].

1. The improvement of technology infrastructure, sharia cooperatives need to invest in the procurement of technology infrastructure, such as hardware, software, and internet connectivity. Cooperatives located in remote areas can partner with the government or telecommunications companies to ensure adequate internet access, which will positively impact the smooth operation of their services.
2. Conducting training and digital literacy, intensive training for managers and cooperative members to enhance understanding, including the use of sharia-compliant digital financial applications and data security literacy. Impacting the readiness of human resources in adopting technology.
3. Collaborate with third parties by establishing communication, forming partnerships with sharia fintech companies, educational institutions, and technology enthusiasts to accelerate the implementation of digital technology and always ensure compliance with sharia principles [15].
4. Adjustment of digital systems with Sharia principles by involving Sharia experts in the design and implementation of cooperative services to remain in accordance with Sharia principles, avoiding *riba*, *gharar*, and *maysir*.
5. Improvement of data and system security, using encryption technology, firewalls, and dual authentication systems to protect member data from leaks or cyber attacks.
6. Increasing transparency and accountability using technology such as blockchain to record financial transactions with cooperative activities transparently.
7. Formulating a financial strategy for technology investment, allocating special funds for technology investment through the cooperative's reserve fund mechanism or seeking external funding from Islamic financial institutions, while ensuring the sustainability of technology investment without burdening the cooperative's operations.
8. This research reveals that digital transformation in the management of sharia cooperatives is a strategic step to enhance efficiency, transparency, and

competitiveness in the modern digital era [16]. The implementation of digital technology, such as application-based financial recording systems, online membership services, and collaboration with sharia fintech, has provided significant benefits in expanding service access and improving the operational quality of cooperatives. Opportunities arising from digital transformation include increased financial inclusion, the development of innovative sharia-compliant products and services, and the strengthening of cooperatives' competitiveness in the modern financial market. However, challenges such as limited technological infrastructure, low digital literacy, high investment costs, and data protection require special attention to ensure the success of this transformation.

9. Therefore, sharia cooperatives must adopt adaptive and collaborative strategies, involving intensive training for managers and members, establishing strategic partnerships, and ensuring that all digital initiatives comply with sharia principles. With a planned and sustainable approach, sharia cooperatives can optimally utilize digital technology to strengthen their role in promoting financial inclusion and enhancing the welfare of society based on Islamic values.

CONCLUSION

Fundamental Finding : This study underscores the critical role of reliable digital infrastructure in facilitating the digital transformation of sharia cooperatives. Beyond technological advancements, the success of digitalization relies on the competence of cooperative managers and members. Regular training programs focused on digital literacy and technology adoption are essential to ensure effective implementation.

Implication : Strengthening digital-based cooperative services can significantly enhance financial inclusion and contribute to economic welfare. Increased public awareness of the benefits of digital transformation is necessary to encourage broader participation in digital cooperative management. Additionally, strategic collaboration with stakeholders, including financial technology (fintech) companies and regulatory bodies, is crucial to optimizing digital adoption while maintaining sharia compliance. **Limitation :** This study primarily focuses on the conceptual and qualitative aspects of digital transformation in sharia cooperatives, limiting its ability to measure direct impacts quantitatively. Moreover, variations in technological infrastructure and regulatory environments across different regions may affect the generalizability of the findings.

Future Research : Further studies should evaluate the tangible impacts of digital transformation on cooperative performance, including operational efficiency, member satisfaction, and economic growth. Additionally, research exploring the integration of emerging technologies such as blockchain and artificial intelligence in sharia cooperatives could provide valuable insights into the future of digital Islamic finance.

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***Fitri Nur Latifah (Corresponding Author)**

Muhammadiyah University of Sidoarjo, Sidoarjo, Indonesia

Email: fitri.latifah@umsida.ac.id

Franciska Marta Oftariana

Muhammadiyah University of Sidoarjo, Sidoarjo, Indonesia

Email: franciskam.oaff19103@gmail.com

Kafita Luluk Anjani

Muhammadiyah University of Sidoarjo, Sidoarjo, Indonesia

Email: kafitala126@gmail.com
