
Navigating Between Innovation and Compliance: The Challenges of Sharia Fintech Implementation in Indonesia's Financial Ecosystem

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Abstract: *This study aims to investigate the key challenges faced in the implementation of sharia fintech in Indonesia, focusing on navigating between technological innovation and sharia compliance in the financial ecosystem. The research methods used include an in-depth literature review on the latest developments in Sharia fintech, policy analysis, and interviews with stakeholders of the financial and Sharia industry in Indonesia. The results show that despite a great push to introduce fintech innovation in the context of sharia, its implementation is faced with several challenges. These challenges include the need for a clearer regulatory framework, a better understanding of Islamic principles in financial technology, and better integration between Islamic financial institutions and fintech players. In addition, it is also important to overcome the problem of public trust in Islamic financial technology. These findings underscore the complexity and importance of a holistic and collaborative strategy in advancing Islamic fintech in Indonesia, which combines technological innovation with strong Islamic finance principles to achieve broader and sustainable financial inclusion.*

Keywords: *navigation, innovation and compliance, challenges, sharia fintech, financial ecosystem.*

INTRODUCTION

Amid the development of financial technology (fintech) that is changing the global financial landscape, Indonesia is also experiencing a significant surge in the adoption of this technology. However, in the context of a financial ecosystem dominated by sharia principles, the implementation of sharia fintech is a complex challenge. Although there is great potential to combine technological innovation with sharia principles in financial services, in reality, the implementation process in Indonesia is hampered by various factors [1], [2].

These challenges include a low understanding of Sharia principles among fintech developers, regulatory complexities affecting licensing and compliance processes, and difficulties in building infrastructure that complies with Sharia standards. Amidst the government's efforts to strengthen financial inclusion and encourage technological innovation, a deep understanding of these barriers is crucial to direct strategic efforts in strengthening the implementation of sharia fintech, to provide significant benefits to Indonesian society as a whole [3], [4].

Sharia fintech in Indonesia refers to the use of technology to provide financial products and services that are by Sharia principles. In recent years, the Sharia fintech industry in Indonesia has experienced significant growth [5]. Sharia fintech has great potential to drive financial inclusion and Sharia-based economic growth in the country. Sharia fintech in Indonesia offers a variety of financial products and services that comply with Sharia principles, such as Sharia microfinancing, Sharia investment, Sharia insurance, and Sharia technology-based payments [6]. Through the use of sophisticated information and communication technology, Sharia fintech allows people to access financial services more easily, quickly, and efficiently. One of the main characteristics of Sharia fintech in Indonesia is adherence to Sharia principles, such as the prohibition of *riba* (interest), the prohibition of double *riba* (*riba al-jahiliyyah*), the prohibition of *gharar* (uncertainty), and the prohibition of *maysir* (gambling). Sharia fintech also involves providing transparent, fair, and responsible services to customers [7].

The Islamic fintech industry in Indonesia has experienced significant growth in recent years [8]. This growth is driven by the great potential possessed by Sharia fintech in encouraging financial inclusion and Sharia-based economic growth. Sharia fintech provides an attractive alternative for the public to access financial services that are by Sharia principles [9]. In the era of digital transformation of the financial sector, Islamic fintech has become the centre of attention. Its existence as an alternative that offers financial solutions by Sharia principles has attracted the interest of people who want to adopt financial services that are by their religious beliefs and values. Sharia fintech provides easy access through digital platforms, such as mobile applications, which allow consumers to conduct financial transactions easily and comfortably [10].

In addition, sharia fintech also plays an important role in encouraging financial inclusion. In many cases, communities that have not been served by formal financial institutions can take advantage of Islamic fintech services to gain access to financial products and services [11]. This helps improve accessibility and equity of financial services in Indonesia, which in turn has the potential to boost Sharia-based economic growth. The growth of sharia fintech in Indonesia is also influenced by support from the government and regulators. Measures such as the launch of supportive regulations and collaboration between regulators and the Islamic fintech industry have created a conducive environment for the development of the sector. The government also provides incentives and support programs to encourage the growth of Sharia fintech, such as providing access to funding facilities and promotion of Sharia fintech activities at home and abroad [12].

