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Integration of Financial Technology (Fintech) with Islamic Finance: Literature Review and Future Research Agenda

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Abstract: This study aims to examine the integration between financial technology (fintech) and Islamic finance using a *library research* approach with an *integrative review* method. This method synthesizes both empirical and conceptual findings from relevant literature to construct a comprehensive understanding and formulate a future research agenda. Data were collected from leading academic databases such as Google Scholar, Scispace, DOAJ, and Scopus, with inclusion criteria covering articles published between 2015 and 2024, relevant to the topic, and available in full-text format. The findings reveal that although the integration of Islamic fintech faces significant challenges such as uneven digital infrastructure, complex technology adoption, and evolving regulatory frameworksit offers substantial opportunities. Islamic fintech is seen as a catalyst to expand financial inclusion, drive value-based innovation, and strengthen the ethical and sustainable nature of Islamic finance. Future research should adopt a holistic and interdisciplinary approach, addressing not only technical development but also regulatory alignment, digital literacy, and the long-term sustainability of Islamic financial systems in the digital era.

Keywords: Islamic Fintech, Sharia Compliance In Fintech, Financial Technology and Islamic Finance, Halal Investment Platform, Digital Islamic Banking.

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A. INTRODUCTION

The integration of financial technology (fintech) with Islamic finance is a topic that is gaining increasing attention in Islamic economics literature. Fintech, which includes services such as peer-to-peer lending, crowdfunding, and digital payments, has revolutionized the way financial transactions are conducted. In the context of Islamic finance, fintech must comply with sharia principles that prohibit usury, gharar, and maysir, and ensure fairness and transparency in every transaction (Gani, 2023; Muchtar & Zubairin, 2021). This integration aims to increase financial inclusion, expand access to financial services, and encourage sustainable economic growth in accordance with Islamic values.

Research by Hidayat and Sururi (2023) shows that the development of Islamic fintech in Indonesia faces challenges in terms of regulation, capital, and financial literacy. Regulations that are not yet fully specific to Islamic fintech cause ambiguity in the implementation of services. In addition, limited capital and low levels of Islamic financial literacy among the community also hamper the growth of this sector. However, despite this, Islamic fintech shows great potential in expanding financial access for the community, especially in areas that have not been reached by conventional financial services.

Fatimah and Ludfi (2024) stated that the rapid development of sharia fintech requires continuous updating of legal regulations to keep up with emerging innovations. They emphasize the importance of regulations that are adaptive and responsive to industry dynamics, while adhering to sharia principles and consumer needs. Without clear and comprehensive regulations, sharia fintech is at risk of facing legal challenges that could hinder its growth.

Nur'aeni (2022) in his research showed that sharia fintech has succeeded in providing easier and more transparent access to financing for MSMEs, especially in the micro sector. With the principle of profit sharing and no interest, sharia fintech offers alternative financing that is in accordance with Islamic values. However, challenges such as inadequate regulations and low sharia financial literacy still need to be overcome to maximize the potential of this sector.

Al Hafidz et al. (2024) in their study found that financial technology has increased public participation in sharia investment by offering more affordable and accessible products. However, they also noted that regulatory and data security challenges are major obstacles to the development of technology-based sharia investment. It is important to create an ecosystem that supports technological innovation while ensuring investor protection and compliance with sharia principles.

Although various studies have discussed the aspects of regulation, capitalization, and financial literacy in the context of Islamic fintech, there is still a lack of studies that integrate these aspects comprehensively. In addition, studies that examine in depth the integration of financial technology with Islamic finance in Indonesia are still limited. Therefore, this study aims to fill this gap by conducting an in-depth literature review on the integration of fintech with Islamic finance and developing a future research agenda that can encourage the development of this sector in a sustainable manner.

