



Article

The Role of Artificial Intelligence in The Performance of Indonesian Sharia Bank: A Systematic Literature Review

¹ Fitri Ana Siregar

¹ Universitas Islam Negeri Sulthan Thaha Saifuddin Jambi, Indonesia

*Corresponding author: fitrianasiregar@uinjambi.ac.id

ABSTRACT

Artificial intelligence is promising for the banking sector. The application of artificial intelligence (AI) in the banking sector can provide positive benefits for banking, namely increasing profits, especially for Bank Syariah Indonesia. The aim of this research is to analyze the role of artificial intelligence (AI) in improving the performance of Bank Syariah Indonesia. The research was carried out by collecting articles from CrossRef published from 2019 to 2023, which will be classified based on the methods used and research results. After enumerating the articles according to keywords, methods, and research results, 16 articles were analyzed. The method used in this research is systematic literature review (SLR), which is used to examine methodological results, topics or themes, recommendations, and limitations of published articles. The results of this research show that artificial intelligence drives increased revenue through enhanced personalization of services to customers and employees at lower costs due to the existence of an automation system, reducing the level of human error, and making good use of existing resources. Apart from that, in the banking world, artificial intelligence can increase the ability to achieve extraordinary results in terms of increasing profits. The efficiency of increasing Bank Syariah Indonesia's profits is also driven by digital-based services through BSI Mobile, which reached 5.39 million registered users with total transactions reaching 170.70 million transactions as of June 2023. Artificial intelligence drives competitive advantage by increasing company efficiency by reducing costs and increasing productivity, thereby driving higher profitability.

Keywords: Role; Compensation; Artificial Intelligence; Sharia Bank Performance

How to cite: Siregar, F., A. (2024). The Role of Artificial Intelligence in The Performance of Indonesian Sharia Bank: A Systematic Literature Review. *Proceeding International Conference on Islamic Economics and Business (ICIEB), 2024, 3(1)*, pp. 128-142. DOI: <https://doi.org/10.14421/icieb.2024.3.1.1483>

INTRODUCTION

Such amazing developments in the world of science and technology have indeed brought extraordinary benefits to the progress of human civilization. Types of work that previously required considerable physical ability can now be relatively

easily replaced by automatic machines. Likewise, the discovery of new formulations of computer capacity seems to have been able to shift the position of current technological capabilities in various fields of science and activity. In short,

current technological advances have truly been recognized and felt to provide much convenience and comfort for human life (Ngafifi, 2014).

One of the developments in information and communication technology that has emerged in the last ten years is artificial intelligence (AI). Artificial intelligence (AI) is a technology developed to understand and model human thought processes and design machines so they can imitate human behavior. The use of artificial intelligence (AI) by industry is not only limited to the

telecommunications industry sector but also in the banking, manufacturing, services, and even government sectors. In some countries, the implementation of artificial intelligence reaches 56%, especially in the industrial sector (Rukmayuninda Ririh et al., 2020). In Indonesia, the majority, or 78% of Indonesian respondents, think that artificial intelligence (AI) brings many benefits. This makes Indonesia the country most optimistic about this technology.

