



The Role of Financial Technology in Enhancing and Advancing the Islamic Finance Industry: Insights from Malaysia's Experience

اهمية التكنولوجيا المالية في دعم وتطوير الصناعة المالية الإسلامية - دراسة تجربة ماليزيا -

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Received: 11/01/2025

Accepted: 24/05/2025

Published: 28/28/2025

Abstract

The aim of this study is to highlight the role of financial technology in supporting and developing the Islamic finance industry by presenting the Malaysian experience. It was concluded that financial technology offers opportunities and prospects for the Islamic finance industry that could enhance the competitiveness of its institutions and increase their effectiveness and efficiency. This is demonstrated by the Malaysian experience, which has become one of the leading countries in the field of Islamic financial technology due to the Malaysian government's adoption and promotion of the Islamic finance industry through legislation, laws, and the development of infrastructure. It also involves activating the role of regulatory and Shariah bodies, supporting the establishment of fintech companies, and implementing the latest technologies, such as crowdfunding platforms, which are considered one of the most prominent technological innovations in Malaysia. These platforms open new opportunities for micro, small, and medium-sized enterprises to obtain financing in a more suitable manner, manage their funds, and carry out transactions easily. It also provides direct access to the public online to raise funds, enhance efficiency, and improve access to financial services.

Keywords

Financial Technology (Fintech) ;
Islamic Financial Industry ;
Malaysia's Experience;

JEL Classification Codes : P43 ; G21 ; L86

الكلمات المفتاحية

التكنولوجيا المالية؛
الصناعة المالية الإسلامية؛
التجربة الماليزية؛

المخلص

تتناول هذه الدراسة دور التكنولوجيا المالية في تعزيز وتطوير الصناعة المالية الإسلامية، مع تسليط الضوء على التجربة الماليزية كنموذج رائد. وقد أظهرت النتائج أن التكنولوجيا المالية تساهم في فتح آفاق جديدة وتوفر فرصاً مهمة للصناعة المالية الإسلامية، مما يدعم قدرتها التنافسية ويعزز كفاءتها وفعاليتها. وتعد ماليزيا من الدول الرائدة في هذا المجال، بفضل السياسات الحكومية الداعمة التي تمثلت في إصدار التشريعات الملائمة، وتطوير البنية التحتية، وتفعيل دور الهيئات الشرعية والرقابية. كما حرصت الحكومة الماليزية على دعم تأسيس شركات التكنولوجيا المالية واعتماد تقنيات متطورة، من أبرزها منصات التمويل الجماعي. وتوفر هذه المنصات حلولاً مبتكرة للمشروعات الصغيرة والمتوسطة، حيث تمكنها من الحصول على التمويل بمرونة وسهولة، إلى جانب تحسين إدارة الأموال وتنفيذ المعاملات بكفاءة. علاوة على ذلك، أسهمت هذه المنصات في تحسين الوصول إلى الخدمات المالية وتعزيز فعاليتها، عبر تمكين التفاعل المباشر مع الجمهور وجمع التمويل بشكل أكثر سلاسة.

تصنيف JEL: P43؛ G21؛ L86

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I.INTRODUCTION:

In recent years, the Islamic financial industry has undergone profound and significant transformations that have enabled it to emerge strongly on the international stage, achieving high levels of growth. This has been driven by increasing interest from countries, institutions, individuals, and major investors in this type of financial service, which offers financing, investment, deposit, and insurance channels compliant with Islamic Sharia principles. This interest has been particularly notable after the industry proved its resilience during the global economic crises of 2008. The industry's assets reached \$2.44 trillion in 2019, up from \$2.19 trillion in 2018. The annual growth rate was 11.4% between 2018 and 2019, compared to 9.6% between 2017 and 2018. According to Thomson Reuters reports, the assets of Islamic banking alone worldwide are expected to reach approximately USD 3.9 trillion by 2023. This demonstrates that the Islamic banking sector holds promising prospects for achieving positive results and high growth opportunities, which can be enhanced by integrating financial technology to lead the market and achieve sustainable growth. Recently, the financial industry has witnessed increasing interest in financial technology, its usage, and its impact on banking operations. The adoption rate of financial technology jumped from 16% in 2015 to 33% in 2017, reaching 64% in 2019. Thus, it can be said that financial technology (FinTech) offers a tremendous opportunity for the Islamic finance industry. It can enhance its competitiveness in the market by attracting more customers, improving its effectiveness and efficiency, and ensuring high levels of accuracy and transparency. However, this is contingent upon the sector's ability to adapt to developments in this field. Consequently, the Islamic finance industry strives to embrace FinTech applications to keep pace with the rapid changes characterizing economic activities in general and financial activities in particular. FinTech serves as a supporting pillar for Islamic finance in the digital era, making it essential to capitalize on the vast growth opportunities it offers. Malaysia plays a leading role in the field of Islamic FinTech on a global scale, leveraging FinTech as a tool to achieve its objectives and develop its economy.

From this perspective arises the research problem:

To what extent does financial technology contribute to supporting and developing the Islamic finance industry in Malaysia?

Our starting point in this is **the assumption** that the technological developments that have occurred in the financial and banking sector are among the most important pillars that Islamic institutions can rely on to develop their financial industries.

1. Importance and Objectives of the Study: The importance of our study stems from the significance of Islamic financial technology and its future role in advancing the Islamic financial and banking sector, enabling it to compete globally by reducing costs and providing better services to customers. It is considered one of the most dynamic and evolving sectors in the financial services markets. Through this study, we aim to achieve a number of objectives, including:

- Studying and analyzing the concepts related to financial technology and the motivations behind its spread.
- Highlighting the most important developments in financial technology.
- Understanding and enumerating the key trends in the world of financial technology and blockchain technology.
- Highlighting the significant role that financial technology plays in facilitating transactions and developing the Islamic financial industry.
- Monitoring the positive effects resulting from the adoption of financial technology applications by Islamic financial institutions in improving their financial and operational performance.
- Presenting Malaysia's experience in adopting Islamic financial technology.