B. METHOD

This study uses a library research approach with an integrative review type, which is a literature review method that not only summarizes the results of previous studies, but also integrates and synthesizes knowledge from various sources to form a comprehensive understanding of the topic of fintech integration with Islamic finance. This approach is suitable for identifying trends, themes, and research gaps that have not been widely explored in previous literature (Whittemore & Knafl, 2005). This method was chosen because it is able to provide conceptual contributions through the preparation of a future research agenda based on in-depth analysis of relevant literature.

The data sources in this study were obtained from several trusted scientific databases, namely Google Scholar, Scispace, Directory of Open Access Journals (DOAJ), and Scopus. The literature collected includes national and international journal articles relevant to the main variables, namely fintech, Islamic finance, Islamic compliance, and financial technology. Inclusion criteria include: (1) articles published between 2015 and 2024; (2) available in full text; (3) directly relevant to the topic of fintech and Islamic finance integration; and (4) from indexed or reputable journals. The exclusion criteria include: (1) articles that are opinion articles or non-academic essays; (2) not available in full text; and (3) not focused on the context of Islamic economics or finance.

The literature search process was carried out using a combination of keywords such as: "Islamic fintech," "sharia compliance in fintech," "financial technology and Islamic finance," "halal investment platform," and "digital Islamic banking." Boolean operators such as AND, OR, and NOT were used to narrow or expand the search results as needed. After the search results were collected, a literature selection procedure was carried out in two stages, namely: (1) initial screening based on title and abstract; and (2) full-text review to ensure the suitability of the substance with the research focus. The selection process was carried out manually and assisted by reference management tools such as Zotero to avoid duplication.

The data analysis method in this study uses narrative synthesis techniques, which allow researchers to identify patterns, relationships, and differences between the studies analyzed. To ensure validity and reliability, the author uses the principle of source triangulation (using various types of journals from various databases) and peer debriefing with experts in the field of Islamic economics. Content validity is also maintained through repeated critical reading of each article, while reliability is increased by recording search traces (audit trails) and using clear and systematic selection criteria (Snyder, 2019).

C. RESULTS AND DISCUSSION

1. Models and Forms of Fintech Integration in Islamic Finance

Fintech integration in Islamic finance is a strategic digital transformation effort to increase financial inclusion, operational efficiency, and comply with sharia principles. Conceptually, this integration model can be categorized based on the type of service, the role of stakeholders, and the application of digital technology that is in accordance with sharia norms.

First, the form of fintech integration in Islamic finance can be implemented through strategic partnerships between Islamic banks and fintech service providers. For example, collaboration between Islamic banks and fintech platforms such as Ammana.id shows a profit-sharing-based P2P lending model that helps finance MSMEs while maintaining compliance with Islamic principles (Yahya et al., 2020; , Putri & Akbary, 2021; . This partnership approach not only increases access to funding for micro, small, and medium enterprises, but also spreads risk and facilitates the digital transformation of the Islamic financial system as a whole (Norrahman, 2023; , (Haris et al., 2020; .

Furthermore, in terms of product innovation, sharia fintech integrates financial technology in various services such as digital payments, crowdfunding, digital lending, and sharia-based investments (Ramadan, 2022). The use of advanced technologies such as blockchain, AI, and IoT has revolutionized the sharia financial intermediation mechanism, thereby providing transparency, security, and transaction effectiveness in the sharia context (Ali et al., 2019). This product innovation is the foundation for more equitable financial inclusion and the spread of sharia financial services to the wider community, especially in segments that have not been reached by conventional banks (Muzdalifa et al., 2018).

Furthermore, the integration of fintech into Islamic finance also involves regulatory and compliance aspects. Regulatory adjustment is a crucial challenge in the digital era that must accommodate technological innovation without ignoring sharia principles. Several studies emphasize the importance of adaptive regulations and increasing sharia financial literacy to support the sustainable growth of Islamic fintech (Norrahman, 2023; , Ayu & Wati, 2022). In addition, the development of digital infrastructure, partnerships with DSN-MUI, and support from relevant supervisory authorities are integral components in ensuring that fintech integration runs according to Islamic norms and ethics (Mulyana et al., 2024).

