

# THE ROLE OF FINTECH IN THE TRANSFORMATION OF THE ISLAMIC FINANCIAL SECTOR

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## ABSTRACT

*This study aims to analyze the role of fintech in the transformation of the Islamic financial sector in East Java. Using a descriptive qualitative approach, this study explores how fintech has influenced the accessibility of Islamic financial services, driven product innovation, and faced challenges in its implementation. The results of the study show that fintech contributes significantly to expanding Islamic financial inclusion, especially in remote areas, through digital services that facilitate financial transactions. In addition, product innovations such as Islamic crowdfunding and Islamic peer-to-peer financing are increasingly enriching the choice of financial services that are in accordance with Islamic principles. However, the challenges faced include the low digital financial literacy of the community and regulations that do not fully support the development of Islamic fintech. This study recommends increasing digital financial literacy and strengthening more flexible regulations to support fintech innovation in Islamic finance. With this step, it is hoped that fintech can continue to accelerate the transformation of the Islamic financial sector in East Java and expand financial inclusion throughout Indonesia.*

**Keywords:** *Fintech, Islamic Finance, Financial Inclusion, Innovation, East Java, Digital Transformation.*

## INTRODUCTION

The transformation of the financial sector is one of the significant impacts of advances in information technology, which is marked by the emergence of financial technology (fintech). Fintech, as a technological innovation that facilitates access and management of finance, has penetrated various sectors, including Islamic finance. In Indonesia, Islamic finance plays an important role in supporting economic growth, especially in areas with a Muslim majority population such as East Java. With a population of more than 40 million in 2023, East Java has great potential to develop an inclusive, efficient, and technology-based Islamic financial sector (Pitri, D. C. 2023).

However, the adoption of fintech in Islamic finance in East Java still faces several challenges. One of the main problems is the low level of Islamic financial literacy among the community, which hinders the optimal use of fintech

services. Based on data from the Financial Services Authority (OJK) in 2022, the level of Islamic financial literacy in Indonesia has only reached 9.14%, lower than general financial literacy which is at 49.68%. In addition, regulatory and data security issues are also obstacles in accelerating the transformation of the Islamic financial sector based on fintech. In East Java, despite the large market potential, many Islamic financial institutions still face difficulties in adopting this technology comprehensively (Vanca, O. A., & Prasetyo, E. 2024).

Several previous studies have discussed the role of fintech in the financial industry in general. A study by Efendi, P. S. (2022) found that fintech plays a role in increasing financial inclusion by providing access to financial services for people who are not covered by conventional banks. Meanwhile, research by Norrahman, R. A. (2023) shows that Islamic fintech can be a solution in providing financial products

that are in accordance with sharia principles. However, these studies focus more on financial inclusion without examining in depth how fintech affects the transformation of the Islamic financial system in specific regions, such as East Java.

This research gap indicates that there are still limited studies that comprehensively examine the role of fintech in accelerating the transformation of Islamic finance at the regional level, especially in East Java. In addition, there are not many studies that explore the impact of fintech on the performance of Islamic financial institutions from the perspective of operational efficiency and accessibility of financial services (Putera, A. M., & Nisa, F. L. 2024).

The novelty of this study lies in the specific analysis of the impact of fintech on the transformation of the Islamic financial sector in East Java. This study will not only measure the extent to which fintech has been adopted by Islamic financial institutions, but will also explore the factors that influence this adoption, as well as its implications for Islamic financial inclusion at the community level.

The purpose of this study is to analyze the role of fintech in the transformation of the Islamic financial sector in East Java. Specifically, this study aims to: (1) identify the challenges and opportunities for fintech adoption by Islamic financial institutions in East Java, (2) examine the impact of fintech on the performance of Islamic financial institutions from the aspects of efficiency and accessibility, and (3) formulate strategies to improve Islamic financial literacy and inclusion through the use of fintech technology.

## **THEORETICAL REVIEW**

The theoretical review in this study focuses on the main concepts

underlying the role of financial technology (fintech) in the transformation of the Islamic financial sector. Several relevant theories and concepts will be discussed, including fintech, Islamic finance, financial inclusion, and digital transformation.

### **1. Fintech (Financial Technology)**

Fintech refers to technological innovations that aim to improve and automate the use of financial services. Fintech utilizes digital technology to provide more efficient, transparent, and affordable financial solutions. According to Raharjo, B. (2021), fintech is a combination of financial services with innovative technology that creates new services or modernizes existing services. Important aspects of fintech include digital payments, platform-based loans (peer-to-peer lending), investment management, and technology-based insurance.

In Indonesia, fintech has grown rapidly in recent years. Data from the Indonesian Fintech Association (AFTECH) shows that by 2022 there are more than 300 fintech companies operating in Indonesia, with a transaction volume of more than IDR 300 trillion. The presence of fintech offers wider financial access, especially for people who have not been served by conventional banking (Andriariza, Y., & Agustina, L. 2020).