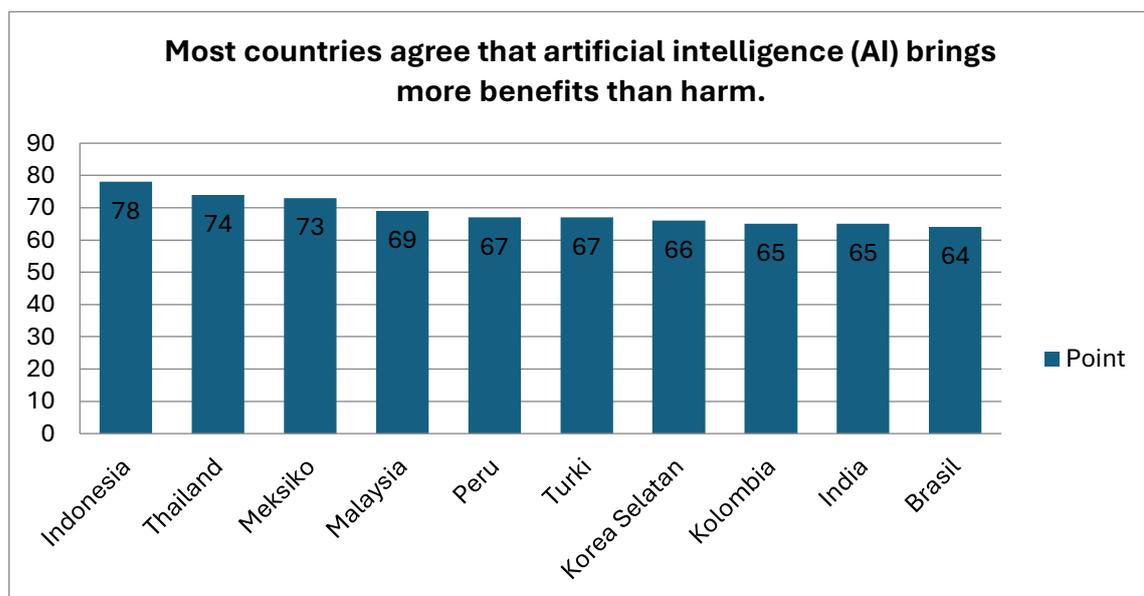


Figure.1 Countries Most Agree on the Benefits of AI

Source: Databooks,2023

The presence of artificial intelligence (AI), which is capable of carrying out activities like humans looking at things, can result in disruptions to services for humans. Artificial intelligence (AI) is real material that can be used as a basis for studies in providing recognition as a person has. In artificial intelligence (AI), the important roles are learning

procedures, argumentation, and correction. Artificial intelligence (AI) has been used by companies in various fields. In 2017, the technology sector adopted the most, namely 32%. The automotive sector is 29%, and financial services is 28%.

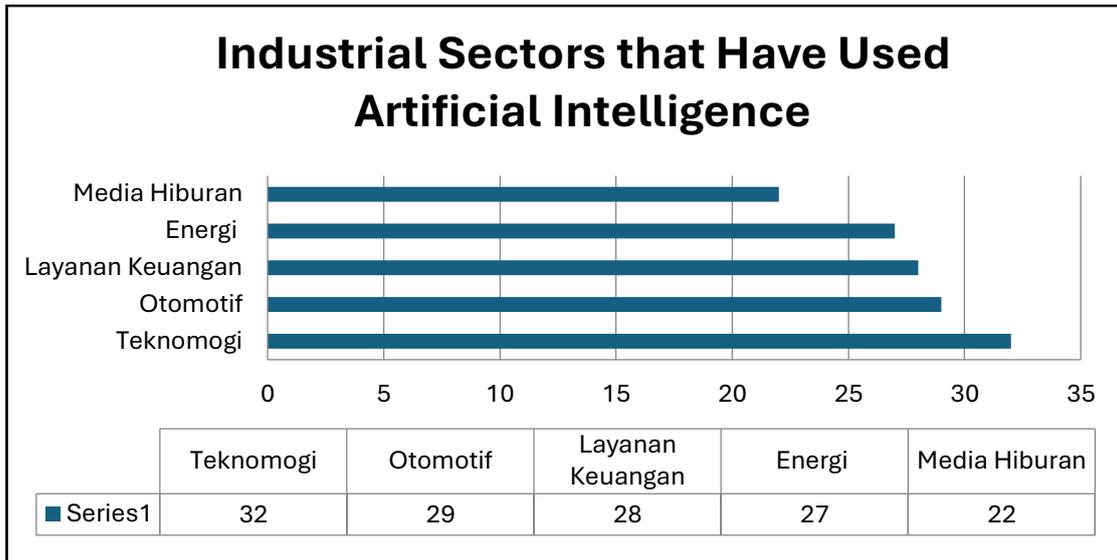


Figure 2. Industries Using AI

Source: Databooks, 2023

The development of artificial intelligence (AI) is very useful for various business fields at this time, especially those engaged in finance or banking. The first plan of activity in banking was carried out offline, face-to-face. However, this matter is considered ineffective and inefficient, requiring a long time for operational effectiveness and safety. Based on the McKinsey on Bughin working paper in research (Talwar & Koury, 2017), the application of artificial intelligence (AI) in the banking sector can provide four positive benefits for the bank itself, namely increasing profits, large-scale personalization, working on the omnichannel

market (online shopping), and increasing innovation in the company.