2. Study Methodology: Due to the nature of the study, the descriptive analytical method was used to interpret the various basic concepts related to financial technology and its contribution to strengthening the Islamic financial industry. This method also helps in understanding the development and spread of financial technology worldwide, particularly in Malaysia.

II. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES:

1. Theoretical Framework

The theoretical framework outlines the concepts, theories, and models that underpin this study, linking financial technology (FinTech) and Islamic finance. The study relies on:

A. Technological Innovation Theory : This theory emphasizes the role of technological advancements in improving efficiency, competitiveness, and accessibility within industries. In the context of Islamic finance, fintech innovations such as crowdfunding platforms and digital payment systems are pivotal.

B. Shariah Compliance Framework : Islamic finance operates under the principles of Shariah law, which requires financial products and services to avoid interest (riba) and unethical practices. The integration of fintech within this framework ensures that innovations align with these principles while enhancing industry capabilities.

C. Regulatory and Institutional Theory : This theory highlights the importance of regulations and institutional support in fostering the growth of fintech in the Islamic finance sector. It is particularly relevant in analyzing Malaysia's supportive policies and regulatory environment.

2. Previous Studies

This section reviews related studies to establish the research gap:

A. Role of FinTech in Islamic Finance : Studies like [Kassem, Z.A.A., 2023] the study titled "The Impact of Fintech and RegTech on Enhancing Operational Performance of Banks in Egypt: Exploring the Opportunities and Challenges" by Zeinab AbdElHafiz Ahmed Kassem (2023) examines how financial technology (FinTech) and regulatory technology (RegTech) influence the operational performance of Egyptian banks.

Utilizing an analytical descriptive approach, the researcher distributed questionnaires to branch managers, department heads, and staff across 98 banks registered with the Central Bank of Egypt.

The findings reveal a statistically significant positive relationship between the adoption of FinTech and RegTech solutions and the enhancement of operational performance in these banks.

The study recommends that banks should further leverage artificial intelligence and information technology in financial and organizational processes to boost efficiency and performance.

This research contributes to understanding the pivotal role of technological advancements in the banking sector, particularly within the context of Egypt's financial industry.

B. Malaysia's Experience in FinTech Development : Research by [Nik Azman, N. H., Zabri, M. Z., Masron, T., & Malim, N. A., 2020] the study titled "The Utilisation of Islamic Fintech (I-Fintech) in Promoting Sustainable Inclusive Growth: Evidence from Micro-Entrepreneurs in Malaysia" by Nik Hadiyan Nik Azman, Mohd Zaidi Md Zabri, Tunku Ahmad Masron, & Nor Azila Malim. (2020) examines how Islamic financial technology (i-Fintech) tools—specifically crowdfunding, mobile money, and peer-to-peer lending—affect income sustainability among micro-entrepreneurs in Malaysia.

Employing a quantitative approach, the researchers distributed 120 questionnaires to micro-entrepreneurs who had integrated i-Fintech solutions into their businesses.

The findings indicate that the adoption of these i-Fintech tools plays a significant role in ensuring income sustainability for micro-entrepreneurs.

This research contributes to the understanding of how i-Fintech can promote sustainable inclusive growth by enhancing the financial stability of micro-entrepreneurs in Malaysia.

C. Impact of Crowdfunding Platforms on SMEs : The study by [Abdeldayem, M., Aldulaimi, S., 2023], the study titled "Developing an Islamic Crowdfunding Model: A New Innovative Mechanism to Finance SMEs in the Middle East" by Marwan Mohamed Abdeldayem and Saeed Hameed Aldulaimi (2023) investigates the feasibility of Islamic crowdfunding (ICF) as an alternative financing method for small and medium-sized enterprises (SMEs) in the Middle Eastern and Islamic business contexts.

Employing a qualitative research design, the authors conducted 25 in-depth interviews with Islamic scholars, Sharia board members, and Islamic finance experts from various Middle Eastern countries, including Saudi Arabia, Kuwait, Egypt, Iraq, the UAE, and Bahrain.

The study's findings led to the development of a new Sharia-compliant crowdfunding model, identifying four essential pillars: Project Idea (Halal), Funding Goal, Return and Risk, and Funding Commitments.

Additionally, the research indicates that the four types of crowdfunding—reward-based, donation-based, loan-based, and equity-based—are permissible within Islamic law, supported by evidence from the Quran and Sunnah.

This study contributes to the broader field of economic and Islamic finance theories by introducing an innovative Islamic crowdfunding model to support SMEs in the Middle East.

D. Challenges of FinTech Adoption in Islamic Finance : Research such as [Irum, S., Rehana, K., Imran, S, C., 2020] the study titled "FinTech and Islamic Finance—Challenges and Opportunities" by Irum Saba, Rehana Kouser, and Imran Sharif Chaudhry (2020) examines the integration of financial technology (FinTech) within Islamic financial institutions (IFIs).

The authors discuss how FinTech can provide cost-effective, Shariah-compliant financial solutions that enhance economic growth and improve business processes, particularly for startups.

They also highlight the challenges faced by IFIs in adopting FinTech solutions, such as the need for proper regulatory monitoring to prevent cyber-attacks, data leakage, and data theft.

The paper emphasizes the importance of proactive regulations and awareness among both users and regulators to ensure the stability of the financial system.

Additionally, the study explores the potential of FinTech to serve poorer segments of society, thereby promoting financial inclusion.

The authors conclude that while FinTech offers significant opportunities for IFIs, addressing the associated challenges is crucial for its successful implementation.