In terms of economic impact, the application of the fintech integration model in Islamic finance has been proven to provide a positive contribution to economic growth by increasing inclusive finance and access to capital for MSMEs (Yahya et al., 2020; , Supriadi et al., 2023). The synergy between fintech and Islamic banks, for example, not only drives economic growth but also provides alternative solutions in facing post-pandemic challenges, where digitalization and innovation are the main needs to maintain competitiveness (Haris et al., 2020; , Supriadi et al., 2023).

Overall, the model and form of fintech integration in Islamic finance has three main pillars, namely (1) strategic collaboration between Islamic banks and fintech platforms, (2) innovation of digital technology-based products that are in accordance with Islamic principles, and (3) adjustment of regulations and strengthening of Islamic financial literacy. These three pillars are interrelated and provide a framework for the creation of a modern, inclusive, and ethical Islamic financial system. This integration not only creates added value for the Islamic financial sector, but also expands the reach of financial services in the form of innovative solutions that support the economic growth of the people (Norrahman, 2023; , Ramadhan, 2022).

In this framework, the challenges that must be faced include the development of digital infrastructure, the adoption of new technologies, and increasingly dynamic regulatory adjustments. However, the opportunities offered are much greater, especially in creating a resilient and innovative Islamic financial ecosystem, as well as improving the economic welfare of the people through expanded financial access (Yahya et al., 2020; , Putri & Akbary, 2021; , Supriadi et al., 2023).

2. Challenges and Opportunities for Sharia Fintech Development

The development of Sharia Fintech in Indonesia shows a complex dynamic where there are great opportunities for digital economic growth as well as challenges that must be addressed strategically. In general, Sharia Fintech integrates Islamic financial principles with technological innovation, which can expand financial inclusion, increase the efficiency of sharia banking services, and support the growth of MSMEs and the economic welfare of local communities (Judijanto, 2025; Adipurno, 2025; Rahman et al., 2023).

On the one hand, the opportunity for developing Sharia Fintech lies in the ability of digital technologies such as blockchain, artificial intelligence, and smart contracts to encourage transparency, efficiency, and security of sharia financial transactions. This also strengthens the role of the Islamic digital economy as a tool to support local communities by increasing access to halal financial services, which has been demonstrated in various studies (Adipurno, 2025; Rahman et al., 2023). The integration between Sharia Fintech and traditional financial institutions, such as sharia banking, also provides productive synergy in expanding the reach of financial product services and innovation, as described by (Padli, 2021; Khudhori & Hendri, 2021). This perspective shows that cross-sector collaboration can create a more inclusive and sustainable financial ecosystem.

On the other hand, there are fundamental challenges in the development of Sharia Fintech. The issue of regulation and legal certainty is the main issue, because there are still shortcomings in the regulatory framework that specifically directs the operation of Sharia Fintech to be consistent with sharia principles (Laldin & Djafri, 2019; Fidhayanti et al., 2024). The absence of uniform operational standards and a systematic sharia governance system also hampers the integration between technological innovation and sharia compliance (Lutfiah, 2024). In addition, the issue of public trust is a critical obstacle because the public still needs to improve their understanding of digital financial products that are free from usury, gharar, and other haram elements (Billah & Saripudin, 2024; Nuri, 2025). This complexity requires intensive collaboration between regulators, industry players, and Islamic financial institutions to implement supportive policies and adaptive regulatory harmonization.

The synergy between these opportunities and challenges reflects the need for a holistic approach in the development of Sharia Fintech. The application of technological innovation must be accompanied by efforts to increase digital literacy in the community, the preparation of clear accounting and operational standards, and the integration of policies that support innovation without sacrificing compliance with sharia principles (Judijanto, 2025; Adipurno, 2025; Laldin & Djafri, 2019; Billah & Saripudin, 2024). Thus, Sharia Fintech has the potential to not only support digital transformation in the financial sector but also strengthen the characteristics of ethical and inclusive Islamic finance, which can ultimately increase the competitiveness of the national economy in the digital era.