For the financial sector, technological innovation is actually no longer a new phenomenon because technology and finance have a long history of symbiosis, so financial technology is no longer a new development in the financial industry. However, the intensity of the discussion and the relationship between the two are quite high. Artificial intelligence is promising for the banking sector. The application of artificial intelligence (AI) in the banking sector can provide positive benefits for banks, namely increasing Sharia banking assets in Indonesia.

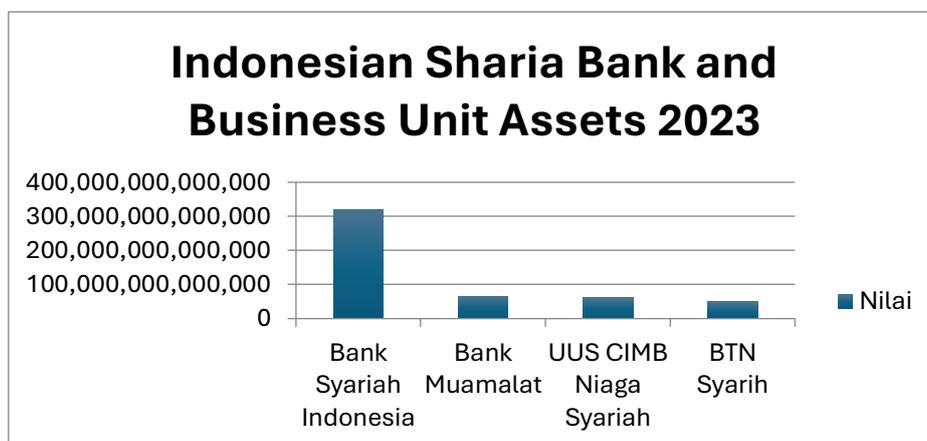


Figure 3. Development of Total Banking Assets and Sharia Business Units in Indonesia

Source: Otoritas Jasa Keuangan

Financial performance is the achievements achieved by a company in the financial sector in a certain period that reflect the company's level of health. On the other hand, financial performance describes the strength of a company's financial structure and the extent to which its available assets are capable of achieving profits. The performance of Bank Syariah Indonesia was ranked first with the highest total assets in 2023, with a total of IDR 319.84 trillion in the third quarter of 2023. Bank assets resulting from the merger of BRI Syariah, Bank Syariah Mandiri, and BNI Syariah increased 4.61% from December 2022, which is IDR 305.72 trillion. This increase in assets is in line with the increasing use of banking digitalization, which is utilized for more productive performance processes to expand financial services and solutions.

With the explanation above, this research aims to examine and contribute to a theoretical study using a systematic literature review (SLR) approach regarding the phenomenon of artificial intelligence (AI) in financial incubators, and this will explain the research question on how the application and influence of artificial intelligence technology affects the performance of Islamic banks in Indonesia based on empirical evidence and literature.

LITERATURE REVIEW

A. Theoretical Background

Digitalization is an opportunity for companies and organizations to improve business activities. In the financial sector, including banking, digitalization is seen as the development of work methods and work environments. Skill in information technology and computer systems is seen as a positive improvement, which makes work more efficient and faster. One of the digital technologies that is widely used in the business world is cloud computing (Dz, 2018). In the last

decade, cloud computing has brought a technological revolution and paradigm shift in the information and communications technology sector. Banking digitalization can reduce efficiency. According to McKinsey (2016), banking digitalization can reduce banking operational costs by up to 25%, or perhaps more.

According to Islamiah et al. (2024), the development of information technology in the financial services sector, apart from giving birth to digital channels, also encourages increased efficiency. The use of information technology at a more advanced level even provides opportunities for banks to create products and business models that can combine the products and business models of the financial services sector and other economic sectors through the use of artificial intelligence (AI). This enables business growth and rapid improvement in banking performance for banks, as well as accelerating the creation of new products and business models.

