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Islamic Fintech: The Engine of Growth of Islamic Economics and **Finance**

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ABSTRACT

Excluding fintech from the business strategy could drive the company out of the market. However, the implementation of fintech in the Islamic banking business has constraints that make it difficult to implement. This study investigates the impact of financial technology developments on the efforts to improve the quality of services in the Islamic economy and finance in Indonesia. In this study, descriptive analysis is combined with a qualitative research methodology. Using interactive models is the method of data analysis that is performed here. The result is that, although the Fintech Shariah authorizes OJK by October 2023, only seven companies, very few compared to conventional fintech in Indonesia, with 94 companies. However, it is very likely to be the answer to the many dissatisfactions with conventional FinTech. Nevertheless, Shariah-based Fintech is highly likely to serve as an alternative solution to the widespread dissatisfaction with conventional platforms, particularly in terms of compliance, trust, and ethical financial practices. The study underscores the importance of strengthening regulatory frameworks, technological capacity, and consumer literacy to accelerate the integration of Fintech within Islamic banking and finance.

Keywords: islamic economics, finance, fintech.

INTRODUCTION

The problems faced by societies that are not served by the financial industry are what led to the emergence of fintech. These problems include complicated regulations, limited capacity of the banking industry, and distance of location from consumers, which means that consumers cannot be serviced by banks. Fintech was created as a solution to these problems. Because of this, it is doubtful that the economic cycle would go without any hitches.

As a direct result of this shift in the marketplace, a sector that has come to be known as financial technology has recently emerged and is rapidly becoming the driving force behind financial services and products. The peer-to-peer-based sharing economy, affirmative regulation, and information technology are driving the rapid development of fintech, which is playing an increasingly significant role in the innovations that are taking place inside the financial sector.

Constant advancements are being made in financial technology on a global basis. Encompassing a wide variety of different financial dealings. The use of new financial technologies brings about a shift in approach.¹

Figure 1. Asia-Pacific Will Be the Largest Fintech Market by 2030, and Latin America and Africa Will Be the Fastest-Growing Regions



Source: https://fintechnews.am/fintech-usa/48649/north-america-fintechmarket-set-to-quadruple-by-2030/.

Alternative Finance ■ Indonesia UK □ Malaysia ■ Saudi Arabia ■ UAE IIS Pakistan ■ Iran ■ Nigeria ■ Others

Figure 2. Geographical structure of the top six i-fintech verticals.

Source: https://www.mdpi.com/1911-8074/14/12/602²

¹ North America Fintech Market Set to Quadruple by 2030," Fintech News America, May 3, 2023, accessed October 2, 2025, https://fintechnews.am/fintech-usa/48649/north-americafintech-market-set-to-quadruple-by-2030/

² Sofya, Irina, and Anna. "Assessment of the Competitiveness of Islamic Fintech Implementation: A Composite Indicator for Cross-Country Analysis." Journal of Risk and Financial Management 12, no. 12 (2021): 602. https://doi.org/10.3390/jrfm14120602

Fintech is a new and innovative means of providing financial services, and it has received a lot of support and endorsements from the Islamic banking industry. The adoption of fintech as an innovative supporting service and solution in Islamic finance is commended by sharia as long as it prevents the prohibited behaviors in transactions such as interest, gambling, cheating, and so on. Fintech is an acronym for financial technology. 71% of the assets held by the Islamic finance industry are provided by the Islamic banking sector, which also contributes USD 1.72 trillion.3

By the year 2022, the Gross Merchandise Value (GMV) of the internet in Indonesia had reached \$77 billion, representing a 22% increase from the previous year. It is anticipated that by the year 2030, it will reach \$220–360 billion US. In the same vein as this, the financial technology industry is forecasted to experience expansion.

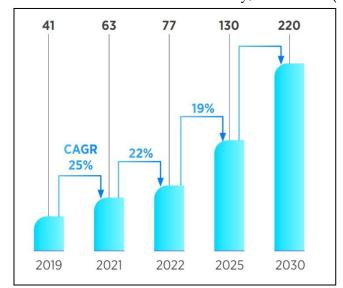


Figure 3. GMV Indonesia's Internet Economy, 2019-2030 (in US\$ billion)

Source: e-Conomy SEA 20224

It is considered that the financial technology industry can improve financial inclusion by making it relatively easier to gain access to financial products and services than traditional financial services. The percentage of respondents who act on their own initiative to promote public financial literacy has increased from 85% in 2021 to 88% in 2022/2023. This represents an increase

³ Global Islamic Finance Market Size, Analysis ... and Forecast," Market Research Intellect, September 2025, accessed October 2, 2025, https://www.marketresearchintellect.com/product/global-islamic-finance-market-size-andforecast/

⁴ The e-Conomy SEA 2022 Report Projects Indonesia's Digital Economy Will Reach US \$77 Billion," Google Blog Indonesia (November 7, 2022), accessed October 2, 2025.