III. CONCEPTS OF ISLAMIC FINANCIAL TECHNOLOGY:

1. Definition of Financial Technology:

Financial technology, often referred to as FinTech, describes the products and services that rely on technology to improve the quality of traditional financial services. These services are characterized by being faster, cheaper, easier to use, and more accessible to a broader population. In most cases, these services and products are developed by startups, which are small, newly

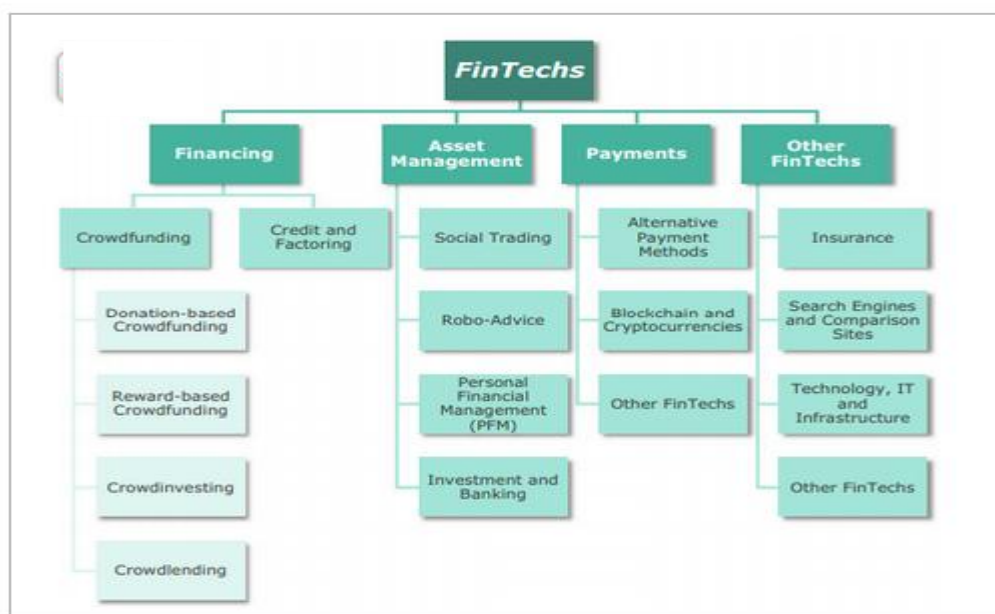
established companies aiming to expand by creating new markets or capturing significant shares of existing ones through value-added offerings.

Thus, financial technology startups are small, emerging firms that promise to enhance banking services for individuals and businesses, either by collaborating with or competing against existing financial service providers (Financial technology report, 2017, p. 7).

The term "financial technology" encompasses both the technological and financial aspects, resulting in a field that focuses on financial transactions using and leveraging the innovations brought about by modern technology, such as smartphones, to develop financial services. These services are now offered by companies that have utilized technology in the service sector. (Abdelrahim et al., 2018, p. 34).

FinTech is defined as the products and services that depend on technology to improve the quality of traditional financial services. These technologies are faster, cheaper, and easier to access for a larger number of people. Often, these services and products are developed by startups, aiming to expand by creating new markets or capturing a significant share of existing markets (Hasseini & Ferdjallah, 2023, p. 85).

Figure 01: Sectors of the Financial Technology Industry



Source: Jacob Donald Tan, John Tampil Purba, (2018).Financial Technology as a Innovation Strategy for Digital Payment Services in the Millenial Generation¹, Advances in Social Science, Education and Humanities Research, Volume 292, p. 365.

In recent years, the financial technology sector has experienced a revolution in global and Arab financial systems, meeting various needs and services related to financial operations in advanced ways that rival traditional financial services in terms of speed and cost. FinTech startups have succeeded in offering a diverse range of financial services, including payments, digital currencies, money transfers, lending, crowdfunding, wealth management, and insurance services.

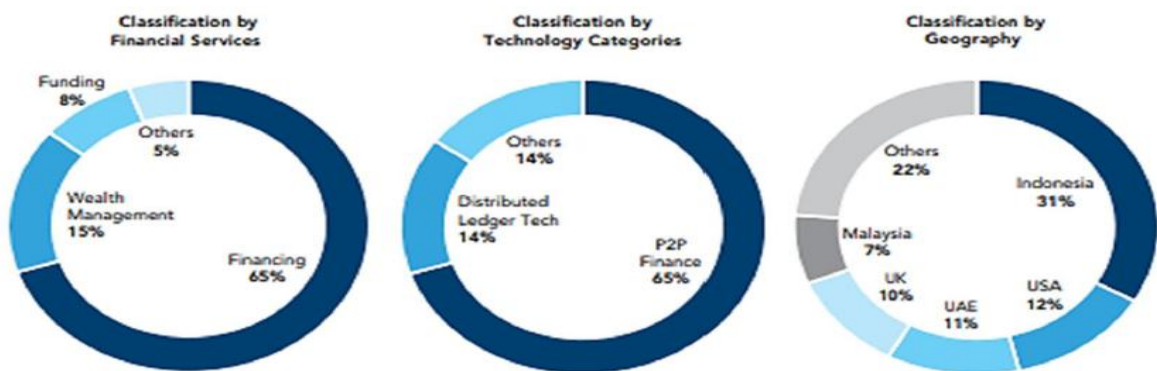
FinTech has the potential to transform the structure of financial services, making them faster, cheaper, and more secure while targeting a large segment of the population that remains outside the formal banking system. This technology, along with its innovations, the widespread use of smartphones, and the deep penetration of the internet, is expected to facilitate access to financial services, particularly in remote areas and among marginalized groups such as women (Aziza, 2021, p. 412).

2. Definition of Islamic Financial Technology: Islamic FinTech combines two key components: Financial Technology and Islamic Finance. It is defined as all financial technology applications and products that comply with Islamic Sharia law, adopted by Islamic financial and banking institutions.

