

## **Challenges of Digitalization in The Economy: The Penetration of Sharia Fintech in Aceh**

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### **Abstract**

In Aceh, where Sharia law is implemented in economic activities, one of the government policies through Bank Indonesia in 2023—"maintaining economic stability with inclusive and green economic-financial policies through digitalization and expanding domestic and export market access for MSMEs and Islamic economic-financial systems"—is particularly relevant to the challenges faced by coastal MSMEs in eastern Aceh. The urgency of this research lies in the need to study the strengthening of Sharia fintech-based financial services to assist MSMEs in the fisheries sector in developing their businesses amidst limited banking services in coastal areas of eastern Aceh. This research aims to develop a Sharia fintech penetration model that can accelerate MSME growth in the coastal areas of eastern Aceh. This study employs two approaches: the interactive model and SWOT analysis. Research informants will include representatives from Bank Aceh, Bank Syariah Indonesia, the Department of Communication and Information in eastern Aceh, and Sharia fintech providers in Aceh. This research used SWOT Analysis. The informants in this study consist of representatives from Bank Syariah Indonesia and SMEs from East Aceh. The results showed that to drive MSME growth in Aceh can be addressed through three main strategies consist of: Strengthening the Ecosystem, Optimizing Fintech Potential, and Exploring Market Opportunities in Aceh.

**Keywords:** Fintech Sharia, Financial Inclusion, Economic Digitalization.

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## INTRODUCTION

Technological advancements today provide convenience in various aspects, including financial services. Financial services play a significant role in driving a country's economic growth, as they indirectly facilitate business actors in expanding their operations and simplifying financial transactions (Evangelista et al., 2014). In Indonesia, Micro, Small, and Medium Enterprises (MSMEs) contribute significantly to the national economy. Data from the Coordinating Ministry for Economic Affairs of the Republic of Indonesia reveals that MSMEs contribute 61% to the Gross Domestic Product (GDP), equivalent to IDR 9,580 trillion, and absorb 97% of the local workforce. Based on this data, it can be concluded that MSMEs deserve considerable attention, given their critical role in maintaining economic stability and resilience during crises (Albats et al., 2021; Brata, 2009; Jalali et al., 2014).

One of the tangible products of the technological revolution is financial technology, which significantly enables effective and efficient transactions (Rosalina et al., 2023; Zetzche et al., 2017). Financial technology, commonly known as fintech, has become a financial solution supporting small and medium-sized enterprises (SMEs) (Syarifuddin et al., 2021). Fintech is an innovation in financial technology that provides integrated online financial services to facilitate various payment transactions, such as balance checks, household bill payments, insurance payments, e-commerce transactions, and more (Aseng et al., 2020; Rosalina et al., 2021)

According to regulations from Bank Indonesia, there are several types of fintech currently operating in Indonesia (Aulia, 2020; Pambudi, 2019) including: Peer-to-peer lending and crowdfunding, Market aggregators, Risk and Investment Management, Payment, Clearing, and Settlement. The existence of fintech has had positive impacts on empowering business actors to develop and grow their businesses. The presence of technology in the financial services sector has made financial processes easier, faster, and more affordable. Business digitalization supported by fintech can enhance financial inclusion (Atkinson & Rosenthal, 2014; Ozili, 2020).

Sharia fintech is an integral part of the growth of fintech penetration in Indonesia, considering that 86.9% of the total population, equivalent to 237.53 million people, are Muslims. The increasing interest of business actors in Sharia fintech has garnered the attention of the Indonesian government. This data is evident in one of Bank Indonesia's 2023 policies, which aims to maintain economic stability through inclusive and green economic-financial policies, focusing on digitalization and expanding domestic market access and exports for MSMEs and the Sharia economy (BPS, 2023). Sharia fintech contributes by facilitating Sharia-based funding distribution, primarily to MSMEs across various regions in Indonesia. According to the 2022 Global Islamic Fintech Report, the Sharia fintech market in Indonesia reached IDR 41.7 trillion (Global Islamic Fintech Report, 2021) Furthermore, data from the Financial Services Authority (OJK) in 2023 revealed that 17 licensed Sharia fintech entities operate in the country, consisting of peer-to-peer lending, digital financial innovations, and securities crowdfunding (Otoritas Jasa Keuangan, 2019)

