

## Balancing the Scales: Navigating Benefits and Risks in Indonesia's Sharia FinTech Landscape

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#### ABSTRACT

This research provides a thorough literature analysis to clarify the dynamics of advancing financial technology that complies with Shariah for inclusive development and implementing broad surveillance in Indonesia. The objective is to provide a qualitative review of the current studies to offer insightful perspectives on the growth and risks related to Shariah FinTech. This study integrates a library research approach with a qualitative research methodology. The literature results suggest that Shariah-compliant FinTech is being more widely used in Indonesia, demonstrating its advantages and disadvantages. This literature-based study advances our understanding of the complex balance needed for the ethical and sustainable development of Indonesia's developing Shariah FinTech sector.

**Keywords:** Financial Technology, Network Access, Operational Risk, Sharia FinTech, Surveillance

## **INTRODUCTION**

In the era of digital economic development, technological innovation has been the foundation of the transformation of the financial services industry (Afonasova et al., 2019). The digitization era is part of the Industry 4.0 revolution, representing a stage consciously entered rather than a mere trend (Yaquub & Alsabban, 2023). Conscious entry into the digital era requires preparatory stages, as advanced as the technology may be, acknowledging both its positive and negative aspects. Entering the digitization era consciously allows society to harness technology positively while being prepared for the potential negative impacts (Okoye et al., 2023).

The advancement of technology has a significant impact on the financial market, especially on its business activities (Mgunda, 2020). One notable innovation in the financial industry is (FinTech). The FinTech industry is growing amid the digital revolution 4.0 worldwide, offering innovative services in existing banking and financial institutions (Ali & Zaini, 2019). FinTech began to develop 2004 in the UK in the form of peer-to-peer (P2P) lending called Zopa, followed by the emergence of new financial models such as the software Bitcoin introduced by Satoshi Nakamoto in 2008 (Rizal et al., 2018). The development of FinTech in Indonesia started in 2015, marked by the establishment of the Indonesian FinTech Association (AFI) in 2016 (Nuryakin et al., 2019). AFI serves as a platform for FinTech providers to advocate and collaborate with various stakeholders to promote technological innovation and strengthen the competitiveness of the national FinTech industry (Asia Development Bank, 2022).

Authentic data on the growth of the FinTech industry in Indonesia indicates potential opportunities and challenges for well-established banking, both conventional and Islamic, requiring a quick response in various aspects (Afif & Samsuri, 2022). The competition extends beyond face-to-face business into software, web, and internet-based aspects of daily life (Subanidja et al., 2020).

The emergence of the FinTech industry is a response to various challenges faced by traditional banks and financial institutions, including strict regulations and limitations in serving communities in specific regions (Batunanggar, 2019). Consequently, the economy, financial markets, industries, and politics are all in the digitisation phase (Spence, 2021). Internationalisation has occurred with the development of the internet and technology (Loane, 2006).

Implementing internet and technology usage, providing added value to an organisation or company, impacts competition among companies to sustain continuous innovation in delivering the best services and products to the public or customers to dominate market share (Farida & Setiawan, 2022). The internal impact of technology used for organisations or companies includes cost savings in operational expenses, covering labour, general administration, and promotional costs (Farida & Setiawan, 2022). Thus, everything is now undergoing digitisation. This internationalisation has led to all industries depending on the development of the internet and technology. Not only that, but FinTech also poses potential risks that may arise in the future (Rachinger et al., 2018).

Therefore, the author considers this the background problem in this research, providing an overview of the potential models and risk management capabilities that will emerge in Islamic FinTech in Indonesia.

## **LITERATURE REVIEW**

### **Sharia FinTech**

Sharia FinTech offers Muslim customers a competitive alternative to traditional banking by meeting the growing need for Islamically compliant financial services (Ali & Zaini, 2019). Sharia FinTech ensures compliance with Sharia law while improving accessibility to financial solutions through cutting-edge technologies and digital platforms (Qudah et al., 2023). Sharia FinTech is distinguished by its commitment to ethical investment standards and avoidance of interest-based transactions (Pati et al., 2021). This helps to promote financial inclusion among populations that traditional financial institutions typically underserve (Nuryakin et al., 2019). Moreover, its focus on ethical and transparent concerns aligns with the larger societal objectives of promoting social responsibility and economic justice in the financial ecosystem (Aldboush & Ferdous, 2023). Sharia FinTech is dedicated to fusing Islamic ethics with financial innovation to create a more equitable and morally acceptable financial environment (Ajib, 2022).

