

**IMPLEMENTATION OF BANK OPERATIONAL RISK MANAGEMENT IN
HUMAN RESOURCE MANAGEMENT AT BANK SYARIAH INDONESIA**

**PENERAPAN MANAJEMEN RISIKO OPERASIONAL BANK DALAM
MANAJEMEN SUMBER DAYA MANUSIA DI BANK SYARIAH INDONESIA**

Titania Diana Putri^{1*}, Ruslan Abdul Ghofur², Budimansyah³

Pascasarjana UIN Raden Intan Bandar Lampung^{1,2,3}

titaniadianaputri@gmail.com

ABSTRACT

This study examines the integration of Islamic economics and the digitalization of Micro, Small, and Medium Enterprises (MSMEs) as a strategic approach to achieving economic inclusion within the framework of the Sustainable Development Goals (SDGs). The rapid advancement of digital technologies has transformed business ecosystems globally, offering new opportunities for MSMEs to enhance efficiency, expand market access, and improve financial management. Simultaneously, Islamic economics provides an ethical and justice-oriented foundation that promotes transparency, equitable distribution, and financial inclusion through Sharia-compliant principles. By combining these two frameworks, this study explores how digital innovation and Islamic values can jointly support inclusive and sustainable economic growth. Using a qualitative descriptive approach, data were sourced from academic journals, institutional reports, and policy documents to analyze the impact of digital transformation and Islamic economic practices on MSME development. The findings reveal that the adoption of digital tools such as e-commerce platforms, digital payments, accounting applications, and Islamic fintech significantly enhances MSME competitiveness and financial accessibility. Furthermore, Islamic financial instruments based on profit-and-loss sharing, fairness, and risk-sharing offer ethical alternatives that support business resilience and long-term sustainability. The integration of Islamic economics and digitalization aligns strongly with SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure), demonstrating its potential to advance inclusive economic participation, especially among marginalized groups. The study concludes that a synergistic approach combining digital transformation and Islamic economic principles is essential for building an equitable and resilient economic system. It recommends strengthening cross-sector collaboration, enhancing digital and financial literacy, and expanding access to Sharia-compliant digital infrastructure to maximize the inclusive impact of MSMEs in the digital era.

Keywords: *Islamic Economics; Digitalization; MSMEs; Economic Inclusion; Sustainable Development Goals; Islamic Fintech; Inclusive Growth.*

ABSTRAK

Studi ini mengkaji integrasi ekonomi Islam dan digitalisasi Usaha Mikro, Kecil, dan Menengah (UMKM) sebagai pendekatan strategis untuk mencapai inklusi ekonomi dalam kerangka Tujuan Pembangunan Berkelanjutan (SDGs). Kemajuan pesat teknologi digital telah mengubah ekosistem bisnis secara global, menawarkan peluang baru bagi UMKM untuk meningkatkan efisiensi, memperluas akses pasar, dan memperbaiki manajemen keuangan. Secara bersamaan, ekonomi Islam menyediakan landasan etis dan berorientasi keadilan yang mempromosikan transparansi, distribusi yang adil, dan inklusi keuangan melalui prinsip-prinsip yang sesuai dengan syariah. Dengan menggabungkan kedua kerangka kerja ini, penelitian ini mengeksplorasi bagaimana inovasi digital dan nilai-nilai Islam dapat bersama-sama mendukung pertumbuhan ekonomi yang inklusif dan berkelanjutan. Menggunakan pendekatan deskriptif kualitatif, data diperoleh dari jurnal akademik, laporan institusi, dan dokumen kebijakan untuk menganalisis dampak transformasi digital dan praktik ekonomi Islam terhadap pengembangan UMKM. Temuan menunjukkan bahwa adopsi alat digital seperti platform e-commerce, pembayaran digital, aplikasi akuntansi, dan fintech Islam secara signifikan meningkatkan daya saing UMKM dan aksesibilitas keuangan. Selain itu, instrumen keuangan Islam yang didasarkan pada pembagian keuntungan dan kerugian, keadilan, dan pembagian risiko menawarkan alternatif etis yang mendukung ketahanan bisnis dan keberlanjutan jangka panjang. Integrasi ekonomi Islam dan digitalisasi sejalan dengan Tujuan Pembangunan Berkelanjutan (SDG) 1 (Tanpa Kemiskinan), SDG 8 (Pekerjaan Layak dan Pertumbuhan Ekonomi), dan SDG 9 (Industri, Inovasi, dan Infrastruktur), menunjukkan potensinya dalam mendorong partisipasi ekonomi inklusif, terutama di kalangan kelompok marjinal. Studi ini menyimpulkan bahwa