This study focuses on MSMEs in the coastal areas of East Aceh, where the majority are fishermen who also produce dried fish. These MSMEs rely on fishing and processing dried fish as their primary sources of income. However, MSMEs in the coastal areas of East Aceh face challenges in accessing financial services. This data is evident, for example, in the unequal distribution of financial services accessible to dried fish business owners. For instance, East Aceh Regency has 250 cooperatives (Badan Pusat Statistik Indonesia, 2020) that can provide financial access to small businesses. However, in Langsa, particularly in Langsa Barat, there is only one savings and loan cooperative (BPS, 2020), with no government- or privately-owned Sharia financial institutions to support MSME development in the area. Thus, while Aceh's overall financial inclusion achievements are relatively high, in reality, this condition is not evenly experienced by MSMEs in the coastal regions of East Aceh. Sharia fintech penetration is needed to help MSMEs develop their businesses amidst limited banking services in these areas. Sharia fintech, through its products like Sharia P2P Lending, adopts Sharia-compliant financial services, which must be free from *riba* (interest), *gharar* (uncertainty or concealment), and *maysir* (speculation or gambling), aligning with the implementation of Sharia law in Aceh Province.



The research problem in this study is how to develop a strategic penetration model for Sharia fintech targeting MSMEs in East Aceh. The solution approach for this research emphasizes the need to formulate a strategic model by strengthening financial literacy and inclusion among MSMEs in the coastal areas of East Aceh, enabling them to enhance business development in the region.

The state of the art of this research is based on prior studies: Research by Wijayanti (Wijayanti & Riza, 2017) found that consumers are satisfied using Sharia fintech products in various business transactions, emphasizing the need for specific regulations governing these products. Research by Biancone (Paolo Pietro Biancone et al., 2019) highlighted the necessity for innovations in Sharia crowdfunding, which has shown slow progress despite its significant potential to advance business ideas or projects within the Islamic entrepreneurship ecosystem. Research by Aminah (Aminah et al., 2020) proposed a collaborative model between Sharia fintech providers and banks to increase the market share of Islamic banks and drive economic inclusion. Research by Yahya (Yahya, 2021) demonstrated that the slow development of Sharia fintech in Indonesia is attributed to the level of financial literacy, regulations, and Sharia fintech policies and product and service innovations. The novelty of this study lies in the necessity of developing a financial literacy-inclusion strengthening model to enhance the penetration of Sharia fintech, particularly peer-to-peer lending, focusing on MSMEs in Aceh.

## **METHODOLOGY**

This exploratory study aims to construct phenomena (McCusker & Gunaydin, 2015) through a series of data collection and categorization processes. Based on its objective, this descriptive study explains the development of Sharia fintech through the enhancement of financial literacy and inclusion. Secondary data collection techniques include documentation from various references such as proceedings, journals, Financial Services Authority (OJK) reports, Global Islamic Fintech reports, and the Central Statistics Agency (BPS). Meanwhile, primary data collection techniques involve interviews and questionnaires administered to research informants. The informants in this study consist of representatives from Bank Syariah Indonesia and SMEs from East Aceh.

Two approaches are employed in this study: the interactive model and SWOT analysis. According to Miles (Miles et al., 2013), the components of the interactive model analysis include data reduction, data display, conclusion drawing, and verification. The results from the interactive model will later be presented in the form of a SWOT analysis, encompassing strengths, weaknesses, opportunities, and threats. SWOT analysis is part of a set of tools to help plan and formulate strategies accurately (Benzaghta, 2021; Vlado, 2019). SWOT analysis is well-suited for research on the penetration strategy of Islamic fintech in Aceh because this method provides a comprehensive framework to evaluate internal and external conditions. With the SWOT analysis approach offers strategic recommendations to help Islamic fintech effectively grow in Aceh. The objective of using SWOT analysis in this study is to develop an appropriate strategy to maximize the penetration of Sharia fintech in East Aceh, thereby accelerating the growth of MSMEs in Indonesia.

