

THE KEY CHALLENGES FOR ISLAMIC FINTECH IMPLEMENTATION IN MALAYSIA

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Abstract

This article explores the evolving landscape of Islamic fintech in Malaysia, delving into the looming regulatory challenges. As Malaysia solidifies its position as the global epicentre of Islamic finance and technological innovation, the intersection of these domains presents a distinctive set of challenges for regulators. The authors scrutinise the challenges and potential gaps within the regulatory framework governing Islamic fintech in Malaysia through meticulous analysis. The key challenges include ensuring Shariah compliance amid rapid technological advancements, addressing consumer protection concerns, navigating cross-border regulatory issues, managing technological risks and cybersecurity, achieving regulatory clarity for innovative models, and addressing talent scarcity and expertise gaps. Ultimately, the recommendations in this article offer valuable insights into developing regulatory models that harmonise innovation with adherence to Shariah principles. By embracing these recommendations, stakeholders in Malaysia can pave the way for a vibrant Islamic fintech ecosystem that thrives on innovation, integrity, and inclusivity. The study employs qualitative research techniques, including a review of existing literature, regulatory documents, and industry reports, to gather information on the regulatory framework governing the Islamic fintech ecosystem.

Keywords: *islamic finance, fintech, shariah compliance, malaysia, consumer protection, malaysia.*

I. INTRODUCTION

In recent years, Malaysia has positioned itself as a hub for Islamic finance,¹ blending its rich Islamic heritage with a forward-looking technological approach. Islamic fintech, the convergence of Islamic finance principles with innovative financial technology, is rapidly gaining traction in Malaysia. The rise of Islamic fintech in the country is a response to global fintech trends and a testament to Malaysia's commitment to fostering financial inclusion while adhering to Shariah principles.

¹ Shereen Mohamed Ahmed, *ICD-Refinitiv Islamic Finance Development Report 2022: Embracing Change*, Islamic (Corporation for the Development of the Private Sector, 2022): 6. https://icd-ps.org/uploads/files/ICD%20Refinitiv%20ifdi-report-20221669878247_1582.pdf.

Nevertheless, access to funding or financial services has been a significant issue for many Malaysians, whether on the retail side (for individuals and household consumers) or on the business side (micro, small, and medium-sized enterprises (MSMEs)).² The lack of digital adoption by MSMEs can significantly limit the potential of Malaysia's economy. This is the primary reason for a majority-Muslim nation such as Malaysia to grow the Islamic fintech market, as it may be the best way to harness innovative solutions to address issues of accessibility and tap into a broader domestic market, comprising both Muslims and non-Muslims.

This combination of technology and Islamic finance has created a dynamic ecosystem that presents both opportunities and challenges.³ In Malaysia's dynamic Islamic fintech landscape, regulatory authorities are grappling with numerous challenges in effectively overseeing this burgeoning sector. These challenges are impeding the progress of Islamic fintech.⁴ As cutting-edge technologies intersect with Shariah-compliant financial practices, regulators face the formidable task of adapting existing regulatory frameworks to navigate Islamic finance's intricacies while safeguarding consumer interests.

This article explores the complicated landscape of Islamic fintech in Malaysia, focusing on the regulatory challenges ahead. Given the promising future of Islamic fintech, regulatory frameworks play a pivotal role in ensuring stability, security, and ethical practices within the industry. Foremost among these challenges is the need to ensure Shariah compliance amidst the rapid pace of technological progress. This entails reconciling traditional Islamic finance principles with the latest advancements in fintech, a task that demands innovative solutions and robust regulatory oversight.

Furthermore, this study extends to the complexities of navigating cross-border regulatory landscapes, particularly in an era of global interconnectedness. By analysing the existing regulatory framework, this article seeks to determine the underlying regulatory challenges and potential gaps surrounding Islamic fintech in Malaysia.

As the Islamic fintech industry evolves, it faces challenges that necessitate careful consideration by regulatory bodies, consumers, market participants, and other stakeholders. To address regulatory challenges, this article advocates frameworks that accommodate and foster innovation while upholding Shariah

² Jennifer Ley. 2023, "Islamic Fintech for Financial Inclusion," January 18, 2023, <https://www.emirresearch.com/islamic-fintech-for-financial-inclusion/>.

³ Sharma, Itesh. 2024. "Fintech Challenges and Opportunities." TatvaSoft. Accessed February 8, 2024. <https://www.tatvasoft.com/outsourcing/2022/01/fintech-challenges-and-opportunities.html>

⁴ Kinan Salim and Abubakar Ilyas, "Challenges Facing Malaysia in Expanding its Islamic Fintech Landscape & Possible Remedies." *International Journal of Islamic Economics (IJIE)* 2, no. 1 (2020): 1-18, <https://doi.org/10.32332/ijie.v2i01.2250>.

principles. This implies striking a balance between regulatory oversight and fostering an environment conducive to experimentation and growth. Therefore, the authors elucidate the regulatory dynamics and potential areas of concern to facilitate informed discussions and policy deliberations.

II. METHOD OF STUDY

The introduction sets the stage by highlighting the rapid growth of Islamic fintech in Malaysia and the significance of regulatory oversight. It outlines the research objectives and questions, emphasising the need to address regulatory challenges to foster the development of the Islamic fintech industry in Malaysia. The study employs qualitative research techniques. A descriptive research design is adopted to provide an overview of the regulatory challenges in Malaysia's Islamic fintech sector. At the same time, a qualitative method such as the current analysis is utilised to gain in-depth insights into stakeholders' perspectives and regulatory dynamics. The data collection methods include a review of existing literature, regulatory documents, and industry reports for gathering information on the regulatory framework governing the Islamic fintech ecosystem. This article summarises the study's key findings and offers recommendations to address regulatory challenges in Malaysia's Islamic fintech sector.