### **Financial Technology Framework**

The FinTech industry in Indonesia is a reflection of how quickly financial technology has advanced in the last several years (Suryanto et al., 2022). As one of Southeast Asia's biggest economies, Indonesia has emerged as an important base in the development of fintech (Asia Development Bank, 2022). The expansion of the financial technology sector, appropriate legislation, and public acceptance of digital financial innovations form the theoretical basis of the FinTech environment in Indonesia (Maulana et al., 2022). The main factors driving this expansion are the desire for financial inclusion among people underserved by traditional financial services, the growing ubiquity of smartphones, and government backing for the FinTech ecosystem.

The FinTech environment is significantly shaped by regulation, as governments and regulatory bodies work to establish an atmosphere that fosters innovation while protecting consumers and maintaining financial stability. The growing use of online financing services, digital payment applications, and digital platform investment indicates that FinTech is becoming increasingly accepted. Together, these elements create a dynamic environment that offers prospects for growth but also raises issues with consumer protection, privacy, and security. It is, therefore, essential to comprehend these theoretical underpinnings to investigate the FinTech trends and effects in Indonesia.

### **Benefits of Sharia FinTech in Indonesia**

The benefit of Sharia FinTech in Indonesia stems from its ability to meet financial requirements in accordance with Islamic law, providing a unique set of benefits within the financial sector (Agustina & Faizah, 2023). The promotion of financial inclusion is one of the main advantages. Sharia FinTech projects support the larger objectives of promoting economic inclusion by giving access to financial services to those typically ignored by conventional banking (Ali & Zaini, 2019). This inclusion is essential in Indonesia, where a sizeable fraction of the population may have limited access to mainstream financial services efficiency. Improvements brought about by technical progress are another fundamental element. Sharia FinTech enhances operational procedures, lowers expenses, and boosts the effectiveness of financial operations by utilizing digital platforms. Technology integration makes financial services more accessible and user-friendly by enabling improved services, faster processing times, and more convenience for users.

By encouraging entrepreneurship and making investments in line with Islamic principles easier, Sharia FinTech might boost economic growth. The market for Islamic financial products and services is growing due to the alignment with Sharia law, which draws in customers looking for morally and ethically sound financial options. The ability of Sharia FinTech to improve financial inclusion, maximize operational efficiency, and support moral and economic growth by providing Islamic-compliant financial solutions is the theoretical basis for its advantages in Indonesia.

### **Risks in Sharia FinTech in Indonesia**

Risks linked to Sharia FinTech in Indonesia come from a variety of sources and are obstacles to the long-term growth of Islamic finance technology. The main concern is compliance risk, which includes the possibility that Sharia FinTech platforms could unintentionally disobey Islamic law when conducting business. This risk is significantly elevated in the complicated area of Islamic finance, where strict obedience to Sharia law is required. Various technical and operational risks are also significant; these include possible system failures, data leaks, and cyberattacks that might compromise the security and integrity of Sharia FinTech platforms. It becomes essential to have robust risk management procedures to lessen these technological and operational difficulties.

A further source of risk for Indonesian Sharia FinTech is the constantly changing legislative environment and regulatory concerns. Because the business is still in its early stages, there may be uncertainties about regulatory monitoring and compliance standards, which makes it difficult for Sharia-compliant financial technology companies to negotiate the regulatory environment successfully. Moreover, the potential for reputational harm is significant since users and stakeholders may become less trusting of any alleged departure from Sharia law or instances of wrongdoing. Sustainable reputation building calls for a dedication to transparency, moral behavior, and aggressive marketing strategies.

Market risks are also an issue in the context of Sharia FinTech in Indonesia. The feasibility and sustainability of Sharia-compliant financial technology businesses can be impacted by fluctuations in the economy, shifts in consumer preferences, and pressure from the FinTech industry's competition. Sharia FinTech companies must comprehend and handle these market dynamics to adjust to evolving circumstances and promote sustained expansion while maintaining Islamic values.

## **RESEARCH METHOD**

### **Research Methods**

Using a methodical strategy to collect and analyze existing secondary data on Sharia FinTech risks in Indonesia, this study thoughtfully develops its library research design. In order to provide a broad overview of the body of current information, the selected library research approach comprises a thorough study of theoretical frameworks, academic articles, books, and related literature.

The research methodology includes an in-depth examination of numerous secondary data sources. This substantial data collection procedure is the key component for understanding the practical and theoretical aspects of Sharia FinTech risks.

## RESULTS

### **Promoting Shariah-Acceptable FinTech for Inclusive Development in Indonesia**

Encouraging the emergence and adoption of financial technology (FinTech) solutions that comply with Shariah principles is a key component of Promoting Shariah-acceptable FinTech for Inclusive Development in Indonesia (Usman et al., 2020). With an emphasis on serving Indonesia's largely Muslim population, this program seeks to establish an ethically sound and technologically advanced financial ecosystem (Durrani & Boocock, 2005).

