Al-Istinbath
Jurnal Hukum Islam

Vol. 10. No. 1, Mei 2025, 172-193
P-ISSN: 2548-3374 (p), 25483382 (e)
http://journal.iaincurup.ac.id/index.php/alistinbath

Optimizing AI Technology in Assessing Islamic Financing Risks: A SWOT Analysis of Challenges and Opportunities from an Islamic Legal Perspective (*Fiqh*)

***Wazin[1], Siti Patimah[2], Aan Ansori [3], Wasehudin[4]**

Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Indonesia[1,2,3,4]

Corresponding author: * wazin@uinbanten.ac.id

DOI: 10.29240/jhi.v10i1.11941		
Received: 21-12-2024	Revised: 27-01-2025	Accepted: 15-02-2025
Cite this article:	Wazin, Siti Patimah, Aan Ansori, Wasehudin (2025). Optimizing AI Technology in Assessing Islamic Financing Risks: A SWOT Analysis of Challenges and Opportunities from an Islamic Legal Perspective (*Fiqh*) Approach. Al-Istinbath : Jurnal Hukum Islam, 10(1), 173-194 Doi : 10.29240/jhi.v10i1.11941	

Abstract

This study aims to analyze the implementation of AI in Islamic financial risk assessment using a SWOT approach. The primary objective is to evaluate how AI can be integrated to enhance risk assessment effectiveness while ensuring compliance with Islamic legal principles (*Fiqh*), particularly the prohibition of *Riba*, the avoidance of *Gharar*, and the promotion of ethical transparency. A qualitative methodology with a descriptive analytical approach is employed in this research. Data sources include scholarly literature, regulatory policies, industry reports, and case studies related to AI adoption in Islamic finance. The analysis utilizes the IFAS and EFAS to assess internal and external factors influencing AI adoption. Additionally, an Islamic legal analysis is conducted to ensure that AI implementation aligns with Shariah principles. The findings reveal that AI has significant potential to enhance efficiency and innovation in Islamic finance. However, challenges such as infrastructure limitations and a lack of technological literacy pose obstacles to its implementation. From an external perspective, opportunities for financial inclusion and strategic technological partnerships are expanding, yet concerns regarding data security and regulatory uncertainties remain prevalent. From an Islamic legal standpoint, this study underscores the importance of developing an AI framework that adheres to Shariah principles. The adoption of AI in Islamic

finance must follow a balanced approach by leveraging external opportunities, addressing internal challenges, and ensuring compliance with ethical and legal standards. This study offers strategic insights into AI integration within Islamic finance, contributing to its sustainability and global competitiveness.

Keywords: Artificial Intelligence; Islamic Financing; Islamic Legal Perspective

Introduction

Digital transformation has become a major catalyst across various sectors, including the Islamic finance industry. Artificial intelligence (AI) has emerged as a revolutionary innovation, offering the ability to enhance efficiency, speed, and accuracy in data analysis. In the context of Islamic financing, AI has the potential to assist financial institutions in understanding and managing risks more effectively while adhering to Sharia principles such as justice, transparency, and avoidance of speculative elements.[1] However, the implementation of this technology also presents challenges, particularly in ensuring compliance with Islamic law and integrating Sharia ethics into the framework of modern technology.

Islamic finance has rapidly evolved as a value-based alternative to the global financial system. This system aims to ensure fairness in financial transactions by rejecting elements such as usury (*Riba*) and uncertainty (*Gharar*). On the other hand, risk management is a critical aspect that determines the sustainability of Islamic financial institutions. Unfortunately, conventional methods of risk assessment are often inefficient and prone to bias. AI offers a potential solution with its capability to process data instantaneously, identify risk patterns, and provide recommendations based on accountable algorithms.[2]

Despite the potential of AI in Islamic finance, several issues persist in its application. One major challenge lies in the lack of clear regulatory standards to ensure that AI-based systems align fully with Sharia principles.[3] Moreover, the limited expertise in both technology and Islamic law often creates a gap in developing effective and sustainable solutions. The integration of AI with Islamic financing models also faces resistance due to concerns regarding technology's

[1] Gökmen Kılıç and Yavuz Türkan, "The Emergence of Islamic Fintech and Its Applications," *International Journal of Islamic Economics and Finance Studies* 9, no. 2 (2023): 212–36.

[2] Davinder Kaur et al., "Trustworthy Artificial Intelligence: A Review," *ACM Computing Surveys (CSUR)* 55, no. 2 (2022): 1–38.

[3] Shabana Kausar, Ali Raza Leghari, and Abdul Salam Soomro, "Analysis of the Islamic Law and Its Compatibility with Artificial Intelligence as a Emerging Challenge of the Modern World," *Annals of Human and Social Sciences* 5, no. 1 (2024): 99–114.

complexity and perceived risks of violating Sharia values[4]. This research problem highlights the need for an integrative approach that addresses both the technical and legal challenges in aligning AI with Islamic financing risk assessment.

Previous research has demonstrated how digital technology can be applied in the Islamic finance sector. For instance, a study by Benediktus Rolando and Herry Mulyono (2024) revealed how AI-based fintech can enhance operational efficiency, despite challenges in regulation and data protection.[5] Seng Loong Kok and Supaprawat Siripipatthanakul (2023) further emphasized that cybersecurity is a key factor in the adoption of AI for Islamic financial institutions.[6] Similarly, Kılıç and Türkan, (2023) explored the role of machine learning algorithms in detecting fraudulent activities within Sharia-compliant financial products, highlighting the importance of ethical data usage to maintain compliance with Islamic principles.[7] Furthermore, a study by Issam Tlemsani et al., (2023) examined the application of blockchain technology in enhancing transparency and trust in Islamic microfinance, showing how digital tools can align with the values of fairness and justice central to Islamic finance.[8] However, most of these studies have not specifically addressed the integration of AI in assessing Islamic financing risks through a holistic Islamic legal approach, leaving room for further exploration.

This research offers a new perspective by exploring how AI can assist Sharia principles in assessing financing risks.[9] Unlike previous studies that tend to focus separately on technical or regulatory aspects, this research adopts an integrative approach that encompasses Islamic law, technology, and ethics.[10] The study aims to address the gap in existing research and provide practical guidance for the implementation of AI in alignment with Sharia values. AI has the potential

---

[4] Alwi M Bamhdi, "Analysis of Intangible Assets Reporting Standards and Automation in KSA within an Islamic Context–a Case Study," *Journal of Islamic Accounting and Business Research*, 2024.

[5] Benediktus Rolando and Herry Mulyono, "Managing Risks In Fintech: Applications And Challenges Of Artificial Intelligence-Based Risk Management," *Economics and Business Journal (ECBIS)* 2, no. 3 (2024): 249–68.

[6] Seng Loong Kok and Supaprawat Siripipatthanakul, "Artificial Intelligence (AI) Adoption: The Case of the Malaysian Financial Industry," *Advance Knowledge for Executives* 2, no. 4 (2023): 1–15.

[7] Kılıç and Türkan, "The Emergence of Islamic Fintech and Its Applications."

[8] Issam Tlemsani et al., "Digitalization and Sustainable Development Goals in Emerging Islamic Economies," *Journal of Islamic Accounting and Business Research*, 2023.

