



## Digitalization of the Sharia Economy: A Literature Review on the Role of Information Technology in Driving Economic Growth

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### ABSTRACT

The digitalization of the sharia economy has become an important driver in strengthening the halal industry, Islamic banking, and sharia-based financial services globally. Information technology plays a strategic role in improving efficiency, expanding access, and fostering innovation within sharia-compliant economic activities. This study employs a literature review method to analyze the contribution of information technology to the growth of the sharia economy, particularly in the context of fintech, e-commerce, digital payment systems, and blockchain-based contracts. Findings from the reviewed literature indicate that the integration of technology into the sharia economy enhances financial inclusion, promotes transparency, and increases transaction security. Nevertheless, digital transformation also poses challenges such as regulatory adaptation, cybersecurity risks, and the need for digital literacy. This study contributes to the body of knowledge by offering an up-to-date synthesis of the role of information technology in driving the growth of the sharia economy, while highlighting opportunities and challenges in its implementation.

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## INTRODUCTION

The development of digital technology has brought significant changes across various sectors of life, including the economic sector. Digital technology represents a shift from operational systems that previously relied heavily on human labor to systems that are more automated and sophisticated with the support of computers. This technology operates based on binary numbers (zero and one) readable by computers, where all forms of information are processed as numerical values. Unlike analog technology, which converts images and sound into radio waves, digital technology transforms them into digital data in the form of 1s and 0s, producing more natural color quality, high resolution, and stability even when displayed on large screens (Prasetya & Nugraha, 2022).

The rapid development of digital technology is marked by the emergence of various modern communication devices that enable individuals to process, produce, transmit, and receive messages anytime and anywhere. This advancement has triggered a transformation in the mass media sector, both print and electronic, placing society in a constant flow of massive and boundless information (Setiawan, 2021). While this development brings numerous positive impacts, such as faster information distribution and increased efficiency, it also poses negative consequences that must be anticipated, including the misuse of information and data security risks (Rahman & Putri, 2023).

Amid this wave of digitalization, the Islamic economy stands out as a sector with significant growth potential. Over the past decade, Islamic economics has experienced remarkable expansion across various parts of the world, including in non-Muslim majority countries such as the United Kingdom, which aspires to become a global hub for Islamic finance (Ismail & Omar, 2020). Indonesia, as the country with the largest Muslim population in the world—87% or approximately 207 million people according to the 2023 Statistics Indonesia (BPS) census—holds vast opportunities to leverage digitalization in advancing the Islamic economy. The utilization of technologies such as Islamic mobile banking applications, Sharia-compliant e-wallets, and halal digital trade platforms can expand market reach and enhance financial inclusion (OJK, 2022).

The digital era has enabled Islamic economic services to be available at users' fingertips through smartphones, allowing interactions, transactions, and education related to Islamic finance to be conducted anytime and anywhere. This golden opportunity demands that Islamic economy stakeholders adapt, innovate, and integrate information technology to remain competitive in a fast-paced and borderless global market (Yuliani, 2021).

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The research problems addressed in this study relate to the urgency of digitalizing the Islamic economy in the era of globalized gadget technology, the utilization of digitalization in Islamic economics, and the level of user trust in Sharia-based digital economic services. The purpose of this study is to gain an in-depth understanding of why digitalization is essential in building the economy during an era of rapidly advancing information technology, where the world is accessible in the palm of one's hand through gadgets without spatial or temporal limitations.

## METHOD

This study employs a literature review method to examine the role of information technology in driving the growth of the Islamic economy. This approach was chosen because it enables researchers to systematically collect, analyze, and synthesize findings from previous studies, thereby providing a comprehensive understanding of the topic under discussion (Snyder, 2019).

Reference collection was conducted through searches in reputable scientific databases such as Google Scholar, Scopus, ScienceDirect, and DOAJ. The publication time frame was set between 2015 and 2025 to ensure relevance to the latest developments in information technology within the Islamic economic sector. Keywords used in the literature search included: digitalisasi ekonomi syariah (Sharia digital economy), Islamic digital economy, Sharia financial technology, digital Islamic banking, and technology in Islamic finance.

The inclusion criteria for literature selection were as follows:

- a. Scientific articles, books, official reports, or conference proceedings discussing the digitalization of the Islamic economy.
- b. Publications addressing information technology and its application in the Sharia-based financial or economic sector.
- c. References directly related to economic growth, financial inclusion, or the efficiency of Sharia services.

The exclusion criteria were established to ensure the quality of the literature used, which included:

- a. Publications lacking clear data sources or theoretical foundations.
- b. Opinion pieces, popular news articles, or blogs that do not meet scientific standards.
- c. Literature that focuses solely on conventional economics without relevance to Islamic economic principles.

The literature analysis process involved critically reading each source, identifying key themes, comparing research findings, and formulating a synthesis of relevant insights. This process adhered to systematic literature review guidelines to ensure objectivity and traceability of the findings (Kitchenham & Charters, 2007).