Shariah-compliant FinTech adheres to Islamic finance principles by prioritizing fair, transparent, and socially responsible financial transactions ahead of practices like interest (riba) (Pati et al., 2021). The goal is to serve the various demands of the nation's society while promoting inclusive development in the nation's financial sector by adopting these principles (Ahmed et al., 2015).

One of the main goals of this strategy is to promote financial inclusion (Van & Linh, 2019). Shariah-compliant FinTech aims to provide financial services to previously underserved or unbanked groups using cutting-edge technology like blockchain, digital wallets, and peer-to-peer lending platforms (Irfan & Rusmita, 2023). It seeks to close financial access gaps and provide people with services, including investment opportunities, savings accounts, and payment options through effective and simple-to-use solutions (Rabbani et al., 2021).

The development of Shariah-acceptable FinTech requires a supportive regulatory environment. The involvement of government entities is vital in establishing a conducive atmosphere for innovation while maintaining adherence to Shariah regulations (Menne et al., 2022). The establishment and adoption of these financial services are supported by regulations that are straightforward to understand (Syarif, 2019).

### **Extensive FinTech Surveillance in Indonesia**

The monitoring and control of financial technology providers that operate throughout Indonesia is carried out through a thorough and organized process known as extensive FinTech surveillance (Boukherouaa et al., 2021). Ensuring compliance with established regulations, safeguarding consumer interests, and maintaining the integrity of the financial system all depend on this surveillance (Aldboush & Ferdous, 2023).

The foundation of comprehensive FinTech surveillance is regulatory oversight. FinTech companies' operations are governed by regulations that are set and enforced by governmental agencies and regulatory authorities (Asia Development Bank, 2022). In order to comply with compliance criteria, licenses must be issued, and any infractions must be corrected by taking remedial action (Vicente & Duarte, Diogo Pereira Granadeiro, 2023). Mitigating risks related to developing technology and preserving the stability of the financial industry are the goals (Batunanggar, 2019).

Making sure that financial data is secure and private is a major area of attention for surveillance activities (Boukherouaa et al., 2021). The purpose of monitoring activities is to confirm that FinTech platforms have strong security measures in place, given the sensitive nature of transactions and the personal information involved (Rehman et al., 2023). Preventing data breaches that can jeopardise user confidentiality, guarding against unwanted access, and defending against cyberattacks are all examples of this (Villalón-fonseca, 2022).

Comprehensive FinTech surveillance includes financial services that comply with Shariah in the context of Indonesia, where the majority of the population is Muslim (Usman et al., 2020). Monitoring transactions is necessary to ensure compliance with Islamic finance principles, which include encouraging moral and just financial practices and outlawing interest (riba) (Rahahleh et al., 2019). Ensuring that FinTech platforms providing Shariah-compliant services adhere to established Islamic economic norms is the goal of surveillance activities in this field (Ajib, 2022).

## **DISCUSSION**

The public's awareness and comprehension of the advantages of Shariah-compliant FinTech must be increased through educational programs (Alfarizi, 2022). By demonstrating how these services are consistent with Islamic principles, these efforts hope to increase their adoption and acceptance among a wider range of social groups (Qudah et al., 2023).

Establishing a successful ecosystem requires collaboration (Purbasari et al., 2020). Collaboration is required amongst stakeholders, which include governmental organizations, financial institutions, IT firms, and academics of various faiths (Hidayah et al., 2023). An ecosystem where all members contribute to the creation and application of Shariah-acceptable FinTech may result from such cooperation (Ajib, 2022).

In the Shariah-compliant FinTech industry, support for entrepreneurship is essential (Ali & Zaini, 2019). The overall vibrancy of the ecosystem is increased when startups and entrepreneurs are supported through funding possibilities and mentorship programs which fosters competition and innovation (Urus, 2021). The entrepreneurship-friendly environment in the Shariah-compliant FinTech sector is essential to improving the environment's overall sustainability and competitiveness (Qudah et al., 2023). A number of important factors come into play when startups and entrepreneurs receive support in the form of funding opportunities and mentorship programs, which help the industry grow and change (Mason & Brown, 2014).

Firstly, financial support in the form of investment opportunities gives entrepreneurs the money they need to launch and grow their FinTech businesses that adhere to Shariah (Trimulato et al., 2020). They can invest in Research and Development, buy cutting-edge technologies, and broaden their market reach thanks to this financial support (Qudah et al., 2023). Because of this, these firms are able to provide more competitive and robust financial solutions, which helps to diversify the industry's offerings (Trimulato et al., 2020).

