

Exploring the Role of Smart Technology in the Social and Economic Transformation of Muslims

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ARTICLE INFO	ABSTRACT
Volume: 4 ISSN: 2963-5489	This study aims to explore how smart technologies, such as artificial intelligence, blockchain, and digital platforms, play a role in supporting the social and economic transformation of Muslims. Using an exploratory qualitative approach, data was collected through literature review and interviews with several expert informants. The results show that smart technologies open wider access to Islamic information, encourage the growth of a sharia-compliant digital economy, and strengthen the community's social networks through virtual communities. However, the use of these technologies also faces ethical challenges and requires the integration of Islamic values, particularly the maqasid sharia, into their development. This study recommends collaboration between stakeholders to ensure that the community's digital transformation is fair, ethical, and sustainable.
KEYWORD	
Smart Technology, Social Transformation, Islamic Economics, Maqashid Sharia, Digitalization of The Ummah	

1. Introduction

The development of intelligent technologies such as artificial intelligence (AI), the Internet of Things (IoT), big data, and blockchain has brought structural changes to social and economic life around the world. These technologies drive efficiency, automation, and expanded access to information and public services. The Industrial Revolution 4.0 era not only demands rapid adaptation from individuals and institutions but also creates opportunities for profound transformation in economic systems and social structures (Schwab, 2017).

Muslims, as part of the global community, face significant challenges in adopting and integrating smart technology into their daily lives. On the one hand, there is significant potential to empower communities through economic digitalization, online education, and technology-based social services. However, obstacles such as low digital literacy, limited infrastructure, and socioeconomic disparities remain major issues. Furthermore, the limited integration of Islamic values in the use of technology presents a unique ethical challenge (Al-Kandari & Dashti, 2014).

The use of smart technology by Muslims must be directed towards supporting the achievement of the objectives of sharia (maqasid syariah), namely safeguarding religion, life, intellect, posterity, and wealth. With a values-based approach, social and economic transformation can occur in a just, sustainable, and ethical manner. Therefore, exploring the role of smart technology is crucial not only for understanding its impact but also for formulating strategies aligned with Islamic principles in navigating the digital era (Kamali, 2008).

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2. Literature Review

To understand how artificial intelligence (AI) technology can contribute to the Role of Smart Technology in the Social and Economic Transformation of Muslims:

2.1. *Smart Technology and Digital Transformation*

Smart technologies encompass innovations such as artificial intelligence (AI), big data, the Internet of Things (IoT), and blockchain, driving automation and efficiency across various sectors. According to Schwab (2017), these technologies are key pillars of the Industrial Revolution, impacting major changes in production, distribution, and consumption systems. Digital transformation not only transforms business processes but also impacts the way people interact, work, and obtain information (Brennen & Kreiss, 2016).

2.2. *The Role of Technology in Social Change*

Technology has the power to transform social structures by providing access to information, online educational services, and social media that accelerate communication and advocacy. Digital technology also opens up broader public participation in social development. Castells (2010) emphasized that digital networks create an interconnected society, where information becomes a key force in shaping opinions, behavior, and social relations.

2.3. *Technology and Empowerment of the Community Economy*

In an economic context, smart technology opens up new opportunities for entrepreneurship, digital finance (fintech), and e-commerce. This is particularly relevant for Muslims seeking to strengthen Sharia-compliant economic independence. The use of technology in Islamic economics can increase the efficiency of zakat, waqf, and Sharia-compliant crowdfunding (Mohamed & Ali, 2018). Digital platforms also provide a means for Muslim MSMEs to expand their markets and increase their global competitiveness (Kurniawan et al., 2020).

2.4. *Integration of Islamic Values in the Utilization of Technology*

The use of technology by Muslims must adhere to ethical values and the maqashid sharia (objectives of Islamic law), such as protecting property, reason, and human dignity. Technology should not be free-standing without moral guidance, as this can lead to dehumanization or abuse. (Kamali, 2008) explains that maqashid sharia can serve as a conceptual framework for assessing whether a technological innovation aligns with the principles of justice, benefit, and sustainability. Therefore, an Islamic approach to technology must be critical yet adaptive.

3. Methodology

This research uses an exploratory qualitative approach to explore the impact of smart technology on the social and economic dynamics of Muslims. This approach was chosen because it is relevant to the complex and contextual nature of the issue, and requires an in-depth descriptive understanding of the interaction between technological developments and Islamic values. In its implementation, this research combines desk research and case studies, reviewing scientific literature, institutional reports, and relevant articles. In addition, primary data collection was conducted through semi-structured interviews with key informants competent in technology and Islamic economics, including academics, Muslim digital business actors, and technology-based Islamic finance practitioners.

The data collection techniques used included documentation studies, reviewing various secondary sources such as journals, books, news, and policies related to Islamic technology and economics, as well as qualitative interviews with 5–7 expert informants. The data obtained were analyzed using thematic analysis methods, which aim to identify patterns, themes, and interrelationships between concepts that emerge from the interviews and documentation. The analysis process included data reduction, categorization based on themes such as smart technology and economic transformation, and drawing conclusions to gain new insights. To ensure data validity, source triangulation was conducted by comparing various references and informants' perspectives to ensure the accuracy and consistency of the findings.