3. Future Research Directions and Agenda in Fintech and Islamic Finance Integration

In facing the dynamics of digital development and increasing adoption of financial technology, the direction and agenda of future research in the integration of Fintech and Islamic Finance is a strategic topic that needs serious attention. Recent research shows that Fintech plays a key role in transforming the Islamic financial landscape through product innovation, increasing financial inclusion, and digitalization of services without neglecting compliance with Islamic principles (Norrahman, 2023; Judijanto, 2025). The role of this digital technology, for example in the development of a peer-to-peer lending system based on Islamic principles (Muhlis, 2022) and the application of fintech to non-cash payment services, has opened up space for improving business models and integrative strategies that can increase the efficiency and transparency of Islamic financial institutions' operations (Wulandari & Nasik, 2021; Zubaidi, 2019).

Future research agendas should be directed at developing an integration model that combines cutting-edge technological aspects, such as blockchain, artificial intelligence, and big data analysis, with innovative Islamic financial products. In addition, an in-depth analysis of integration is needed that is not only limited to transaction aspects, but also includes strengthening Islamic financial literacy and increasing the role of social financial institutions such as waqf and zakat (Sukmana, 2020; Posumah, 2024). Bibliometric-based research can also provide insight into research trends, as well as help identify existing literature gaps, so that the direction of further research can be adjusted to technological developments and the needs of both banked and unbanked communities (Judijanto, 2025).

In addition to developing technical models, future research agendas need to highlight regulatory and policy aspects. Integrating fintech into Islamic finance requires an adaptive regulatory framework and support from authorities such as the Financial Services Authority (OJK) and the National Sharia Council Fatwa (Zubaidi, 2019; Maulida et al., 2020) Research using the SWOT approach has provided an overview of the existing strengths, weaknesses, opportunities, and threats, so that a comprehensive and collaborative technology implementation strategy between the public sector, financial institutions, and regulators is urgently needed (Setyaningsih, 2018; Abadi et al., 2020). In-depth empirical studies are also needed to measure the impact of fintech lending on the performance of Islamic banks, especially in the context of reducing operational costs and increasing revenue through digital efficiency (Mulyana et al., 2024; Sudirman et al., 2023).

Furthermore, the sharia research agenda needs to integrate sustainability principles in the design and development of financial instruments. The application of sustainability principles in sharia finance covers economic, social, and environmental aspects, where fintech has the potential to be a catalyst that supports sustainable development and corporate social responsibility (Haerunnisa et al., 2023). The involvement of technology in supporting sharia business transformation, for example through improving service excellence and integration with systems based on contract principles such as Qard and Wakalah bil Ujrah, marks the existence of new research opportunities that bridge financial innovation and sharia compliance (Maulida et al., 2020; Trimulato et al., 2020).

Thus, future research in the integration of Fintech and Islamic Finance must be multidimensional and interdisciplinary. It is recommended that future research not only focus on technology development and market analysis, but also carry a holistic approach that considers aspects of regulation, financial literacy, sustainability, and digital transformation strategies so that the integration can be optimal and able to answer global challenges in the Islamic financial system (Norrahman, 2023; Cahyani et al., 2024; Posumah, 2024; Rani et al., 2024).

D. CONCLUSION

The integration of financial technology (fintech) and Islamic finance shows enormous potential in supporting the digital transformation of the financial sector in accordance with Islamic principles. This literature review reveals that despite significant challenges such as uneven digital infrastructure, complex technology adoption, and ever-changing regulations, the opportunities that emerge are much more promising. Islamic fintech can expand financial inclusion, encourage value-based innovation, and improve the economic welfare of the people through the provision of ethical and easily accessible financial services. The success of this integration is highly dependent on the synergy between technology development, increasing digital literacy, clarity of operational standards, and policy support that supports sharia compliance.

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