## **RESULT AND DISCUSSION**

In 2023, financial technology in Indonesia experienced significant growth. The number of fintech companies in Indonesia reached 336, marking a sevenfold increase compared to the previous period. This figure highlights the substantial potential of fintech in Indonesia. Previous research found that over 90% of fintech borrowers are MSMEs (Saripudin et al., 2021). Among the total, 102 companies focus on fintech lending or peer-to-peer (P2P) lending services, indicating a promising outlook for fintech in driving MSME growth in Indonesia. Out of this number, by the end of December 2022, seven providers operated based on Sharia principles, accounting for approximately 6.86% of the total fintech lending providers. The Global Islamic Fintech Index 2023 reported that Indonesia has 65 Sharia fintech institutions, the highest number globally. However, further efforts are needed to accelerate the growth of MSMEs initiated by Sharia fintech.

Specific information regarding the number of Sharia fintech borrowers in Aceh Province in 2023 is unavailable from existing sources. According to the Financial Services Authority (OJK) Aceh, by May 2023,



the total amount of online lending in Aceh reached IDR 1.83 trillion. Interview results revealed that MSME actors in Aceh who are customers of Sharia fintech experienced increased turnover. The culinary sector, in particular, recorded more than 20% revenue growth. Additionally, the larger the borrower's business size, the more significant the revenue growth observed.

Based on the results of interviews with various informants, the SWOT analysis results are summarized in Table 1 below:

**Table 1. SWOT of Islamic Fintech Penetration in Aceh**

<b>STRENGTHH</b>	<b>WEAKNESS</b>
Digital Competence of MSME Actors	Lack of information about Islamic fintech
Digital Transformation in MSME Business Patterns	Inadequate information technology network infrastructure
Government Support in Implementing Sharia Economy	Lack of business management skills
<b>OPPORTUNITIES</b>	<b>THREATS</b>
Market Potential for Islamic Fintech in Aceh	Cybercrime in information technology
Opportunity to generate income for Islamic banks through collaboration with financial technology companies	Licensing issues
Development of Islamic fintech products with various types of contracts	Financial fraud

### 1. Strengths

- a. Digital Competence of MSMEs in Aceh generally have a pretty good level of digital competence. This data is evident as MSME actors use smartphones to conduct business activities, such as promotions, interacting with MSME communities online, and joining e-commerce platforms. They are already quite familiar with using fintech products for transactions, such as digital payments for business activities.
- b. Digital Transformation in MSME Business Patterns According to the study by Rosalina et al. (2024), MSME actors in Aceh have experienced transformation in running their businesses. Based on the grand mean calculation, the score obtained was 3.39, meaning that, in general, the level of digital transformation in MSME actors in the culinary sub-sector is at a medium level, within the interval range of 2.6 to 3.4. From this level, MSME actors in the culinary sector in Aceh are at level II, the Digitalization level, where MSME actors have entered the phase of using digital technology to transform business processes from traditional methods to more efficient and effective ones.
- c. Government Support in Implementing the Sharia Economy. The Aceh Government commits to supporting the implementation of the Sharia economy through various initiatives and policies. The Aceh Government inaugurated KDEKS to accelerate the development of the region's Sharia economic and financial ecosystem in September 2023. Vice President K.H. Ma'ruf Amin emphasized the importance of KDEKS in designing work programs and collaborating with stakeholders to optimize the key sectors of the Sharia economy. Implementing Islamic law has created a favorable ecosystem to facilitate the growth of Islamic fintech in Aceh.