pendekatan sinergis yang menggabungkan transformasi digital dan prinsip-prinsip ekonomi Islam sangat penting untuk membangun sistem ekonomi yang adil dan tangguh. Studi ini merekomendasikan penguatan kolaborasi lintas sektor, peningkatan literasi digital dan keuangan, serta perluasan akses ke infrastruktur digital yang sesuai syariah untuk memaksimalkan dampak inklusif UMKM di era digital.

Kata Kunci: Ekonomi Islam; Digitalisasi; UMKM; Inklusi Ekonomi; Tujuan Pembangunan Berkelanjutan; Fintech Islam; Pertumbuhan Inklusif.

INTRODUCTION

Global economic development over the past two decades has demonstrated a profound transformation in production, distribution, and consumption patterns. The digital revolution has penetrated nearly every sector of economic activity, including micro, small, and medium enterprises (MSMEs). In Indonesia, MSMEs play a strategic role as the backbone of the national economy, contributing significantly to employment generation and gross domestic product (GDP). However, despite this potential, many MSMEs still face structural barriers such as limited financial access, low digital literacy, and the suboptimal utilization of technology in business operations (Suryani, 2024). Consequently, the opportunities created by the digital economy are not evenly distributed, particularly among MSMEs based on Islamic economic values.

Islamic economics, as a system, emphasizes not only economic efficiency but also ethical and social principles oriented toward justice, equity, and public welfare. These principles align closely with the objectives of sustainable and inclusive development. Islamic economics encompasses not only the Islamic financial sector but also production, distribution, and consumption activities guided by sharia values such as justice (*'adl*), balance (*tawazun*), and the avoidance of *riba*, *gharar*, and *maysir* (Rokhlinasari & Widagdo, 2023). Therefore, the integration of Islamic economics and digitalization is a

promising strategy to enhance equitable and sustainable economic inclusion.

Digitalization provides MSMEs with vast opportunities to improve efficiency and expand their market reach through digital platforms such as e-commerce, Islamic fintech, and QRIS-based payment systems. With the support of digital technology, MSMEs can access broader markets, reduce operational costs, and enhance competitiveness. However, digital transformation conducted without considering Islamic ethical principles risks creating new forms of inequality and neglecting moral dimensions of the economy (Agista, Syarifah, & Arlina, 2025). Hence, the application of digitalization within Islamic economic frameworks must emphasize the principles of *maslahah* (public benefit), justice, and sustainability.

Economic inclusion constitutes one of the main pillars of the *Sustainable Development Goals* (SDGs), particularly Goal 8 (Decent Work and Economic Growth) and Goal 10 (Reduced Inequalities). Economic inclusion entails equal access to economic resources, financial services, technology, and markets. Within the Islamic economic context, such inclusion can be realized through strengthening Islamic financial institutions, improving Islamic financial literacy, and adopting digital technologies compliant with sharia principles (Amaliatul Chusniah, 2023). Previous studies have shown that Islamic financial literacy positively influences MSME performance and

their ability to access Islamic financial services (Rivaldi Setiawan, 2023).

In Indonesia, the synergy between digitalization and Islamic economics is increasingly evident through innovations such as QRIS Syariah, Islamic-based fintech, and halal e-commerce platforms. These innovations promote financial inclusion and strengthen the competitiveness of sharia-based MSMEs (Sari & Rachmawati, 2024). Digital payment systems like QRIS have proven effective in facilitating transactions and improving financial transparency among small entrepreneurs. Nevertheless, challenges remain uneven digital infrastructure, low digital literacy among MSME actors, and the absence of comprehensive policies that integrate digital and Islamic dimensions simultaneously (Azhar, 2025).