III. OVERVIEW OF EXISTING REGULATIONS

Malaysia has taken significant strides in developing a regulatory framework for Islamic fintech. The regulatory framework refers to the legal, institutional, and policy environment that governs the development, operation, and supervision of fintech activities in the country. The key regulatory bodies, such as Malaysia's central bank, Bank Negara Malaysia (BNM) which oversees fintech activities related to payments, banking and insurance as well as the Securities Commission Malaysia (SC) which regulates fintech about capital markets such as equity crowdfunding, peer-to-peer lending, robo-advisors and digital asset exchanges, have introduced guidelines and policies to ensure the stability and integrity of the financial system. The regulatory infrastructure has been consistently upgraded in line with the 2022-2026 Financial Sector Blueprint, which articulates Malaysia's vision for Islamic fintech.⁵ Besides that,

⁵ Zulfa Abdul Rahman, "Facilitating SDGs with Islamic Finance (Part 3) Mobilizing Islamic Fintech in Malaysia," Accessed February 4, 2024, <https://www.ifac.org/knowledge-gateway/developing-accountancy-profession/discussion/facilitating-sdgs-islamic-finance-part-3-mobilizing-islamic-fintech-malaysia>

the Malaysia Digital Economy Corporation (MDEC) supports digital economy initiatives, including fintech, by promoting innovation and collaboration. This reflects the nation's commitment to maintaining stability and integrity within its financial system.

Over the years, these regulatory entities have implemented guidelines and policies that have contributed to the growth and sustainability of Islamic finance in the country. To date, specific regulations dedicated solely to Islamic fintech in Malaysia may not yet exist, but the broader regulatory framework for Islamic finance and fintech governs Islamic fintech activities. Islamic fintech activities must comply with Shariah principles and relevant regulations applicable to the Islamic finance and fintech sectors. Here are some key rules and guidelines that may apply to Islamic fintech activities in Malaysia:

III.A. Islamic Financial Services Act (2013)

The Islamic Financial Services Act of 2013 (IFSA) lies at the forefront of Islamic fintech regulation in Malaysia.⁶ This is a comprehensive law that provides the regulatory framework for Islamic financial institutions, covering various aspects of Islamic finance activities. IFSA imposes specific Shariah-compliance obligations on Islamic financial institutions, including governance, risk management, and product structuring requirements. It applies to Islamic fintech firms engaged in regulated financial activities, particularly in banking, *takaful*, and payment services.

While primarily focused on traditional Islamic finance activities such as Islamic banking, payment services, and *takaful*, its applicability to fintech varies depending on the specific fintech application. Although IFSA lays the groundwork for regulating Islamic financial institutions in Malaysia, including certain aspects of Islamic fintech, it may not be sufficient to govern all fintech activities cohesively. Fintech activities may be subject to a combination of regulations, guidelines, and Shariah-compliance requirements issued by various regulatory bodies and the Shariah Advisory Councils (SAC) in Malaysia. As fintech innovation evolves, there may be a need to amend IFSA to ensure clarity, consistency, and adequate supervision.

III.B. Capital Markets and Services Act (2007)

The Capital Markets and Services Act of 2007 (CMSA)⁷ regulates various aspects of Malaysia's capital markets, including security offerings, trading, and market intermediaries. Islamic fintech activities that fall within the scope of capital markets activities, such as digital asset exchanges, equity crowdfunding

⁶ Islamic Financial Services Act 2013 [Act 759] (Malaysia).

⁷ Capital Market and Services Act 2007 [Act 671] (Malaysia).

platforms, and peer-to-peer lending (P2P) platforms, are subject to the regulatory requirements of the CMSA. This involves obtaining the necessary licenses or approvals from the SC, adhering to disclosure and reporting requirements, and complying with investor protection measures. The CMSA provides a legal and regulatory framework for Malaysia's conventional and Islamic capital markets and activities. Hence, Islamic fintech platforms conducting capital markets activities must comply with the relevant provisions of the CMSA, regardless of whether they offer Shariah-compliant products and services.

While the CMSA may provide a foundational framework for certain aspects of Islamic fintech activities involving capital markets, it may not address the unique considerations and challenges posed by Islamic fintech, because the CMSA does not explicitly address Shariah compliance requirements for Islamic financial products and services. Plus, the CMSA does not deal with the interdisciplinary nature of Islamic fintech, which may necessitate coordination between different regulatory bodies and Shariah scholars. As the sector evolves, there may be a necessity to update CMSA provisions to better support innovation while maintaining Shariah integrity.

III.C. Guidelines on Digital Assets and Recognised Markets (Issued by Securities Commission Malaysia)

The SC has issued guidelines on digital assets⁸ for digital asset exchanges and initial exchange offerings (IEOs), as well as on regulated marketplaces,⁹ which cover aspects related to P2P lending and equity crowdfunding platforms in Malaysia. Even though they are not explicitly crafted for Islamic fintech, these guidelines may apply to Islamic fintech platforms dealing with digital assets, ensuring compliance with regulatory requirements. Nevertheless, they may not be directly tailored to address the unique considerations of Islamic finance or Shariah compliance. Islamic fintech applications, by their nature, must conform to Shariah principles in their design, development, and operation. Therefore, while the guidelines may provide a baseline for certain aspects of Islamic fintech activities involving digital assets, they may not encompass all the Shariah compliance requirements relevant to Islamic finance and are insufficient to govern Islamic fintech activities comprehensively. The platform providers must comply with Shariah principles, IFSA requirements, and applicable regulatory guidelines.