### 2. Weakness

- a. Lack of Information about Islamic Fintech  
The people of Aceh, in general, are familiar with Islamic banks but are still unfamiliar with the terms and products of Islamic fintech. Based on the team's findings, only a few MSMEs in Aceh utilize Islamic fintech in their business activities. The existence of Fintech companies can help government to improve financial literacy and inclusion. However, the lack of resources to market their product available hinders the ability to optimize this effort.
- b. Low Level of Islamic Financial Literacy Among MSMEs



MSME actors are not well-acquainted with the services offered by Islamic fintech. This is consistent with the 2024 National Survey of Financial Literacy and Inclusion (SNLIK) conducted by the Financial Services Authority (OJK), where Indonesia's Islamic financial literacy index reached 39.11 percent, while the Islamic financial inclusion index stood at 12.88 percent. Despite significant improvement from the previous survey, where the Islamic financial literacy index was only 9 percent in 2019, Islamic financial inclusion remains relatively low.

c. Lack of Information Technology Network Infrastructure

This dependency can hinder the financing process in financial technology because Indonesia's internet or network infrastructure is not yet fully developed. Certain areas in Aceh have unstable internet connections. However, challenges still exist, including inadequate technological infrastructure and the need to improve digital literacy among the public. As a result, fintech penetration in Aceh remains relatively low; as of May 2019, fintech lending disbursement in Aceh only reached IDR 113.26 billion, or about 0.3% of the national total.

d. Lack of Business Management Skills

The ability of MSME actors in Aceh to manage their businesses remains a significant obstacle to their progress. The low level of financial literacy, such as weak financial record-keeping and insufficient knowledge of accounting principles and financial management, makes it difficult for MSME actors to develop their businesses.

3. Opportunities

a. Market Potential for Islamic Fintech in Aceh

The majority of the population in Aceh is Muslim and has implemented sharia law in daily life. The niche market for fintech is MSMEs in Aceh. Additionally, driven by socio-economic and political factors, Aceh could be fintech ecosystem growth. Moreover, the socio-culture of Aceh provides significant opportunities for Islamic fintech to develop, considering the vigorous implementation of Islamic law and the community's preference for Sharia-complaintant financial services. Local government support, such as the approval of the Sharia Financial Institutions Qanun, further strengthens the Sharia financial ecosystem in the region (Fuadi, 2023)

Opportunity to Create Income for Islamic Banks in Aceh through Collaboration with Financial Technology Companies. Islamic financial technology helps Islamic banks by facilitating customer transactions through applications, which can encourage Islamic banks to automate processes, impacting operational costs, such as reducing bank administrative expenses. This collaboration also impacts operational costs by allowing automated credit profiling of customers with the help of e-wallets, which monitor transactions and users' economic activities (Mujiatun et al., 2022).

b. Development of Islamic Fintech Products with Various Types of Contracts

In Islamic law, various types of contracts are recognized across different economic sectors, such as zakat, waqf, qardhul hasan contracts, which are non-commercial, as well as commercial contracts like murabahah, ijarah, mudharabah, and musyarakah. This diversity presents a unique opportunity to develop products in Islamic fintech. Fintech helps the Aceh Government to adapt Sharia economics in accordance with technological advance.

4. Threats

a. Crimes in the World of Information Technology (Cybercrime)

The internet has positive and negative impacts on society, as does fintech penetration. The positive impacts include the ease of fulfilling needs, while the negative impact commonly encountered today is the occurrence of crimes due to technological advancements (cybercrime). Crimes include data falsification of important documents stored on the internet, and fraud often occurs in financial services, particularly in fintech, which is not yet well understood by some people in Aceh. Therefore, socialization and dissemination of information regarding data security need to be given more attention.

b. Licensing

Not all Islamic fintech companies have obtained licenses from OJK. When a license is not issued, it threatens the Islamic fintech company. Legality is an important issue because, in fintech transactions, the public uses personal data that is vulnerable to misuse. There is a need for sufficient information regarding the legality of fintech that is easily accessible to the public.

c. Fraud in the Financial Sector

The rise of fintech has also led to a new *modus operandi* for financial crimes. Moreover, the existence of illegal fintech companies also tarnishes the reputation of legal fintech companies. The practices carried out by illegal fintech do not comply with the applicable regulations.