over the previous year's figure of 85%.⁵ According to the findings of in-depth interviews, respondents confirmed that not only does financial inclusion require considerable effort, but financial literacy does as well.6

Because of this, it provides the greatest segment of the Islamic finance industry, which has been digitized and given birth to "digital Islamic banking" as a result of the endorsement of Fintech. It is anticipated that Fintech would change the financial industry by lowering costs, improving the quality of financial services, and encouraging a more diversified and balanced financial sector 'The Fintech Revolution, 2015'. Fintech will strengthen the recommended Islamic behavior in banking transactions. Therefore, Islamic Fintech business models have the potential to expand the industry, particularly in the areas of crowdfunding, peer-to-peer lending, and wealth management. In addition to this, the use of halal blockchains will be helpful in controlling how closely transactions adhere to the standards of Sharia law. It is generally acknowledged that the effective use of fintech might provide an easy solution to the problem of financial inclusion, which is closely related to the maintenance of sustainable economic growth.

Several previous studies that are in accordance with this research are, in spite of the obstacles that rural populations must overcome in order to take advantage of financial services, financial inclusion plays a significant part in the expansion of the economy. 7. 8, Opportunities and challenges for Sharia-compliant financial technology can be found in Indonesia, and they include regulation, human resources, and the ability of society to master technology. Fintech has fulfilled the magashid shariah and also has clear legal protection contained in the legislation 9. Islamic economic law developed alongside ordinary economic law. The Shariah fintech services make it easier for borrowers and lenders to meet financial demands without meeting in person because Muslims follow Islamic

⁵ OJK Aims to Increase Financial Literacy Index to 70 Percent," Antara News (February 28, 2023), accessed October 2, 2025, https://en.antaranews.com/news/274122/ojk-aims-toincrease-financial-literacy-index-to-70-percent

⁶ Djayanti, Neni, Muhammad Iqbal, and Muhammad Zulfikar. "The Role of Islamic Fintech P2PL in Increasing Inclusion and Financial Literacy of MSMEs." Journal of Islamic Finance https://journals.iium.edu.my/iiibf-11, no. (2022): 94-101. journal/index.php/jif/article/view/638

⁷ Sheng, Jiali. "Digital Financial Inclusion Enables Rural Revitalization." In *Proceedings of* the International Workshop on Navigating the Digital Business Frontier for Sustainable Financial Innovation (ICDEBA 2024), Advances in Economics, Business and Management Research 315. https://www.atlantis-press.com/proceedings/icdeba-24/126008561

⁸ Christiaan, P., & Wong, L.. Financial Inclusion as a Tool for Economic Empowerment of Rural Communities. Journal of Multidisciplinary Sustainability Asean (2025), 2(1), 12-22. https://doi.org/10.70177/ijmsa.v2i1.1942

⁹ Rohmatun Nafiah and Ahmad Faih, "Analysis of Sharia Financial Technology (Fintech) Transactions in Sharia Maqashid Perspective," Iqtishadia: Journal of Sharia Economic and Banking 6, no. 2 (2019), https://doi.org/10.19105/iqtishadia.v6i2.2479

shariah.¹⁰. ¹¹, Through fintech, all forms of transactions become faster, easier, more efficient, without having to face-to-face. 12, Key variables influencing the development of Islamic financial technologies worldwide are identified. The highest-scoring economies are analyzed for strengths and shortcomings. The leading countries vulnerability-addressing practices are described. ¹³, Financial technology directly and indirectly boosts UMKM enterprise growth by increasing capital and consumer numbers. 14, It does not seem to have a negative impact on people's interest in using Islamic financial technology. People's interest in utilizing Islamic fintech is influenced by a number of factors, including its utility, how easy it is to use, the threat of cyberattacks, their level of digital literacy, and the accessibility of relevant infrastructure.

Refer to Efectivity Theory "The amount of progress made toward achieving a goal can be quantified using the concept of efficiency". In this piece of study, the authors make an attempt to answer two significant questions: The first focuses on the utilization of financial technology services within the growth of Islamic Economic industry and the effect that this utilization has had on the expansion of Islamic banking assets. The second inquiry investigates potential outcomes for the field of fintech in the future in Indonesia.

Literature Review

Fintech Industry Review

One definition of financial technology describes it as a type of financial service that makes use of information technology in an original, productive, and effective manner, to the extent that its presence disrupts the operations of traditional financial institutions. Payments, money transfers, loan applications, insurance purchases, asset management, and investment are all examples of tasks that are performed by fintech. As a result of the encouraging rise of fintech in Indonesia, an increasing number of people are beginning to use fintech for the

¹⁰ World Bank Group, Leveraging Islamic Fintech to Improve Financial Inclusion (Kuala Lumpur: International Bank for Reconstruction and Development / The World Bank, 2020), https://openknowledge.worldbank.org/server/api/core/bitstreams/df90ac5a-ea9d-54c9a347-d549196c34f1/content.