Technology transforms physical and tangible objects, contributing to the improvement of company operations and promoting competencies and capabilities for future business solutions. New digital solutions always change the competitive strategies used in business and contribute to new approaches to value creation. One of the digital developments supported by artificial intelligence (AI) in the banking industry is the use of chatbots, which utilize technology with natural language to solve user or customer problems. Chatbots can understand written and spoken text and respond to consumer questions. Chatbot technology handles large numbers of calls from customers and increases customer satisfaction and trust in banking services (Hwang & Kim, 2021).

B. Previous Studies

Business developments have seen an increase in interest in the use of artificial intelligence (AI),

including financial services, manufacturing, information services, and banks as the sectors that benefit most. The development of artificial intelligence (AI) technology in the financial sector is considered to have great benefits for business in Indonesia, especially in the banking sector. According to McKinsey & Company research (Harahap et al., 2017), there are several advantages to using artificial intelligence (AI) in banking services. First, increasing revenue through the personalization of customer and employee services (Rizki et al., 2014). Second, reducing expenses through efficiency from automation technology, reducing error rates, and better resource utilization. Finally, banks can capture new opportunities based on the data they have collected. The benefits of the industrial revolution have provided positive benefits to banking transactions, resulting in convenience, time effectiveness, and efficiency (Ayunda, 2021). Artificial intelligence (AI) in banking applications offers huge benefits, saving bank budgets and making it easier for banks to make quick strategic decisions.

According to Shook and Knickrehm (2018) in their research, the use of artificial intelligence (AI) in industry and investment, coupled with a focus on collaboration between employees and technology, can increase bank revenues by 34% (Shiyyab et al., 2023). In addition, according to the McKinsey Global Survey, the current condition of artificial

intelligence (AI) in 2023 will increase globally. Survey results show an increase in companies embedding AI in at least one business function or one business unit. The impact of AI on financial performance that it generally has an impact on company financial performance, both positively and negatively. This can be analyzed from the quality of national governance, which plays an important role in mitigating the negative impact of the COVID-19 crisis on company performance (Shiyyab et al., 2023).

METHODOLOGY

This type of research is qualitative descriptive research using a systematic literature review approach with secondary data sources. The data is in the form of research results published in journal literature. Systematic Literature Review is the process of identifying, assessing, and interpreting all available research evidence with the aim of providing answers to certain research questions (Kitchenham in Latifah & Ritonga, 2020).

The review method in this research uses data searching via Crossref. Article searches were carried out by combining several keywords, including "Artificial Intelligence on Sharia Banking Performance." Based on the PICO framework, these are the basic keywords that will be developed when conducting a literature search.

Table 1. PICO Summary

Population	Financial Performance of Indonesian Sharia Banks
Intervention	Use of Artificial Intelligence
Comparison	There is no comparison
Outcome	Application of Artificial Intelligence The Influence of Artificial Intelligence

Source: Article Analysis

The literature criteria consist of inclusion and exclusion criteria, and the criteria in this study were adapted to the PICO summary that had previously

been made. The inclusion and exclusion criteria were used to select primary studies as follows:

Table 2. Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Literature Database	Crossref	Non-Crossref
Literature Type	Journal (Research Article)	Prosiding, Skripsi dan Tesis
Language	English or Indonesian	Non-English or Indonesian
Publication Period	2019 - 2023	< 2019
Subject	Research on technologies around digitalization, AI, and financial performance	Beyond research around digitalization, AI, and financial performance
Object	Indonesian Sharia Bank	Non-Indonesian Sharia Bank

Source: Article Analysis

Research journals that meet the inclusion criteria and exclusion criteria are then collected via Crossref and created as PRISMA (Preferred

Reporting Items for Systematic Reviews and Meta-Analyses), which consists of four stages.

