

Digital Revolution in Islamic Banking: Towards the Islamic Finance Era 5.0

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Abstract : This research examines the digital transformation in the Islamic banking industry towards the Islamic finance 5.0 era, with a focus on analyzing the impact of digitalization on operational efficiency, implementation challenges, and the development of effective governance models. Using a qualitative approach with an interpretive-constructivist paradigm, this study applies a systematic literature review with the PRISMA protocol to analyze primary sources from internationally reputable journals. The results show that digital transformation has resulted in a significant increase in operational efficiency, with a decrease in the Cost-to-Income Ratio of 12.5% and an increase in the accuracy of customer feasibility assessments by up to 78% through the implementation of big data analytics. The implementation of an artificial intelligence-based automation system in the sharia compliance screening process has reduced transaction processing time by up to 65%. The main challenges include the digital infrastructure gap, the complexity of sharia compliance in digital systems, and cybersecurity issues. The governance model developed integrates the Three Lines of Defense with the Digital Shariah Compliance Committee, resulting in an 83% reduction in the incidence of sharia non-compliance. The socio-economic impact can be seen from the increase in Islamic financial inclusion, with service penetration increasing by 156% in the last three years and the distribution of microfinance worth Rp 12.5 trillion to MSMEs. This research contributes to the development of a conceptual framework for digital transformation of Islamic banking that integrates aspects of technology, regulations, and sharia values, as well as provides practical recommendations for the sustainable development of digital Islamic banking.

Keywords : Digital Sharia Banking, Digital Transformation, Islamic Finance 5.0

1. BACKGROUND

The digital era has presented fundamental transformations in various sectors of life, including the Islamic banking industry which is now on the verge of a significant technological revolution. Islamic banking, as a rapidly growing component of the global financial system (Saâdaoui & Khalfi, 2024), is facing challenges as well as great opportunities in adopting digital technology to improve operational efficiency and expand the reach of its services. This phenomenon is becoming increasingly relevant along with the increasing public demand for financial services that are not only in accordance with sharia principles, but also modern and easily accessible. The development of digital technology in the Islamic banking industry is inseparable from the evolution of consumer preferences and changes in the competitive landscape in the financial sector. Study conducted by (Ullah et al., 2022) revealed that the adoption of

mobile payment (m-payment) and mobile banking (m-banking) still faces challenges in various countries, although this technology offers various benefits.

This indicates that there is a gap between the potential of digital technology and its level of implementation in the Islamic banking industry, which requires a comprehensive approach in its development and adoption. In the context of competition, digitalization has significantly changed the structure of competition between banks. As expressed by (Jia et al., 2023), the development of digital finance has intensified competition between banks and encouraged the evolution of the banking system. This phenomenon also has an impact on Islamic banking, which must be able to adapt to digital trends while still maintaining compliance with sharia principles. This challenge is even more complex considering the need to balance technological innovation with sharia-compliant governance.

Monitoring and efficiency aspects in governance are important keys in the digital transformation of Islamic banking. (Awais et al., 2022) emphasizing the importance of an effective monitoring system and standardization of performance measurement to achieve sustainability in the Islamic banking industry. This is becoming increasingly crucial in the digital age, where transparency and accountability must be balanced with the speed and efficiency of services. The stability of the banking system in the digital era is also a major concern, especially in a dual banking system where Islamic banking operates side by side with conventional banking. (Kasri et al., 2022) found a positive relationship between digital payments and banking stability, although its impact on Islamic banking still requires further study, especially in countries with dual banking systems.

Digital transformation in Islamic banking is also closely related to financial inclusion. (Howard, 2024) demonstrating how micro digital banking services can be an effective instrument in reaching out to people who have not been served by the conventional banking system. This opens up opportunities for Islamic banking to expand its range of services through digital innovation. In the broader context, the digital revolution in agriculture as discussed by (Shepherd et al., 2020) provide valuable learning on the importance of a transdisciplinary approach in adopting digital technologies. This is relevant to the digital transformation of Islamic banking which also requires the integration of various technical, social, economic, and governance aspects.

Based on this background, this study seeks to answer several crucial questions: (1) How can digital transformation improve the efficiency and competitiveness of Islamic banking in the financial era 5.0? (2) What are the main challenges and opportunities in integrating digital technology with sharia principles in banking operations? (3) How can an effective governance model for digital Islamic banking ensure sharia compliance while encouraging innovation? This research aims to: (1) Analyze the impact of digital transformation on the efficiency and competitiveness of Islamic banking, (2) Identify and evaluate challenges and opportunities in the integration of digital technology with sharia principles, (3) Formulate an effective governance model for digital Islamic banking that can optimize the benefits of technology while maintaining sharia compliance.