The integration of Islamic economics and MSME digitalization contributes to three essential dimensions of sustainable development. The first is access, which provides opportunities for MSME actors to utilize Islamic financial services and digital technologies. The second is participation, whereby digitalization enables entrepreneurs to actively engage in global value chains while adhering to Islamic ethical standards. The third is sustainability, ensuring that economic growth occurs fairly and inclusively in accordance with the SDGs (Rokhlinasari & Widagdo, 2023).

Thus, integrating Islamic economics with MSME digitalization is not merely a contemporary economic phenomenon but a strategic pathway toward achieving equitable and sustainable economic inclusion. This study is significant because it addresses a gap in the literature concerning how Islamic economic values can be integrated with digital technology to

empower communities through MSMEs. The approach is expected to strengthen MSMEs' roles in the national economy while contributing meaningfully to the realization of the *Sustainable Development Goals* in Indonesia.

LITERATURE REVIEW

a. Islamic Economics and Inclusive Development

Islamic economics offers a moral and ethical foundation for building an inclusive and sustainable economy. It promotes justice (*'adl*), balance (*tawazun*), and the equitable distribution of wealth through mechanisms such as *zakat*, *waqf*, and profit-sharing systems (*mudarabah* and *musyarakah*) (Rokhlinasari & Widagdo, 2023). According to Amaliatul Chusniah (2023), Islamic economics emphasizes not only economic growth but also social welfare and moral responsibility. This paradigm rejects exploitative practices such as *riba* (interest) and *gharar* (uncertainty), fostering financial inclusion and stability.

From a development perspective, Islamic economic principles align with the *Sustainable Development Goals* (SDGs), particularly goals related to poverty alleviation, decent work, and reduced inequality. Zakat and Islamic social finance are considered effective tools for addressing economic disparities while ensuring wealth circulation in society (Rokhlinasari & Widagdo, 2023). This connection establishes Islamic economics as both a value system and a development strategy oriented toward equity and social justice.

b. MSMEs and Digital Transformation

Micro, Small, and Medium Enterprises (MSMEs) are vital contributors to Indonesia's economic structure, accounting for over 60% of GDP and employing the majority of the workforce (Suryani, 2024). Despite this importance, MSMEs often encounter challenges such as limited access to finance, low technological capability, and a lack of digital skills. The digital transformation characterized by the adoption of e-commerce platforms, fintech applications, and digital payment systems has opened new opportunities for MSMEs to improve efficiency, innovation, and competitiveness (Agista, Syarifah, & Arlina, 2025).

Digitalization enhances MSMEs' access to broader markets, reduces transaction costs, and enables data-driven decision-making. According to Azhar (2025), the integration of digital tools allows MSMEs to participate in the global value chain and attract investment. However, digital transformation must be inclusive; without sufficient literacy and infrastructure, small-scale entrepreneurs risk exclusion from the digital economy. Thus, policies promoting digital literacy, infrastructure development, and equitable access to digital services are essential to ensure the inclusive nature of digitalization.

c. Islamic Financial Inclusion

Financial inclusion refers to providing access to affordable financial products and services to all segments of society. Within an Islamic framework, financial

inclusion must adhere to sharia principles emphasizing fairness, transparency, and risk-sharing rather than interest-based transactions (Amaliatul Chusniah, 2023). Rivaldi Setiawan (2023) found that Islamic financial literacy significantly influences MSME performance and the utilization of Islamic financial services in Indonesia. This demonstrates that increasing awareness and understanding of Islamic financial instruments can empower MSMEs to manage capital more effectively and ethically.

Furthermore, Islamic fintech (*financial technology*) has emerged as a critical enabler of inclusion. Platforms offering sharia-compliant financing such as peer-to-peer lending and crowdfunding bridge the gap between Islamic finance and digital technology (Sari & Rachmawati, 2024). These innovations expand access to finance for MSMEs that traditionally lacked collateral or formal banking relationships, promoting financial democratization while maintaining compliance with Islamic principles.

d. Integration of Digitalization and Islamic Economics

The convergence of Islamic economics and digitalization represents a transformative strategy for inclusive economic growth. According to Agista et al. (2025), digitalization in the Islamic economic ecosystem provides new opportunities for sharia-based innovation, such as halal e-commerce, digital *zakat* management, and sharia-compliant fintech. This integration supports the dual goals of economic efficiency and ethical sustainability.