Mentorship programs enhance the effects of financial assistance by providing advice, industry insights, and invaluable experience to aspiring business owners (Verma et al., 2023). Experienced mentors can offer tactical guidance on overcoming regulatory obstacles, recognizing industry trends, and creating long-term business plans (Mulford, 2003). In addition to quickening the learning curve for new businesses, this mentorship promotes a culture of cooperation and mutual growth within the ecosystem by facilitating knowledge transfer (Verma et al., 2023).

An environment that is beneficial for competitiveness and creativity is produced when mentorship and financial support are combined (Wang & Shibayama, 2022). Startups are more likely to offer innovative and competitive solutions to the market if they are supported by sufficient funding and mentorship from seasoned professionals (Ziakis et al., 2022). Increased competition pushes the sector forward by promoting constant innovation and adaptation to changing market demands, which helps customers by giving them more options (Pabón & Capobianco, 2023).

Furthermore, the success stories of well-funded companies inspire would-be business owners and draw additional talent to the Sharia-compliant FinTech industry (Fitriyaningsih & Munawan, 2020). Diverse viewpoints, skill sets, and creative ideas are brought to the table by this talent funding, therefore improving and strengthening the environment as a whole (Menne et al., 2023).

A crucial component of surveillance is also the monitoring of the technology infrastructure. In order to do this, the systems supporting FinTech operations must be assessed for resilience and trustworthiness (Rahahleh et al., 2019). Detecting weaknesses, guaranteeing service availability, and encouraging the FinTech sector to embrace cutting-edge, safe technologies are the main goals of surveillance operations (Feyen et al., 2021). But, it is crucial to remember that there are still limitations and potential for development in Indonesia's FinTech surveillance system (Pranoto et al., 2019). Occasionally, monitoring systems are not able to keep up with the FinTech industry's rapid evolution, even with the best efforts to monitor technological infrastructure (Randy et al., 2021).

A significant obstacle finance platforms face is the complexity of cyberattacks. Hackers are constantly creating new methods to take advantage of weaknesses as technology progresses (Rizal & Yani, 2019). To properly detect and reduce possible dangers to the integrity of financial systems, FinTech surveillance in Indonesia has to keep up with these constantly changing challenges (Batunanggar, 2019). Additionally, the regulatory framework can have gaps in it, which would make it difficult to enforce standardized surveillance procedures throughout the FinTech industry and lead to uncertainty (Bains & Wu, 2023). FinTech activity may be more consistently and thoroughly monitored by guaranteeing a more standard and comprehensive approach to surveillance through the harmonization and strengthening of regulatory procedures (Asia Development Bank, 2022).

Regulation authorities, law enforcement organizations, and industry stakeholders must work together effectively for FinTech monitoring to be effective (Aldboush & Ferdous, 2023). The FinTech ecosystem may be strengthened by enhanced coordination and information exchange, which can augment the ability to identify and address new dangers. Educating and making FinTech providers aware of the value of strong security procedures is another area that needs emphasis (Xie et al., 2021). Some sector participants might need more funds or expertise to put the most recent security measures into place, especially smaller businesses (Gerardo et al., 2022). A more secure FinTech environment can be achieved by increasing understanding within the industry and supporting the implementation of best practices (Bains & Wu, 2023).

In order to address this issue, intentional attempts must be made to share information and raise awareness among FinTech professionals of the significant advantages that come from strict security procedures (Feyen et al., 2021). By cultivating a comprehensive comprehension of the possible consequences of weak security protocols, industry stakeholders may develop an increased perception of responsibility with regard to protecting confidential financial data and guaranteeing transaction integrity (Tawalbeh et al., 2020).

The instructional programs must highlight both the possible dangers of insufficient security and the advantages of making a significant investment in strong security procedures (Batunanggar, 2019). Obtaining support for implementing best practices requires highlighting the ways in which a safe environment may improve consumer trust, draw in new users, and ultimately promote the long-term survival and expansion of FinTech enterprises (Vergara & Agudo, 2021).

Targeted support systems are necessary for smaller enterprises that are limited by resources and experience (Santoso et al., 2022). This could be giving out materials, offering training courses, or creating chances for cooperation with bigger organization that can mentor and provide information (Verma et al., 2023). By helping smaller FinTech providers to apply cutting-edge security measures successfully, such initiatives help strengthen the industry's overall resilience (Nugraha et al., 2022).

## **CONCLUSION**

The role of risk management and inclusive development promotion must be carefully balanced in Indonesia's Sharia FinTech sector. A favorable regulatory framework and training programs are essential to promoting FinTech solutions that adhere to Shariah. On the other hand, constant enhancement is necessary to counter emerging dangers, and strict FinTech monitoring is essential for maintaining system integrity. Encouraging cooperation among stakeholders and creating knowledge gaps on security is crucial, particularly for smaller companies. In order to have a robust and inclusive Sharia FinTech sector in Indonesia, innovation and security must be balanced.

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