## RESULT AND DISCUSSION

The Islamic economy is an economic system grounded in the principles of Islamic Sharia, such as the prohibition of *riba* (usury), *gharar* (excessive uncertainty), and *maysir* (gambling), while emphasizing justice, public welfare, and equitable wealth distribution. These principles are implemented through the application of Sharia-compliant contracts (*akad*), the management of funds in accordance with Islamic provisions, and the strengthening of the real sector to support economic sustainability.

Digitalization of the economy is defined as the transformation process of economic activities by leveraging digital technology to improve efficiency, reach, and service quality. In the context of the Islamic economy, digitalization can accelerate transactions, expand access to Sharia financial services, and support financial inclusion based on Islamic values.

Information technology plays a strategic role in the Islamic financial sector, such as providing application-based transaction platforms, digital payment systems, and financial data integration that facilitates monitoring and ensures compliance with Sharia principles. The adoption of such technologies fosters innovation, broadens the market for Islamic financial services, and contributes added value to the national economy.

The literature review findings indicate that digital innovation has brought significant changes to Islamic banking through the development of services such as mobile banking, internet banking, and Sharia blockchain applications. These technologies not only facilitate customer transactions but also enhance transparency, security, and operational efficiency for Islamic financial institutions.

Digitalization has been shown to contribute positively to economic growth at both micro and macro levels. At the micro level, Sharia-based small and medium enterprises (SMEs) gain easier access to financing and digital markets. At the macro level, digitalization drives productivity, expands financial inclusion, and strengthens the competitiveness of the Islamic financial industry in the global arena.

The Financial Services Authority (OJK, 2023) reports that the use of Sharia financial technology (Islamic fintech) has facilitated Sharia-compliant peer-to-peer financing, thereby expanding capital access for micro-entrepreneurs. Another study by Ahmed and Haron (2022) emphasizes that the application of artificial intelligence and big data analytics in Islamic banking can improve the quality of risk analysis, support creditworthiness assessment, and optimize investment portfolio management.

However, the implementation of technology in the Islamic economy is not without challenges. Regulatory frameworks that are not yet fully adaptive to digital innovation can pose obstacles, particularly in the development of new financial instruments requiring specific fatwas or guidelines. Variations in digital literacy among the public also influence the effectiveness of technology adoption. Furthermore, cybersecurity issues are a major concern in ensuring data protection and transaction security, in line with the Islamic principle of amanah (trustworthiness).

Several studies (Rahman & Abdullah, 2021; Karim, 2023) highlight the importance of synergy between the government, Islamic financial institutions, and technology providers to create an inclusive, secure, and sustainable Sharia digital ecosystem. This collaborative approach includes enhancing digital literacy, strengthening responsive regulations, and investing in adequate digital infrastructure.

Table 1. Literature Review Findings on the Digitalization of the Islamic Economy

Author & Year	Focus of Study	Key Findings	Relevance to This Study
Hijriah et al. (2024)	Sharia Fintech Ecosystem	Systematic research covering financial inclusion, customer behavior, regulation, and fintech ecosystems.	Illustrates the structure and critical aspects of the digital ecosystem
Rabbani et al. (2023, MDPI)	Islamic fintech trends & IT	Blockchain, AI, ESG, and enhanced financial inclusion as the future trends of Sharia fintech.	Highlights technological innovation and ESG integration
As-Salafiyah (2024)	Sharia fintech during COVID-19	Surge in Sharia fintech adoption during the pandemic as a solution for inclusion and service delivery.	Evidence of phenomenal technology adoption in crisis
Aisyah & Mardhiyatturrositaning sih (2024)	Inclusive digital finance in Islamic economy	Islamic banks use digital platforms for <i>zakat</i> , <i>infaq</i> , and commercial/non-commercial services.	Demonstrates inclusive digitalization in Sharia services
Alsadi (2025)	Blockchain & Islamic economy	Decentralization that is fair, transparent, and Sharia-compliant.	Revolutionary technology for Islamic finance
Waliullah et al. (2025)	Cybersecurity in digital banking	Threats of phishing/malware; MFA, biometrics, AI, and blockchain as security and trust solutions.	Addresses critical security aspects in Sharia fintech

The findings confirm that digitalization fosters efficiency, inclusion, and innovation—through Sharia fintech, blockchain, and AI. The need for adaptive regulation, digital literacy, and technological security becomes evident. ESG-oriented approaches and cross-sector synergy emerge as key strategic agendas.

## Discussion

The digitalization of the Islamic economy refers to the transformation of processes, services, and business models based on Sharia principles through the utilization of information and communication technology (ICT). Technological developments such as Islamic fintech, blockchain, halal e-commerce, and Sharia-based crowdfunding have become key drivers in enhancing financial inclusion and fostering economic growth grounded in Islamic values.