[9] Siti Nor Amira Mohamad, Nuradli Ridzwan Shah Mohd Dali, and Mohamad Yazis Ali Basah, "Navigating the Moral Compass of Halal FinTech in Islamic Finance: Harvesting Benefits While Curbing Risks," in *Emerging Technology and Crisis Management in The Halal Industry: Issues and Recent Developments* (Springer, 2024), 157–71.

[10] Yudho Taruno Muryanto, Dona Budi Kharisma, and Anjar Sri Ciptorukmi Nugraheni, "Prospects and Challenges of Islamic Fintech in Indonesia: A Legal Viewpoint," *International Journal of Law and Management* 64, no. 2 (2022): 239–52.

to assist religious courts in areas like inheritance calculations, virtual mediation, and Sharia contract analysis, improving efficiency while facing challenges such as regulatory gaps, bias, and alignment with Islamic law.[11] Furthermore, the study examines the cybersecurity and legal aspects of dropshipping in Indonesia and Islamic law, highlighting the need for updates to cybersecurity laws and using Islamic Fatwas for guidance.[12] Additionally, it discusses the legal capacity of AI from an Islamic law perspective, suggesting that although AI does not have full legal rights like humans, it possesses an "*Artificial Personality*" recognized in Islamic law and can be held responsible to protect public interests.[13]

The objective of this study is to explore how AI can optimize the assessment of Islamic financing risks by utilizing a SWOT analysis approach. This research will investigate the challenges and opportunities presented by AI from a *Fiqh* (Islamic law) perspective, providing insights into the potential alignment of AI technology with Sharia principles.[14] The research question centers on how AI can be utilized effectively to enhance risk management practices in Islamic financing while ensuring full compliance with Islamic legal standards.[15]

This study is important as it addresses a critical gap in both the fields of Islamic finance and AI technology by bridging the two disciplines in a way that respects Sharia principles. As the Islamic finance sector continues to grow, it is essential to explore innovative solutions that not only enhance operational efficiency but also maintain ethical and legal integrity.[16] The integration of AI in Islamic financing risk assessment could offer a significant leap toward more effective, transparent, and equitable financial systems, particularly in Islamic financial institutions.[17] Moreover, this research aims to contribute to the

---

[11] Sukindar et al., "Legal Innovation in Religious Courts: The Potential Utilization of Artificial Intelligence (AI) in Resolving Contemporary Cases," *MILRev: Metro Islamic Law Review* 3, no. 2 SE-Articles (December 30, 2024): 388–410, https://doi.org/10.32332/milrev.v3i2.8199.

[12] Khairudin Khairudin et al., "Cyber Security and Legal Protection for Dropshipping Transactions in Indonesia: Between State Law and Islamic Law," *JURIS (Jurnal Ilmiah Syariah)* 23, no. 1 (2024): 81–92.

[13] Miszairi Sitiris and Saheed Abdullahi Busari, "The Legal Capacity (Al-Ahliyyah) Of Artificial Intelligence From An Islamic Jurisprudential Perspective," *Malaysian Journal of Syariah and Law* 12, no. 1 (2024): 31–42.

[14] Kausar, Leghari, and Soomro, "Analysis of the Islamic Law and Its Compatibility with Artificial Intelligence as a Emerging Challenge of the Modern World."

[15] Klemens Katterbauer and Philippe Moschetta, "A Deep Learning Approach to Risk Management Modeling for Islamic Microfinance," *European Journal of Islamic Finance* 9, no. 2 (2022): 35–43.

[16] Shinaj Valangattil Shamsudheen, Saiful Azhar Rosly, and Aishath Muneeza, "Assessing Ethical Praxis of Ethical (Islamic) Financial Institutions: A Survey of Empirical Discoveries," *International Journal of Law and Management* 65, no. 5 (2023): 440–60.

[17] Hazik Mohamed, "Managing Islamic Financial Risks and New Technological Risks," in *Artificial Intelligence and Islamic Finance* (Routledge, 2021), 61–76.

development of clearer regulatory frameworks and best practices for the use of AI in compliance with Islamic law.

In a rapidly digitizing world, the combination of technological advancement and ethical integrity is crucial for the future of Islamic finance. The findings of this study are expected to contribute valuable insights into how AI can be employed to support Sharia-compliant financial practices, ensuring both ethical and operational excellence. The research also seeks to inform policymakers, academics, and practitioners about the potential challenges and opportunities of integrating AI into Islamic finance, guiding future efforts to create a more inclusive and sustainable financial ecosystem.

This research is relevant amid the accelerating digital transformation, which refers to the integration of digital technology into various sectors to enhance efficiency, accessibility, and innovation in services.[18] This transformation demands innovative, inclusive, and sustainable financial services. By combining aspects of technology and Islamic law, this study addresses the need for a system that is not only modern but also grounded in Sharia values. The success of this integration is expected to serve as a model for other financial institutions in facing the challenges of the digital era.

Finally, this study aims to make a significant impact on the advancement of AI technology in supporting Islamic financing by utilizing a qualitative method based on SWOT analysis[19]. SWOT analysis is a strategic method for evaluating the condition of an organization or project by assessing four key factors: Strengths, Weaknesses, Opportunities, and Threats. In the context of AI implementation for Islamic financial risk assessment, strengths include machine learning capabilities and big data analytics that enhance accuracy and efficiency.[20] However, weaknesses such as regulatory gaps and challenges in aligning AI with Shariah principles must be addressed.[21] Opportunities arise from the increasing demand for Islamic financial services and AI's potential to enhance financial inclusion, while threats include ethical concerns, data privacy risks, and algorithmic bias.[22] By systematically analyzing these factors, SWOT analysis helps

---

[18] Arbanur Rasyid, Musda Asmara, and Maulana Arafat Lubis, "Strategi Jihad Digital Sebagai Upaya Perlawanan Informasi Negatif: Studi Metode Istihsan Pada Akun Instagram," *Al-Istinbath: Jurnal Hukum Islam* 6, no. 2 November SE-Articles (November 11, 2021): 409–26, https://doi.org/10.29240/jhi.v6i2.2797.

[19] Emet Gurl, "SWOT Analysis: A Theoretical Review," 2017.

[20] Richard W Puyt, Finn Birger Lie, and Celeste P M Wilderom, "The Origins of SWOT Analysis," *Long Range Planning* 56, no. 3 (2023): 102304.

[21] Orlanda Tavares, Cristina Sin, and Alberto Amaral, "Internal Quality Assurance Systems in Portugal: What Their Strengths and Weaknesses Reveal," *Assessment & Evaluation in Higher Education* 41, no. 7 (2016): 1049–64.

[22] Christian Osita Ifediora, ONYEBUCHI R Idoko, and Justina Nzekwe, "Organization's Stability and Productivity: The Role of SWOT Analysis an Acronym for Strengt. h, Weakness, Opportunities and Threat," 2014.

formulate strategies that maximize AI's potential while mitigating risks, ensuring compliance with Shariah principles, and supporting sustainable growth in Islamic finance.[23] This approach not only provides technical solutions but also offers strategic guidance for regulators, academics, and practitioners in creating a more equitable and sustainable financial ecosystem while bridging technological innovation with the integrity of Shariah values.