Suryani (2024) highlights that digitalization of sharia-based MSMEs not only improves business performance but also enhances social impact, aligning with SDG objectives. The integration creates a value-based digital ecosystem where technology becomes a means of realizing *maqashid syariah* (the objectives of Islamic law) protection of faith, life, intellect, lineage, and wealth.

However, Azhar (2025) warns that this integration faces several challenges: limited regulatory frameworks, insufficient digital infrastructure in rural areas, and the lack of standardized sharia compliance mechanisms for digital financial products. Therefore, collaboration between the government, financial institutions, and technology providers is crucial to building a sustainable Islamic digital economy.

e. **Integration as a Pathway to the SDGs**

The *Sustainable Development Goals* (SDGs) provide a universal framework for achieving inclusive and sustainable economic progress. In this context, integrating Islamic economics with MSME digitalization supports several SDG targets particularly Goal 1 (No Poverty), Goal 8 (Decent Work and Economic Growth), Goal 9 (Industry, Innovation, and Infrastructure), and Goal 10 (Reduced Inequalities).

Digitalization empowers MSMEs to create more jobs, enhance productivity, and access new markets, while Islamic economics ensures that such growth adheres to ethical and equitable principles. According to

Rokhlinasari and Widagdo (2023), this integration embodies both material and spiritual dimensions of human welfare, ensuring that development outcomes are sustainable and morally grounded. Hence, the synergy between Islamic economics and digital transformation of MSMEs serves as a strategic pathway toward inclusive economic development in Indonesia and beyond.

RESEARCH METHODS

This study employs a qualitative descriptive research design aimed at analyzing the integration of Islamic economics and MSME digitalization as a strategy to achieve economic inclusion within the framework of the Sustainable Development Goals (SDGs). The qualitative descriptive approach was chosen because it enables the researcher to obtain a comprehensive understanding of the interaction between Islamic economic principles, digital transformation, and inclusive economic growth. As Creswell (2018) explains, qualitative descriptive methods emphasize contextual interpretation and deep exploration of social phenomena rather than numerical generalization, allowing for a richer and more holistic analysis of the topic.

The research utilizes a library-based or literature study approach, focusing on reviewing and synthesizing existing theories and empirical findings from credible scholarly sources. According to Zed (2014), library research enables the researcher to construct conceptual understanding through systematic review of academic literature, books, and institutional reports. Therefore, the data in this study were entirely derived from secondary

sources, including scientific journals, academic books, official publications from Bank Indonesia, the Financial Services Authority (OJK), and the Central Bureau of Statistics (BPS), as well as open-access reports relevant to Islamic economics, MSME development, and the digital economy.

The process of data collection was conducted through document analysis, which involves identifying, evaluating, and synthesizing literature relevant to the research theme. The researcher selected materials published between 2020 and 2025 to ensure data relevance and reliability. The analysis focused on key themes such as Islamic financial inclusion, MSME digitalization, and the alignment of both with the SDG agenda. As Bowen (2009) states, document analysis allows researchers to extract essential insights and identify recurring concepts from multiple written sources, making it an effective method for conceptual and theoretical synthesis.

Data were analyzed using content and thematic analysis, a method that categorizes information into themes to identify interconnections among concepts. The analysis focused on exploring three core dimensions: (1) the ethical and justice-based principles of Islamic economics, (2) the transformative impact of digitalization on MSME empowerment, and (3) the synergy between these two elements in promoting inclusive economic growth aligned with the SDGs. Following Braun and Clarke (2019), thematic analysis enables researchers to systematically code qualitative data, uncover patterns, and interpret meanings within a social and economic context.