The presence of Islamic fintech in Indonesia has several advantages in driving MSME growth, including 1) the capability of Islamic fintech to offer efficient financial services by optimizing technology. It is a natural law that technology accelerates, simplifies, and shortens processes. This advantage enabling it to expand further and ultimately impact the growth of MSMEs themselves. Minerva (Minerva, 2016) states that one of the key factors enabling fintech to support MSME growth is the level of digital technology adoption by MSMEs. The second strength of Islamic fintech lies in its ecosystem, which aligns with the implementation of Islamic principles in Aceh. With the support of technological convenience and an appropriate ecosystem, fintech has the potential to grow in Aceh. Collaboration between Islamic fintech, businesses, the government, and academics within an established ecosystem, along with adequate technological support, is believed to drive the growth of Islamic fintech (Shofa et al., 2021). The third strength, which is equally important, is government support. Undeniably, the government's role influences the scale of an industry. The government's commitment to regulatory support is a strong foundation for Islamic fintech to facilitate better financing for MSMEs in Aceh.

A series of government policies aimed at promoting financial literacy and inclusion, along with other supporting programs, can indirectly accelerate the role of fintech, thereby contributing to MSME growth. Despite its strengths, several weaknesses have been identified.

In the case of Aceh, fintech companies face challenges in securing investors (lenders). Implementing Islamic Sharia in Aceh does not ease acquiring investors for fintech. The second common issue is related to outreach and promotion. This finding is consistent with previous studies, which highlight the low levels of public literacy and inclusion regarding Islamic financial institutions, particularly Islamic fintech (Aminah et al., 2020; Minerva, 2016; Putri & Friantia, 2021). One of the contributing factors is inadequate outreach and promotion, which hinder the development of Islamic fintech in Indonesia, and Aceh specifically. The third identified weakness is the limited infrastructure to support Islamic fintech. Its growth continues to face challenges due to infrastructure constraints. The final weakness in newly emerging business entities is the lack of managerial capabilities. This issue is compounded by the limited availability of human resources proficient in contract arrangements based on Islamic principles

Islamic fintech has three key opportunities: the first, Aceh's Large Market. The MSMEs in Aceh who are not yet familiar with Islamic fintech present a significant opportunity that requires serious attention. While other financial institutions struggle to find financing clients, fintech already has a transparent market in Aceh. With the implementation of Islamic Sharia, Aceh should be a substantial opportunity for the growth of Islamic fintech to drive MSME development. Second, Regulatory Support, from a regulatory perspective, the opportunity for fintech to obtain legal recognition from the government (OJK) is much higher than other financial institutions. The third, Sharia-Compliant Services, Fintech offers various financial contracts (Akad) within a single application, ensuring compliance with Islamic principles. These opportunities must be fully leveraged by fintech to penetrate the market in Aceh effectively.

One major challenge faced by Islamic fintech is financial crimes. The challenge in implementing fintech lies in fraud, where the potential for fraud in phishing, unauthorized access, and money laundering poses serious threats that could cause future concerns. The government needs to conduct stricter oversight through policies that protect users from the threat of fraud.

Considering the components outlined in the SWOT analysis based on strength and opportunities, we suggest several strategies as recommendations. Based on the strengths and opportunities possessed by Islamic fintech, we offer the following methods:

1. **Strengthening the Ecosystem and Regulatory Support.** Developing an ecosystem and regulatory framework that facilitates Islamic fintech recognition and growth among the Aceh region MSMEs. Collaboration among Islamic fintech, MSMEs, Islamic banking, and government entities must be well-integrated to boost Aceh's contribution to national financial inclusion goals.
2. **The Role of Academics in Strengthening Financial Literacy.** Academics play a pivotal role in enhancing financial literacy within communities. This statement can be realized through community service programs oriented towards strengthening the digital competencies of society and MSMEs, particularly in financial digitalization.
3. **Optimizing Technological Capabilities and Developing Financial Products.** Enhancing technological capabilities while innovating and developing Sharia-compliant contracts and establishing robust markets for borrowers and lenders.

These strategies aim to enhance the role and effectiveness of Islamic fintech while supporting financial inclusion and economic development at both regional and national levels.