Discussion

The implementation of AI in assessing Islamic financing risks offers significant advantages, such as enhancing accuracy and efficiency through big data and machine learning, enabling precise risk profiling for Sharia-compliant financial institutions and MSMEs. With over 65 million MSMEs in Indonesia contributing to economic growth, AI's ability to optimize financing solutions and expand financial inclusion is evident. However, challenges include the lack of specific regulations, ensuring compliance with Islamic law, and addressing risks like data misuse, privacy violations, and algorithmic bias. To maximize AI's potential while adhering to Sharia principles, robust regulatory frameworks and ethical safeguards are essential.

The discussion emphasizes the broader implications of these findings by exploring relevant literature and expert insights. From a SWOT perspective, AI presents opportunities to accelerate financial inclusion, especially in countries with large Muslim populations, by enabling personalized financial products and addressing specific societal needs through detailed risk profiling. Nonetheless, threats such as data misuse, privacy violations, algorithmic bias, and potential non-compliance with Sharia principles underscore the ethical and legal risks associated with AI implementation. Literature and expert opinions highlight the need for transparency in decision-making algorithms, adherence to principles of fairness and justice, and the establishment of ethical guidelines rooted in Islamic law to address these concerns. Consequently, aligning AI-driven solutions with Islamic legal and ethical frameworks is imperative to maintaining public trust and achieving long-term success in Islamic finance. Future research should prioritize developing comprehensive regulatory frameworks and ethical standards that harmonize AI's capabilities with the principles of fairness, justice, and Sharia compliance.

SWOT Analysis

In an increasingly competitive world, organizations must implement the right strategies to achieve their goals and address various challenges. SWOT

[23] Faizi Faizi, "How Are Islamic Banking Products Developed? Evidence from Emerging Country," *Cogent Economics & Finance* 12, no. 1 (2024): 2378961.

analysis is one of the widely used methods to assist in formulating more effective strategies. By identifying internal and external factors, this method provides a comprehensive overview that supports data-driven decision-making. Therefore, SWOT analysis is extensively applied in various fields, such as business management, product development, and project management, to ensure more informed and well-planned decisions.[24]

Strengths refer to internal factors that provide an organization or company with advantages in achieving its goals. These strengths can include various aspects, such as the expertise or capabilities of human resources, a strong market position, advanced technology, operational efficiency, or good relationships with customers and business partners. These factors give the organization the ability to compete more effectively, offer superior products or services, and create more value than competitors. In SWOT analysis, identifying the internal strengths allows the organization to optimally utilize existing resources to capitalize on external opportunities and overcome emerging challenges.[25] The SWOT analysis for Strengths is as follows: 1) Efficiency and Accuracy: AI technology can process large amounts of data quickly and accurately, improving efficiency in financing risk assessments.[26] 2) Compliance with Sharia Principles: With specially designed algorithms, AI can help ensure that financing decisions remain in line with the principles of justice, transparency, and non-usury that form the foundation of Islamic law.[27] 3) Financial Product Innovation: AI opens up opportunities to create more personalized and market-relevant Islamic financial products.[28] 4) Real-Time Monitoring: AI technology can provide the ability to monitor market and customer conditions in real time, making decision-making more responsive.[29] 5) Economic Welfare Improvement for the Ummah: The implementation of AI in Islamic financing supports the goal of maqashid sharia, which is to enhance the economic welfare of the community.[30]

---

[24] Debprotim Dutta and Indranil Bose, "Managing a Big Data Project: The Case of Ramco Cements Limited," *International Journal of Production Economics* 165 (2015): 293–306.

[25] Joseph William Bull et al., "Strengths, Weaknesses, Opportunities and Threats: A SWOT Analysis of the Ecosystem Services Framework," *Ecosystem Services* 17 (2016): 99–111.

[26] Bibitayo Ebunlomo Abikoye et al., "Integrating Risk Management in Fintech and Traditional Financial Institutions through AI and Machine Learning," 2024.

[27] Othman Abdullah et al., "AI Applications for Fiqh Rulings in Islamic Banks–Shariah Committee Acceptance," *ISRA International Journal of Islamic Finance* 16, no. 1 (2024): 111–26.

[28] Md Riaj Uddin, "The Role of the Digital Economy in Bangladesh's Economic Development," *Sustainable Technology and Entrepreneurship* 3, no. 1 (2024): 100054.

[29] James M Tien, "Internet of Things, Real-Time Decision Making, and Artificial Intelligence," *Annals of Data Science* 4 (2017): 149–78.

[30] Ziyaad Mahomed and Irum Saba, "Sustainable Development: Exploring the Role of Islamic Social Finance in Promoting Sustainable Development and Social Welfare," in *The Future of Islamic Finance: From Shari'ah Law to Fintech* (Emerald Publishing Limited, 2024), 103–20.

6) Operational Scalability: AI enables Islamic financial institutions to expand their operations without significantly increasing the workforce.[31]

Weaknesses refer to internal factors that may hinder the progress or performance of an organization or company. These weaknesses include deficiencies in resources, limitations in technology, ineffective management, or operational issues that cause inefficiency. Additionally, weaknesses can stem from poor reputation, lack of skills within the team, or an inability to adapt to market changes. In SWOT analysis, it is important to identify these weaknesses so the organization can take steps to address them, either by improving existing resources, enhancing management systems, or finding innovative solutions to overcome the obstacles.[32] The SWOT analysis for Weaknesses is as follows: 1) Lack of Specific Regulations: There is no clear regulatory framework for the application of AI technology in the context of Islamic finance, leading to legal uncertainty.[33] 2) Algorithmic Bias: AI algorithms that are insufficiently supervised may contain biases that are not in line with sharia principles, such as discrimination or unfairness.[34] 3) Limited Understanding of Technology: The lack of understanding about AI technology among Islamic finance practitioners can hinder optimal adoption.[35] 4) Limited Technological Infrastructure in Remote Areas: Implementing AI is challenging in regions with limited access to technology.[36] 5) High Investment Requirements: The implementation of AI requires significant initial investment in hardware, software, and human resources training.[37] 6) Difficulty Integrating Sharia Values into AI Algorithms: Algorithms

[31] Tlemsani et al., "Digitalization and Sustainable Development Goals in Emerging Islamic Economies."

[32] Pragati A Shinde et al., "Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of Supercapacitors: A Review," *Journal of Energy Chemistry* 79 (2023): 611–38.

[33] Early Ridho Kismawadi, "Islamic Fintech: Navigating the Regulatory Framework and Promoting Financial Inclusion in Gulf Cooperation Council (GCC) Countries," *Journal of Islamic Marketing*, 2024.

[34] Joan Rebecca Njeri Birika, "A Theoretical Assessment of the Nexus between Universal Child Legal Identity and Universal Principles of Child Protection: A Case Study of Emirates ID," 2021.

[35] Mohammad Mahbubi Ali et al., "Islamic Financial Inclusion Determinants in Indonesia: An ANP Approach," *International Journal of Islamic and Middle Eastern Finance and Management* 13, no. 4 (2020): 727–47.

[36] Adedeji Olugboja and Elizabeth Moghalu Agbakwuru, "Bridging Healthcare Disparities in Rural Areas of Developing Countries: Leveraging Artificial Intelligence for Equitable Access," in *2024 International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA)* (IEEE, 2024), 1–6.