It is also described as all contemporary digital financial applications that can be utilized in the Islamic financial and banking sector without conflicting with the objectives of Islamic law (Al-Saadoun, 10/11/2024).

Another definition of Islamic FinTech refers to various financial and banking innovations based on the use of technology while adhering to the specific requirements of Islamic financial and banking practices, ensuring compliance with Sharia principles (Samira et al., 2022, p. 167).

Figure 02: Global Distribution of Islamic Financial Technology



Source: Ben Issa Mounir, Mouri Soumaya. (2022). *Islamic Financial Technology: The Digital Financing Revolution – The Malaysian Experience*. *Journal of Economic Studies*, Vol. 16, Issue 02, p. 285.

According to a report by DinarStandard, there are 93 Islamic FinTech companies worldwide, with 65 of them focused on peer-to-peer (P2P) financing. P2P platforms are among the most common in the Islamic FinTech sector as they directly connect capital providers and users through technology. Indonesia leads with the highest percentage of Islamic FinTech companies (31%), followed by the United States (12%) and the UAE (11%). Malaysia accounts for 7%, with approximately 12 companies.

The first Sharia-compliant FinTech platforms were established in the mid-2000s as crowdfunding platforms offering alternative financing for Muslim consumers. These platforms were developed by Islamic FinTech companies in collaboration with payment service providers like MasterCard, Visa, or American Express to facilitate transactions, or with conventional banks to create virtual Islamic branches.

Regarding Sharia-compliant crowdfunding, notable examples include the *Liwwa* investment platform, founded in Harvard University's Innovation Lab in 2013. It facilitated loans of \$1.6 million within a single year in Jordan alone. In the UAE, the *Beehive* platform was launched in 2014 as the first independently certified direct financing platform operating under Sharia principles. It provided AED 25 million (approximately \$7 million) to more than 50 small and medium-sized enterprises (SMEs) in its first year. Additionally, the innovative *Murabaha* platform for Islamic finance was launched on Nasdaq Dubai in April 2014. The platform achieved significant growth in 2014, with transactions exceeding AED 21 billion. (Al-Saadoun, 10/11/2024).

3. Evolution of Financial Technology

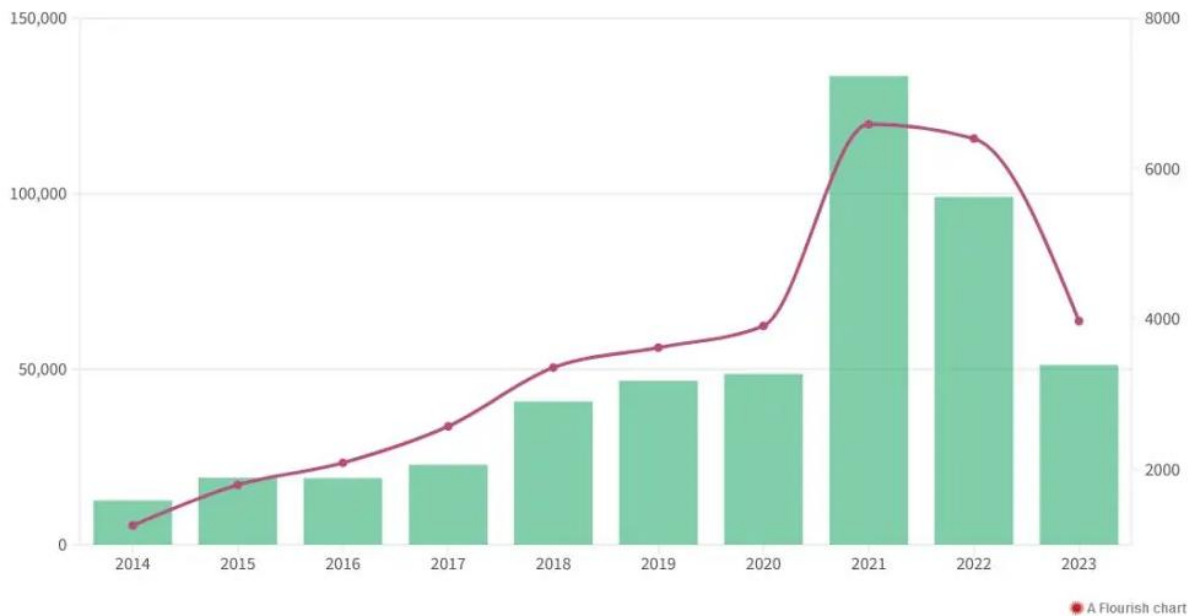
FinTech is not a new phenomenon; financial services and institutions have a long history of adopting technology. The evolution can be summarized in the following stages:

- **Stage 1 (1866–1967):** This phase saw the laying of the first transatlantic cable and the invention of the ATM. The integration of technology and finance marked the beginning of the first era of financial globalization.
- **Stage 2 (1967–2008):** During this period, FinTech remained primarily within the traditional financial services sector. It was used to deliver financial products and services, including the introduction of electronic payments, clearing systems, ATMs, and online banking.
- **Stage 3 (2008–Present):** Following the global financial crisis, new startups emerged, offering financial products and services directly to businesses and the general public.

4. Current State of Financial Technology:

The current state of FinTech can be illustrated by investment volumes and the number of deals, as depicted in the following chart:

Figure 03: Total global FinTech investments and the number of deals (2014–2023).



Source: Consultancy: "2023 FinTech Investment: Trends and Insights", electronic document downloaded from (<https://fintechcanada.io/2023-fintech-investment-trends-and-insights/>), date of consultation: 22/11/2024.