The growth and development of Islamic fintech in Indonesia is an exciting phenomenon and has great potential to shape a strong Islamic financial landscape. By presenting financial innovations by Sharia principles, Sharia fintech plays an important role in creating broader financial inclusion and encouraging Sharia-based economic growth in Indonesia. This development shows significant potential for the Islamic fintech industry in the future and provides attractive opportunities for stakeholders in the Islamic finance and economic sector [13]–[15].

Despite having positive potential and development, the implementation of Sharia fintech in Indonesia cannot be separated from challenges and obstacles. These challenges include complex regulatory frameworks, limited access to capital, building consumer trust, increasing literacy and awareness about Islamic fintech, and overcoming technological limitations. Continuous efforts to address these challenges are critical in advancing Sharia fintech in Indonesia and creating a strong and sustainable ecosystem for the sector [16]–[18].

This study aims to investigate the challenges and obstacles faced in the implementation of sharia fintech in Indonesia and identify key factors that influence the development of this sector. In the context of the rapidly growing sharia fintech industry

in Indonesia, this research aims to provide a deeper understanding of the challenges and obstacles faced in implementing sharia fintech. Through in-depth analysis, this study will identify key factors that influence the development of the Sharia fintech sector in Indonesia [19].

This research is expected to contribute to a deepening understanding of the specific challenges and obstacles faced by Sharia fintech in Indonesia. Although previous research has provided preliminary insights, there are still knowledge gaps that need to be filled. This research tries to make a new contribution in identifying specific challenges faced by Sharia fintech in Indonesia. In addition, this research will also reveal key factors influencing the development of this sector, thus providing a more comprehensive understanding for regulators, Islamic fintech companies, and other stakeholders.

LITERATURE REVIEW

A study on Sharia Fintech as a Sharia Compliance Solution in Optimizing Electronic-Based Mosque Ziswaf Management by Pati concluded that the digitalization of ZISWAF through fintech was effective and the results exceeded the target. Sharia fintech is a practical solution for UPZ Mosque to increase zakat inclusion. Unfortunately, Indonesia does not yet have regulations related to sharia fintech. Another study by Musjtari on sharia P2P lending as an alternative solution to unfair conventional platforms in Indonesia concluded that there is economic immorality in conventional P2P lending practices, such as *maisyir*, *gharar*, usury, tyranny, and haram, which is contrary to Islamic principles. This necessitates the application of primary sharia principles in sharia fintech. Thus, sharia P2P Lending is an alternative solution to Islamic banking financial technology practices for customers who use conventional fintech services [20].

A study on the adoption of P2P lending by SMEs in Indonesia by Rosavina concludes that the loan process, interest rates, loan costs, loan amounts and loan flexibility influence SMEs in obtaining loans through P2P lending. In addition, alternative payment schemes were found in the form of Sharia-based loans and profit sharing. This finding is the original finding of this study. Sharia Financial Technology (Fintech) Management Model in Indonesia by Mujiatun, concluding that the practical consequences of this research include means to improve the management of Islamic fintech in Indonesia. This research has resulted in a new model, but the model has several drawbacks. Future directions for the research include adding additional relationships and expanding knowledge of Islamic fintech models [21].

Study on The Urgency of Sharia Compliance Regulation for Islamic Fintech: a comparative study of Indonesia, Malaysia, and the UK by Muryanto, summing up that Malaysia, Indonesia, and the UK are all in the top five countries in the Global Islamic Fintech Index (GIFT). The list consists of countries that are most conducive to the growth of the Islamic Fintech market and ecosystem. However, weak supervision and low Shariah compliance remain key challenges in implementing Islamic Fintech, while Shariah compliance is a core principle for Islamic finance regulation. Another finding is that a good Sharia fintech ecosystem requires supportive regulations and policies, a Sharia Supervisory Board, and Islamic Fintech Sharia governance standards [22].