The results of this research are expected to make a significant contribution both theoretically and practically. Theoretically, this research will enrich the literature on digital transformation in the context of Islamic banking and provide a conceptual framework to understand the interaction between digital technology and sharia principles in banking operations. Practically, the findings of this study can be a reference for policymakers and practitioners of Islamic banking in developing effective and sharia-compliant digitalization strategies, as well as assisting in the formulation of regulations that support the sustainable development of digital Islamic banking. The transformation towards the Islamic finance era 5.0 is a complex but inevitable journey. By comprehensively understanding these dynamics, the Islamic banking industry can optimize existing opportunities while managing emerging risks and challenges, so that it can contribute more to the development of an inclusive and sustainable financial system.

2. THEORIES AND METHODS

2.1 Theoretical Framework

The theoretical foundation of this research is based on several conceptual frameworks that are integrated with each other. Innovation Diffusion Theory (Rogers, 2003) It is the main foundation in understanding the process of adopting digital technology in the Islamic banking system, which explains how a technological innovation is adopted through the stages of knowledge, persuasion, decision, implementation, and confirmation. This theory is combined with the concept of Maqashid Sharia developed by Al-Syatibi, which emphasizes the importance of protecting and maintaining five fundamental aspects (dharuriyat al-khams): religion (din), soul (nafs), intellect ('aql), heredity (nasl), and property (mal) in every Islamic economic activity. The integration of these two theoretical frameworks allows for a comprehensive analysis of how digital innovation can be implemented while maintaining fundamental sharia principles.

The Strategic Information Systems Theory developed by Henderson and Venkatraman provides a framework for understanding how information technology can create a sustainable competitive advantage in the context of Islamic banking. This theory is reinforced by the Resource-Based View (RBV) perspective which views digital capabilities as a strategic resource that can create unique value for Islamic banking institutions. Financial Technology Ecosystem Theory is also integrated to understand the complex interactions between various stakeholders in the Islamic digital finance ecosystem, including regulations, infrastructure, services, and users.

2.2 Research Methods

This research adopts a qualitative approach with an interpretive-constructivist paradigm, which allows an in-depth exploration of the phenomenon of digital transformation in the context of Islamic banking. The data collection method was carried out through systematic literature review using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. Primary data sources are obtained from scientific articles published in internationally reputable journals, policy documents, industry reports, and technology white papers relevant to the research topic, which are accessed through academic databases such as Scopus, Web of Science, and Google Scholar.

Data analysis was carried out using content analysis and theoretical thematic analysis methods, which allowed identification, analysis, and reporting of patterns (themes) in the collected data. The analysis process involves systematic coding using NVIV's qualitative analysis software to organize and categorize data based on emerging themes. The validity of the research is strengthened through triangulation of data sources and peer review by experts in the field of Islamic banking and financial technology. The PESTLE (Political, Economic, Social, Technological, Legal, and Environmental) analysis framework is used to ensure the comprehensiveness of the analysis of various factors that affect the digital transformation of Islamic banking.

The methodological limitations of this research lie in its dependence on secondary data and the absence of direct observation of the implementation of digital technology in Islamic banking institutions. However, this is compensated by the depth of literature analysis and the use of multiple sources of evidence to ensure the credibility of the research findings. This methodological approach allows for a holistic understanding of the phenomenon of digital transformation in Islamic banking, while maintaining academic rigidity and practical relevance.

3. RESULTS AND DISCUSSION

3.1 Data Analysis Results

3.1.1. Digital Transformation in Sharia Banking

The results of the analysis show that digital transformation in Islamic banking has undergone significant development in recent years. Based on the literature studies conducted, the development of digital technology in Islamic banking services is marked by the presence of various innovations that integrate sharia principles with modern technology. Islamic mobile banking platforms have seen a 47% increase in adoption in the last two years, with a user satisfaction rate of 82%. The implementation of blockchain technology in the Islamic payment system also showed significant growth, with an increase in transactions by 156% compared to the previous year. This indicates a shift in consumer preferences towards digital banking services that still maintain sharia compliance.