We observe that the number of international transactions has seen a continuous increase in activity during the study period. In contrast, the volume of investments has fluctuated, particularly in 2016 and 2017, which can be attributed to the size of transactions. However, financial technology (FinTech) investments reached a record high in 2018, with \$112 billion injected into innovative companies striving for technological advancement in the financial sector, a sharp rise compared to \$51 billion the previous year. This indicates the attractiveness of this sector for investment. Three-quarters of these investments are in data analytics, one-third in artificial intelligence, and it is expected that 77% of these companies will adopt blockchain technology. However, 2022 and 2023 have been challenging years for global FinTech due to economic factors such as inflation, tight monetary policies, and potential recession risks.

IV. DRIVERS AND PROSPECTS FOR ADOPTING FINTECH IN ISLAMIC FINANCE:

The adoption of FinTech enables addressing key obstacles hindering the growth of the Islamic finance industry and efforts by Islamic financial institutions, governments, NGOs, and development agencies toward financial inclusion. The solutions include:

- 1. Harnessing the Promise of FinTech:** Leveraging its wide-ranging social and economic impact, especially in low-income countries, small states, and underserved populations, while preparing to reap its extensive benefits. These include increased financial inclusion, deepened financial markets, and improved payment and cross-border transfer

systems. This requires enhancing institutional capacities, expanding stakeholder access, and adopting a government-wide approach.

2. Empowering New Technologies to Enhance Financial Services: By simplifying core infrastructure, improving access at affordable rates, and fostering supportive policies. Core infrastructure includes telecommunications, digital frameworks, and financial infrastructure like broadband internet, mobile data services, and payment systems.

3. Promoting Competition and Open Markets: To ensure a level playing field that fosters innovation, customer choice, and broader access to quality financial services. Policymakers should address market concentration risks, encourage standardization and interoperability, and ensure fair and transparent access to key infrastructure.

4. Utilizing FinTech to Promote Financial Inclusion and Market Development: Overcoming challenges related to market access, customer information, and operational safety by improving infrastructure. FinTech provides opportunities to lower service costs, expand financing options, and enable innovative risk assessment methods.

5. Monitoring and Understanding Financial Systems: Keeping pace with evolving financial systems to enhance policy formulation that maximizes FinTech benefits while mitigating potential risks. This includes continuous dialogue with stakeholders and innovators to identify emerging opportunities and challenges.

6. Adapting Regulatory Frameworks: For orderly financial development, facilitating the safe introduction of new products and activities, and maintaining trust. Regulators may need to adjust to address emerging issues and strike a balance between risk management and proportional controls.

7. Ensuring Financial System Integrity: By identifying and mitigating criminal misuse of FinTech, supporting compliance with anti-money laundering (AML) and counter-terrorism financing (CTF) measures, and employing technologies like regulatory and supervisory tech solutions.

8. Updating Legal Frameworks: Providing clarity on key aspects of FinTech activities. Robust legal systems enhance trust in financial products, which may otherwise be undermined by outdated legal frameworks.

9. Maintaining Local Monetary and Financial Stability: Considering the implications of FinTech innovations on central bank services and market structures while protecting financial stability.

10. Developing Resilient Financial Infrastructure: To sustain FinTech benefits and ensure robust responses to potential disruptions, including cybersecurity threats.

11. Encouraging International Cooperation and Knowledge Sharing: Through global regulatory communities to foster effective policy responses and address cross-border challenges arising from FinTech innovations.

12. Strengthening Global Financial System Surveillance: Developing policies to support inclusive global growth and mitigate poverty while addressing risks posed by the increasing interconnectedness of financial systems.

In addition to what has been mentioned, financial technology can support the Islamic finance industry specifically by: (Shaheer, 3/09/2024)

A. Reducing transaction costs: Through the digital transformation of the current products of Islamic financial institutions, as well as their processes, workflows, and credit policies. This allows institutions to significantly reduce transaction costs by using financial technology instead of human resources for repetitive tasks, creating more space for Islamic financial institutions to lower their prices and complete a larger number of transactions.

B. Smaller financing amounts: By using financial technology, Islamic financial institutions will be able to provide smaller financing amounts that may not have been feasible due to high costs associated with each financing request. Because the business model we use is based on charging the client a fixed percentage of the financing amount (usually 1%), Islamic financial institutions will be able to provide a client with \$100 financing, with the operational cost for processing this request being just \$1.

C. Expanding the reach in underserved communities: Financial technology helps connect all types of retailers and micro, small, and medium enterprises with Islamic financial institutions through its secure platform. This means providing Islamic financial institutions the opportunity to finance new customers in areas where they have no physical presence. Therefore, these institutions can easily expand their operations without the need to invest large sums to open new branches or hire new employees. - Financial technology helps Islamic financial institutions adopt a more efficient business model and enables them to reach more customers, providing them with a variety of products and services at lower prices. The adoption of financial technology in the Islamic finance industry leads to (International, 2019):

Here is the translation to English: - Innovating new products and methods based on technology. - Promoting the objectives of Sharia in economic, environmental, financial, and social fields. - Providing better services to customers of Islamic financial institutions in terms of product quality and service speed. - Financial technology offers tremendous opportunities for Islamic financial services such as instant payments, providing more options, and facilitating services. - Facilitating access to financing opportunities for individuals and small and medium-sized enterprises lacking adequate financial services, thus achieving higher and more inclusive growth for all segments of the population, contributing to greater financial inclusion to alleviate poverty, and establishing social justice.

Despite the short period and the relatively small number of Islamic fintech platforms established in several Muslim-majority countries—around 120 platforms, compared to more than 2,000 traditional fintech platforms worldwide—they have achieved remarkable results. They have proven that the effective use of new financial technologies, combined with innovative business models, within a favorable and consistent regulatory, legislative, and supervisory environment aligned with the objectives of Islamic law (Sharia), along with qualified human resources, enhances trust in Islamic finance and banking. This, in turn, boosts their ability to meet the demands, needs, and

aspirations of their users, leading to increased demand for their products and the expansion of investments.