⁸ Guidelines on Digital Assets, SC-GL/1-2020 (R2-2024) (Malaysia), <https://www.sc.com.my/regulation/guidelines/digital-assets>.

⁹ Guidelines on Recognised Markets, SC-GL/6-2015 (R3-2019) (Malaysia), <https://www.sc.com.my/regulation/guidelines/recognizedmarkets>.

III.D. Bank Negara Malaysia Guidelines and Regulations

Various guidelines and regulations issued by BNM, including those related to electronic money, payment systems, and financial consumer protection, may also apply to Islamic fintech activities. For example, guidelines on e-money¹⁰ may be relevant to Islamic digital wallet providers. These guidelines outline the regulatory requirements for issuing, operating, and managing e-money services, including customer due diligence, risk management, and consumer protection measures. Apart from that, BNM has issued guidelines on digital currencies to regulate activities related to cryptocurrencies and digital tokens. These guidelines set out regulatory requirements for digital currency exchanges and wallet providers, including anti-money laundering (AML) and counter-terrorism financing (CTF) measures, as well as consumer protection and transparency requirements. Islamic fintech platforms offering Shariah-compliant digital wallets or e-money and digital currency services must observe these guidelines.

III.E. Shariah Compliance Requirements

Islamic fintech activities are expected to comply with Shariah principles,¹¹ and regulations promulgated by bodies such as BNM, the SC, and the SAC may guide Shariah compliance for Islamic fintech products and services. Shariah compliance requirements for Islamic fintech activities are vital to ensure that all financial products and services offered through fintech platforms observe Islamic principles. Shariah compliance encompasses various aspects, including product design, transaction structures, ethical considerations, and regulatory adherence. Most importantly, Islamic fintech platforms often seek guidance and endorsement from the SAC or Shariah scholars to ensure compliance of their products and services. The SAC plays a significant role in issuing Shariah rulings (*fatwas*) and giving advice on Shariah matters relevant to Islamic finance and fintech. Islamic fintech firms must engage with the SAC to obtain Shariah endorsements and ensure compliance with Shariah principles. The SAC assumes a pivotal role in ensuring the consistent application of Shariah rulings by the Islamic financial institutions in Malaysia. The SAC provide the Shariah basis for developing a comprehensive Shariah contract-based regulatory framework for Islamic financial institutions in the country.¹² Currently, the SAC has nine

¹⁰ Guidelines on Electronic Money (e-money, BNM/RH/PD 029-57) (Malaysia), [https://www.bnm.gov.my/documents/20124/943361/PD-eMoney 202302.pdf](https://www.bnm.gov.my/documents/20124/943361/PD-eMoney%202302.pdf).

¹¹ James Chen, "Shariah-Compliant Funds: Definition and Examples," ed. Gordon Scott, updated August 28, 2024, accessed January 31, 2025. <https://www.investopedia.com/terms/s/shariah-compliant-funds.asp>.

¹² Malaysia, Bank Negara. n.d. *Shariah Advisory Council*. Accessed February 5, 2024. <https://www.bnm.gov.my/committees/sac>.

members, including Shariah scholars and practitioners with vast experience, domestically and abroad, in Shariah, law, Islamic economics, and finance.

III.F. Data Protection Law

The Malaysian Personal Data Protection Act of 2010 (PDPA)¹³ law regulates the processing of personal data and may apply to Islamic fintech platforms that collect and process users' data/information. This law ensures the privacy, security, and confidentiality of personal and financial information collected and processed by every fintech platform.¹⁴ Since Malaysia does not have a specific data protection law dedicated solely to Islamic fintech activities, Islamic fintech platforms must comply with the country's primary legislation governing data protection. Under the PDPA, data users must conform to data protection principles and obligations to ensure the lawful and fair processing of personal data. By adhering to data protection laws and obligations, Islamic fintech platforms can build consumer trust and demonstrate their commitment to protecting personal data in accordance with regulatory requirements. Nevertheless, the PDPA may not explicitly address certain Islamic fintech activities or technologies, such as Shariah-compliant crowdfunding platforms, digital Islamic banking services, or blockchain-based Islamic financial products. This lack of specificity in the PDPA's scope and definition may create ambiguity and uncertainty regarding applying data protection requirements to these emerging technologies.

IV. CHALLENGES IN THE CURRENT REGULATORY FRAMEWORK

As the Islamic fintech sector gains momentum, existing regulations may face challenges in accommodating the unique characteristics of this hybrid industry. While Malaysia's position as a global Islamic financial hub appears laudable at first glance, its local Islamic fintech sector still pales compared to its conventional fintech counterpart.¹⁵ These impediments to growth arise due to the dynamic nature of fintech innovation, the complexities of Islamic finance, and the need to balance innovation with regulatory oversight. The following points are the key challenges faced in governing Islamic fintech activities in Malaysia.

¹³ Personal Data Protection Act 2010 [Act 709] (Malaysia) (hereinafter the "PDPA").

¹⁴ Christina Kow et al., "Fintech Laws and Regulations Malaysia 2023-2024," July 12, 2023, <https://iclg.com/practice-areas/fintech-laws-and-regulations/malaysia>.