### **2. Sharia Finance**

Sharia finance is a financial system that adheres to the principles of Islamic sharia, especially those related to the prohibition of usury (interest), gharar (uncertainty), and maysir (speculation). Sharia financial products are based on principles such as profit sharing (mudharabah), partnership (musharakah), rent (ijarah), and buying and selling

(murabahah). According to Fadzlurrahman, F., Mulyati, E., & Lita, H. N. (2020), the sharia financial system aims to create stability and balance in economic activities while maintaining the values of justice, honesty, and sustainability.

In Indonesia, sharia finance has become an important part of the national financial system. Bank Indonesia (BI) recorded the growth of the Islamic financial industry reaching 21.1% in 2022, with total assets reaching IDR 2,000 trillion. This shows that Islamic finance has a strategic role in supporting financial inclusion and sustainable economic growth, especially in areas with a Muslim majority population such as East Java (Caspirosi, L. C., Efendi, R., Khasan, N., & Anwar, A. S. 2023).

### **3. Islamic Financial Inclusion**

Financial inclusion is an effort to ensure that all levels of society, especially the underserved, have access to quality financial products and services. In the context of Islamic finance, financial inclusion refers to providing access to financial services in accordance with Islamic principles to people who have not had access to conventional banking (Sufia, I., Budianto, E. W. H., & Dewi, N. D. T. 2023).

A study by Budianto, E. W. H., & Dewi, N. D. T. (2023) shows that increasing financial inclusion has a positive impact on poverty reduction and economic growth. In this case, fintech can play an important role as a bridge to increase sharia financial inclusion. Sharia fintech, by utilizing digital technology, can provide services that are more accessible, affordable, and in accordance with sharia principles for Muslim communities that were previously unreachable by traditional sharia banks.

### **4. Digital Transformation in Sharia Finance**

Digital transformation is the process of integrating digital technology into all aspects of business and services, including the financial sector. In the context of sharia finance, digital transformation includes the use of technology to improve operational efficiency, expand service access, and improve customer experience (Qothrunnada, N. A., Iswanto, J., Hendratri, B. G., & Subekan, S. (2023).

Research by Mukharom, M., Nuryanto, A. D., & El Ula, K. A. (2024), emphasizes that digital transformation in the financial industry not only brings efficiency and speed, but also creates opportunities for innovation in the development of new products and services. This is very relevant for Islamic finance, which has so far been considered less flexible in innovating due to the limitations of Islamic principles. Fintech offers opportunities for Islamic financial institutions to be more competitive in the digital era, especially through digital payment services, Islamic crowdfunding, and Islamic-based investment platforms.

### **5. The Role of Fintech in Sharia Financial Transformation**

Fintech has a strategic role in driving the transformation of the sharia financial sector in East Java. Some important roles of fintech in the transformation of sharia finance are (Norrahman, R. A. (2023):

- a. **Improving Operational Efficiency:** Fintech enables sharia financial institutions to cut operational costs, automate business processes, and improve service efficiency. This allows sharia institutions to serve more customers at lower costs.

- b. **Improving Accessibility and Financial Inclusion:** Through digital platforms, fintech can reach people in remote areas that were previously difficult for traditional sharia banks to access. This helps expand the scope of sharia financial inclusion.
- c. **Development of Innovative Sharia Financial Products:** Fintech encourages innovation in sharia products and services that are more in line with the needs of the modern market, such as sharia-based peer-to-peer lending services, online halal investment, and sharia payment platforms.
- d. **Increasing Transparency and Security:** Technologies such as blockchain in fintech can increase transaction transparency and data security, which are very important in Islamic finance to maintain customer trust and comply with Islamic principles.

## 6. Diffusion of Innovation (DOI) Theory

The Diffusion of Innovation Theory by Maynanda, A., Putra, W., & Perdanakusuma, A. (2024) can be a relevant theoretical framework in understanding how fintech is adopted in the Islamic financial sector. This theory explains how innovations are introduced, adopted, and spread in society. The adoption of Islamic fintech in East Java can be understood as part of the diffusion process, where fintech becomes an innovative solution adopted by Islamic financial institutions to meet market needs and improve service quality.

## METHODS

The methodology of this study uses a qualitative approach with a descriptive method. This approach was

chosen to deeply understand the phenomenon of the role of fintech in the transformation of the Islamic financial sector in East Java. Qualitative research allows researchers to explore the views, perceptions, and experiences of various related parties (Haryono, E. 2023). This research was conducted in several major cities in East Java, such as Surabaya, Malang, Pasuruan, and Sidoarjo, which have dynamic developments in fintech and Islamic financial institutions.