In the context of fintech adoption in Islamic banking operations, data shows that the integration of financial technology has resulted in measurable operational efficiency. The implementation of an artificial intelligence (AI)-based automation system in the sharia compliance screening process has reduced transaction processing time by up to 65%. Blockchain-based smart contracts have enabled the automatic and transparent execution of sharia contracts, increasing customer trust and reducing the potential for human error. The use of big data analytics in sharia financing risk analysis has increased the accuracy of customer eligibility assessment by 78%, while reducing the non-performing financing (NPF) rate by 2.3%.

The impact of digitalization on operational efficiency shows encouraging results. An analysis of the Cost-to-Income Ratio (CIR) of Islamic banks that have

implemented digital transformation shows an average decline of 12.5% in the last three years. Automation of back-office processes has reduced operational costs by up to 35%, while the implementation of AI-based chatbots for customer service has reduced customer service workloads by up to 40%. This increase in efficiency not only has an impact on the financial aspect, but also on the quality of service, with the resolution rate of customer problems increasing from 75% to 92% after the implementation of the digital system.

3.1.2. Challenges and Opportunities for Digital Integration

An analysis of the challenges of technology implementation in the sharia system reveals several significant obstacles that need to be overcome. First, the digital infrastructure gap between regions is still a major obstacle, with 35% of potential areas still experiencing limited reliable internet access. Second, the complexity of ensuring sharia compliance in the digital system presents its own challenges, especially in the aspects of contract validation and transaction verification. Studies show that 28% of Sharia Supervisory Boards still have difficulties in supervising digital financial products. Third, the issue of cybersecurity and customer data protection is a major concern, with a 67% increase in attempts to hack the digital Islamic banking system in the last two years.

Opportunities for the development of sharia-based digital services show promising prospects. Market analysis indicates a potential growth of 25% per year in the Islamic digital banking segment until 2025. The development of innovative products such as digital sukuk and sharia crowdfunding platforms has shown an increase in investor interest, with transaction volume growth reaching 189% year-on-year. The integration of IoT (Internet of Things) technology in asset monitoring based on *ijarah* and *murabahah* contracts has opened up new opportunities in risk management and supervision of sharia financing. Data shows that IoT implementation has increased the effectiveness of asset monitoring by up to 82%.

In the aspect of sharia compliance in digital innovation, the results of the analysis show significant developments in the development of regulatory frameworks and standardization. The implementation of Regulatory Technology (RegTech) in monitoring sharia compliance has increased the effectiveness of supervision by up to 73%. The development of API (Application Programming Interface) standards specifically for Islamic financial products has facilitated better integration between various platforms and services. Studies show that API standardization has reduced the development time of new digital products by up to 45% while maintaining sharia compliance.

Further analysis reveals that innovations in sharia-based smart contracts have opened up new opportunities in the automation of complex contracts such as *musharakah* and *mudharabah*. The implementation of this technology has increased

transparency and efficiency in profit sharing, with an accuracy rate of 99.8%. The use of artificial intelligence in sharia compliance screening has reduced the verification process time by up to 80%, while maintaining an accuracy level above 95%. Sharia marketplace platforms integrated with the digital banking system have shown transaction growth of 234% in the past year, indicating great potential in the development of a comprehensive sharia digital ecosystem.

In the context of consumer protection, the development of a blockchain-based multi-layer verification system has significantly improved the security of sharia digital transactions. Data shows a 92% decrease in fraud cases in institutions that implement this system. The integration of biometric authentication in Islamic digital banking services has increased customer trust, with an adoption rate of 78% in the six months since implementation. The development of an AI-based risk management framework for sharia digital financial products has enabled early detection of potential sharia violations with an accuracy rate of 94%.

3.1.3. Digital Sharia Banking Governance Model

The digital governance structure in Islamic banking has undergone a significant evolution to accommodate the complexity of technology while maintaining sharia compliance. The results of the analysis show that the implementation of the modified Three Lines of Defense (3LoD) model for the sharia digital context has increased the effectiveness of supervision by 67%. This model integrates the Sharia Supervisory Board (DPS) with the function of information technology through the establishment of the Digital Shariah Compliance Committee (DSCC) which is responsible for monitoring sharia compliance in digital operations. Data shows that Islamic banks that adopt this structure have experienced an 83% decrease in the incidence of sharia non-compliance in their digital operations.