¹¹ Setiani, Dina Dwi, Hanien Nivanty, Wardah Lutfiah, and Lilik Rahmawati. "Fintech Syariah: Manfaat Dan Problematika Penerapan Pada UMKM". Jurnal Masharif Al-Syariah: Jurnal Ekonomi dan Perbankan Syariah 5, no. 1 (July 1, 2020). https://journal.umsurabaya.ac.id/Mas/article/view/4718.

¹² Musjtari, Dewi Nurul, Fiska Silvia Raden Roro, and Ro'fah Setyowati. "Islamic P2P Lending as an Alternative Solution for The Unfair Conventional Platform in Indonesia". UUM no. Legal Studies 13, (January 31, 2022): 21-43. journal.uum.edu.my/index.php/uumjls/article/view/15608.

¹³ Sukma Nawang Sari and Imam Mukhlis, "MSME Development Strategy Through Financial Technology with Increasing Capital and the Number of Consumers as Intervening Variables," Management Studies and Entrepreneurship Journal 3, no. 4 (2022).

¹⁴ Sari, Khalila Husna, Rifqi Muhammad, Anwar Sholihin, and Sinky Adella. "Analisis Faktor-Faktor Yang Mempengaruhi Minat Pelaku UMKM Dalam Menggunakan Islamic Fintech". Jurnal Ilmiah Ekonomi Islam 9, no. 2 (July 14, 2023): 2216-2228. https://jurnal.stieaas.ac.id/index.php/jei/article/view/9487.

transaction services they require. One interpretation of the term "fintech" or "financial technology" is a start-up company whose primary mission is to deliver contemporary software-based financial services facilities. Fintech advances will be encountered by all industries that are connected to the financial industry, including B2B industry clients, B2C end customers and merchants, and companies that are both. 15

The technological upheaval that has taken place over the past several years will inevitably have some sort of impact on the expansion of the digital economy in Indonesia. According to the report entitled "2022 Southeast Asia e-Conomy," which was compiled by Google, Temasek, and Bain & Company, the value of Indonesia's recorded digital economy reached US\$77 billion by the year 2022, which is equivalent to around 5.8% of the country's Gross Domestic Product (GDP). It is anticipated that this number will continue to increase and will reach between 220-360 billion US dollars by the year 2030, which is approximately 9-15% of the GDP in 2030. Not only will there be an increase in the digital economy's growth in absolute terms, but there will also be an increase in the digital economy's growth relative to the overall economy of Indonesia. 16

The development of the financial technology industry in Indonesia is also on the increase, which is occurring concurrently with the expansion of the digital economy. The number of financial technology companies that were registered as AFTECH members climbed to 366 in 2022, up from 352 in 2021 and 302 by the end of 2020. Additionally, the Indonesian financial technology industry is highly powerful across the Southeast Asian region. Indonesia received around 33 percent of the entire money that was provided to fintech start-ups in Southeast Asia during the first nine months of 2022. This made Indonesia the second largest recipient, following Singapore, which received 43 percent of the overall funding. The total amount of funding entering into Indonesia had roughly an 11% increase when compared to the same time period in the previous year. In contrast to the worldwide start-up industry, which has been thrown into turmoil as a result of the slowdown in the global economy, this trend is moving in the opposite direction.17

In the research paper that Sofia Anwar and her colleagues wrote, they conducted an empirical investigation of the association between the growth of Pakistan's financial industry and the country's long-term economic growth. They determined the long-term trend by utilizing the autoregressive distributed lag (ARDL) method. 18 connection as a term. The researchers came to the conclusion that the two factors are highly connected with one another and have a positive

¹⁵ Gupta Alam and A. Zameni, Fintech and Islamic Finance (Cham: Springer International Publishing, 2019), 24.

¹⁶ ASFI, 05 August 2022: Indonesia Runs 3rd in Global Islamic Fintech Index 2022, accessed from https://fintechsyariah.id/en/news/7d379190-1499-11ed-a7bf-63941a350012.

¹⁷ Fintech Indonesia. Annual Members Survey 2022/2023. Jakarta: Fintech Indonesia, 2023.

¹⁸ Muhammad Khan, Abdul Qayyum, and Saeed Sheikh, "Financial Development and Economic Growth: The Case of Pakistan," The Pakistan Development Review 44 (2005), 44.

connection. The causation test revealed that the financial sector is absolutely necessary for the growth of the economy. They chose to evaluate the progress of the financial sector based on three different indices: the ratio of domestic lending to private sector to nominal GDP, the ratio of M2 minus currency in circulation to nominal GDP, and the ratio of assets held by the central bank to GDP. The ratio of a country's total foreign debt to its total exports was used in the calculation of sustainable development.19