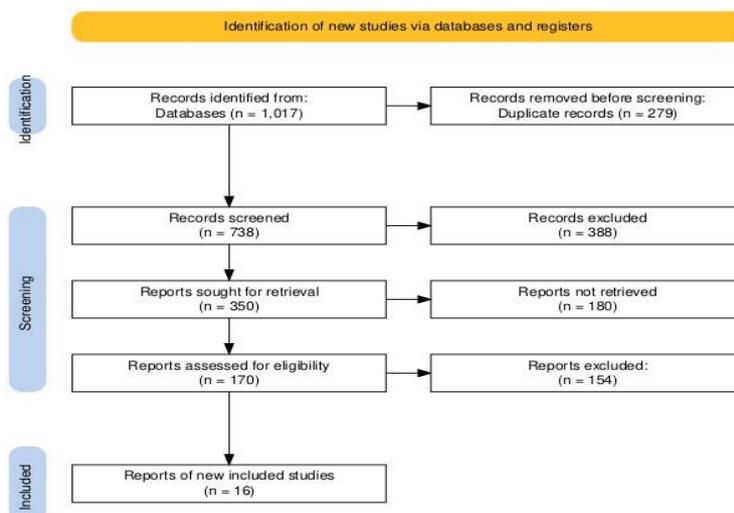


Figure 4. Selection with PRISMA

Source: data processed by PRISMA Flow Diagram, 2024

Next, conduct a quality assessment to guide the interpretation of the synthesis findings and determine the strength of the conclusions outlined. The purpose of data synthesis is to collect evidence from selected studies to answer the research question. The results of the PRISMA Flow Diagram articles were eliminated because they chose the keywords artificial intelligence and sharia banking

performance and had a relationship with the topic, totaling 16 articles that will be used to carry out data synthesis. Extracted data that is similar to the research keywords will be measured to answer the objectives of the of the study.

RESULT AND DISCUSSION

RQ 1. Application of Article Intelligence in Sharia Banking

Table 3. Application of AI in Sharia Banking

No	Title	Researcher	Findings
1	Risk and Risk Management in the Credit Card Industry	(Butaru <i>et al.</i> , 2019)	Disruptive technologies are changing the industrial landscape as a whole, playing a significant role through innovation and the use of artificial intelligence (AI). The application of artificial intelligence is a form of technological development that can present positive opportunities for the banking world to improve institutional performance.
2	Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance	(Mikalef & Gupta, 2021)	Artificial intelligence is deemed ready to provide services that are easy, hassle-free, effective, and efficient, especially in the banking sector.
3	The use of artificial intelligence technology in the process of creating an ATM service model	(Leonov <i>et al.</i> , 2020)	A The use of AI in the banking sector uses one method of technological infrastructure, for example, cloud computing, which functions in customer fulfillment. Implementation of artificial intelligence applications by banks in fast, easy, and efficient services such as ATMs, which have devices for writing or recording, collecting, depositing, and withdrawing cash
4	Peran Teknologi Disruptif dalam Transformasi Perbankan dan Keuangan Islam	(Fitroh & Syakarna, 2023)	The application of AI in banking applies across the board. By utilizing AI, Islamic financial institutions can optimize internal processes such as credit assessment, investment management, and customer supervision by providing personalized and intelligent recommendations and improving services.

5	Peran Financial Technology Dalam Meningkatkan Kinerja Perbankan Syariah Di Indonesia	(Hasni, 2022)	Financial technology plays a role in the performance of sharia banks. This is because many banks that collaborate with financial technology experience an increase in performance every year, both from banks and financial technology.
6	The Impact of Artificial Intelligence Disclosure on Financial Performance	(Shiyyab et al., 2023)	The application of AI drives competitive advantage in two main ways: first, by increasing company efficiency through reduced costs and increased productivity thereby driving higher profitability; secondly, by improving the quality of financial services and products offered to consumers. The use of AI yields new benefits, which may lead to substantial improvements in labor productivity, workflow time efficiencies, operations and new sources of revenue.
7	Performance of Artificial Intelligence Technologies in Banking Institutions	(Al-Ababneh et al., 2023)	Artificial intelligence (AI) is a form of progress in digitalization with the capacity and skills possessed by industry in carrying out its business activities as well as achieving maximum efficiency for the industry. In the banking sector, AI exists to maximize digital security procedures and minimize manipulation or fraud crimes.
8	Penerapan Artificial Intelligence Sebagai Inovasi Di Era Disrupsi Dalam Mengurangi Resiko Lembaga Keuangan Mikro Syariah	(Sulistiyowati et al., 2023)	The role of AI for financial institutions and improving performance. Banks developing AI applications demonstrate the benefits of AI for improving bank operations. This shows the importance of integrating AI technology into business models, resulting in lower costs and higher