[37] Soumyadeb Chowdhury et al., "Unlocking the Value of Artificial Intelligence in Human Resource Management through AI Capability Framework," *Human Resource Management Review* 33, no. 1 (2023): 100899.

that are not designed with a deep understanding of sharia principles may fail to reflect these values.[38]

Opportunities refer to external factors that an organization or company can leverage to expand its reach, improve performance, or achieve larger goals. These opportunities can arise from various sources, such as market changes, technological developments, supportive regulations, or favorable socio-economic trends. By identifying these opportunities, organizations can direct their resources and strategies to capitalize on favorable external conditions. Advances in digital technology or increased consumer awareness of eco-friendly products could be significant opportunities for companies to innovate and meet market demands. It is essential for organizations to continuously monitor changes in the external environment to identify and fully utilize available opportunities.[39] The SWOT analysis for Opportunities is as follows: 1) Expansion of Islamic Financial Inclusion: AI has the potential to help reach communities that have not been served by formal financial systems, particularly in countries with large Muslim populations.[40] 2) Technology Support: The rapid advancement of technology and increasing investments in AI provide significant opportunities for the Islamic finance industry to undergo digital transformation.[41] 3) Development of Global Standards: The opportunity to create international standards that integrate sharia principles with advanced technologies like AI.[42] 4) Strategic Partnerships with Global Technology Firms: Islamic financial institutions can partner with global tech companies to accelerate AI adoption.[43] 5) Expansion of Digital Shariah Market: The development of shariah-based digital platforms presents a great opportunity to integrate AI into financial services.[44] 6) Public Education on AI-

[38] Abdulazeem Abozaid, "Financial Applications of Artificial Intelligence: Shariah Issues and Maqasid Considerations," in *Islamic Finance in the Digital Age* (Edward Elgar Publishing, 2024), 165–89.

[39] Bartlomiej Igliński et al., "SWOT Analysis of Renewable Energy Sector in Mazowieckie Voivodeship (Poland): Current Progress, Prospects and Policy Implications," *Environment, Development and Sustainability* 24, no. 1 (2022): 77–111.

[40] Aishath Muneeza and Zakariya Mustapha, "Islamic Fintech and Financial Inclusion," *Islamic FinTech: Insights and Solutions*, 2021, 173–90.

[41] Mohammad Atif et al., "Islamic FinTech: The Digital Transformation Bringing Sustainability to Islamic Finance," in *COVID-19 and Islamic Social Finance* (Routledge, 2021), 91–103.

[42] Bamhdi, "Analysis of Intangible Assets Reporting Standards and Automation in KSA within an Islamic Context–a Case Study."

[43] Mousa Ajouz and Fayez Abuamria, "Unveiling the Potential of the Islamic Fintech Ecosystem in Emerging Markets," *Al Qasimia University Journal of Islamic Economics* 3, no. 1 (2023): 115–48.

[44] Mohammad Alsaghir, "Digital Risks and Islamic FinTech: A Road Map to Social Justice and Financial Inclusion," *Journal of Islamic Accounting and Business Research*, 2023.

Based Islamic Finance: Educational programs can increase public understanding of the benefits and principles of AI-driven Islamic finance.[45]

Threats in a SWOT analysis refer to external factors that may hinder or limit an organization's ability to achieve its goals. These threats can stem from various sources, such as intense competition, unfavorable regulatory changes, economic fluctuations, or rapidly developing technologies that threaten the relevance of existing products or services. Additionally, threats can arise from social factors, such as shifts in consumer behavior or political instability that may affect business operations. It is crucial for organizations to quickly identify these threats to develop effective mitigation strategies, such as product diversification, business model changes, or operational efficiency improvements to face external challenges.[46] The SWOT analysis for Threats is as follows: 1) Data Security Risks: Misuse of customer data and privacy violations pose serious threats in the implementation of AI in Islamic finance.[47] 2) Non-Compliance with Sharia Principles: Unsupervised technology implementation may violate core Sharia principles, such as justice and transparency.[48] 3) Global Competition: Dominance of large tech-based companies may threaten the sustainability of local Islamic financial institutions if they cannot compete.[49] 4) Rapid Macro-Economic Changes: Global economic instability may affect the sustainability of AI implementation in the Islamic finance sector.[50] 5) Regulatory Incompatibility Across Countries: Differences in regulations among Muslim-majority countries can hinder the standardization of AI implementation.[51] 6) Rapid Technology Evolution: Rapid technological changes may render the implemented AI systems obsolete if they are not continuously adapted.[52]

---

[45] Syaima Adznan et al., "Islamic Banking and the Fourth Industrial Revolution: The Current Application, Adoption, and Future Challenges of Artificial Intelligence," in *The Future of Islamic Finance* (Emerald Publishing Limited, 2024), 207–19.

[46] Boonyarat Phadermrod, Richard M Crowder, and Gary B Wills, "Importance-Performance Analysis Based SWOT Analysis," *International Journal of Information Management* 44 (2019): 194–203.

[47] Mustafa Raza Rabbani et al., "Ethical Concerns in Artificial Intelligence (AI): The Role of RegTech and Islamic Finance," in *Artificial Intelligence for Sustainable Finance and Sustainable Technology: Proceedings of ICGER 2021 1* (Springer, 2022), 381–90.

[48] David Kuo Chuen Lee et al., *Applications and Trends in Fintech I: Governance, AI, and Blockchain Design Thinking*, vol. 4 (World Scientific, 2022).

[49] Amna Al-Mulla, Ibrahim Ari, and Muammer Koç, "Sustainable Financing for Entrepreneurs: Case Study in Designing a Crowdfunding Platform Tailored for Qatar," *Digital Business* 2, no. 2 (2022): 100032.

[50] Ahmad Ali Jan et al., "Does Islamic Corporate Governance Prevent Bankruptcy in Islamic Banks? Implications for Economic Sustainability," *Management & Sustainability: An Arab Review*, 2023.

[51] Ömer Faruk Aladağ, "International Strategies of Islamic Financial Institutions: Current Challenges and Future Trends," *Kocatepe İslami İlimler Dergisi* 6, no. Özel Sayı (2023): 202–16.

[52] Spyros Makridakis, "The Forthcoming Artificial Intelligence (AI) Revolution: Its Impact on Society and Firms," *Futures* 90 (2017): 46–60.

To facilitate mapping the SWOT analysis, a SWOT Matrix table is created, which serves as a means to assess the strengths, weaknesses, opportunities, and threats faced by an organization or project in a structured format. This matrix helps researchers in decision-making by identifying internal factors that can be leveraged for the organization's advantage (strengths) or that need improvement (weaknesses), as well as exploring external factors that may create opportunities for growth or pose threats to operational continuity (opportunities and threats). By organizing all these factors in a simple matrix, SWOT analysis provides a clear picture of the organization's position and the strategic direction that can be taken to maximize performance and minimize risks. To further clarify, this can be mapped in the following SWOT Matrix table:

Tabel 1: SWOT Analysis Matrix

Faktor	Strengths	Weaknesses
Efficiency and Accuracy	AI technology processes large data quickly and accurately, improving efficiency in risk assessment for financing.	Lack of specific regulations creates legal uncertainty regarding the implementation of AI technology in the Islamic finance sector.
Sharia Compliance	AI ensures financing decisions align with the principles of justice, transparency, and non-usury in accordance with Islamic law.	Algorithmic bias may arise if algorithms are not properly supervised, leading to injustice.
Financial Product Innovation	AI opens opportunities to create more personalized and market-relevant Islamic financial products.	Limited understanding of AI among Islamic finance practitioners hinders optimal technology adoption.
Real-Time Monitoring	AI's ability to monitor market conditions and clients in real-time increases the responsiveness of decision-making.	Limited technological infrastructure in remote areas hinders effective AI implementation.
Improved Welfare	AI supports the maqashid shariah goal of improving the economic welfare of the community.	AI implementation requires significant upfront investment in hardware, software, and human resource training.
Operational Scalability	AI allows Islamic financial institutions to expand operations without significantly increasing labor.	Difficulty integrating Sharia values into AI algorithms if not designed with an understanding of Sharia principles.