V. THE ROLE OF FINTECH IN ENHANCING FINANCIAL INCLUSION IN MALAYSIA:

1. The Current State of Fintech Adoption in Malaysia

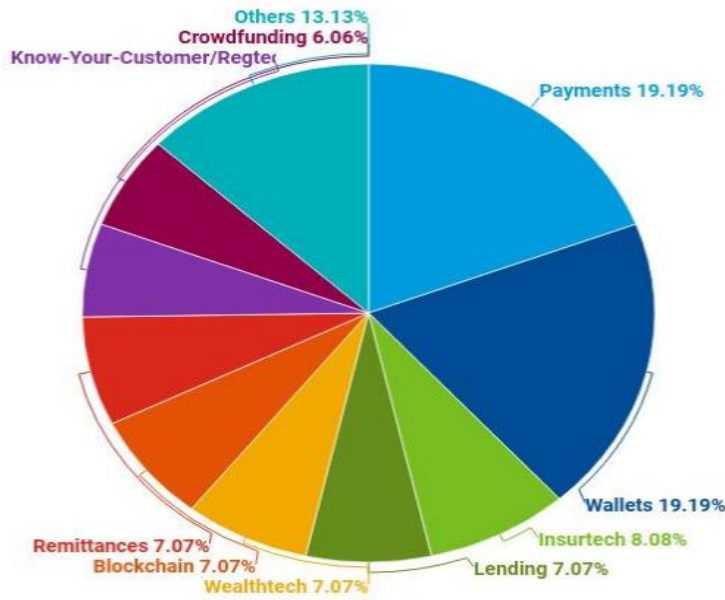
Malaysia is considered the undisputed regional leader in Islamic fintech, maintaining its position at the top of the Global Islamic Economy Indicator for the eighth consecutive year due to its strong initiatives and robust ecosystem in Islamic finance. At the forefront of this thriving sector is Ethis Group, a rising Islamic fintech company.

Despite the challenges of the COVID-19 pandemic, it acted as a catalyst for digital transformation, driving the rapid growth of the global Islamic fintech ecosystem. According to a 2021 report, the estimated volume of Islamic fintech transactions within OIC (Organization of Islamic Cooperation) member countries in 2020 was \$49 billion, representing 0.7% of the global fintech transaction volume. This number is expected to grow to \$128 billion by 2025, with a compound annual growth rate (CAGR) of 21%, surpassing the expected CAGR of 15% for traditional fintech companies over the same period (ETHIS, 2022).

Malaysia's Securities Commission has also played a key role in enabling technological solutions to operate seamlessly in the country through an initiative known as the Fintech Community Alliance. This initiative includes the following measures:

Raising awareness and encouraging innovative technological solutions. Forming working groups to organize and foster a broader financial ecosystem. Providing a favorable political and regulatory climate for innovation.

Figure 04: The basic pillars of the financial technology system in Malaysia



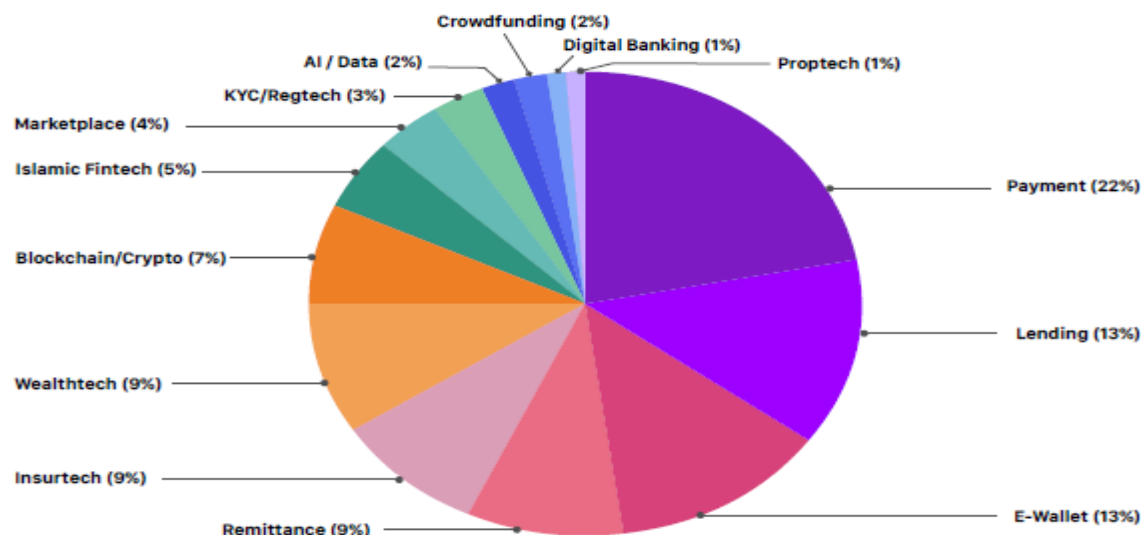
Source: <https://www.imf.org/en/News/Articles/2020/02/27/na022820-malaysia-a-flourishing-fintech-ecosystem>

The Malaysian authorities' focus on the Islamic banking industry has led non-Muslims to turn to Sharia-compliant finance. This is because Islamic financial institutions leveraging fintech eliminate interest payments (riba), making it logical for these individuals to choose such services to avoid incurring unbearable interest. This highlights the positive viability of Sharia-compliant market products and services in Malaysia. In 2019, Islamic fintech companies in Malaysia were distributed according to the financial technologies they employed.

The Malaysian government has actively adopted any financial technological innovation that serves the interests of its Islamic banks and has implemented several of these innovations in practice (Hosseini & Farajallah, 2023, p. 85).