Tabel 1 Fintech maturity rate for every vertical business, 202220

Fintech	Accounta	Description	
clusters	bility	2 000 F	
	level		
Digital	Mature	When compared to other Fintech clusters, the rate of	
Payment		maturity for digital payments is rated as having the most potential.	
		In recent years, there has been a surge in the number of	
		transactions conducted through digital payment applications, such as digital wallets and electronic money.	
		In addition, cashless transactions are starting to become more commonplace in today's culture.	
		The development of the cluster is also encouraged by	
		relevant policies, such as the 2025 Indonesia Payment	
		System Blueprint and the 2025 Money Market Development Blueprint, amongst others. In addition, BI is	
		continuing its efforts to broaden the application of QRIS by	
		working closely with four ASEAN nations. Additionally, the digital payment cluster accounted for 43% of all Fintech	
		funding in Indonesia during the first three quarters of 2022.	
Online	Mature	Due to the rapidly growing number of transactions and	
Loans		companies in the industry, as well as the established legal environment in the sector, the maturity rate for online loans	
		is currently the second highest in the world. The economy	
		of the internet presents opportunities for businesses that	
		provide digital financing services, in particular for UMKM and those who are economically disadvantaged.	
		One of the most well-established clusters that receives	
		regulatory support is the online loan cluster. The Office of	
		Justice and the Constitution (OJK) is continuing its efforts to encourage the expansion of this cluster by conducting an	
		anti-illegal internet borrowing campaign. By the first three	

¹⁹ Sofia Anwar, Ghulam Shabir, and Zakir Hussain, "Relationship between Financial Sector Development and Sustainable Economic Development: Time Series Analysis from Pakistan," International Journal of **Economics** and Finance (2011): 262, https://www.ccsenet.org/journal/index.php/ijef/article/view/4419.

²⁰ McKinsey & Company, Fintechs: A New Paradigm of Growth, accessed October 4, 2025, https://www.mckinsev.com/industries/financial-services/our-insights/fintechs-a-newparadigm-of-growth

		quarters of 2022, the cluster had risen to the position of the
		third-largest recipient of fintech capital in Indonesia.
Digital	Movement	Since the regulatory sandbox was initially implemented in
Finance		2019, there has been an increase in the number of financial
Innovatio		technology start-ups that have IKD business models. OJK
n (IKD)		had registered 105 IKD enterprises by the end of April,
		which were then grouped into 15 different clusters.
Neobank	Growth	The Neobank business model is a very recent innovation, and the rules that are pertinent to this business model, particularly the POJK, which also covers activities related to digital banking, have recently released. A population that does not have a bank account has a tremendous amount of room to expand in the years to come whitin this cluster. (not using a bank). In addition, Neobank is now engaged in competition with traditional banks in the retail market, and there is still a significant distance to travel before the company can penetrate the corporate market in the future.
Wealth	Growth	The pandemic caused by COVID-19 has had an impact on
Managem		the rising market demand for services targeted at high-net-
ent		worth individuals (HNWI). It is the primary factor behind
		the expansion of wealth management clusters.

Islamic Financial Thechnology

A financial technology company licensed by OJK, with over 50% conventional services. Financial technology is slowly entering Shariah finance. This is shown by the rise of Shariah-based start-ups that have been registered in the OJK and DSN-MUI. It is important for these start-ups to follow the sharia rules regarding products, accords, rukhun, and legal limits according to the fatwa and consumer protection.²¹

Besides the fact that Indonesia's financial technology industry is booming, the Indonesian Ulama Assembly (MUI) considered the public's concerns regarding the shariah start-up's products. Clearer requirements and legal constraints for Shariah-compliant IT-based finance services are also needed. Fatwa of the National Shariah Council-Majelis Ulama Indonesia (DSN-MUI) No. 117/DSN/MUI/II/2018 addressed Sharia Funding Services Based Information Technology.²²

Lending websites are growing in Indonesia. There are loan sites with more efficient systems than banks, with their own terms. Example: sites that lend less than 300 million rupees, 1.5 to 2 million, 2 million to 10 million. Intended for middle-to-lower communities. Their banking is still basic. The middle-down

²¹ Otoritas Jasa Keuangan (OJK) and Asian Development Bank (ADB), Supporting Financial Inclusion for SMEs through Fintech (Jakarta: OJK, 2020), 175.

²² Annisa Dian Arini, "Legal Literature Review of Peer to Peer Lending in Indonesia: Building Sharia FinTech Ecosystem," Journal Islamic Business Law Az Zagro 16, no. 1 (2024): 37, https://journal.um-surabaya.ac.id/index.php/azzargo/article/view/18156.

segment is targeted by fintech players who provide lending services, or at least is the middle segment because more than 50% of Indonesia's demographics are middle segments. ²³