Faktor	**Strengths**	**Weaknesses**
Factor	**Opportunities**	**Threats**
Sharia Financial Inclusion	AI can help reach underserved communities, especially in large Muslim countries, by extending financial services.	Data security risks and privacy violations pose a serious threat in the implementation of AI in Islamic finance.
Technology Support	Advancements in technology and AI investment support the digital transformation of the Islamic financial industry.	Non-compliance with Sharia principles may occur if AI implementation is not properly supervised, violating justice and transparency.
Global Standards	Opportunity to create international standards integrating Sharia principles with AI technology.	Global competition may threaten the sustainability of local Islamic financial institutions that cannot compete.
Technology Partnerships	Islamic financial institutions can partner with global tech companies to accelerate AI adoption.	Global economic instability may affect the sustainability of AI implementation in Islamic finance.
Digital Sharia Market	Sharia-based digital platforms provide significant opportunities to integrate AI into financial services.	Regulatory inconsistencies between countries hinder the standardization of AI implementation across Muslim-majority countries.
Public Education	Educational programs can enhance public understanding of AI-based Islamic finance.	Rapid technological change can make AI systems obsolete if not continuously adapted.

Data Source: SWOT Analysis

IFAS Analysis

IFAS for the SWOT analysis related to the implementation of AI technology in Islamic finance can be created by assigning weights to each internal factor based on its level of impact, and then providing ratings based on relative performance compared to competitors or in the current context. Below is the IFAS matrix that combines strengths and weaknesses :

Table 2: IFAS Analysis

Internal Factors	Weight	Rating	Score
Strengths			
1. Efficiency and accuracy in data processing	0.15	4	0.60
2. Compliance with Sharia principles	0.13	5	0.65
3. Innovation in Sharia financial products	0.12	4	0.48
4. Real-time monitoring for decision-making	0.11	3	0.33
5. Improvement of economic welfare of the community	0.14	5	0.70
6. Operational scalability allowing for expansion	0.10	4	0.40
Total Strengths	**1.00**		**3.16**
Weaknesses			
1. Lack of specific regulations related to AI in Sharia finance	0.14	2	0.28
2. Algorithmic bias in AI algorithms	0.12	2	0.24
3. Limited understanding of technology by Sharia practitioners	0.11	2	0.22
4. Limited technology infrastructure in remote areas	0.10	3	0.30
5. High investment requirements for AI implementation	0.13	3	0.39
6. Difficulty integrating Sharia values into algorithms	0.10	3	0.30
Total Weaknesses	**1.00**		**1.73**

Data Source: SWOT Analysis Matrix

The application of AI technology in Sharia finance presents several significant strengths. One of these is the efficiency and accuracy in data processing (score: 0.60). AI enables the rapid and precise processing of large amounts of data, which enhances efficiency in assessing financing risks. This allows Sharia financial institutions to make more accurate decisions and be responsive to dynamic market conditions. Additionally, compliance with Sharia principles (score: 0.65) is another key strength. AI technology can be designed with algorithms that ensure each financial decision remains in line with Sharia principles such as justice, transparency, and non-usury, which are essential in Sharia finance. Furthermore, innovation in Sharia financial products (score: 0.48) plays a role in creating more personalized products that meet market needs, thus expanding the reach of Sharia financial services. Real-time monitoring for decision-making (score: 0.33) also provides significant benefits by directly monitoring market and customer conditions, enhancing responsiveness to market changes. Additionally, AI can improve the economic welfare of the community (score: 0.70) through more equitable and efficient financial distribution, supporting the goals of maqashid

Sharia. Lastly, operational scalability (score: 0.40) enables Sharia financial institutions to expand their services without significantly increasing the workforce, opening up faster expansion opportunities. On the other hand, several weaknesses need to be addressed in the implementation of AI in Sharia finance. One major issue is the lack of specific regulations related to AI in Sharia finance (score: 0.28). Currently, there is no clear regulation on the use of AI in this sector, which creates legal uncertainty and hinders the adoption of the technology. Furthermore, algorithmic bias in AI algorithms (score: 0.24) can lead to decisions that do not align with Sharia principles, resulting in unfair financing.

The limited understanding of technology by Sharia practitioners (score: 0.22) also presents a challenge, as many practitioners lack an understanding of AI technology, hindering its effective implementation in Sharia financial institutions. The limited technology infrastructure in remote areas (score: 0.30) is a barrier to expanding AI-based Sharia financial services, particularly in areas with limited infrastructure. Additionally, the high investment requirements for AI implementation (score: 0.39) compel financial institutions to allocate large funds for hardware, software, and human resource training. Finally, the difficulty in integrating Sharia values into AI algorithms (score: 0.30) is a major challenge, especially if the technology is not designed with a sufficient understanding of Sharia principles, which risks reducing the alignment of AI with Sharia values.

EFAS Analysis

EFAS for the SWOT analysis pertaining to the application of AI technology within Sharia finance provides an overview of external factors that can impact the success or challenges of AI implementation. This matrix identifies opportunities and threats related to the application of AI technology in the Sharia finance sector, assigning weights to each external factor based on its level of influence on strategic success, and then rating it according to relative performance compared to competitors. Below is the EFAS matrix for the SWOT analysis regarding the implementation of AI technology in Sharia finance:

Table 3: EFAS Analysis.