¹⁵ Rahman, "Facilitating SGDs."

IV.A. Shariah Compliance and Fintech

The intersection of fintech and Shariah principles introduces complexities that may not be adequately addressed by existing regulations.¹⁶ Ensuring Shariah compliance in the rapidly evolving landscape of Islamic fintech poses a considerable challenge. While IFSA provides a foundational framework for regulating financial institutions and activities in Malaysia, including those with Islamic finance components, it may not comprehensively address all aspects of fintech activities.¹⁷ Fintech encompasses various innovative technologies and business models, including digital payments, crowdfunding, robo-advisory services, blockchain, and cryptocurrencies.

For example, a significant matter to be considered is whether the digital assets involved in Islamic fintech activities comply with Shariah principles. Islamic finance prohibits involvement in specific industries or activities deemed non-compliant with Shariah, such as gambling (*maysir*), alcohol (*kehamr*), and interest-based transactions (*riba*). Therefore, Islamic fintech platforms are responsible for ensuring that the digital assets offered or facilitated in trading are strictly Shariah-compliant. Simultaneously, establishing a supervisory mechanism becomes imperative to ensure that regulatory compliance is diligently monitored and upheld.

Additionally, emerging technologies like blockchain, which underpin cryptocurrencies and smart contracts, challenge traditional interpretations of Islamic finance structures. The decentralised nature of blockchain can pose challenges for establishing clear accountability and adherence to Islamic principles of transparency and fairness. These activities may not have been envisioned or explicitly regulated under IFSA, which was drafted before the emergence of many fintech innovations. Flexible regulations are needed in the Islamic fintech sector to protect investors and, at the same time, to foster the growth of innovation.

IV.B. The Need for a Comprehensive Data Protection Law

As Malaysia advances its vision of becoming a regional Islamic fintech hub, the protection of consumer data has emerged as a critical pillar of sustainable and ethical financial innovation. Islamic fintech, which combines Shariah-compliant financial services with cutting-edge digital technologies, relies heavily on the collection, processing, and storage of sensitive personal and financial data.

¹⁶ Yudho Taruno Muryanto, "The Urgency of Sharia Compliance Regulations for Islamic Fintechs: A Comparative Study of Indonesia, Malaysia and the United Kingdom," *Journal of Financial Crime* 30, no. 5 (2023): 1264-78, <https://doi.org/10.1108/JFC-05-2022-0099>.

¹⁷ Muhammad Ilyas Ab Razak et al., "Fintech in Malaysia: An Appraisal to the Need of Shariah-Compliant Regulation," *Pertanika Journal of Social Sciences & Humanities* 28, no. 4 (2020): 3223-33, doi: <https://doi.org/10.47836/pjssh.28.4.40>.

Therefore, a comprehensive data protection framework is essential to support consumer trust, uphold Islamic ethical principles, and ensure regulatory compliance.

IV.B.1. Regulatory Clarity for Innovative Models

The existing regulatory framework may not comprehensively cover all aspects of Islamic fintech activities. The rapid evolution of Islamic fintech has introduced innovative business models that may not fit neatly into present regulatory categories. For instance, crowdfunding platforms using blockchain or AI-driven investment advisory services may not fit neatly into traditional financial service classifications.

Regulatory uncertainty increases the barriers to entry for new entrants into the Islamic fintech space and weakens competition and market diversity. Startups and emerging firms would be hesitant to enter the market without clear, well-defined regulations and guidelines for using and implementing fintech and related applications. This, in turn, has hindered the development of the Islamic fintech ecosystem since few players have contributed to market innovation and consumer choice.

IV.B.2. Consumer Protection in Islamic Fintech

The digitisation of financial services brings new dimensions of risk and responsibility regarding consumer protection. Islamic fintech platforms that offer services such as crowdfunding, P2P, and digital banking must ensure transparency and fair treatment of customers. Challenges may arise in defining consumers' rights and responsibilities in the digital realm, especially when dealing with complex Islamic financial products. One significant challenge is the regulatory ambiguity surrounding Islamic fintech activities. Since the financial consumer protection framework applies to all financial services providers, including Islamic fintech platforms, the unique characteristics of Islamic finance and Islamic fintech may not always align neatly with existing regulations. As a result, there may be uncertainty about which laws apply to specific Islamic fintech products or services, potentially creating gaps in consumer protection.

Moreover, existing consumer protection regulations may not adequately address Shariah compliance requirements specific to Islamic finance. For example, consumer protection measures related to transparency, disclosure, and dispute resolution may need to be tailored to accommodate Shariah-compliant financial products and services such as Islamic banking, *takaful*, or Islamic investment products. Other than that, Islamic fintech firms often offer innovative and complex financial products and services, which may be

difficult for consumers to understand fully. Consumers may face challenges in assessing the risks and benefits of Shariah-compliant financial products and services, especially those involving digital assets, crowdfunding, or investment platforms.

Other than that, the PDPA only applies to the processing of personal data in the context of commercial transactions.¹⁸ This means that any personal data processed for non-commercial or private use is exempt from this legislation. Such circumstances may breed scepticism among consumers regarding safeguarding their data.¹⁹ This situation could indirectly erode public trust and investor confidence in the legal safeguards that protect their personal information.