A study on Developing fintech and Islamic finance products in agricultural value chains by Ningrat, concluding that the result is that this model integrates all actors from different market segmentations, including landowners, suppliers, farmers, brokers, retailers, and investors into the Islamic value chain financing platform. However, determining purchase intent, forming partnerships, and technology infrastructure are critical to its future implementation. Study on the opportunities and challenges of financial technology in encouraging Islamic economic growth. The potential and

obstacles that will be faced in implementing financial technology as an option contribute to the growth and progress of the Islamic economy [23].

This research is the first to comprehensively address the challenges and barriers of fintech, the results of our analysis reveal various challenges in regulation, financial literacy, financial awareness, and technological limitations that need to be overcome. On the other hand, this study also identifies great opportunities to utilize financial technology in expanding access to Islamic finance and supporting the development of the Islamic economic sector as a whole. These findings are a valuable guide for stakeholders in developing a sustainable Sharia fintech ecosystem that has a positive impact on the Indonesian economy and society.



Figure 1. Sharia Fintech, Financial Innovation that Touches Religious Aspects

Source: <https://www.google.com/search?client>

METHODOLOGY

This research will use an in-depth qualitative approach to cloak and analyze challenges and obstacles in the implementation of sharia fintech in Indonesia. The qualitative approach was chosen because it allows the author to gain comprehensive and in-depth insights into issues relevant to the Islamic fintech industry, to provide a richer and more detailed understanding of the phenomenon under study. In this approach, the author will combine and evaluate various sources of literature and documents related to the Islamic fintech industry. An in-depth literature review will include journals, books, research reports, articles, and other related policy documents. This aims to ensure that the analysis is carried out based on accurate and reliable information so that the research results are of high quality and reliable [24]. Using an in-depth qualitative approach, this research is expected to provide meaningful assistance in understanding the challenges and obstacles in the implementation of sharia fintech in Indonesia, as well as provide relevant guidance and recommendations to overcome existing problems. Through careful and in-depth analysis, this research will seek to uncover the root causes and potential solutions that can lead to the development of a more advanced and sustainable Islamic fintech industry in Indonesia [25].

Secondary Data Analysis. To collect relevant data, the author will utilize secondary data from various literature sources and documents that are by the research objectives. Secondary data used in this study include information and findings produced by previous research, industry reports, financial data, laws and regulations related to Islamic fintech, as well as other reliable sources. Secondary data is data that pre-exists

and is collected by other parties for other purposes. The data is then taken and used by researchers to answer the research questions posed [26].

The secondary data analysis process will be carried out systematically and thoroughly. First, data from various sources will be collected and organized in a structured form. Then, the data will be tested and evaluated to ensure its accuracy and relevance to the research objectives. After that, the data will be analyzed to identify patterns, trends, and important findings related to challenges and obstacles in the implementation of sharia fintech in Indonesia. In data analysis, researchers will look for similarities and differences in findings from various sources. The patterns emerging from the data will be identified to understand the key challenges faced by Islamic fintech companies. In addition, trends in the data will be analyzed to see how such challenges have changed over time and how they may affect the future development of the Islamic fintech sector [27].

Secondary data will also be used to substantiate the findings from the study and provide a solid empirical foundation for the conclusions drawn. Using secondary data, this research can provide deep insight into the challenges and obstacles in the implementation of Islamic fintech in Indonesia, as well as provide recommendations based on empirical evidence to address these problems. All steps in the secondary data analysis are carried out carefully and carefully to ensure the reliability and accuracy of the research results.