			performance. Banking has realized the impact AI can have on better overall performance, increased revenue, and reduced costs.
9	Tantangan Dan Peluang Implementasi Artificial Intelligence Pada Perbankan	(Sari, 2023)	AI plays an important role in the progress of banking in Indonesia, especially in the field of open banking, which is a transition from close banking. AI challenges and opportunities lie in four main aspects, namely: 1) data; 2) human resources; 3) ethics and regulation; and 4) research and innovation.
10	Is artificial intelligence and machine learning changing the ways of banking: a systematic literature review and meta analysis	(Kalyani & Gupta, 2023)	The existence of AI makes it easier for banks to contribute to the growth of the financial sector and build consumer trust in the era of banking digitalization. AI has been widely used in banking and is evolving to meet society's needs.
11	Artificial Intelligence in Indian Banking Sector: A Game Changer	(Michael Page, 2022)	Banks apply artificial intelligence for future growth and customer satisfaction. Artificial intelligence has been adopted in many banking sectors, with one of the sectors showing an increase in the application of artificial intelligence and experiencing quite significant changes. Artificial intelligence has proven to be a boon for the banking industry. Artificial intelligence is changing company operations and customer service and is being leveraged to improve banking profitability and performance.

Source: Article Analysis

Table 3 provides research results regarding research related to artificial intelligence (AI), which is developing very quickly and being integrated into the world in which we live. The banking world needs these technologies with relevant coverage

because the success of the banking world requires holistic information from all levels in the organization. The use of artificial intelligence in Islamic banking can overcome customer problems, for example, customer and service provider

interactions, answering or serving customers, and minimizing long queues caused by manual system performance. Artificial intelligence plays an important role in the progress of banking in Indonesia, especially in the field of open banking, which is a transition from close banking. (Sari, 2023). The role of AI for financial institutions and improving performance. Banks developing AI

applications demonstrate the benefits of AI for improving bank operations. This shows the importance of integrating AI technology into business models, resulting in lower costs and higher performance.

RQ 2. The Influence of Artificial Intelligence on Indonesian Sharia Banking Performance

Table 4. Influence of AI on Sharia Banking Performance

No	Title	Researcher	Findings
1	Utilization of artificial intelligence in the banking sector: a systematic literature review	(Fares et al., 2023)	According to research by Omar H. Fares, banks are expected to save \$447 billion by 2023 by using AI. Nearly 80% of banks are aware of the potential benefits that AI offers. AI has generated many opportunities and challenges. In the banking context, AI has resulted in smooth sales and supported the development of effective customer relationship management systems.
2	The Impact of Artificial Intelligence Disclosure on Financial Performance	(Shiyyab et al., 2023)	According to the OECD's (2021) research on Fade Shehab Shiyyab, AI drives competitive advantage by increasing company efficiency by reducing costs and increasing productivity, thereby encouraging higher profitability. The use of AI generates new benefits, leading to substantial improvements in workforce productivity, operational workflow efficiencies, and new sources of revenue. This will strengthen risk management, increase the customer base, and improve performance.
3	Predictive Analytics Adoption by Banking and Financial Services: The Future Perspective	(Kikan et al., 2019)	Artificial intelligence (AI) is widely used by businesses to reduce fraud and theft of customer data. Banks have increased processing speed,