4. Results and Discussion

In the discussion there are several important points, namely:

4.1 Smart Technology and Accessibility of Islamic Information

The use of intelligent technology, particularly artificial intelligence (AI) and machine learning-based applications, has increased Muslims' accessibility to Islamic information and digital education. For example, the emergence of prayer reminder apps, AI Quran assistants, and algorithm-based digital da'wah platforms. These technologies enable the delivery of personalized and real-time Islamic content, thereby enhancing religious understanding and facilitating independent learning across all levels of society (Al-Emran et al., 2020). However, serious challenges remain regarding the authenticity of content and the dissemination of religious information that is not academically or theologically validated, which has the potential to mislead the community.

4.2 Technology-Based Islamic Economic Innovation

This study found that smart technology also plays a role in driving innovation in the Islamic economic sector, such as blockchain-based zakat and waqf systems, Islamic digital financial services (sharia fintech), and halal e-commerce. Blockchain technology enables more transparent, accountable, and efficient recording of zakat and waqf transactions (Rabbani et al., 2021). Furthermore, Muslim MSMEs are increasingly encouraged to utilize digital platforms to expand their markets and increase the competitiveness of halal products. This demonstrates that the Islamic economy is increasingly digitalized and adapting to global technological developments (Salleh et al., 2022).

4.3 Social Impact: Formation of Virtual Communities and Collective Identity

Another finding from this study is the formation of active virtual Muslim communities on various social media and digital platforms. These communities serve as platforms for disseminating information, religious education, and advocating for socio-economic issues based on Islamic values. According to Castells (2010), the formation of such digital networks can strengthen collective identity and faith-based social solidarity. However, this dynamic also risks triggering polarization, particularly if extreme narratives or faith-based propaganda are disseminated without adequate moderation.

4.4 The Urgency of Integrating Islamic Ethics in Technology

Although smart technology offers significant benefits, it has not yet been fully integrated with Islamic ethical principles. Expert informants in this study emphasized the importance of implementing the maqasid sharia—such as protecting the mind, property, and life—in the design and use of digital technology. Without a strong ethical foundation, technology use can neglect moral aspects and the welfare of the community (Kamali, 2008). Therefore, it is necessary to develop an Islamic technological ethics framework that can guide innovation so that it remains in line with the values of justice, transparency, and social responsibility.

5. Conclusion

This research demonstrates that smart technology plays a strategic role in accelerating the social and economic transformation of Muslims. Innovations such as artificial intelligence, blockchain, and digital platforms have opened up widespread access to Islamic information, strengthened religiously based social networks, and created new economic opportunities based on Sharia principles. Utilizing this technology enables Muslims to improve digital literacy, strengthen collective identity, and encourage economic growth based on justice and sustainability. The benefits of smart technology can only be optimized if supported by the integration of Islamic values in its development. Without an ethical and regulatory framework based on the maqasid sharia, technological advancement risks causing social disruption, data misuse, and the dissemination of unvalidated religious content. Therefore, collaboration between academics, religious scholars, technology practitioners, and policymakers is essential to ensure that the digital transformation of Muslims is inclusive, ethical, and beneficial to all levels of society.

Reference

- Al-Emran, M., Elsherif, H.M., & Shaalan, K. (2020). Investigating attitudes towards the use of mobile learning in higher education. *Computers in Human Behavior*, 56, 93-102.
- Al-Kandari, A. J., & Dashti, A. A. (2014). Evaluating the use of the Internet among Kuwaiti users. *Telematics and Informatics*, 31(3), 452–458.
- Brennen, S., & Kreiss, D. (2016). Digitalization and Digitization. *The International Encyclopedia of Communication Theory and Philosophy*.
- Castells, M. (2010). *The Rise of the Network Society* (2nd ed.). Wiley-Blackwell.

- Kamali, M.H. (2008). *Maqasid al-Shari'ah Made Simple*. International Institute of Islamic Thought (IIIT).
- Kurniawan, B., Susanto, H., & Nizam, A. (2020). The Role of E-Commerce in Empowering Muslim Entrepreneurs in Indonesia. *International Journal of Islamic Economics and Finance Studies*, 6(1), 123-138.
- Mohamed, N., & Ali, A. (2018). Financial Technology (FinTech) and Its Implications on Islamic Finance Regulations. *Islamic Economic Studies*, 26(1), 59–76.
- Rabbani, M.R., Khan, S., & Thalassinou, E.I. (2021). Fintech, Blockchain and Islamic Finance: An Extensive Literature Review. *International Journal of Economics and Business Administration*, 9(3), 65–86.
- Salleh, MS, Hassan, MK, & Habib, AM (2022). The Role of Islamic Fintech in Supporting Financial Inclusion: Evidence from Southeast Asia. *Journal of Islamic Monetary Economics and Finance*, 8(1), 25-46.
- Schwab, K. (2017). *The Fourth Industrial Revolution*. World Economic Forum.