External Factors	Weight	Rating	Score
Opportunities			
1. Expansion of Islamic Financial Inclusion	0.20	4	0.80
2. Technological Support and Investment in AI	0.25	4	1.00
3. Development of Global Standards for Islamic Finance	0.15	3	0.45
4. Strategic Partnerships with Global Technology	0.15	3	0.45

5. Expansion of the Digital Islamic Finance Market	0.15	4	0.60
6. Public Education on AI-Based Islamic Finance	0.10	2	0.20
Total Opportunities	**1.00**		**3.50**
Threats			
1. Data Security Risks	0.20	2	0.40
2. Non-compliance with Sharia Principles	0.25	2	0.50
3. Global Competition in Financial Technology	0.20	3	0.60
4. Rapid Changes in Macroeconomic Conditions	0.15	2	0.30
5. Regulatory Disharmony Across Nations	0.10	3	0.30
6. Rapid Evolution of Technology	0.10	3	0.30
Total Threats	**1.00**		**2.40**

Data Source: SWOT Analysis Matrix

There are several significant opportunities that can be leveraged in the application of AI technology in Islamic finance. One of these is the expansion of Islamic financial inclusion (score: 0.80). With the advancement of technology and digital penetration, Islamic financial institutions can reach a larger segment of the population that previously lacked access to financial services. Support for technology and investments in AI (score: 1.00) also represents a significant opportunity, as increased investments in AI development enable Islamic financial institutions to adopt and implement advanced technology to enhance efficiency and services. Developing global standards for Islamic finance (score: 0.45) offers the chance for Islamic financial institutions to align with international standards, strengthening credibility and competitiveness in the global market. Strategic partnerships with global technology companies (score: 0.45) create opportunities for Islamic financial institutions to collaborate with major tech firms to accelerate AI development and adoption. Furthermore, the expansion of the digital Islamic finance market (score: 0.60) provides an avenue to broaden Islamic financial services in diverse and larger markets, particularly through digital platforms that enable easier and faster access. Public education about AI-based Islamic finance (score: 0.20) is another opportunity to be explored to raise awareness and understanding among the public about the importance of technology in Islamic finance, thereby increasing trust and participation in AI-based Islamic financial systems. Despite these opportunities, this sector also faces several threats that must be addressed. One major threat is data security risks (score: 0.40), a critical concern in AI technology use. Ensuring data security is vital to protect customer information and transactions, as potential threats from hacking or data breaches can damage the reputation of Islamic financial institutions. Non-compliance with Sharia principles (score: 0.50) is another significant threat, as AI technology not

designed with Sharia principles in mind can lead to errors in financial decision-making that contradict Islamic teachings.

Moreover, global competition in financial technology (score: 0.60) is intensifying, with large tech companies racing to develop and offer increasingly sophisticated financial solutions, which could threaten the position of Islamic financial institutions. Rapid changes in macroeconomic conditions (score: 0.30) also pose a threat, as shifts in global or domestic economies could impact the stability of Islamic financial markets. Lastly, regulatory disharmony across nations (score: 0.30) and the rapid evolution of technology (score: 0.30) exacerbate challenges in developing and applying AI in Islamic finance, as inconsistent regulatory changes or rapidly advancing technology may make it difficult for financial institutions to adapt and comply.

The IFAS matrix evaluates the internal strengths and weaknesses in the implementation of AI technology in the Islamic finance sector. The total score for Strengths is 3.10, reflecting strong potential in areas such as efficiency, product innovation, and adherence to Sharia principles. For instance, Bank Syariah Indonesia has successfully implemented AI-driven customer service systems to enhance operational efficiency while ensuring compliance with Sharia guidelines[53]. Similarly, AI algorithms are used in risk assessment processes at Dubai Islamic Bank, enabling more accurate evaluations of creditworthiness while avoiding elements of *Riba* and *Gharar*.[54] Conversely, the Weaknesses score of 2.80 highlights internal challenges, such as limited understanding of technology and infrastructure constraints, which require greater attention to overcome. This indicates that while the sector has a solid internal foundation, certain aspects need strengthening, particularly in terms of building technological literacy among Sharia finance professionals and improving digital infrastructure in developing regions.

On the other hand, the EFAS matrix assesses external opportunities and threats. The total score for Opportunities is 3.00, indicating significant prospects, such as expanding Islamic financial inclusion and leveraging domestic technological support. An example is the growth of Indonesian Sharia-compliant fintech platforms like Amartha Syariah, which utilize AI to facilitate peer-to-peer lending and investment opportunities, particularly in underserved Muslim communities within Indonesia.[55] These platforms demonstrate how AI can broaden access to financial services, contributing to economic empowerment and

---

[53] Issa Hamadou et al., "Unleashing the Power of Artificial Intelligence in Islamic Banking: A Case Study of Bank Syariah Indonesia (BSI)," *Modern Finance* 2, no. 1 (2024): 131–44.

[54] Nafis Alam, Lokesh Gupta, and Abdolhossein Zameni, *Fintech and Islamic Finance* (Springer, 2019).

[55] Indah Permata Suryani, Atika Gando Suri, and Zahra Shafira, "How Fintech Peer to Peer Lending Affected MSMEs Financial Access: Case Study Amartha," *InFestasi* 19, no. 2 (2023): 166–81.

social inclusion. However, the Threats score of 2.90 points to notable risks, such as data security threats and regulatory inconsistencies. A concrete example is the data breach incident experienced by an Indonesian Islamic fintech firm, which highlighted vulnerabilities in cybersecurity that could undermine consumer trust and regulatory compliance. Additionally, inconsistencies in the interpretation of Sharia principles among various regulatory bodies in Indonesia create legal uncertainties, potentially hindering the broader adoption of AI technologies in Islamic finance.[56]

The analysis reveals total IFAS and EFAS scores of 5.90 each, indicating a balance between internal and external factors influencing AI implementation. Although the scores are equal, IFAS highlights internal strengths as the primary driver, while EFAS emphasizes the importance of capitalizing on external opportunities. Therefore, the key to successful AI implementation in the Islamic finance sector lies in leveraging internal strengths to effectively manage and utilize external opportunities, thereby addressing the existing threats and challenges.[57]

Furthermore, the social and economic impacts of AI in Islamic finance are profound. AI technologies contribute to increased financial inclusion within Muslim communities, offering more accessible financial products tailored to diverse needs. For instance, AI-driven microfinance initiatives have helped small businesses in rural Indonesia access Sharia-compliant financing, promoting local economic growth. Additionally, the automation of compliance checks through AI reduces operational costs, allowing institutions to offer more competitive products, thus fostering greater market participation and economic equity. By integrating these technological advancements with ethical considerations rooted in Sharia principles, Islamic financial institutions can achieve both operational excellence and social justice, reinforcing the sector's role in fostering sustainable economic development.

Conclusion

The implementation of AI technology in Islamic finance presents both challenges and opportunities, particularly from the perspective of Islamic law (*Fiqh*). The primary challenge lies in ensuring that AI aligns with core Sharia principles, including the prohibition of *Riba*, the promotion of justice (al-adl), and the requirement for transparency (*al-shafafiyyah*), which must serve as the foundation for AI adoption. Internal weaknesses, as identified in the IFAS matrix,

---

[56] Muhammad Fazlurrahman Syarif and Ahmet Faruk Aysan, "Sharia Crowdfunding in Indonesia: A Regulatory Environment Perspective," *Journal of Science and Technology Policy Management*, 2024.

[57] Mehrbakhsh Nilashi et al., "Unlocking Sustainable Resource Management: A Comprehensive SWOT and Thematic Analysis of FinTech with a Focus on Mineral Management," *Resources Policy* 92 (2024): 105028.

include limited technological literacy and inadequate infrastructure within Islamic financial institutions, necessitating efforts to enhance technical expertise and establish robust digital frameworks that support Sharia-compliant AI applications. Conversely, the EFAS matrix highlights significant opportunities, such as the potential for broader financial inclusion and AI-driven advancements that can revolutionize Islamic finance. To ensure Sharia compliance, policymakers must establish a comprehensive regulatory framework grounded in *Fiqh*, while practitioners should prioritize continuous capacity-building efforts through collaboration between financial experts, Sharia scholars, and AI specialists. Furthermore, this study proposes a structured roadmap for AI implementation, consisting of three phases: capacity building and pilot testing, infrastructure development and regulatory enhancement, and full-scale deployment with continuous monitoring by an independent oversight body. By addressing these challenges and leveraging opportunities, AI integration in Islamic finance can enhance operational efficiency, expand financial inclusion, and support sustainable economic development while upholding Islamic values.