			accuracy, and efficiency through the use of data management and predictive analysis to stop fraud incidents before they occur, such as through several technologies such as Secure Socket Layer (SSL) for online transactions, encryption data storage, device fingerprinting, and malware detection.
4	Perlindungan Data Nasabah Terkait Pemanfaatan Artificial Intelligence dalam Aktifitas Perbankan di Indonesia	(Ayunda, 2021)	The influence of the industrial revolution has provided positive benefits to banking transactions, resulting in convenience, time effectiveness, and efficiency. Artificial intelligence (AI) in banking applications offers huge benefits, saving bank budgets and making it easier for banks to make quick strategic decisions.
5	Application of Artificial Intelligence and Its Powered Technologies in the Indian Banking and Financial Industry: An Overview	(Malali & Gopalakrishnan, 2020)	Artificial intelligence will make banking stronger by totally redefining the way it works and creating innovative products and services. To maintain banking performance, banking and financial companies need to use AI and incorporate it into their business strategies and operations.

Source: Analysis Article

Based on Table 4, Artificial intelligence drives increased revenue through enhanced personalization of services to customers and employees at lower costs due to the automation system, reduced levels of human error, and good utilization of existing resources. Apart from that, in the banking world, artificial intelligence can

increase the ability to achieve extraordinary results in terms of increasing profits. Banks that do not immediately use artificial intelligence will lose out to competitors and be left behind by customers as the banking world adopts the digital world, especially since the COVID pandemic occurred.



Figure 5. Net Profit of Indonesian Sharia Bank

Source: Indonesian Sharia Bank

Bank Syariah Indonesia recorded an increase in profits in 2020, growing until 2023. The driver of this achievement was positive growth in financing and third-party funds. The efficiency of increasing Bank Syariah Indonesia's profits is also driven by digital-based services through BSI Mobile, which reached 5.39 million registered users with total transactions reaching 170.70 million transactions as of June 2023. The number of QRIS merchants currently reaches 188 thousand throughout Indonesia. Business efficiency also had a positive impact on the company's return on assets (ROA), which was recorded at 2.36, and return on equity (ROE), which was recorded at 17.27%. In bank financial performance reports, which are assessed using several alternatives, accounting performance includes return on equity (ROE), return on assets (ROA), and company performance.

According to research by Omar H. Fares, banks are expected to save \$447 billion by 2023 by using artificial intelligence. Nearly 80% of banks are aware of the potential benefits that AI offers. AI has generated many opportunities and challenges. In the banking context, AI has resulted in smooth sales and supported the development

of effective customer relationship management systems (Fares et al., 2023). According to the OECD's (2021) research on Fade Shehab Shiyab, AI drives competitive advantage by increasing company efficiency by reducing costs and increasing productivity, thereby encouraging higher profitability. The use of AI generates new benefits, leading to substantial improvements in workforce productivity, operational workflow efficiencies, and new sources of revenue. This will strengthen risk management, increase customers, and improve performance (Shiyab et al., 2023).

CONCLUSION AND RECOMMENDATION

Disruptive technologies are changing the industrial landscape as a whole, playing a significant role through innovation and the use of artificial intelligence (AI). The application of artificial intelligence is a form of technological development that can present positive opportunities for the banking world to improve institutional performance. The application of AI in banking applies across the board. By utilizing artificial intelligence, Bank Syariah Indonesia can optimize internal processes such as financing assessment, investment management, and

customer supervision by providing personal and intelligent recommendations and improving services. Artificial intelligence drives increased revenue through enhanced personalization of services to customers and employees at lower costs due to automation systems, reduced levels of human error, and good utilization of existing resources. Apart from that, in the banking world, artificial intelligence can increase the ability to achieve extraordinary results in terms of

increasing profits. Artificial intelligence can increase the ability to achieve extraordinary results in terms of increasing profits. Recommendations: Future researchers who are interested in research related to artificial intelligence can conduct research related to the role of artificial intelligence in limiting crime in cyberspace with case studies of banking in Indonesia using different research methods.