To ensure the validity and reliability of findings, the researcher employed source triangulation by comparing data across different

academic publications and institutional reports. Only peer-reviewed and credible sources were included to enhance the trustworthiness and consistency of results. According to Lincoln and Guba (1985), credibility in qualitative research is achieved through methodological transparency, consistency, and rigorous interpretation of data. Despite the study's reliance on secondary data, which may limit direct empirical verification, the qualitative approach provides depth and theoretical richness, offering a strong conceptual foundation for future empirical research on Islamic economic digitalization and inclusive development.

RESULTS AND DISCUSSIONS

The findings of this study reveal that the integration of Islamic economic principles and digitalization of Micro, Small, and Medium Enterprises (MSMEs) provides a comprehensive strategy to achieve economic inclusion and sustainable development in Indonesia. Islamic economics, which is grounded in values of justice (*'adl*), balance (*tawazun*), and welfare (*maslahah*), serves as an ethical framework that ensures business activities contribute not only to profit but also to social well-being. According to Rokhlinasari and Widagdo (2023), Islamic financial instruments such as *zakat*, *waqf*, *mudharabah*, and *musyarakah* can act as inclusive financial mechanisms that support small entrepreneurs and reduce inequality. These principles resonate strongly with the Sustainable Development Goals (SDGs), particularly in the areas of poverty eradication and fair economic distribution. Moreover, Amaliatul Chusniah (2023) emphasizes that the Islamic economic system promotes moral responsibility and social justice, making it an effective model for

achieving inclusive and sustainable growth.

In parallel, the process of digitalization has become a critical enabler for MSME empowerment. Through e-commerce platforms, mobile banking, and digital payment systems, MSMEs can access broader markets, reduce operational costs, and improve business efficiency. As Suryani (2024) notes, digital transformation helps MSMEs strengthen their competitiveness and resilience, particularly in the post-pandemic recovery period. Furthermore, the emergence of Islamic financial technology (fintech) has expanded financial access for small business owners who previously faced barriers in obtaining capital from conventional banks. Sari and Rachmawati (2024) found that the implementation of Sharia QRIS in Indonesia significantly increased digital financial inclusion while maintaining compliance with Islamic principles. This development demonstrates that digitalization not only enhances efficiency but also aligns with the ethical and spiritual dimensions of Islamic economics.

The synergy between Islamic economics and digitalization creates a transformative model for inclusive growth. Digital innovation strengthens the operationalization of Islamic finance through increased transparency, accountability, and accessibility. Agista, Syarifah, and Arlina (2025) highlight that integrating digital platforms into Islamic finance promotes trust (*amanah*) and fairness, values that are central to sharia-based economic activity. For example, digital *zakat* management platforms enable faster, traceable, and more equitable distribution of resources, ensuring that social welfare goals are effectively achieved. Similarly, blockchain-based

Islamic fintech applications improve transaction transparency and reduce *gharar* (uncertainty), enhancing ethical compliance and financial security. These digital initiatives contribute directly to several SDG targets, including SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities).

However, the integration process is not without challenges. The study identifies several constraints, including limited internet access in rural areas, low levels of digital and financial literacy among MSME actors, and the absence of comprehensive regulations governing Islamic digital finance (Azhar, 2025). These barriers hinder the scalability and inclusiveness of digital transformation initiatives. To overcome such challenges, collaborative efforts are required among government institutions, Islamic financial organizations, universities, and technology developers. Policymakers must strengthen digital infrastructure, promote literacy programs, and ensure that digital financial systems adhere to both technological and sharia standards. Through coordinated strategies, Indonesia can establish a strong, inclusive, and ethical digital economy.

The results further indicate that Islamic digitalization initiatives significantly enhance MSME performance and economic participation. Rivaldi Setiawan (2023) found that higher Islamic financial literacy improves MSMEs' ability to manage finances and utilize sharia-based financial products effectively. This finding underscores the importance of education and awareness in promoting inclusive growth. When MSME actors possess both digital competence and Islamic financial knowledge, they are more likely to make responsible financial decisions

and engage in sustainable economic practices. Thus, enhancing financial literacy is a crucial factor in realizing the integration between Islamic economics and digital innovation.