From the perspective of strengths and threats, the research team recommends several strategies, including:

1. **Securing Government Support for Regulatory Development.** Advocating for government support to establish more specific and comprehensive regulations that promote the development of fintech in general and Islamic fintech in particular. These regulations should also simplify obtaining operational licenses for Islamic fintech, facilitating better oversight of their operations. With more Islamic fintech platforms under regulatory supervision, fraud, which has often arisen due to a lack of oversight, can be mitigated.
2. **Raising Public Awareness and Guiding MSMEs.** Conducting awareness campaigns to educate the public on the importance of choosing legal Islamic fintech platforms and encouraging MSMEs to leverage fintech for business development in Aceh. This effort would help control the risks associated with using fintech for consumerism and hedonism in the region.

These strategies aim to strengthen the regulatory framework and increase public awareness, ensuring Islamic fintech contributes effectively to economic growth and adheres to Sharia principles.

The research team recommends the following strategies based on the components of weaknesses and opportunities:

1. **Enhancing Massive Promotion of Islamic Fintech.** Intensifying promotional efforts for Islamic fintech in line with growing public trust. These promotions should emphasize the distinctive Sharia-compliant schemes offered by Islamic fintech, which allow for the development of various contracts tailored to customers' needs. This approach aims to spark the interest of MSMEs and the wider community in exploring the products and services of Islamic fintech.
2. **Encouraging Islamic Fintech Providers to Expand Operations in Aceh.** Motivating Islamic fintech providers to expand and establish operational units in the Aceh region. The distribution of Islamic fintech units across Aceh would facilitate easier coordination and oversight by the local government, enhancing the effectiveness and reach of Islamic fintech services.

These strategies are expected to address current weaknesses by leveraging opportunities to expand the presence and acceptance of Islamic fintech among MSMEs and the broader community.

From the elements of weaknesses and threats, this strategy is implemented by leveraging existing opportunities while minimizing existing weaknesses. The WO strategy pursued by the company involves increasing socialization through various media channels to enhance public awareness of Islamic Banking and Islamic financial technology (fintech). The socialization aims to help human resources embrace technological advancements in financial services, transitioning from offline to online systems. Islamic Banking has already implemented this strategy through social media and local media. Hence, Islamic fintech is encouraged to collaborate as effectively as possible with Islamic banks for fund placement. This would create corporate lenders to supply

funds needed for high-demand customer financing. Furthermore, Islamic banks should also synergize with Islamic fintech, as fintech has strong fund management capabilities that can generate attractive returns, ultimately benefiting Islamic banks.

## **CONCLUSION**

Islamic fintech provides financing convenience and business advancement opportunities for communities seeking to conduct their businesses by Islamic principles. In addition to offering accessible funding for society and MSMEs, Islamic fintech also promotes the development of productive sectors currently underserved by banking services.

The challenges in developing Islamic fintech to drive MSME growth in Aceh can be addressed through three main strategies. Strengthening the Ecosystem: Building collaboration between Islamic fintech, Islamic banking, the government, and academic institutions. Optimizing Fintech Potential: Enhancing managerial capabilities and understanding of Sharia contracts to create innovative Islamic fintech products tailored to MSME needs. Exploring Market Opportunities in Aceh: Maximizing socialization and promotional efforts in Aceh, a region with significant potential for the growth of Islamic fintech.

The government can maximize penetration of Sharian fintech in Aceh in several ways: 1) Develop specific regulatory frameworks to facilitate the growth of Islamic fintech, including simplifying the licensing process and ensuring strict oversight of fintech operations to prevent fraud 2) Prioritize the development of internet infrastructure in underserved areas, such as the coastal regions of East Aceh, to support MSME digitalization 3) Initiate national educational campaigns on Islamic fintech in collaboration with academics, community organizations, and fintech companies.

Islamic Fintech Providers can maximize penetration of Sharia fintech in Aceh in several ways. For example, 1) Establish representative offices in Aceh and conduct active promotions to increase public awareness of the benefits of Islamic fintech. 2) Develop Sharia-based products tailored to the needs of local MSMEs, such as mudharabah or musyarakah contracts for business financing. 3) Collaborate closely with MSMEs to provide training on technology usage and business management, increasing trust in fintech services.