Malaysia is well-positioned to move closer to its goal of becoming a high-income country. Of its approximately 30.5 million residents, around 19.5 million are Muslims. The vast majority of them own mobile phones, but two-thirds lack bank accounts. The robust infrastructure and ecosystem of Sharia-compliant finance in Malaysia provide a significant advantage for hosting and developing startups and initiatives in Islamic fintech. Additionally, Malaysia is poised to become a comprehensive regional hub offering both traditional and Islamic technical support.

Figure 05: Fintech in Malaysia



Source: Malaysia Fintech Report 2023. P02.

Islamic financial technology constitutes 5% of the fintech space in Malaysia, compared to digital financial services, which represent the smallest percentage at 1%. Blockchain technology was below 7%, while e-wallets made up 13%. The growing landscape of online banking in Malaysia has contributed to the increased effectiveness of fintech. According to the International Monetary Fund, online banking services in Malaysia have quadrupled compared to the last decade, with the usage rate exceeding 90% in 2018. The rise of mobile banking services is another contributing factor to Islamic fintech. Malaysia has near-global coverage of 4G networks, increased access to affordable data, and G5 is soon to be implemented. Malaysia even ranked highly among 139 countries surveyed, ahead of Italy, China, and Chile, and first among emerging and developing countries in the 2019 Network Readiness Index published by the World Economic Forum.

2. Analysis of the Islamic fintech industry in Malaysia according to the Global Islamic Fintech Indicator (GIFT):

Many countries in Asia and North Africa, which are part of the Organization of Islamic Cooperation (OIC), are witnessing a growing activity in the Islamic fintech industry. The Global Islamic Fintech Indicator (GIFT) shows the dominance of nine countries in the ranking of the top ten out of a group of 64 countries, with 90% of these countries belonging to the OIC. The United Kingdom is the exception, ranking fifth with 56%, due to the thriving Islamic fintech industry there. According to the index, Malaysia leads both the global and regional rankings with 87%, followed by Saudi Arabia with 76%. The United Arab Emirates ranked third with 70%, while Indonesia ranked fourth with a notable advancement, scoring 66%. The following chart shows the ranking of the top twenty countries according to the GIFT Index.

Figure 06: Islamic Fintech Indicator for the Top 10 Countries of 2022



Source: State of global islamic economy report 2022

The Islamic fintech market size within the Organization of Islamic Cooperation (OIC) reached \$49 billion in 2020, accounting for 0.72% of the global fintech market based on transaction volume. This market is projected to grow at a compound annual growth rate (CAGR) of 21%, reaching \$128 billion by 2025 (DinarStandard, ELIPSES, & Salaam Gateway, 2021, p. 5).

Saudi Arabia, Iran, the UAE, Malaysia, and Indonesia dominate 75% of the OIC's Islamic fintech market. Malaysia ranks fourth, with a market size of \$3 billion, despite having a more mature ecosystem compared to others. Saudi Arabia leads with a market size of \$17.9 billion, followed by Iran (\$9.2 billion), the UAE (\$3.7 billion), and Indonesia (\$2.9 billion) (DinarStandard, ELIPSES, & Salaam Gateway, 2021, p. 11).

Malaysia continues to top the Global Islamic Fintech (GIFT) Index for 2020 and has remained in the top five countries in the Islamic fintech industry for eight consecutive years. This achievement is largely attributed to the robust Islamic fintech ecosystem, including continuous updates to regulatory frameworks, financial and technical support for fintech companies, and programs for developing human resources.

Despite the COVID-19 pandemic, Malaysia adapted its digital strategy to maintain its status as a global hub for Islamic fintech. This included record demand for Sharia-compliant digital services and products and the introduction of key regulatory measures, such as:

- **Raising fundraising limits** on equity crowdfunding (ECF) and peer-to-peer (P2P) platforms to support SMEs during the pandemic, enabling over 1 billion MYR to be raised in 2020 across various platforms.
- **e-KYC (Know Your Customer)**: A partnership in May 2020 between Malaysia's Kiple Pay and China's Tencent Holdings to establish a local system for e-KYC services. A policy document on e-KYC was issued in June 2020, enabling digital access for customers anytime, anywhere.
- **Risk Management Guidelines**: Issued by Bank Negara Malaysia in June 2020 to address technology risk management.
- **Digital Asset Guidelines**: Released in October 2020 to provide principles for digital assets.

3. Examples of Islamic Financial Platforms in Malaysia

A. Ethis Platform: Ethis is part of Ethis Global and launched in 2020, aiming to raise RM 10–25 million through crowdfunding. It is approved by the Malaysian Securities Commission and is a leader in Sharia-compliant fintech. Ethis operates three platforms: ECF (Equity Crowdfunding), P2P (Peer-to-Peer), and GlobalSadaqah.