In the context of the Islamic financial industry, "sharia compliance" refers to the fact that all financial transactions and products offered by Islamic financial institutions adhere to the religious law known as sharia. his indicates that Islamic finance prohibits ambiguity, such as unclear financial transactions; it also prohibits interest rates, such as interest rates on debts; and it prohibits investment in forbidden sectors, such as gambling, alcohol, tobacco, drugs, and other activities that are forbidden in Islam. On the other hand, Islamic finance promotes the use of asset-backup in financing transactions, as well as profit markup, risk sharing, openness in economic activities, and fairness. Due to the fact that Islam is the second most practiced religion on the planet, the number of people who practice Islamic finance is increasing at a rapid rate. As a consequence of this, there is a significant increase in the amount of demand for Islamic finance in every region of the world. ²⁴

METHOD

The researchers employ qualitative descriptive research to describe or illustrate facts, conditions, or symptoms of fintech shariah development in Indonesia. This study collects data from documents. Sugiyono (2014) states that documents can be written, visual, or monumental. Documentation method: searching for notes, transskips, books, newspapers, magazines, inscriptions, meeting minutes, lengths, agendas, etc. The grand theory in this research is Effectivity Theory, which mean Effectivity refers to the success of achieving organizational goals, so efficiency is described as a measure of whether managers are doing the right job. Effectiveness is defined as the extent to which an organization achieves its goals.²⁵

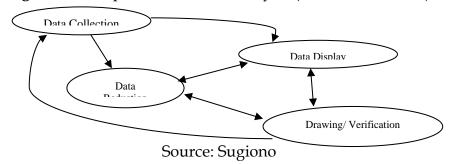


Figure 4. Components in Data Analysis (Interactive Model)

²³ Otoritas Jasa Keuangan (OJK) and Asian Development Bank (ADB), Supporting Financial Inclusion for SMEs through Fintech (Jakarta: OJK, 2020), 86.

²⁴ Wan Hasanah Megat Ajib, "Application of Fintech for a Modern Islamic Financial Industry: Challenges and Practical Solution," Al-Muhasib: Journal of Islamic Accounting and Finance 2, no. 2 (2022). https://jurnalfebi.iainkediri.ac.id/index.php/almuhasib/article/view/238.

²⁵ Sugiyono, Metode Penelitian Kombinasi (Mixed Methods) (Bandung: Alfabeta, 2014), 98.

RESUT AND DISCUSSION

Developments in Shariah Financial Technology and a Look Ahead Scenario

Beehive was the first Sharia-compliant financial technology company to launch in 2004, and it was founded in the emirate of Dubai. This new company, Beehive, is the first in the world to acquire Sharia certification. Beehive is a peerto-peer lending marketplace that offers affordable finance for UMKM.

During the past few years, sharia crowdfunding firms have flourished in a number of nations around the world. These start-ups include alamisharia.com, bloom skolafund, and others like them. Sharia fintechs in Indonesia, such as Investree, SyarQ, Santara, Paytren, and others, have also experienced significant expansion. Paytren is the first Shariah-compliant financial technology company in Indonesia to receive MUI halal certification. The growth of the sharia fintech industry cannot be compared to the number of conventional fintech companies; nonetheless, the sustainability of the sharia fintech start-up is an important factor that must be taken into consideration. Essentially, these financial technology companies expanded their operations Indonesia. A fintech that is based on *Islamic* sharia is one that does not employ interest in order to ensure that the community can make a secure claim because the result delivered is already in conformity with the laws of Islam. This type of fintech is known as *sharia*-compliant fintech.²⁶

AFSI released if with a projected rise in transaction volume from \$4,239.4 million (2021) to \$11,263.6 million (2026), or a cumulative annual growth rate (CAGR) that is 21.6% higher than that of Saudi Arabia and Malaysia, Indonesia is seen to have a promising Shariah fintech possibility. In addition, out of Indonesia's eight primary rating categories, it has received a perfect score in market share, conformity with the Shariah, and regulation.²⁷

Tabel 2. Fintech's Data and Asset in Indonesia, 2023

E' at a de	Organizer			Assets (IDR billion)			
Fintech	March	Agust	Oct	April	May	June	
Fintech Conventional	95	95	94	6,314.41	6,29	6,695.67	
Fintech Shariah	7	7	7	127,95	0,13	129.73	
Total	102	102	101	6,442.31	6,42	6,825.39	

Source: Statistic Fintech Lending, www.ojk.go.id

According to information provided by KNEKS in Figure 1.2 of the fintech business in Indonesia, the Payments sector accounts for 39%, followed by the P2P Lending sector with 24%, and finally the Market Aggregator sector with 11%. 8% came via crowdfunding, 7% came from financial planning, and the remaining

²⁶ Mohd. Ma'sum Billah, *Islamic Fintech* (Cham: Palgrave Macmillan, 2021). https://link.springer.com/book/10.1007/978-3-030-45827-0.

Fintech Syariah Indonesia, "News," accessed October 2025. https://fintechsyariah.id/en/news.

11% came from various sources. According to Ronald Yusuf Wijaya, Chairman of Fintech Shariah Indonesia Association, there are a total of 12 organizations that are either registered with OJK or are in the send box category of OJK as of the month of October 2019, and now in October 2023, there are seven registered Shariah Fintech with OJK. The majority of such sums come from various forms of fintech financing, most notably loan and crowdfunding. There are still a great number of other organizations that are in the process of being included in the Digital Financial Innovation database. It is estimated that there will be twice as many as there are right now.