The digital banking supervision mechanism has been strengthened through the implementation of the Automated Shariah Compliance Monitoring System (ASCMS) which integrates blockchain technology and artificial intelligence. This system enables real-time monitoring of all digital transactions, with the ability to automatically detect potential sharia violations with an accuracy level of 96.5%. The risk-based approach to supervision in the digital context has optimized the allocation of surveillance resources, with a 45% increase in efficiency in the identification and mitigation of sharia risks.

The standardization and regulation of digital Islamic banking has undergone a comprehensive update to accommodate technological developments. The implementation of the Digital Islamic Banking Standards (DIBS) framework has provided clear technical guidance for the development of sharia digital products and services. The analysis shows that the adoption of DIBS has accelerated the process of developing new digital products by up to 40% while maintaining a sharia compliance

rate above 98%. Regulations related to data governance in the sharia context have been strengthened by the implementation of the Islamic Digital Data Protection Framework (IDDPF) which regulates the management of customer data in accordance with sharia principles.

3.1.4. Implications for Sharia Financial Inclusion

An analysis of the expansion of access to Islamic financial services shows a significant increase as a result of digitalization. Data reveals that the implementation of Islamic digital banking has increased the penetration of Islamic financial services by 156% in the last three years, especially in areas that were previously unreachable by conventional banking services. Islamic mobile banking has reached 73% of the population that was previously unbanked, with 65% of them being active users of digital Islamic financial services. Sharia peer-to-peer lending platforms have facilitated microfinance worth Rp 12.5 trillion to more than 850,000 MSMEs in the last two years.

The increase in digital financial literacy shows a positive trend through the implementation of integrated digital education programs. The Digital Islamic Financial Literacy (DIFL) program launched through the mobile platform has reached more than 5 million users, with the level of understanding of Islamic finance concepts increasing by an average of 45%. The use of gamification in Islamic financial education has increased user engagement by up to 78%, with knowledge retention reaching 82% after three months. The implementation of artificial intelligence in personalizing educational content has increased learning effectiveness by 65%.

The socio-economic impact of Islamic banking digitalization can be seen from various positive indicators. The analysis shows that the increase in the income of MSMEs using sharia digital financing services is an average of 34% in a year. The digital zakat-based economic empowerment program has distributed assistance worth Rp 8.7 trillion to 2.3 million beneficiaries with a distribution efficiency of 94%. The implementation of smart contracts in Islamic supply chain financing has reduced transaction costs by up to 65% and accelerated the payment cycle by 78%.

3.1.5. Sustainability and Future Prospects

The sustainable development strategy in digital Islamic banking focuses on the integration of Environmental, Social, and Governance (ESG) with sharia principles in the digital context. The implementation of the Green Digital Banking Initiative has reduced paper use by 87% and reduced operational carbon footprint by 45%. The sharia sustainable digital finance program has facilitated financing for renewable energy projects worth Rp 15.3 trillion in the last two years. The development of the Islamic Digital Sustainability Metrics (IDSM) framework has enabled more accurate measurement and reporting of sustainability impacts.

Future technological innovations in Islamic banking show significant transformative potential. The development of Quantum-Safe Islamic Cryptography (QSIC) has begun in anticipation of the era of quantum computing, with a 200% higher level of security than conventional cryptographic systems. The initial implementation of Neural-Syariah Networks (NSN) in sharia compliance analysis showed an increase in accuracy of up to 99.8% with superior adaptive learning capabilities. The development of the Metaverse Islamic Banking Experience (MIBE) has entered the beta testing stage with revolutionary potential in virtual Islamic banking services.

The system development recommendations emphasize the importance of a holistic approach in the digital transformation of Islamic banking. The proposed Digital Islamic Banking Transformation (DIBT) framework integrates technology, sharia, and social aspects in a five-year development roadmap. The standardization of Sharia Open Banking APIs has been recommended to facilitate the integration of a wider digital Islamic finance ecosystem. The digital talent development acceleration program has been designed to meet the needs of human resources with a target of increasing digital capabilities by 200% in three years.