Effective enforcement and redress mechanisms are also essential components of consumer protection frameworks. Consumers may face challenges in seeking recourse for grievances arising from Islamic fintech activities. Currently, the negotiating process between consumers and traders is flawed if conducted without the supervision of the President of the Tribunal for Consumer Claims (TTC) or any of its officers. This situation might present an imbalance of negotiating power between the parties. Often, in weaker positions, consumers can be denied proper protection if the TTC President, upon hearing the claim, does not supervise discussions between the involved parties.²⁰ The accessibility and effectiveness of current dispute-resolution mechanisms need to be improved to better address the specific needs of consumers in Islamic fintech.

IV.B.3. Cross-Border Regulatory Issues

The global nature of Islamic fintech means that firms often operate across borders, leading to challenges in regulatory harmonisation. Divergent regulatory approaches in different jurisdictions may result in compliance challenges for Malaysian Islamic fintech firms expanding into foreign markets and foreign firms entering the Malaysian market. A prime example is the cross-border utilisation of blockchain technology, where interoperability among different regulatory regimes is essential for the seamless functioning of Islamic fintech platforms.

¹⁸ PDPA, Section 4.

¹⁹ Surianom Miskam et al., "Catching the Fintech Wave in Islamic Finance: Regulatory Approach for Malaysia," in *Proceedings of the 4th Musakarah Fiqh & International Fiqh Conference (MFIFC 2018)*, Kuala Lumpur, October 17, 2018, 232.

²⁰ Su'aida Safei and Nuraisyah Chua Abdullah, "A New Proposed Features of Malaysian Legal Framework for Alternative Dispute Resolution in the Tribunal for Consumer Claims," *ESTEEM Journal of Social Sciences and Humanities* 7, no. 2 (2023): 72. <https://ejssh.uitm.edu.my/>.

The absence of a cohesive regulatory framework poses an obstacle to Islamic Fintech activities. Indeed, the imposition of a patchwork of regulations emanating from diverse religious regulatory bodies across various jurisdictions appears to impede the upward trajectory of its advancement. Consequently, this fragmented regulatory landscape may hinder the growth of Islamic financial institutions, constraining their ability to operate seamlessly across borders. This limitation poses challenges in meeting the needs of unbanked individuals seeking access to ethical and Sharia-compliant banking services.²¹ In the meantime, the wide variety of fintech and its diversified business plans make it challenging for regulators to build a one-size-fits-all regulatory framework.²²

In addition, the PDPA imposes restrictions on cross-border transfers of personal data, requiring data users to ensure that such transfers are made to jurisdictions with adequate levels of data protection. However, Islamic fintech activities may involve cross-border transactions and collaborations with foreign companies, raising questions about compliance with cross-border data transfer requirements under the PDPA.

Standardising regulatory practices, especially in cross-border transactions and data protection, is crucial to fostering a globally interconnected but well-regulated Islamic fintech ecosystem.

IV.B.4. Technological Risks and Cybersecurity²³

Cybersecurity issues are also prevalent in Islamic fintech activities. The reliance on technology exposes Islamic fintech platforms to various risks, including cybersecurity threats, system outages, and data breaches. For instance, digital wallet providers handling Islamic financial transactions must adhere to stringent cybersecurity protocols to protect customer funds and sensitive financial information. Significant resources must be allocated to tightening security measures.

Additionally, Islamic fintech activities use digital technologies and platforms to collect, process, and store sensitive personal and financial data. Regarding data protection, the existing PDPA does not prescribe specific data security and encryption requirements, leaving room for interpretation and variability in the implementation of security measures by Islamic fintech platforms.

²¹ Binmile, "Islamic Fintech - Evaluating Impacts on Financial Inclusion, Potential Challenges & Solutions," July 15, 2023, <https://www.linkedin.com/pulse/islamic-fintech-evaluating-impacts-financial-inclusion-potential>.

²² Irum Saba et al., "Fintech and Islamic Finance-Challenges and Opportunities," *Review of Economics and Development Studies* 5, no. 4 (2019): 587, doi:10.26710/reads.v5i4.887.

²³ Mustafa Raza Rabbani, "Fintech innovations, Scope, Challenges and Implications in Islamic Finance: A Systematic Analysis," *International Journal of Computing and Digital Systems* 13, no. 1 (2022): 593, <http://dx.doi.org/10.12785/ijcds/130147>.

Additionally, Islamic fintech platforms often rely on third-party service providers for functions such as cloud computing, data analytics, and payment processing. However, the PDPA does not explicitly address data users' responsibilities for ensuring third-party service providers' compliance with data protection requirements, potentially exposing Islamic fintech platforms to risks arising from third-party data breaches or non-compliance.

IV.B.5. Talent Scarcity

Compared to traditional Islamic financial institutions, talent scarcity affects operations and Shariah compliance in fintech due to its 'plug-and-play' model.²⁴ Mufti Faraz Adam, Executive Director of Amanah Advisors, stated that the areas that demand the most Shariah resources and expertise in fintech are blockchain functionalities and applications, crypto assets, and artificial intelligence (AI).²⁵ However, our current regulatory framework does not emphasise the requirement for Islamic fintech regulators to be well-versed in technological aspects.

Regulators and businesses may also face challenges in keeping pace with the evolving landscape of Islamic fintech. They may face capacity constraints in understanding and effectively regulating Islamic fintech, as technological expertise has yet to be appropriately embedded in existing IFSA or other Islamic finance regulations. Developing and maintaining a workforce with the expertise to understand both the intricacies of Islamic finance and the rapidly advancing fintech domain is crucial.