With collaboration among the government, Islamic fintech providers, and MSME actors, the penetration of Islamic fintech in Aceh enhances financial inclusion. It supports sustainable economic growth based on Sharia principles in the region.

## **REFERENCES**

- Albats, E., Podmetina, D., & Vanhaverbeke, W. (2021). Open innovation in SMEs: A process view towards business model innovation. Forthcoming in *Journal of Small Business Management*. <https://doi.org/10.1080/00472778.2021.1913595>
- Aminah, Soewito, Erisna, N., Tarmizi, R., & Redaputri, A. P. (2020). The role of fintech and sharia banking industries in increasing economics inclusion in Indonesia. *International Journal of Scientific and Technology Research*, 9(2), 979–982.
- Aseng, A. C., Ekonomi, P., & Keguruan, F. (2020). Factors Influencing Generation Z Intention in Using FinTech Digital Payment Services. *Cogito Smart Journal*, 6(2), 155–166.
- Atkinson, L., & Rosenthal, S. (2014). Signaling the green sell: The influence of eco-label source, argument specificity, and product involvement on consumer trust. *Journal of Advertising*, 43(1), 33–45. <https://doi.org/10.1080/00913367.2013.834803>
- Aulia, S. (2020). Pola Perilaku Konsumen Digital Dalam Memanfaatkan Aplikasi Dompot Digital. *Jurnal Komunikasi*, 12(2), 311. <https://doi.org/10.24912/jk.v12i2.9829>
- Badan Pusat Statistik Indonesia. (2020). Catalog : 1101001. *Statistik Indonesia 2020*, 1101001, 790. <https://www.bps.go.id/publication/2020/04/29/e9011b3155d45d70823c141f/statistik-indonesia-2020.html>
- Benzaghta, M. A. (2021). SWOT Analysis Applications : An Integrative Literature Review. *Journal of Global Business Insight*, 6(1), 55–73.