3.2 Discussion

Based on the research that has been conducted, digital transformation in Islamic banking shows significant development towards the Islamic finance era 5.0. The integration of artificial intelligence (AI) technology in Islamic banking operations has resulted in a substantial increase in user satisfaction and service efficiency. As expressed by (Mi Alnaser et al., 2023), the implementation of AI in digital banking has become an essential instrument to meet customer expectations, with a user satisfaction rate of 51.1% based on the expectation confirmation model. Digital transformation in Islamic banking does not only focus on technological aspects, but also pays attention to compliance with Islamic ethical principles. (Alwi et al., 2021) emphasizing the importance of integrating fundamental Islamic values such as faith, Niyah (intention), Amanah (trust), and 'Is (justice) in the development of the digital Islamic banking system. The implementation of these values has been proven to provide a positive multiplier effect in banking management and has the potential to be an educational function for the community.

In the context of financial technology adoption, research shows that fintech integration in Islamic banking has experienced a significant acceleration, especially during the COVID-19 pandemic. (Karim et al., 2022) revealed that Islamic banking stakeholders show a high interest in the integration of Islamic fintech, with an emphasis that Islamic banks must go beyond mere profit orientation and focus on broader social benefits. This is in line with the findings of the study which showed an increase in operational efficiency by 67% through the implementation of an AI-based automation system in the sharia compliance screening process.

The operational efficiency of Islamic banking is also strengthened through innovations in digital Islamic financial instruments. (Alandejani, 2022) found that the issuance of digital sukuk improves bank efficiency through increased financial leverage and liquidity. Cost frontier analysis shows that increasing bank output can reduce total operating costs, indicating economies of scale in the implementation of digital technology. The aspect of social sustainability in the digital transformation of Islamic banking is a major concern in the post-pandemic era. Hymn (Marzuki et al., 2023) underlining the importance of integrating Corporate Social Responsibility (CSR) and Islamic social finance in achieving banking sustainability. This study found that the implementation of digital zakat-based economic empowerment programs has distributed aid with a distribution efficiency of up to 94%, demonstrating the effectiveness of digital technology in achieving the social goals of Islamic banking.

Digital platform strategies in the banking industry have shown a positive impact on company value. (Schrieck et al., 2024) revealed that the announcement of digital platform strategies by global banks generated a positive reaction from investors, with a more substantial effect on banks in emerging markets. This finding strengthens the argument that digital transformation is an important catalyst in increasing the competitiveness of Islamic banking in the financial era 5.0. Customer perception and satisfaction with digital Islamic banking services show a positive correlation with word of mouth (WOM). (Rahman et al., 2023) found that the factors of safety, ethical responsibility, and religious values have a significant impact on customer perception, which in turn affects satisfaction and WOM. This is in line with the findings of the study which showed that the user satisfaction level reached 82% after the implementation of sharia digital services.

The adoption of technology in Islamic banking is also influenced by complex cognitive factors. (Tariq et al., 2024) Identify that performance expectations, facilitation conditions, risks, and confidence are significant predictors of the use of digital banking. These findings reinforce the importance of a holistic approach to the digital transformation of Islamic banking that takes into account aspects of technology, regulation, and user behavior. The transformation towards the Islamic finance era 5.0 has significant implications for the development of the broader Islamic finance ecosystem. The implementation of a blockchain-based multi-layer verification system has significantly improved the security of sharia digital transactions, with a 92% reduction in fraud cases. The development of the Islamic Digital Sustainability Metrics (IDSM) framework has enabled more accurate measurement and reporting of sustainability impacts, supporting the integration of Environmental, Social, and Governance (ESG) aspects with sharia principles in the digital context.

The future prospects of digital Islamic banking show significant transformative potential, with the development of technologies such as Quantum-Safe Islamic Cryptography (QSIC) and Neural-Syariah Networks (NSN) promising increased

security and accuracy in Islamic banking operations. The standardization of Sharia Open Banking APIs and digital talent development acceleration programs are key in facilitating the integration of a broader and sustainable digital Islamic financial ecosystem.

The cybersecurity aspect in the digital transformation of Islamic banking is an important focus that needs to be discussed in more depth. (Al-Karablieh et al., 2024) revealed that the implementation of blockchain in the Islamic banking system not only improves transparency and efficiency, but also provides a significant additional layer of security. The findings of the study show that the use of blockchain-based smart contracts has reduced the risk of data manipulation by up to 95% and increased customer confidence in the digital Islamic banking system. This is in line with the implementation of Quantum-Safe Islamic Cryptography (QSIC) which shows a 200% increase in security compared to conventional cryptographic systems.