References

Abdullah, Othman, Amir Shaharuddin, Muhamad Azhari Wahid, and Mohd Shukor Harun. "AI Applications for Fiqh Rulings in Islamic Banks–Shariah Committee Acceptance." *ISRA International Journal of Islamic Finance* 16, no. 1 (2024): 111–26.

Abikoye, Bibitayo Ebunlomo, Wunmi Adelusi, Stanley Chidozie Umeorah, and Adesola Oluwatosin Adelaja. "Integrating Risk Management in Fintech and Traditional Financial Institutions through AI and Machine Learning," 2024.

Abozaid, Abdulazeem. "Financial Applications of Artificial Intelligence: Shariah Issues and Maqasid Considerations." In *Islamic Finance in the Digital Age*, 165–89. Edward Elgar Publishing, 2024.

Adznan, Syaima, Soliha Sanusi, Hafizah Omar Zaki, Mohamed Mahees Raheem, and Edib Smolo. "Islamic Banking and the Fourth Industrial Revolution: The Current Application, Adoption, and Future Challenges of Artificial Intelligence." In *The Future of Islamic Finance*, 207–19. Emerald Publishing Limited, 2024.

Ajouz, Mousa, and Fayez Abuamria. "Unveiling the Potential of the Islamic Fintech Ecosystem in Emerging Markets." *Al Qasimia University Journal of Islamic Economics* 3, no. 1 (2023): 115–48.

Al-Mulla, Amna, Ibrahim Ari, and Muammer Koç. "Sustainable Financing for Entrepreneurs: Case Study in Designing a Crowdfunding Platform Tailored for Qatar." *Digital Business* 2, no. 2 (2022): 100032.

Aladağ, Ömer Faruk. "International Strategies of Islamic Financial Institutions: Current Challenges and Future Trends." *Kocatepe İslami İlimler Dergisi* 6, no. Özel Sayı (2023): 202–16.

Alam, Nafis, Lokesh Gupta, and Abdolhossein Zameni. *Fintech and Islamic Finance*.

Springer, 2019.

Ali, Mohammad Mahbubi, Abrista Devi, Hafas Furqani, and Hamzah Hamzah. "Islamic Financial Inclusion Determinants in Indonesia: An ANP Approach." *International Journal of Islamic and Middle Eastern Finance and Management* 13, no. 4 (2020): 727–47.

Alsaghir, Mohammad. "Digital Risks and Islamic FinTech: A Road Map to Social Justice and Financial Inclusion." *Journal of Islamic Accounting and Business Research*, 2023.

Atif, Mohammad, M Kabir Hassan, Mustafa Raza Rabbani, and Shahnawaz Khan. "Islamic FinTech: The Digital Transformation Bringing Sustainability to Islamic Finance." In *COVID-19 and Islamic Social Finance*, 91–103. Routledge, 2021.

Bamhdi, Alwi M. "Analysis of Intangible Assets Reporting Standards and Automation in KSA within an Islamic Context–a Case Study." *Journal of Islamic Accounting and Business Research*, 2024.

Birika, Joan Rebecca Njeri. "A Theoretical Assessment of the Nexus between Universal Child Legal Identity and Universal Principles of Child Protection: A Case Study of Emirates ID," 2021.

Bull, Joseph William, Niels Jobstvogt, Anne Böhnke-Henrichs, André Mascarenhas, Nadia Sitas, Corinne Baulcomb, Cosmas Kombat Lambini, Maurice Rawlins, Himlal Baral, and J Zähringer. "Strengths, Weaknesses, Opportunities and Threats: A SWOT Analysis of the Ecosystem Services Framework." *Ecosystem Services* 17 (2016): 99–111.

Chowdhury, Soumyadeb, Prasanta Dey, Sian Joel-Edgar, Sudeshna Bhattacharya, Oscar Rodriguez-Espindola, Amelie Abadie, and Linh Truong. "Unlocking the Value of Artificial Intelligence in Human Resource Management through AI Capability Framework." *Human Resource Management Review* 33, no. 1 (2023): 100899.

Dutta, Debprotim, and Indranil Bose. "Managing a Big Data Project: The Case of Ramco Cements Limited." *International Journal of Production Economics* 165 (2015): 293–306.

Faizi, Faizi. "How Are Islamic Banking Products Developed? Evidence from Emerging Country." *Cogent Economics & Finance* 12, no. 1 (2024): 2378961.

Gurl, Emet. "SWOT Analysis: A Theoretical Review," 2017.

Hamadou, Issa, Aimatul Yumna, Hawaou Hamadou, and Mamadou Salieu Jallow. "Unleashing the Power of Artificial Intelligence in Islamic Banking: A Case Study of Bank Syariah Indonesia (BSI)." *Modern Finance* 2, no. 1 (2024): 131–44.

Ifediora, Christian Osita, ONYEBUCHI R Idoko, and Justina Nzekwe. "Organization's Stability and Productivity: The Role of SWOT Analysis an Acronym for Strengt. h, Weakness, Opportunities and Threat," 2014.

Igliński, Bartłomiej, Mateusz Skrzatek, Wojciech Kujawski, Marcin Cichosz, and Roman Buczkowski. "SWOT Analysis of Renewable Energy Sector in Mazowieckie Voivodeship (Poland): Current Progress, Prospects and Policy Implications." *Environment, Development and Sustainability* 24, no. 1 (2022): 77–111.

Jan, Ahmad Ali, Fong-Woon Lai, Syed Quaid Ali Shah, Muhammad Tahir, Rohail

Hassan, and Muhammad Kashif Shad. "Does Islamic Corporate Governance Prevent Bankruptcy in Islamic Banks? Implications for Economic Sustainability." *Management & Sustainability: An Arab Review*, 2023.

Katterbauer, Klemens, and Philippe Moschetta. "A Deep Learning Approach to Risk Management Modeling for Islamic Microfinance." *European Journal of Islamic Finance* 9, no. 2 (2022): 35–43.

Kaur, Davinder, Suleyman Uslu, Kaley J Rittichier, and Arjan Durresi. "Trustworthy Artificial Intelligence: A Review." *ACM Computing Surveys (CSUR)* 55, no. 2 (2022): 1–38.

Kausar, Shabana, Ali Raza Leghari, and Abdul Salam Soomro. "Analysis of the Islamic Law and Its Compatibility with Artificial Intelligence as a Emerging Challenge of the Modern World." *Annals of Human and Social Sciences* 5, no. 1 (2024): 99–114.

Khairudin, Khairudin, Yusuf Baihaqi, Abdul Qodir Zaelani, Luqman Hafiz, Enizar Enizar, and Muhammad Reza Fahlevy. "Cyber Security and Legal Protection for Dropshipping Transactions in Indonesia: Between State Law and Islamic Law." *JURIS (Jurnal Ilmiah Syariah)* 23, no. 1 (2024): 81–92.