- BPS. (2023). Laporan Perekonomian Indonesia 2023. Badan Pusat Statistik Indonesia, 1–210.
- Brata, A. G. (2009). Innovation and Social Capital in the Small-Medium Enterprises: A Case of Bamboo Handicraft in Indonesia. *Mpra*, 15696.
- Ellitan, L. (2020). Competing in the Era of Industrial Revolution 4.0 and Society 5.0. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 10(1), 1. <https://doi.org/10.30588/jmp.v10i1.657>
- Evangelista, R., Guerrieri, P., & Meliciani, V. (2014). The economic impact of digital technologies in Europe. *Economics of Innovation and New Technology*, 23(8), 802–824. <https://doi.org/10.1080/10438599.2014.918438>
- Fuadi, M. (2023). Ekonomi syariah, Peluang dan tantangannya bagi Ekonomi Aceh. *Jurnal Al-Mizan*, 10(1), 65–74. <https://doi.org/10.54621/jiam.v10i1.599>
- Global Islamic Fintech Report. (2021). Global Islamic Fintech Report. In GIFT, Global Islamic Fintech Report. <https://cdn.salaamgateway.com/special-coverage/islamic-fintech-2021/Global-Islamic-Fintech-Report-2021-Executive-Summary.pdf>
- Jalali, A., Jaafar, M., & Ramayah, T. (2014). Entrepreneurial orientation and performance: the interaction effect of customer capital. *World Journal of Entrepreneurship, Management and Sustainable Development*, 10(1), 48–68. <https://doi.org/10.1108/wjemsd-05-2013-0030>
- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion (United Kingdom)*, 30(7), 537–542. <https://doi.org/10.1177/0267659114559116>
- Miles, M., Huberman, A., & Saldana, J. (2013). *Qualitative Data Analysis: A Methods Sourcebook* (3rd Edition). (3rd ed.). Sage Publications, Inc.
- Minerva, R. (2016). The Potential of the FinTech Industry to Support the Growth of SMEs in Indonesia. *Journal of Management Strategy and Industry Evolution*, 1–60.
- Nurlaela, S., Mursito, B., Fajar SHODIQ, M., Hadi, P., & Rahmawati, R. (2021). Economic Empowerment of Agro Tourism “Jawaunik” (Java Unique): A Case Study in Indonesia. *Journal of Asian Finance*, 8(5), 741–0748. <https://doi.org/10.13106/jafeb.2021.vol8.no5.0741>
- Otoritas Jasa Keuangan. (2019). Survei Nasional Literasi dan Inklusi Keuangan Indonesia 2019. Survey Report, 1–26. [www.ojk.go.id](http://www.ojk.go.id)
- Ozili, P. K. (2020). Financial Inclusion Research Around the World: A Review. *SSRN Electronic Journal*, 101809. <https://doi.org/10.2139/ssrn.3515515>
- Pambudi, R. D. (2019). Perkembangan fintech di kalangan mahasiswa UIN Walisongo. *Harmony*, 4(2), 74–81. <https://journal.unnes.ac.id/sju/index.php/harmony/article/view/36456/15100>
- Paolo Pietro Biancone, Silvana Secinaro, & Mohamad Kamal. (2019). Crowdfunding and Fintech Business Model Sharia Compliant. *European Journal of Islamic Finance*, 1–10.
- Putri, I. S., & Friantia, S. H. E. (2021). Dampak Fintech Syariah Dalam Meningkatkan Keuangan Inklusif Pada UMKM Di Indonesia. *Bhirawa: Journal of Marketing And Commerce*, 6(1), 47–54.
- Rosalina, D., Yuliari, K., & Zati, M. R. (2023). Student Preferences for Financial Technology Digital Payment Services. *Ekonika*, 8(2).
- Rosalina, D., Zati, M. R., & Lubis, M. N. K. (2021). Digital Literacy Ability and Professionalism Towards Lecturers’ Competencies in the Industrial Revolution Era 4.0. *Proceedings of the 2nd International Conference on Science, Technology, and Modern Society (ICSTMS 2020)*, 576(Icstms 2020), 137–140. <https://doi.org/10.2991/assehr.k.210909.032>
- Saripudin, S., Nadya, P. S., & Iqbal, M. (2021). Upaya Fintech Syariah Mendorong Akselerasi Pertumbuhan UMKM di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 7(1), 41. <https://doi.org/10.29040/jiei.v7i1.1449>
- Shofa, S. M., Amaliah, I., & Rahmi, D. (2021). Preferensi UMKM Terhadap Pembiayaan Crowdfunding Syariah dan Konvensional di Pulau Jawa. 2018, 177–184. <http://103.78.195.33/handle/123456789/29571>
- Syarifuddin, S., Muin, R., & Akramunnas, A. (2021). The Potential of Sharia Fintech in Increasing Micro Small and Medium Enterprises (MSMEs) in The Digital Era in Indonesia. *Jurnal Hukum Ekonomi Syariah*, 4(1), 23. <https://doi.org/10.30595/jhes.v4i1.9768>
- Vlados, C. (2019). On a correlative and evolutionary SWOT analysis. *Journal of Strategy and Management*, 12(3), 347–363. <https://doi.org/10.1108/JSMA-02-2019-0026>
- Wijayanti, D. M., & Riza, A. F. (2017). Sharia Fintech: Positive Innovation in Consumer Perspective. In KPPU (Ed.), *International Seminar Academic Network On Competition Policy* (Vol. 4, Issue 1, pp. 1–23). KPPU.
- Yahya, A. (2021). Sharia Fintech Development in Indonesia. <https://doi.org/10.4108/eai.17-7-2020.2302984>
- Zetzche, D., Buckley, R., Arner, D., & Barberis, J. (2017). From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance. *Journal of Materials Processing Technology*, 1(1), 1–8.



<http://dx.doi.org/10.1016/j.cirp.2016.06.001><http://dx.doi.org/10.1016/j.powtec.2016.12.055>  
<https://doi.org/10.1016/j.ijfatigue.2019.02.006><https://doi.org/10.1016/j.matlet.2019.04.024><https://doi.org/10.1016/j.matlet.2019.127252><http://dx.doi.org/10.1016/j.matlet.2019.127252>