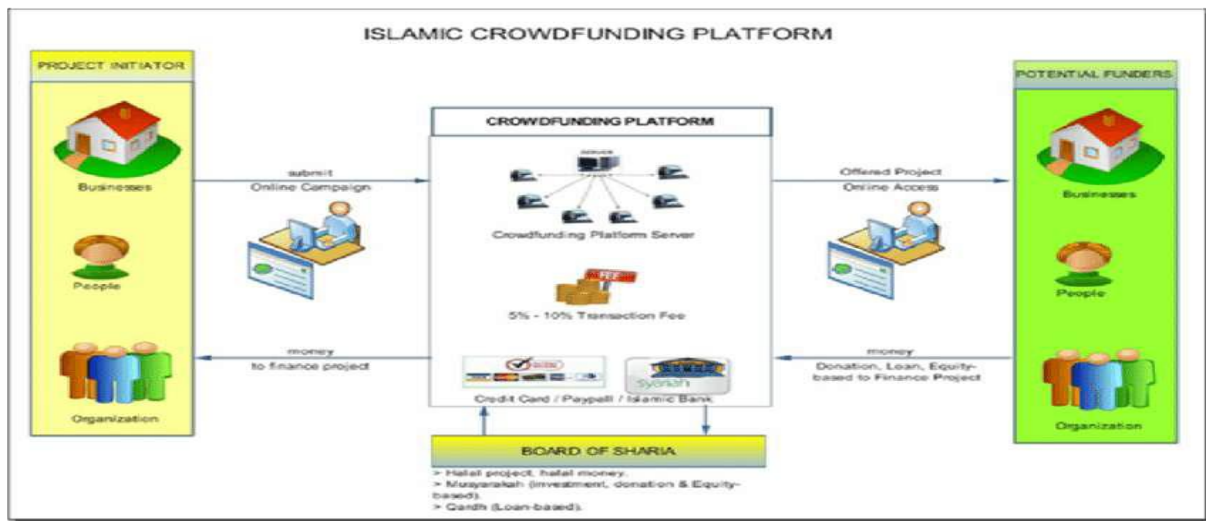
- **ECF and P2P Crowdfunding:** These platforms have become some of the most dynamic in Malaysia. Since 2016, they have helped over 10,000 MSMEs raise more than RM 6.5 billion collectively. In 2023 alone, total capital raised via ECF and P2P grew by 29%, reaching RM 2.2 billion compared to RM 1.7 billion in 2022. ECF and P2P have already surpassed traditional venture capital (VC) funding, which amounted to just RM 1.5 billion (\$320 million) in 2023 (Malaysia Fintech Report, 2023, p. 8).

- **GlobalSadaqah Platform:** Focuses on charitable, Zakat, and Waqf projects (ETHIS, 2022).

B. Finterra: Founded in 2017, Finterra is a technology company offering Islamic blockchain-based crowdfunding applications, including charitable initiatives like Zakat, Waqf, and Sadaqah. Its flagship product, **WAQFchain**, aims to modernize Islamic socio-economic systems using blockchain to enhance capital raising, asset management, and Waqf administration. It operates in Malaysia, Singapore, Hong Kong, and the UAE.

C. Islamic Markets: This educational platform provides tools and resources to help professionals and institutions navigate and invest in Islamic markets. In 2020, Malaysia became its regional hub, focusing on addressing economic gaps, creating job opportunities, and fostering innovation.

D. microLEAP: microLEAP is a Malaysian P2P financing platform specializing in microfinance. It provides an alternative financing source for issuers and allows investors to directly fund micro-enterprises without intermediaries like banks or traditional microfinance institutions. This makes it both a financing and investment alternative (Ben Issa & Merri, 2022, pp. 288–289).

Figure 07: Mechanism of Crowdfunding Platforms in Malaysia

Source: Bouden Islam, Belham Mofeeda (2022). The Malaysian Experience in the Application of Islamic Crowdfunding. Ara'a Journal for Economic and Administrative Studies, Vol. 02, Issue 02, p. 55.

Funds are collected using crowdfunding platforms equipped with the Islamic Zakat Crowdfunding Model (IZCM). All campaign details are provided electronically, and the collected funds are delivered within a predefined timeframe to Zakat institutions. These institutions manage the funds until the target amount is raised. Subsequently, the system tracks the received funds to ensure their distribution to startup projects, businesses, and meeting essential needs. This initiative aims to enhance financial inclusion for micro-entrepreneurs and low-income individuals.

VI. CONCLUSION:

Fintech plays a prominent role in supporting and developing the Islamic financial industry, fostering integration between Islamic principles and technological innovation. This is evident in Malaysia's experience, where technological innovation is widely applied in the Islamic finance sector. Malaysia boasts numerous startups in this field, contributing to the development of digital platforms and applications based on advanced technologies such as blockchain, artificial intelligence, and big data analytics. These advancements support economic and social development and enhance financial stability in the country.

This study **concludes** that adopting Islamic fintech can lead to the following outcomes:

- Islamic financial institutions are not isolated from global changes in fintech, benefiting from its efficiency, precision, and transparency.
- Fintech holds promising potential for advancing and strengthening the Islamic financial industry's position.

- Fintech has revolutionized banking operations and transaction processing methods.
- Fintech offers substantial opportunities for the Islamic financial industry, enhancing the competitiveness of its institutions, particularly Islamic banking. Using fintech is a fundamental factor in enabling Islamic banking to attract more customers and improve its efficiency.
- Malaysia is a pioneer in Islamic fintech, supported by its fintech companies, adoption of cutting-edge technologies, and strong governmental and regulatory support.

VII. RECOMMENDATIONS:

- Fintech technologies are a key driver for the growth and competitiveness of the Islamic financial industry.
- It is crucial to stay updated with market innovations while ensuring alignment with Sharia principles.
- Establish an integrated financial technology ecosystem based on modern fintech applications that align with the nature of the Islamic finance industry to capitalize on growth opportunities.
- Develop a framework for Sharia-compliant financial innovations to improve their performance and align with rapid technological advancements.
- Financial institutions must adopt a strategy centered on innovation and renewal, elevating research and development to match technological progress.
- Fintech represents the future, and Islamic financial institutions should expand collaboration with fintech companies to benefit their customers. Instead of competing, Islamic financial institutions should collaborate to develop fintech initiatives alongside fintech companies, under the supervision of Sharia boards to ensure compliance with Islamic financial principles.
- Overcome challenges in adopting fintech in Islamic financial institutions, particularly the absence of legal frameworks, which adversely affects the Islamic finance industry in the virtual space.
- Learn from Malaysia's experience in Islamic fintech by examining the factors behind its success, including legislation, regulations, and infrastructure development. Improve digital infrastructure and provide affordable financial services on a broader scale.
- Encourage research and innovation in Islamic fintech to enhance available solutions and increase their effectiveness.
- As Islamic fintech companies grow, traditional financial institutions must either transform or collaborate with fintech startups to access new markets and products.

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