According to the Financial Services Authority (OJK, 2024), the penetration of digital Islamic financial services in Indonesia has increased significantly, particularly in sectors such as Sharia-based QRIS payments, digital Islamic banking, and Sharia-compliant peer-to-peer lending investments. This trend aligns with the Bank Indonesia (2023) report, which emphasizes that digitalization can expand access for halal SMEs to global markets. The literature review reveals several key roles of digitalization in driving the growth of the Islamic economy:

1. **Enhancing Sharia Financial Inclusion**

Digitalization enables individuals who previously lacked access to formal financial services to utilize Sharia-compliant solutions such as Islamic mobile banking, Sharia digital wallets, and app-based microfinance services.

2. **Transaction and Financing Efficiency**

The application of blockchain technology and smart contracts in Islamic finance can reduce transaction costs, increase transparency, and ensure compliance with Sharia contracts.

3. **Expansion of the Halal Product Market**

Halal e-commerce platforms with MUI certification verification allow producers and consumers to transact securely and in compliance with Sharia, thereby expanding the market for halal products both domestically and internationally.

4. **Strengthening the Halal Value Chain Ecosystem**

The integration of technology in the halal supply chain facilitates the tracking and auditing of product halal certification, increasing consumer trust and boosting the competitiveness of the industry.

However, the review also identifies several major challenges, including low Sharia digital literacy among the public, limited regulations governing Sharia-based digital innovations, and cybersecurity threats that may undermine user trust. According to Mutmainah et al. (2023), the success of Islamic economic digitalization requires synergy between the government, regulators, the technology industry, and Islamic financial institutions to build a secure, inclusive, and Sharia-compliant digital infrastructure.

Thus, the digitalization of the Islamic economy is not merely a technological transformation but also a component of an economic development strategy rooted in Islamic values. The appropriate use of technology can serve as a catalyst for sustainable, inclusive, and globally competitive growth in the Islamic economy.

## CONCLUSION

Digitalization represents a strategic opportunity for the Islamic economy to grow in a more inclusive, efficient, and transparent manner. The adoption of technologies such as Islamic fintech, blockchain, and artificial intelligence (AI) not only strengthens financial services in accordance with Islamic principles but also fosters innovation in halal products, supports sustainable growth, and enhances transaction efficiency. This potential can serve as a driving force for financial inclusion and transparency in the Islamic economy in the digital era. However, challenges such as low digital literacy, the need for adaptive regulations, and cybersecurity threats must be addressed promptly. These efforts require active collaboration between regulators, financial institutions, industry players, and academia. Strategic recommendations include strengthening an integrated Islamic fintech ecosystem, investing in digital infrastructure, and integrating Environmental, Social, and Governance (ESG) values into the development of Islamic economic products to achieve sustainable growth.

## REFERENCES

- Aisyah, S. N., & Mardhiyaturrositaningsih. (2024). Islamic digital finance: Technology to enhance financial systems to be more inclusive and equitable. *Proceeding International Conference on Islamic Economics and Business*, 3(1). conference.uin-suka.ac.id

- Alsadi, N. (2025). The convergence of blockchain technology and Islamic economics: Decentralized solutions for Shariah-compliant finance. *arXiv*.
- As-Salafiyah, A. (2024). Islamic fintech during COVID-19 outbreak: A bibliometric review. *Islamic Finance and Technology*, 1(1). journals.smartinsight.id
- Hijriah, H. Y., Rusgianto, S., Kholidah, H., Herianingrum, S., & Md Sahiq, A. N. (2024). Critical development of Islamic financial technology ecosystem: Lesson learned from financial technology literature. *Journal of Islamic Accounting and Business Research*, ahead-of-print. Emerald.
- Ismail, A. G., & Omar, M. A. (2020). Islamic finance and digital transformation: Opportunities and challenges. *Journal of Islamic Economics*, 12(2), 45–59.
- Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering* (Technical Report, EBSE-2007-01).
- Otoritas Jasa Keuangan (OJK). (2022). *Perkembangan ekonomi syariah di era digital*. Jakarta: OJK Press.
- Prasetya, B., & Nugraha, R. (2022). Teknologi digital dan dampaknya pada transformasi ekonomi. *Jurnal Teknologi dan Masyarakat*, 8(1), 15–27.
- Rahman, F., & Putri, N. D. (2023). Digitalisasi dan tantangan keamanan data di Indonesia. *Jurnal Keamanan Siber*, 5(3), 101–115.
- Rabbani, M., et al. (2023). Islamic finance in the era of financial technology: A bibliometric review of future trends. *Finance*, 11(2), 76. MDPI.
- Setiawan, H. (2021). Perkembangan teknologi komunikasi digital di Indonesia. *Jurnal Komunikasi Modern*, 14(2), 88–97.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Waliullah, M., Hossain George, M. Z., Hasan, M. T., Alam, M. K., Munira, M. S. K., & Siddiqui, N. A. (2025). Assessing the influence of cybersecurity threats and risks on the adoption and growth of digital banking: A systematic literature review. *arXiv*.
- Yuliani, S. (2021). Strategi pengembangan ekonomi syariah berbasis digital di Indonesia. *Jurnal Ekonomi dan Bisnis Islam*, 9(1), 55–70.