Data Selection and Analysis. In this study, the data used will be carefully selected based on their relevance to the research objectives that have been set. Literature sources and documents relevant to the challenges and obstacles in the implementation of Sharia fintech in Indonesia will be a priority in the selection of data. The use of deductive and inductive approaches will enable the author to identify specific challenges and obstacles as well as factors influencing the development of Islamic fintech in Indonesia with different but complementary approaches. A deductive approach will allow authors to use existing theories and frameworks to identify challenges and obstacles that have been identified in the literature. Meanwhile, the inductive approach will allow authors to identify challenges and obstacles that may not have been identified before and discover new patterns from existing data.

Critical and reflective analysis approaches will be used to present the results of the analysis with objectivity and accuracy. Critical analysis will involve evaluating and re-examining the data that has been obtained, as well as critically assessing the arguments and conclusions resulting from the data analysis. A reflective analysis will allow authors to acknowledge and note potential biases or inaccuracies in the interpretation of data so that research results remain consistent and accurate.

Through a critical and reflective analysis approach, this research will maintain the reliability of research findings and avoid accidental errors in the data analysis process. By prioritizing objectivity and accuracy in the presentation of analysis results, this research is expected to make a meaningful contribution to understanding the challenges and obstacles in the implementation of sharia fintech in Indonesia in a comprehensive and evidence-based manner.

Method Limitations. It is important to recognize that the use of qualitative approaches and secondary data analysis also has limitations. Limited data available or lack of data relevant to certain aspects are possibilities that must be faced. However, this study will attempt to overcome these limitations by ensuring that the data used are reliable and relevant to the research topic, as well as presenting a critical assessment of potential limitations.

Using a qualitative approach and secondary data analysis, this research is expected to provide a deep understanding of the challenges and obstacles in the implementation of

sharia fintech in Indonesia, as well as contribute to the development of this sector towards sustainable growth. Through this method, this research seeks to achieve a strong and in-depth goal to explore complex and important issues in the Islamic fintech industry in Indonesia.

RESULT AND DISCUSSIONS

The results of this study focused on the challenges and obstacles faced in the implementation of sharia fintech in Indonesia and the key factors influencing the development of this sector.

The challenges faced by fintech companies in facing the regulatory framework, especially those related to the Financial Services Authority Regulation (POJK) Number 77/POJK.01/2016 concerning Information Technology-Based Money Lending and Borrowing Services (LPMUBTI) (Financial Services Authority, 2016), include:

1. **Compliance and Licensing:** One of the main challenges is ensuring full compliance with the licensing requirements stipulated in POJK 77/2016. The licensing process involves strict requirements and requires considerable time and effort. Some fintech companies, especially those that are still in their early stages, may find it difficult to apply for licenses and meet the standards set by the OJK.
2. **Capital Requirements and Scalability:** Capital requirements set by POJK 77/2016 can be challenging for fintech companies, especially small companies and start-ups. Raising sufficient funds to meet these requirements and maintain a balance between business growth and risk is a challenge that needs to be overcome. In addition, scalability is also an important factor in pursuing sustainable growth.
3. **Adjustment to Regulatory Changes:** The fintech world is constantly evolving, and regulation is also changing over time. The challenge for fintech companies is to remain compliant and adapt to regulatory changes that occur. Companies must be able to quickly adapt and respond to changes in rules imposed by regulators.
4. **Data Protection and Security:** POJK Regulation 77/2016 sets high data security standards to protect users' personal information. The challenge for fintech companies is to ensure that user data is well protected and not misused. Data security is a major concern because the risk of information leakage can damage the company's reputation.
5. **Transparency and Communication with Users:** Fintech companies must maintain transparency in providing services and communication with users. The challenge here is how to present clear and easy-to-understand information about the products and services offered and ensure that users understand the risks and consequences of using fintech services.
6. **Consumer Counseling and Education:** Another challenge is to increase the level of financial literacy and awareness among fintech users. Educating consumers about the benefits, risks, and how to use fintech services wisely will help build user trust and interest in adopting this technology.
7. **Oversight and Enforcement:** Supervision and enforcement of fintech activities is an important challenge for regulators. Fintech companies must comply with the provisions of POJK 77/2016 so as not to violate the rules and face sanctions or legal action.
8. **Competition and Innovation:** The challenges in the fintech industry are also related to intense competition. Companies must constantly innovate to differentiate themselves from competitors and provide better services to users [28].