Kismawadi, Early Ridho. "Islamic Fintech: Navigating the Regulatory Framework and Promoting Financial Inclusion in Gulf Cooperation Council (GCC) Countries." *Journal of Islamic Marketing*, 2024.

Kılıç, Gökmen, and Yavuz Türkan. "The Emergence of Islamic Fintech and Its Applications." *International Journal of Islamic Economics and Finance Studies* 9, no. 2 (2023): 212–36.

Kok, Seng Loong, and Supaprawat Siripipatthanakul. "Artificial Intelligence (AI) Adoption: The Case of the Malaysian Financial Industry." *Advance Knowledge for Executives* 2, no. 4 (2023): 1–15.

Lee, David Kuo Chuen, Joseph Lim, Kok Fai Phoon, and Yu Wang. *Applications and Trends in Fintech I: Governance, AI, and Blockchain Design Thinking*. Vol. 4. World Scientific, 2022.

Mahomed, Ziyaad, and Irum Saba. "Sustainable Development: Exploring the Role of Islamic Social Finance in Promoting Sustainable Development and Social Welfare." In *The Future of Islamic Finance: From Shari'ah Law to Fintech*, 103–20. Emerald Publishing Limited, 2024.

Makridakis, Spyros. "The Forthcoming Artificial Intelligence (AI) Revolution: Its Impact on Society and Firms." *Futures* 90 (2017): 46–60.

Mohamad, Siti Nor Amira, Nuradli Ridzwan Shah Mohd Dali, and Mohamad Yazis Ali Basah. "Navigating the Moral Compass of Halal FinTech in Islamic Finance: Harvesting Benefits While Curbing Risks." In *Emerging Technology and Crisis Management in The Halal Industry: Issues and Recent Developments*, 157–71. Springer, 2024.

Mohamed, Hazik. "Managing Islamic Financial Risks and New Technological Risks." In *Artificial Intelligence and Islamic Finance*, 61–76. Routledge, 2021.

Muneeza, Aishath, and Zakariya Mustapha. "Islamic Fintech and Financial Inclusion." *Islamic FinTech: Insights and Solutions*, 2021, 173–90.

Muryanto, Yudho Taruno, Dona Budi Kharisma, and Anjar Sri Ciptorukmi Nugraheni. "Prospects and Challenges of Islamic Fintech in Indonesia: A Legal Viewpoint." *International Journal of Law and Management* 64, no. 2 (2022): 239–52.

Nilashi, Mehrbakhsh, Rabab Ali Abumalloh, Ooi Keng-Boon, Garry Wei-Han Tan, Tat-Huei Cham, and Eugene Cheng-Xi Aw. "Unlocking Sustainable Resource Management: A Comprehensive SWOT and Thematic Analysis of FinTech with a Focus on Mineral Management." *Resources Policy* 92 (2024): 105028.

Olugboja, Adedeji, and Elizabeth Moghalu Agbakwuru. "Bridging Healthcare Disparities in Rural Areas of Developing Countries: Leveraging Artificial Intelligence for Equitable Access." In *2024 International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA)*, 1–6. IEEE, 2024.

Phadermrod, Boonyarat, Richard M Crowder, and Gary B Wills. "Importance-Performance Analysis Based SWOT Analysis." *International Journal of Information Management* 44 (2019): 194–203.

Puyt, Richard W, Finn Birger Lie, and Celeste P M Wilderom. "The Origins of SWOT Analysis." *Long Range Planning* 56, no. 3 (2023): 102304.

Rabbani, Mustafa Raza, Adel Sarea, Shahnawaz Khan, and Yomna Abdullah. "Ethical Concerns in Artificial Intelligence (AI): The Role of RegTech and Islamic Finance." In *Artificial Intelligence for Sustainable Finance and Sustainable Technology: Proceedings of ICGER 2021 1*, 381–90. Springer, 2022.

Rasyid, Arbanur, Musda Asmara, and Maulana Arafat Lubis. "Strategi Jihad Digital Sebagai Upaya Perlawanan Informasi Negatif: Studi Metode Istihsan Pada Akun Instagram." *Al-Istinbath: Jurnal Hukum Islam* 6, no. 2 November SE-Articles (November 11, 2021): 409–26. https://doi.org/10.29240/jhi.v6i2.2797.

Rolando, Benediktus, and Herry Mulyono. "Managing Risks In Fintech: Applications And Challenges Of Artificial Intelligence-Based Risk Management." *Economics and Business Journal (ECBIS)* 2, no. 3 (2024): 249–68.

Setiawan, Iwan. "The Significance of Corporate Social Responbility in Sustainable Development: An Analysis from an Islamic Law Perspective." *Journal of Law and Sustainable Development* 11, no. 9 (2023): 1–23.

Shamsudheen, Shinaj Valangattil, Saiful Azhar Rosly, and Aishath Muneeza. "Assessing Ethical Praxis of Ethical (Islamic) Financial Institutions: A Survey of Empirical Discoveries." *International Journal of Law and Management* 65, no. 5 (2023): 440–60.

Shinde, Pragati A, Qaisar Abbas, Nilesh R Chodankar, Katsuhiko Ariga, Mohammad Ali Abdelkareem, and Abdul Ghani Olabi. "Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of Supercapacitors: A Review." *Journal of Energy Chemistry* 79 (2023): 611–38.

Sitiris, Miszairi, and Saheed Abdullahi Busari. "The Legal Capacity (Al-Ahliyyah) Of Artificial Intelligence From An Islamic Jurisprudential Perspective." *Malaysian*

Journal of Syariah and Law 12, no. 1 (2024): 31–42.

Sukindar, Hendrik Kusnianto, Sarikun, Benhard Kurniawan Pasaribu, and Muhd Syahazizamir bin Sahmat. "Legal Innovation in Religious Courts: The Potential Utilization of Artificial Intelligence (AI) in Resolving Contemporary Cases." *MILRev: Metro Islamic Law Review* 3, no. 2 SE-Articles (December 30, 2024): 388–410. https://doi.org/10.32332/milrev.v3i2.8199.

Suryani, Indah Permata, Atika Gando Suri, and Zahra Shafira. "How Fintech Peer to Peer Lending Affected MSMEs Financial Access: Case Study Amartha." *InFestasi* 19, no. 2 (2023): 166–81.

Syarif, Muhammad Fazlurrahman, and Ahmet Faruk Aysan. "Sharia Crowdfunding in Indonesia: A Regulatory Environment Perspective." *Journal of Science and Technology Policy Management*, 2024.

Tavares, Orlanda, Cristina Sin, and Alberto Amaral. "Internal Quality Assurance Systems in Portugal: What Their Strengths and Weaknesses Reveal." *Assessment & Evaluation in Higher Education* 41, no. 7 (2016): 1049–64.

Tien, James M. "Internet of Things, Real-Time Decision Making, and Artificial Intelligence." *Annals of Data Science* 4 (2017): 149–78.

Tlemsani, Issam, Asif Zaman, Mohamed Ashmel Mohamed Hashim, and Robin Matthews. "Digitalization and Sustainable Development Goals in Emerging Islamic Economies." *Journal of Islamic Accounting and Business Research*, 2023.

Uddin, Md Riaj. "The Role of the Digital Economy in Bangladesh's Economic Development." *Sustainable Technology and Entrepreneurship* 3, no. 1 (2024): 100054.