Even though it remains lower than conventional fintechs, infrastructure development in fintexh shariah is much better. This is reflected in the close collaboration with the banking sector. Shariah fintech cooperation with Shariah financial services providers, such as the Shariah People's Credit Bank, BMT (micro-shariah finance agency), and Shariah District Development Bank, is projected to remain strong.

Islamic Finance and Financial Thechnology

When it comes to Sharia fintechs, it is not free from Sharia banking, as the sharia bank itself plays a role as an infrastructure provider. This is because the sharia bank has a responsibility to play in the industry. As a result, the fact that Sharia fintech employs banking infrastructure indicates that it is limited to using Sharia banking alone. Although it wasn't that long ago, a number of *Sharia* banks in Indonesia were working toward becoming a 4-book bank in order to better assist the growth of Sharia fintech and other financial industries. The emergence of financial technology companies in Indonesia during the epidemic is not dissimilar to the phenomena of fintech companies elsewhere in the world.

Avoiding the risk of fraud, the danger of data security (cybersecurity), and the risk that may occur from the market risk of the halal industry due to the uncertainty of the Indonesian halal industry market both in the national and international scope would constitute a safe review in this instance. The second step is figuring out what kind of sharia-compliant financial technology will be used in the halal sector of the economy. ²⁸

Economic and mathematical modeling was conducted to analyze the flow of Fintech company invoices as Islamic banking expanded as a financial system component. We examined the impact of new financial technology investments on Islamic Banking asset expansion using the following factors. 29

Islamic banking assets refer to the total value of assets owned by Islamic banks globally. The total investment in Fintech start-ups is shown in billions of dollars.

²⁸ Yudha, Ana Toni Roby Chandra, et al. Shariah Fintech in Halal Industrial Systems Theory and Practice. Aceh: Syiah Kuala University Press, 2021.

²⁹ Alam, N., L. Gupta, and A. Zameni. Fintech and Islamic Finance. Cham: Springer International Publishing, 2019

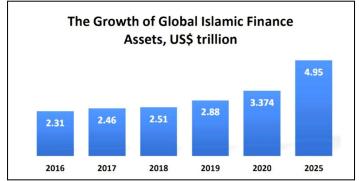
- a) Global private investment in Fintech cyber security, funding Fintech startups to improve security protocols and data encryption.
- b) Global private investment in block chain and crypto currency, crucial elements of digital transactions. Block chain is the system for crypto money transactions.

Tabel 3. Input data for modulation

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Year	2014	2015	2016	2017	2018
Islamic Banking Assets	1445	1604	1675	1721	1809
Total Invesment in Fintech (Capital Invested \$B)	46	59	64	51	120
Total Invesment in Fintech (Deal count)	1556	1981	1998	2318	2590
Global Private Invesment In Fintech: Cyber	60.1	78.9	120	128	250
Security (Capital Invested \$B)					
Global Private Invesment In Fintech: Cyber	16	17	18	31	29
Security (Deal count)					
Global Private Invesment In Block Chain and	0.7	0.5	0,7	4.9	5
Crypto Currency (Capital Invested \$B)					
Global Private Invesment In Block Chain and	148	144	167	245	586
Crypto Currency (Deal count)					

Source: Pollari, 2016³⁰

Figure 5. The Growth of Global Islam Finance Assets, US\$



Source: Refenitiv Islamic Development Report, December 2021

Fintech is essential for reducing bank queues and enabling customers to verify their financial transactions with a few clicks on their devices. Additionally, the bar graph displays global Islamic finance asset growth from 2016 to 2025, assuming Fintech adoption. 31.

In recent years, ten billion dollars' worth of venture money has been drawn to the application of scientific advances to the economic industry. The new digital advice and trading system, cryptocurrencies and the blockchain, equity

³⁰ Pollari, I. "The Rise of Fintech: Opportunities and Challenges." JASSA: The Finsia Journal of Applied Finance 3 (2016): 15-21.

³¹ Ajib, Wan Hasanah Megat. "Application of Fintech for a Modern Islamic Financial Industry: Challenges and Practical Solution." Al-Muhasib: Journal of Islamic Accounting and Finance 2, no. 2 (2022). https://jurnalfebi.iainkediri.ac.id/index.php/almuhasib/article/view/238.

crowdfunding, artificial intelligence and machine learning, peer-to-peer lending and mobile payment system, and digital cash transfer services are all examples of the Fintech revolution.³²

This is a fact that cannot be ignored because of sustainable economic expansion that is inextricably bound up with monetary progress. There have been a number of studies that have discussed the benefits of Fintech for financial diligence from a variety of distinct perspectives. These cases have to do with end users and market integrity, competition, investor protection, and monetary inclusion, as well as coordination to avoid duplication of labor and achieve synergies from the variety of efforts at the global level.