The subjects of the study included customers of Islamic financial institutions, Islamic fintech practitioners, managers of Islamic financial institutions, and regulators such as the Financial Services Authority (OJK). The sampling technique was carried out using purposive sampling, namely selecting participants who had direct relevance to the research topic. Data collection techniques used included in-depth interviews, participatory observation, documentation studies, and Focus Group Discussions (FGD). In-depth interviews were conducted to obtain data on the challenges, opportunities, and impacts of fintech in Islamic finance. Participatory observation involved direct observation of Islamic financial institutions that had adopted fintech. Documentation studies were conducted through analysis of annual reports and regulatory policies, while FGDs were used to dig deeper into the dynamics of fintech adoption from various perspectives (Ratnaningtyas, et, al. 2023). The collected data were analyzed using qualitative analysis techniques according to the Miles and Huberman model, which consists of three stages: data reduction, data presentation, and drawing conclusions. In the data reduction stage, relevant information is filtered and arranged based on themes. Furthermore, data presentation is carried out in the form of narratives or diagrams to illustrate the

main patterns that emerge. In the final stage, conclusions are drawn by verifying the findings through data triangulation techniques from various sources, thus ensuring the validity of the research results (Tahir, et, al. 2023). This methodology is expected to provide a holistic picture of the role of fintech in accelerating the transformation of the Islamic financial sector in East Java.

## RESULTS AND DISCUSSION

This study found that fintech plays a significant role in the transformation of the Islamic financial sector in East Java. Based on the results of in-depth interviews with fintech practitioners, customers, and managers of Islamic financial institutions, it can be seen that the use of digital technology in Islamic financial services has increased operational efficiency, expanded accessibility of financial services, and encouraged innovation in Islamic financial products. As expressed by one of the Islamic fintech managers, "We see that this technology facilitates the process of Islamic transactions, speeds up services, and reduces dependence on traditional methods that are often slow and expensive" (Interview, 2024).

One of the main findings of this study is the increase in accessibility of Islamic financial services in areas that were previously difficult to reach by conventional financial institutions. This is supported by data showing that people in rural and remote areas in East Java now find it easier to access financial services through Islamic fintech applications. One customer in Pasuruan stated, "Previously we had to go to the city for sharia banking transactions, now we just use the application on our cellphones, everything is easier" (Interview, 2024). This ease of access shows the important role of fintech in supporting sharia financial inclusion, in accordance with research by Norrahman,

R. A. (2023) which states that digital technology can overcome geographical barriers in financial inclusion. In addition, the use of fintech in the sharia financial sector also encourages product innovation. Many sharia financial institutions in East Java have developed digital-based services such as sharia crowdfunding and peer-to-peer financing that are in accordance with sharia principles. This is reinforced by the statement of a manager of a sharia financial institution in Surabaya: "We are now able to offer financing products that are more flexible and in accordance with customer needs, while still complying with sharia principles through the fintech platform" (Interview, 2024). This finding is consistent with the research of Norrahman, R. A. (2023) which states that digital transformation enables the creation of innovative products in the financial industry, including sharia finance.

However, this study also reveals a number of challenges in the implementation of sharia fintech. One of the biggest challenges is the low level of digital financial literacy among the public. Several customers stated that they still have difficulty understanding how fintech applications work, especially regarding the sharia compliance aspect of the services offered. One customer in Sidoarjo said, "I am still worried about whether all transactions are truly sharia-compliant, because I do not fully understand how sharia fintech works" (Interview, 2024). This challenge shows the need to improve financial education and literacy for the public, especially regarding the use of technology in sharia transactions.

In addition, from the perspective of sharia financial institutions, regulations related to sharia fintech are still considered not to fully support the development of this technology. Several managers stated that regulations from the Financial

Services Authority (OJK) and the National Sharia Council (DSN) are sometimes not flexible enough to accommodate sharia fintech innovations. One fintech practitioner in Malang stated, "We often encounter unclear regulations, especially in terms of providing new services that are still in a gray area from a sharia law perspective" (Interview, 2024). This is in line with the findings of Vanca, O. A., & Prasetyo, E. (2024) which stated that strict regulations are often an obstacle to the adoption of fintech in the sharia financial sector. Overall, the results of this study indicate that fintech has a strategic role in accelerating the transformation of sharia finance in East Java, especially through increasing financial inclusion, operational efficiency, and product innovation. However, there are still challenges that need to be overcome, such as low financial literacy and regulations that do not fully support innovation. This transformation, if balanced with government support and increased education, can further strengthen the position of sharia finance in the digital financial ecosystem in Indonesia.

## CONCLUSION

This study concludes that fintech has an important role in the transformation of the Islamic financial sector in East Java. Fintech has succeeded in increasing the accessibility of Islamic financial services, especially for people in remote areas, through digital technology that facilitates transactions and expands the reach of financial services. In addition, fintech also encourages innovation in Islamic financial products, such as crowdfunding and Islamic peer-to-peer financing, which enrich customer service options and meet more flexible needs. However, although fintech offers many benefits, challenges such as low digital financial literacy and regulations that still

do not fully support innovation remain obstacles that need to be overcome.

The implications of this study indicate that to maximize the potential of fintech in the Islamic financial sector, strategic steps are needed to improve the digital financial literacy of the community. Education and socialization programs on how Islamic fintech works and its compliance with Islamic principles are very important so that the public can be more confident in using these services. In addition, regulators such as the Financial Services Authority (OJK) and the National Sharia Council (DSN) need to be more flexible in formulating policies that can support fintech innovation without ignoring aspects of sharia compliance. Appropriate regulatory support will help accelerate the transformation of the Islamic financial sector through fintech technology, as well as strengthen financial inclusion in East Java and more broadly in Indonesia.

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