While the PDPA established the Personal Data Protection Department (PDPD) as the regulatory authority responsible for enforcing data protection laws in Malaysia, the effectiveness of regulatory oversight and enforcement may vary, particularly in emerging Islamic fintech activities. There may be challenges in monitoring and regulating the ever-changing landscape of Islamic fintech, especially given the cross-sectoral nature of fintech innovation.

V. RECOMMENDATIONS

The rapid evolution of fintech has introduced new opportunities and challenges within the Islamic finance sector in Malaysia. While the country has demonstrated regulatory foresight through mechanisms such as the Fintech Regulatory Sandbox and digital banking frameworks, the unique requirements

²⁴ Rahman, "Facilitating SGDs."

²⁵ Tayyab Ahmed and Abdul Haseeb Basit, *Global Islamic Fintech Report* DinarStandard and Elipses, 2021, 37, <https://www.capitalmarketsmalaysia.com/wp-content/uploads/2021/06/Global-Islamic-Fintech-Report-2021.pdf>.

of Shariah compliance necessitate a more tailored institutional and legal response. To support the sustainable and ethical growth of Islamic fintech, this article proposes several recommendations to enhance regulatory clarity, ensure consistent Shariah governance, and improve inter-agency coordination. The recommendations are as follows:

V.A. Reform of the IFSA and CMSA

While both laws provide a flexible legal foundation for regulating Islamic fintech activities in Malaysia, there remain lacunae (gaps) that limit their effectiveness in fully governing the evolving Islamic fintech landscape. These lacunae relate to regulatory specificity, Shariah integration, technological adaptability, and jurisdictional coordination. A harmonised reform of both statutes is therefore essential to ensure a consistent, forward-looking, and Shariah-aligned regulatory environment.

First, both the IFSA and CMSA should be amended to include explicit chapters or modules that define and regulate Islamic fintech. This would involve establishing clear legal definitions for Shariah-compliant digital financial services, products, and platforms, as well as introducing licensing and registration categories specific to Islamic fintech operators. The fintech provisions must align with *Maqasid al-Shariah* (the objectives of Islamic law), ensuring that innovation does not compromise core Islamic ethical values.

Furthermore, both laws should be amended to legally recognise Shariah-compliant digital assets, such as tokenised sukuk, asset-backed tokens, and Islamic stablecoins. Smart contracts, particularly those automating Islamic finance structures (e.g., *mudarabah*, *wakalah*, *ijarah*), with provisions for enforceability, auditability, and dispute-resolution mechanisms under both civil and Shariah principles, must be recognised to promote clarity and investor confidence.

While IFSA codifies Shariah governance for Islamic financial institutions, it does not address the operational realities of digital platforms. Reforms should extend mandatory Shariah governance requirements to all Islamic fintech entities regulated under IFSA and CMSA. It should include standards for digital Shariah compliance, such as real-time algorithmic screening, blockchain audit trails, and automated contract validation, and mandate the involvement of qualified Shariah advisers in digital innovation and technology evaluation.

Neither the IFSA nor CMSA currently provides fintech-specific consumer protection provisions rooted in Islamic values. Future reforms should incorporate the requirements for transparent disclosure of Shariah compliance methods, contract structures, and profit-risk sharing mechanisms; guidelines for ethical data usage, consent, and digital privacy aligned with Islamic concepts

such as *amanah* (trust), *ridha* (mutual consent), and *darar* (avoidance of harm); and mechanisms to resolve consumer complaints involving Shariah-sensitive issues transparently and effectively.

In addition, given that many Islamic fintech platforms offer multiple services such as digital lending, investment, and e-wallets, a unified licensing regime should be developed that minimises regulatory fragmentation by integrating the requirements under the IFSA and CMSA where appropriate, as well as enabling multi-service Islamic fintech firms to operate under a single, comprehensive regulatory framework, reducing compliance burdens while maintaining oversight.

To sustain Malaysia's leadership in Islamic finance and adapt to rapid technological advancements, coordinated reforms of both the IFSA and CMSA are imperative. These reforms should recognise the distinct needs of Islamic fintech by embedding Shariah principles into the legal treatment of digital financial innovations. By doing so, Malaysia will not only future proof its regulatory architecture but also promote a resilient, inclusive, and ethically grounded Islamic digital economy.

V.B. Establishment of a Centralised Shariah Governance Framework for Fintech

One of the primary challenges facing the Islamic fintech landscape is the fragmentation of Shariah interpretations across various institutions and platforms. To address this, the establishment of a dedicated Shariah Advisory Council for Fintech (SAC-Fintech), either within the purview of BNM or in collaboration with the SC, is proposed. This body would serve as a central authority to issue sector-specific Shariah guidance on emerging fintech innovations, including blockchain applications, digital tokens, robo-advisory services, and smart contracts.

This proposed entity could evaluate whether the underlying mechanisms uphold the principle of avoiding *gharar* (uncertainty), *riba* (interest), and *maysir* (speculation). Without a clear, unified position, one platform might consider a digital asset compliant, while another might reject it based on differing interpretations of Shariah principles. A unified governance structure would reduce inconsistencies in Shariah rulings and enhance investor and consumer confidence.

Likewise, for robo-advisory services, where algorithms select and manage Shariah-compliant portfolios, the Council could standardise the acceptable parameters for real-time Shariah screening—such as permissible debt ratios or sectoral exclusions—ensuring all Islamic robo-advisors apply consistent methodologies. Similarly, with smart contracts, which automate financial

agreements using pre-programmed code, the SAC-Fintech could issue standards on whether the contractual terms align with Islamic jurisprudence, including valid offer and acceptance (*ijab* and *qabul*), consideration (*‘iwad*), and avoidance of prohibited elements like uncertainty or coercion.