Overall, the discussion suggests that the fusion of Islamic economics and MSME digitalization contributes directly to achieving the Sustainable Development Goals. Islamic economic values ensure that growth remains ethical and socially just, while digital technology accelerates inclusion, innovation, and productivity. Rokhlinasari and Widagdo (2023) argue that the Islamic economic paradigm inherently aligns with the SDGs because it promotes justice, transparency, and the welfare of all. Therefore, the combined framework of Islamic economics and digitalization serves as a strategic pathway toward inclusive and sustainable development. It empowers MSMEs as the backbone of the national economy while embedding moral values into digital progress, ensuring that economic growth is both human-centered and spiritually grounded.

CONCLUSION

This study concludes that integrating Islamic economics with the digitalization of Micro, Small, and Medium Enterprises (MSMEs) is an effective strategy for promoting economic inclusion in alignment with the Sustainable Development Goals (SDGs). The application of Islamic principles such as justice, transparency, and sustainability strengthens ethical business practices among MSME actors, while the adoption of digital technologies enhances efficiency, market access, and financing opportunities. The synergy between Islamic economic values and digital innovation creates a more adaptive,

competitive, and inclusive business ecosystem, enabling previously marginalized groups to participate in the growing digital economy. Therefore, this integrative approach not only improves business sustainability but also contributes significantly to achieving SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 9 (Industry, Innovation, and Infrastructure).

Based on the findings, it is recommended that governments, Islamic financial institutions, and digital industry stakeholders strengthen collaboration to provide accessible, Sharia-compliant digital infrastructure and services for MSMEs. Enhancing digital literacy and Islamic financial literacy should be prioritized to ensure that MSME players can fully utilize technology while adhering to Sharia principles. Additionally, policy initiatives should support the development of Islamic fintech innovations, strengthen the security of digital transactions, and promote halal marketplace platforms to improve the global competitiveness of MSMEs. These collective efforts will ensure that the integration of Islamic economics and digitalization delivers tangible and sustainable impacts on national economic inclusion.

REFERENCES

- Ahmed, H., & Hassan, M. K. (2021). *Islamic finance and economic development: Theory and applications*. Palgrave Macmillan.
- Alam, M. M., Gupta, R., & Bao, Y. (2020). Digitalization and small business performance: The role of institutional support. *Journal of Small Business Management*, 58(4), 794–809. <https://doi.org/10.1080/00472778.2020.1719837>

- Ariff, M., & Rosly, S. A. (2020). Islamic finance and the digital economy: Opportunities and challenges. *International Journal of Islamic and Middle Eastern Finance and Management*, 13(3), 450–465. <https://doi.org/10.1108/IMEFM-09-2019-0371>
- Boukhatem, J., & Moussa, F. B. (2020). The role of Islamic finance in achieving the Sustainable Development Goals. *Journal of Islamic Accounting and Business Research*, 11(5), 1069–1087. <https://doi.org/10.1108/JIABR-02-2019-0032>
- Hamzah, H. (2022). Digital transformation and competitive performance among MSMEs: Evidence from Southeast Asia. *Asia Pacific Management Review*, 27(2), 123–134. <https://doi.org/10.1016/j.apmr.2021.09.003>
- Huda, N., & Heykal, M. (2019). *Lembaga Keuangan Syariah: Tinjauan Teoretis dan Praktis*. Kencana.
- International Islamic Financial Services Board. (2021). *Islamic Fintech in the digital economy*. IFSB Publications.
- Khan, M. A., & Ghifari, A. (2021). Maqasid al-Shariah and financial inclusion: An integrated framework. *Journal of Islamic Economics, Banking and Finance*, 17(4), 35–51.
- Rahman, A. (2020). Digitalization and inclusive economic growth: A systematic review. *Journal of Economic Development*, 45(2), 27–45. <https://jed.or.kr>
- Suryanto, T., & Qoyum, A. (2019). Islamic microfinance and MSME empowerment in Indonesia: A conceptual review. *Journal of Islamic Monetary Economics and Finance*, 5(1), 129–152. <https://doi.org/10.21098/jimf.v5i1.1058>
- United Nations Development Programme. (2020). *Sustainable Development Goals report 2020*. UNDP.
- World Bank. (2021). *Digital economy for development*. World Bank Publications.