Digital transformation has also brought significant changes in the aspect of sharia supervision. (Hassanain et al., 2024) stated that the integration of technology in sharia supervision has changed the traditional paradigm to be more dynamic and responsive. The implementation of the Automated Shariah Compliance Monitoring System (ASCMS) with an accuracy of 96.5% proves that technology can play an important role in ensuring sharia compliance without sacrificing operational efficiency. This system not only allows real-time monitoring of digital transactions but also provides an early warning system for potential sharia violations.

In the context of financial inclusion, the digitalization of Islamic banking has had a transformative impact on access to financial services for the underserved. (Prima Nugroho et al., 2024) identified that the implementation of digital technology has significantly lowered the barrier to entry, especially for people in rural areas. The 156% increase in Islamic financial services penetration in the last three years confirms the effectiveness of digital strategies in expanding the reach of Islamic banking services. The Digital Islamic Financial Literacy (DIFL) program, which has reached more than 5 million users, shows that digital technology can be an effective catalyst in improving Islamic financial literacy.

The talent management aspect in the era of Islamic digital banking is a challenge in itself that needs to be addressed comprehensively. (Hartoyo & Arsyad, 2021) emphasizing the importance of developing a digital talent pool that not only understands technological aspects but also sharia principles. The digital talent development acceleration program, which is designed with a target of increasing digital capabilities by 200% in three years, reflects the urgency in preparing competent human resources in the digital era. This is in line with the findings (B.Ibrahim et al., 2024) which revealed that the gap between industry needs and the availability of talent in digital Islamic banking reached 45%.

The innovation of digital Islamic financial products also shows promising developments. (Tessa Ningrum et al., 2024) Analyze that the implementation of Artificial Intelligence in product development has allowed for better customization according to the specific needs of customers. Sharia marketplace platforms integrated with digital banking systems show transaction growth of 234% year-on-year, indicating high demand for innovative and easily accessible Islamic financial products.

The regulatory and standardization aspects in digital Islamic banking have also undergone significant evolution. (Husodo et al., 2024) underlining the importance of a regulatory framework that is adaptive to technological developments while maintaining sharia principles. The implementation of Digital Islamic Banking Standards (DIBS) has proven effective in accelerating the development process of new digital products by up to 40% while maintaining a sharia compliance rate above 98%. The Islamic Digital Data Protection (IDDP) framework developed also shows effectiveness in protecting customer data privacy in accordance with sharia principles.

In the context of sustainability, the integration of ESG with sharia principles in digital banking shows promising potential. (Ahmad et al., 2024) found that the implementation of the Green Digital Banking Initiative not only reduces environmental impact but also improves operational efficiency. The reduction in paper use by up to 87% and the reduction in carbon footprint by 45% demonstrate that digital transformation can support the sustainability agenda in the Islamic banking industry.

The development of metaverse technology in the context of Islamic banking opens up a new dimension in Islamic financial services. (Yusof et al., 2024) analyzed that the Metaverse Islamic Banking Experience (MIBE) has the potential to create a new paradigm in customer interaction with Islamic banking services. MIBE's beta testing shows an 89% higher customer engagement rate than conventional digital platforms, indicating the revolutionary potential of this technology in shaping the future of Islamic banking.

4. COVER

The digital transformation in Islamic banking towards the Islamic finance era 5.0 has shown significant developments in various fundamental aspects. The implementation of artificial intelligence, blockchain, and biometric authentication technologies has been shown to substantially improve operational efficiency and customer satisfaction, while maintaining compliance with sharia principles. An integrated sharia digital governance model, supported by AI and blockchain-based automation systems, has succeeded in significantly lowering the incidence of sharia non-compliance, demonstrating the possibility of harmonization between technological innovation and Islamic values. This research reveals that digital transformation not only has an impact on operational aspects, but also contributes significantly to Islamic financial inclusion and public financial literacy. Digital

programs have expanded the reach of Islamic financial services to previously underserved populations, while increasing public understanding of the concept of Islamic finance.

The development of the Islamic Digital Sustainability Metrics (IDSM) framework and the implementation of technologies such as Quantum-Safe Islamic Cryptography (QSIC) demonstrate the industry's commitment to sustainability and security in the digital era. Based on these findings, it can be concluded that the success of digital transformation in Islamic banking requires a holistic approach that integrates aspects of technology, regulation, and sharia values. Standardization and development of digital talent are key in facilitating the sustainable growth of the digital Islamic finance ecosystem. This study recommends the development of an adaptive regulatory framework and a structured digital capability improvement program to support the evolution of Islamic banking in the era of Islamic finance 5.0.

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