The establishment of such a centralised governance body would mitigate the risk of regulatory arbitrage, where fintech firms choose the most lenient interpretations to gain a competitive advantage. It would also streamline compliance for Islamic fintech start-ups, especially those lacking in-house Shariah expertise, by providing a clear and authoritative reference point.

V.C. Creation of a National Islamic Fintech Coordination Body

To enhance policy coherence, bridge regulatory gaps, and reduce jurisdictional overlaps in Malaysia’s rapidly evolving Islamic fintech sector, this study proposes that a National Islamic Fintech Coordination Body be established. This multi-agency council would act as a centralised institutional mechanism tasked with the strategic oversight, coordination, and integration of Islamic fintech-related policies and initiatives across regulatory, technological, legal, and Shariah domains.

The proposed council—tentatively referred to as the Islamic Fintech Council of Malaysia (IFCM)—should be composed of representatives from key regulatory and industry stakeholders, including BNM, SC, the MDEC, SAC members, fintech industry associations, and legal and academic experts in Islamic finance and technology law. The inclusion of both public and private sector actors will ensure a holistic approach that balances regulatory prudence with market dynamism and innovation.

The primary mandate of the IFCM would include policy harmonisation between BNM and SC to avoid regulatory overlaps and conflicting jurisdiction in areas such as digital Islamic banking, crowdfunding, e-wallets, and tokenised assets; strategic alignment of fintech innovation with Shariah principles, by collaborating closely with Shariah experts to ensure that regulatory innovations do not compromise Islamic ethical values; facilitation of stakeholder engagement through roundtables, consultation papers, and dialogue platforms to ensure that fintech startups, investors, scholars, and regulators are part of an inclusive policymaking process; acceleration of Islamic fintech adoption by coordinating capacity-building programs, standard setting, and technological infrastructure initiatives (e.g. blockchain sandboxes or Shariah-compliance APIs); and international positioning of Malaysia’s Islamic fintech sector through global partnerships, knowledge sharing, and alignment with Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) or Islamic Financial Services Board (IFSB) standards.

For instance, regulatory ambiguity often arises when a fintech product, such as a Shariah-compliant e-wallet or tokenised *sukuk*, falls under both payment system regulation (BNM) and capital markets regulation (SC). A unified council would serve as an intermediary platform to resolve such jurisdictional questions, facilitate integrated guidance, and support joint oversight mechanisms. Similarly, the IFCM could oversee cross-border collaborations with other Islamic finance jurisdictions—such as the UAE or Indonesia—to ensure that Malaysia’s Islamic fintech products meet both domestic and international regulatory expectations.

Additionally, the IFCM could play a critical role in crisis management and regulatory response, particularly in addressing systemic risks emerging from new technologies like DeFi (decentralised finance), AI-driven robo-advisory, or blockchain-based Islamic financial instruments. This proactive and integrated model would allow Malaysia to future-proof its Islamic finance system against rapid digital transformation.

Ultimately, the creation of a coordinated national Islamic fintech platform would strengthen regulatory certainty, promote market confidence, and reinforce Malaysia’s position as a global pioneer in Shariah-compliant digital finance. It reflects a necessary evolution of governance models that embrace interdisciplinary collaboration, technological innovation, and the ethical imperatives of Islamic finance.

V.D. Enhanced Regulatory Sandboxes with Support from the Law

The role of regulatory sandboxes should be formally codified into law, since it has been implemented through a policy instrument to ensure legal certainty for Islamic fintech startups during experimental phases. This shall enable real-time Shariah compliance assessment within sandbox environments and foster collaboration between regulators, Shariah scholars, and technologists in refining future Islamic fintech models.

While BNM has introduced regulatory sandboxes to facilitate innovation in the financial industry, including Islamic finance and fintech sectors, the initiative can be further improved by expanding it to include Shariah-compliance assessments as part of the testing process, which involves a collaboration with the SACs of BNM as well as SC, and possibly academic institutions with expertise in Islamic jurisprudence. Building on the success of regulatory sandboxes in other jurisdictions, Malaysia can also consider enhancing tailored sandboxes specifically for Islamic fintech, such as Shariah sandboxes.²⁶ These sandboxes would provide a controlled environment for

²⁶ IBF Net Group, “Shariah Sandbox for Islamic Fintech Regulation,” October 9, 2022, <https://ibfnet.medium.com/shariah-sandbox-for-islamic-fintech-regulation-91ceb770aa5a>.

testing innovative products and services while allowing regulators to monitor their compliance with Shariah principles closely.

Moreover, the establishment of Shariah sandboxes provides a structured framework for collaboration between Shariah scholars, regulators, and innovators. In a unified framework comprising four phases – application, evaluation, testing, and exit – stakeholders work together to understand Islamic fintech startups' business model, products, and processes. This collaborative approach would ensure that businesses conform to Shariah principles in all aspects of their functioning, thereby enhancing trust and credibility in Shariah-compliant financial products and services.

Indeed, the Shariah-oriented sandboxes could provide a supportive environment for startups dealing with explicit prohibitions and those with unanswered questions surrounding their operations. This inclusivity allows a broad spectrum of Islamic fintech firms to participate and acquire benefits from the sandbox's oversight and guidance. The sandbox offers a platform to address these ambiguities for startups that do not overtly engage in prohibited elements but face uncertainties about their operations.