Financial Stability Board, like any department, the Fintech summarizes now not totally benefits and prospects; rather, it affords a vast variety of dangers that cut across a number of different industries and frequently incorporate both tactical and strategic risk concerns. The following risks are associated with fintech, more specifically in the banking sector: liquidity risk, volatility of bank and other financial institution funding resources, compliance risk, mainly regarding data and privacy, growth problems in assembly compliance requirements, and in particular, competition on market share.³³

Table 3: Financial technologies and revolution includes threats and opportunities

opportunities				
No	Threats	Opportunities		
1.	Due to licensing and minimum capital	Shariah Fintech offenders can		
	requirements, only 7 Shariah Fintechs	register their Finteches with the		
	are registered in the OJK, per 9th oct	Services and Finance Authority		
	2023.	(OJK).		
2.	Consumer sector influence by Fintech	Consumer sector influence by		
	a. Bad marketing practice.	Fintech		
	Minimum villagecommunity	a. Fast finance		
	knowledge for Shariah Fintech	b. Lower contact cost		
	b. Financial services disrupt	c. Highly enhanced investing		
	c. Monitoring input	service		
	d. Data privacy			
3.	The public assumes Sharia fintech and	Social cases and phenomena of		
	conventional fintech are the same.	traditional fintech		
4.	Limited SDMs (human resources) that	Most Indonesians are Muslim.		
	dominate Shariah-compliant	Indonesia has around 207 million		
	transactions	Muslims.		
5.	Future tech competition	It allows Indonesia to advance		
	-	technologically.		

Source: Various sources (data processed and summarized)

³² Surbakti, M. H., and M. S. Nurzaman. "Islamic Fintech Development Strategy in Indonesia: Analytic Network Process (ANP) Approach." Ekonomi Islam Indonesia 6, no. 2 (2025). https://journals.smartinsight.id/index.php/EII/article/view/582.

³³ Al Ajlouni, A., and M. Al-Hakim. "Financial Technology in Banking Industry: Challenges and Opportunities." Paper presented at the International Conference on Economics and Administrative Sciences (ICEAS 2018), Applied Sciences University, Jordan, 2018.

The most important that we can more focused on Conventional fintech cases and phenomena that have gained unfavorable connotation. Sharia fintech can use the harsh billing methods in various media and the many suicides caused by Indonesian fintech's inability to pay online loans to convince customers that it is different from traditional fintech. With such unfavorable events and stigma, the public says there is no difference between Sharia fintech and conventional fintech. It is also strengthened by the fact that the primary reason society looks to equalize conventional and sharia fintech is education, communication, and literacy of Islamic principles in everyday life, which Indonesian society still lacks this is in line with Rusdiana research 34 and Muhammad and Lanaula.35

Islamic fintech has demonstrated significant potential to serve as a driving force for the growth of Islamic economics and finance. This is achieved through several key mechanisms:

- 1. Enhancing Financial Inclusion Islamic fintech leverages digital platforms and mobile applications to extend Sharia-compliant financial services to individuals and MSMEs (micro, small, and medium enterprises) who were previously underserved or excluded from the formal financial sector. This increased accessibility directly supports broader economic participation and growth. 363738
- 2. Supporting MSMEs and the Halal Industry By providing innovative financing solutions such as Sharia-compliant peerto-peer (P2P) lending and crowdfunding, Islamic fintech enables MSMEs and industry players to access capital efficiently, entrepreneurship, job creation, and sustainable economic development.³⁹⁴⁰
- 3. Driving Product and Service Innovation Islamic fintech encourages the development of new financial products and services that adhere to Sharia principles. Examples include:
 - P2P financing platforms for direct funding
 - b. Mobile banking applications that ensure Sharia compliance

³⁴ Rusydiana, A. S. "How to Develop the Sharia Fintech Industry in Indonesia? Interpretive Structural Model (ISM) Approach." Al-Muzara'ah 6, no. 2 (2018): 117-128.

³⁵ Muhammad, R., and R. Lanaula. "Challenges of Islamic Supervisory in the Islamic Financial Technology Industry." Economica: Jurnal Ekonomi Islam 10, no. 2 (2019): 311-338.

³⁶ Imam, Rahma, and Rukhul. "Accelerating Islamic Economy and Finance through Financial Technology: Challenges and Potential in the Digital Age." International Journal of Islamic (2023): 153-168. **Economics** no. journal.metrouniv.ac.id/IJIE/article/download/7740/3692/28953.

³⁷ Putri, Mutiara Eka, and Hanif. "The Role of Financial Technology in Promoting Growth in Islamic Finance in the Digital Era." Al-Fiddoh 5, no. 1 (March 2024): 37-38. https://ejournal.iainkerinci.ac.id/index.php/al-fiddoh/article/download/3500/1199.