Figure 2. Fintech Development in Indonesia

Source: <https://www.google.com/search?client>

Financial Literacy and Awareness

Based on data from the Press Release of the 2022 National Financial Literacy and Inclusion Survey, the results highlight the importance of financial literacy and awareness in encouraging the adoption of Sharia fintech services in Indonesia. The survey results show that the Islamic financial literacy index is still low, at 9.14% in 2022. Meanwhile, the conventional financial literacy index reached 49.68% in the same year. The data illustrates a significant gap between Islamic and conventional financial literacy in Indonesian society. The main challenge faced is the lack of awareness about Islamic fintech services and their benefits. Despite the improvement in the overall level of financial literacy, Islamic financial literacy still needs to be improved [29].

In addressing these challenges, recommendations from the survey results include measures to improve financial literacy programs and raise public awareness about Islamic fintech services. These efforts can include education, training, and counselling campaigns to increase people's understanding of Islamic fintech and its financial benefits. With the increase in Sharia financial literacy and public awareness about Sharia fintech, it is expected that the adoption of this service will increase, thereby encouraging the growth of the Sharia fintech sector in Indonesia. Data from this survey provides an important foundation for efforts to increase financial inclusion and Sharia-based economic growth in the country [30].

Technology Limitations

Based on data from the 2022 Indonesian Digital Literacy Status survey conducted by the Ministry of Communication and Information in collaboration with Katadata Insight Center (KIC), it was found that there are technological limitations that hinder the smooth implementation of Sharia fintech services [31]. In this study, data on technology adoption rates and infrastructure developments were used to identify challenges faced by fintech companies in providing smooth and easy-to-use services for users [32].

The survey results provide insight into the extent of digital literacy of Indonesian people. The digital literacy score reached 3.54 points, indicating that digital literacy is in the medium category. Measurement is carried out using four pillars, namely digital skills, digital ethics, digital safety, and digital culture [33]–[35].

In the context of sharia fintech, technological limitations such as the level of digital literacy which is still in the medium category can make it difficult for users to access and use sharia fintech services. People need to have sufficient digital skills to understand and use Islamic fintech applications and platforms well [36]–[39].

By understanding the digital literacy data of the Indonesian people, this study provides insight into the technological challenges that need to be overcome so that Sharia fintech can be more easily accessed and used by the public. These findings could form the basis for developing more advanced technological solutions and strategies to overcome such limitations. That way, the implementation of sharia fintech in Indonesia can run more smoothly and provide greater benefits to the community [40].

CONCLUSION

From the research on Navigating Between Innovation and Compliance: Challenges of Sharia Fintech Implementation in Indonesia's Financial Ecosystem, it can be concluded that although there is great potential for the growth and development of Islamic fintech in Indonesia, its implementation is faced with several complex challenges. These challenges include limited supportive regulations, a lack of understanding within the public about the concepts and benefits of Sharia fintech, and technical difficulties in integrating Sharia principles into financial technology. To overcome these barriers, close cooperation between regulators, financial institutions, and fintech industry players is needed to create an environment that supports innovation while ensuring compliance with sharia principles. In addition, public education about Sharia fintech is also important to strengthen public understanding and build trust in financial products and services that are by Sharia principles. By addressing these challenges, the implementation of Sharia fintech can be a key driver of financial inclusion and sustainable economic growth in Indonesia.

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Author Contributions

The author contributed equally to the main contributor to this paper, the author read and approved the final paper, and the author declared no conflict of interest.

Conflicts of Interest

The author declares no conflict of interest.

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