On top of that, the sandbox provides a live testing environment where Islamic fintech firms can pilot their products and services under the oversight and guidance of regulatory authorities and Shariah advisors. This real-world testing allows startups to assess their offerings' functionality, usability, and Shariah compliance in a controlled setting before launching them to the market. By testing their products in a live environment, startups can identify and address any potential issues or concerns, enhancing the quality and integrity of their offerings. This shall help fintech firms validate their models both legally and ethically before entering the market fully.

V.E. Capacity Building in Islamic Fintech Regulation and Adjudication

There needs to be increased investment in continuous educational programs and capacity-building initiatives for regulatory officials. It is essential for enhancing the technical and legal capacity of regulators, judiciary members, Shariah scholars, and financial professionals. Structured training programs focusing on fintech-related technologies—such as blockchain, artificial intelligence, and smart contracts—and their implications under Islamic law should be introduced. This would improve regulatory responsiveness, ensure more informed adjudication of disputes, and foster innovation that is both legally sound and Shariah-compliant. Ensuring regulators have a deep understanding of Islamic finance and emerging technologies is essential for crafting nuanced regulations for Islamic fintech. They must have specialised knowledge and expertise in Islamic finance, jurisprudence, and technology. This approach

shall strengthen the regulators' ability to respond to the evolving challenges in the Islamic fintech landscape.

Training programs, collaborative initiatives with educational institutions, and ongoing capacity-building efforts are essential to enhance regulatory capabilities in overseeing Islamic fintech activities and ensure that regulators are well-equipped to make informed decisions and provide effective oversight. For example, IOSCO could offer more capacity-building programs, training workshops, and technical assistance to its members to enhance their capabilities in securities regulation, including Islamic fintech. These initiatives shall equip the regulators with the knowledge, skills, and tools needed to regulate and supervise Islamic fintech activities within their jurisdictions effectively.

Likewise, there is also a need for enhanced consumer education and financial literacy initiatives to empower consumers to make informed decisions. Islamic fintech firms and financial institutions can develop mobile apps to provide consumers with easy access to educational materials and tools related to Islamic fintech. These apps could offer features such as financial calculators, glossaries of Islamic finance terms, case studies, and quizzes to help users learn about Shariah-compliant financial products and their implications. For instance, users can learn how to calculate *zakat* (obligatory almsgiving) on their wealth or investments using the app.

V.F. Cross-Border Collaboration/Global Standards and Interoperability

Malaysia is likely to intensify efforts for cross-border collaboration in Islamic fintech. Strengthening ties with other jurisdictions, harmonising regulatory standards, and facilitating cross-border transactions will be critical. The country should actively participate in global discussions on standardising Islamic fintech regulations. International standards-setting bodies, such as the IFSB and the International Organisation of Securities Commissions (IOSCO), should play a significant part in facilitating collaboration among regulators.

For instance, IFSB has excellent potential to enhance its cooperation with regional and international organisations, standard-setting bodies, and regulatory authorities to undertake joint projects and initiatives to address common challenges and promote regulatory harmonisation in Islamic fintech. Regions could leverage collective expertise and resources to develop innovative solutions and enhance regulatory collaborations by working together on collaborative projects.

IOSCO could contribute to developing principles, standards, and guidelines for applicable securities regulation across jurisdictions. These standards cover many areas, including investor protection, market integrity, transparency, and risk management, which seem relevant to Islamic fintech activities involving

securities markets. Following IOSCO standards, regulators can harmonise their regulatory frameworks and promote consistency in regulating Islamic fintech securities activities.

Establishing common standards and promoting interoperability could facilitate cross-border transactions and collaborations, ensuring a seamless and consistent international experience for Islamic fintech firms. Regulatory bodies may explore mutual recognition agreements to foster international cooperation and create a globally connected Islamic fintech ecosystem. Firms operating within globally recognised regulatory frameworks can adeptly navigate domestic regulation disparities across various jurisdictions. By adhering to universally acknowledged standards, these firms can mitigate compliance risks and dismantle barriers to international expansion. This promotes a seamless global network, fostering connectivity, collaboration, and knowledge-sharing in the Islamic fintech ecosystem. Consequently, this engenders a fertile ground for innovation and propels growth worldwide.

VI. CONCLUSION

The landscape of Islamic fintech in Malaysia stands at the intersection of tradition and innovation, presenting opportunities and challenges. The country has been at the forefront of Islamic finance, attracting international investors seeking Shariah-compliant investment opportunities. As the industry evolves, it faces regulatory challenges that require careful consideration and adaptive frameworks. Thus, collaboration among regulators, industry players, Islamic scholars, and legal and technology experts²⁷ will be paramount in addressing these loopholes and challenges. Together, these stakeholders can ensure that the regulatory framework remains responsive to emerging trends, fosters innovation, protects consumers, and upholds the principles of Islamic finance. With a shared vision and concerted efforts, Malaysia can continue to play a pivotal role in shaping the trajectory of Islamic fintech, contributing to financial inclusion, economic growth, and the global advancement of Shariah-compliant financial solutions.

²⁷ Malaysia, Fintech News, "Navigating the Challenges and Opportunities of Cross-Border Payments in APAC," September 12, 2023, <https://fintechnews.my/39573/payments-remittance-malaysia/navigating-the-challenges-and-opportunities-of-cross-border-payments-in-apac/>.

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