³⁸ ______. "Potential Development of Islamic Fintech in Supporting the Growth of the Halal Industry." International Journal of Islamic Finance 1, no. 2 (2023): 165–170. https://ejournal.uin-suka.ac.id/febi/ijif/article/download/2029/1046/4558.

³⁹ Rahma. "Accelerating Islamic Economy..., 160.

⁴⁰ Rahma. "Accelerating Islamic Economy..., 160.

- c. Digital payment systems (e-wallets) free from interest (riba)
- d. Robo-advisors for Sharia-compliant investment advice
- e. Blockchain-based sukuk for transparent and secure Islamic investment ownership.4142

These innovations make Islamic finance more competitive and responsive to the evolving needs of Muslim consumers, especially the tech-savvy millennial generation.43

4. Increasing Operational Efficiency

The adoption of technology reduces operational costs, minimizes the need for physical infrastructure, and streamlines processes for both financial institutions and customers. This efficiency allows Islamic financial services to be offered at lower costs and with greater convenience. 4445

- 5. Empirical Evidence of Economic Impact
 - Research using Indonesia as a case study found a positive correlation between the growth of Islamic fintech assets and national economic growth. Specifically, every IDR 1 billion increase in Islamic fintech assets results in a measurable increase in GDP, both in the short and long term.⁴⁶ This demonstrates that Islamic fintech not only supports financial sector development but also contributes directly to macroeconomic growth.
- 6. Fostering Collaboration and Ecosystem Development Islamic banks and financial institutions are increasingly partnering with fintech companies to drive digital innovation and expand the reach of Shariacompliant financial services. Such collaborations are essential for scaling up the impact of Islamic fintech and integrating it into the broader financial ecosystem.4748
- 7. Overcoming Challenges

While the potential is substantial, challenges remain, including:

- a. Regulatory gaps and the need for Sharia-compliant oversight
- b. Shortage of skilled human resources in Islamic fintech
- c. Ensuring compliance and risk management

https://www.consultancy-me.com/news/5892/fintech-the-backbone-of-the-islamicbanking-growth-story

⁴¹ Rahma. "Accelerating Islamic Economy..., 160.

⁴² Mutiara Eka "The Role of Financial Technology..., 38.

⁴³ Mutiara Eka "The Role of Financial Technology..., 37.

⁴⁴ Rahma. "Accelerating Islamic Economy..., 165.

⁴⁵ Mutiara Eka "The Role of Financial Technology..., 38

⁴⁶ Iqbal, Arianto, and Alindha. "The Existence of Islamic Fintech in Encouraging National Economic Growth." Jurnal Ilmiah Ekonomi Islam 8, no. 3 (2022): 3145. https://jurnal.stieaas.ac.id/index.php/jei/article/download/5679/2826.

⁴⁷ As the number of Islamic FinTechs increases, the banks can leverage the ecosystem's synergies. Islamic banks are also positioned to fully utilise the potential of emerging technologies blockchain, and artificial intelligence, among such as open banking,

⁴⁸ Mutiara Eka "The Role of Financial Technology..., 38.

Addressing these issues requires coordinated efforts among regulators, industry players, Sharia scholars, and educational institutions to create a supportive environment for sustainable growth.⁴⁹ Islamic fintech stands as a powerful catalyst for Islamic economics and finance growth, capable of broadening accessibility, driving innovation, empowering small and medium enterprises, and making direct contributions to economic advancement. Achieving its complete potential will require addressing regulatory hurdles, developing human talent, and building stronger partnerships throughout the ecosystem.

CONCLUSION

Fintech has dispersed people's manual labor, and society must now adapt to the digital era. Fusion of Fintech and Sharia banking can boost financial inclusion in Indonesia. This is possible due to rapid technological advancement in all sectors, including finance. Technology will bring finance into the digital age. Fintech in the Sharia banking industry will make it easier and closer for company operators, notably UMKM, to obtain sharia financial services products and apply for funding without visiting branch offices. A methodology like this can help the UMKM sector access money, increase inclusive finance, and boost sharia bank performance.

Islamic fintech is well-positioned to be the engine of growth for Islamic economics and finance by expanding access, fostering innovation, supporting MSMEs, and directly contributing to economic development. Realizing its full potential depends on overcoming regulatory and human capital challenges and fostering collaboration across the ecosystem.

Author's Contribution

Elida Elfi Barus: Contribute to formulating research ideas, collecting data, processing data, and interpreting data

Fatimah Zahara: Contributing to writing systematics and researchmethods

Tuti Sugesti: Contributing to analyzing interpretation results

Muhammad Syahbudi: Contributing to collecting data

Irwan Irawadi Barus: Contribute to compiling a literature review and to the language proofread.

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The author declares that there is no conflict of interest.

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Ethical approval No patient-identifying parts in this paper were used or known to the authors. Therefore, no ethical approval was requested.

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⁴⁹ Mutiara Eka "The Role of Financial Technology..., 38.

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