REFERENCES

- Al-Ababneh, H. A., Borisova, V., Zakhazhevska, A., Tkachenko, P., & Andrusiak, N. (2023). Performance of Artificial Intelligence Technologies in Banking Institutions. *WSEAS Transactions on Business and Economics*, 20, 307–317. <https://doi.org/10.37394/23207.2023.20.29>
- Ayunda, R. (2021). Perlindungan Data Nasabah Terkait Pemanfaatan Artificial Intelligence dalam Aktifitas Perbankan di Indonesia. *Jurnal Komunikasi Hukum*, 1(2), 663–677.
- Butaru, F., Chen, Q., Clark, B., Das, S., Lo, A. W., & Siddique, A. (2016). Risk and risk management in the credit card industry. *Journal of Banking and Finance*, 72, 218–239. <https://doi.org/10.1016/j.jbankfin.2016.07.015>
- Dz, A. S. (2018). Inklusi Keuangan Perbankan Syariah Berbasis Digital-Banking: Optimalisasi dan Tantangan. *Al-Amwal: Jurnal Ekonomi Dan Perbankan Syari'ah*. <https://jurnal.syekhnurjati.ac.id/index.php/amwal/article/view/2813>
- Fares, O. H., Butt, I., & Lee, S. H. M. (2023). Utilization of artificial intelligence in the banking sector: a systematic literature review. *Journal of Financial Services Marketing*, 28(4), 835–852. <https://doi.org/10.1057/s41264-022-00176-7>
- Fitroh, N., & Syakarna, R. (2023). Peran Teknologi Disruptif dalam Transformasi Perbankan dan Keuangan Islam. *MUSYARAKAH: Journal of Sharia Economics (MJSE)*, 3(1), 76–90. <http://journal.umpo.ac.id/index.php/musyarakah>.
- Harahap, B. A., Idham, P. B., Kusuma, A. C. M., & Rakhman, R. N. (2017). Perkembangan Financial Technology Terkait Central Bank Digital Currency (CBDC) Terhadap Transmisi Kebijakan Moneter Dan Makroekonomi. *Bank Indonesia*, 2, 1–80.
- Hasni, H. (2022). Peran Financial Technology Dalam Meningkatkan Kinerja Perbankan Syariah Di Indonesia. *Jurnal Ekonomi Dan Bisnis*, 23(1), 56. <https://doi.org/10.30659/ekobis.23.1.56-70>
- Hwang, S., & Kim, J. (2021). Toward a chatbot for financial sustainability. *Sustainability (Switzerland)*, 13(6), 1–18. <https://doi.org/10.3390/su13063173>
- Islamiah, I. N., Fibriyani, N., Salman, B., & Huda, N. (2024). *TRANSFORMASI DIGITAL PADA PERBANKAN SYARIAH INDONESIA : PRODUK IT DAN JENIS TRANSAKSI*. 3, 91–104.

- Kalyani, S., & Gupta, N. (2023). Is artificial intelligence and machine learning changing the ways of banking: a systematic literature review and meta analysis. *Discover Artificial Intelligence*, 3(1). <https://doi.org/10.1007/s44163-023-00094-0>
- Kikan, D., Singh, S., & Singh, Y. (2019). Predictive Analytics Adoption by Banking and Financial Services: The Future Perspective. *International Journal of Recent Technology and Engineering (IJRTE)*, 8, 2277–3878. <https://www.researchgate.net/publication/342232875>
- Latifah, L., & Ritonga, I. (2020). Systematic Literature Review (SLR): Kompetensi Sumber Daya Insani Bagi Perkembangan Perbankan Syariah Di Indonesia. *Al Maal: Journal of Islamic Economics and Banking*, 2(1), 63. <https://doi.org/10.31000/almaal.v2i1.2763>
- Leonov, P., Sviridenko, A., Leonova, E., Epifanov, M., & Nikiforova, E. (2020). The use of artificial intelligence technology in the process of creating an ATM service model. *Procedia Computer Science*, 169(2019), 203–208. <https://doi.org/10.1016/j.procs.2020.02.137>
- Malali, A. B., & Gopalakrishnan, S. (2020). Application of Artificial Intelligence and Its Powered Technologies in the Indian Banking and Financial Industry: An Overview. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 25(6), 55–60. <https://doi.org/10.9790/0837-2504065560>
- Michael Page, I. (2022). *ARTIFICIAL INTELEGENGE IN INDIAN BANKING SECTOR: A GAME CHANGER*. 08, 71–77.
- Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information and Management*, 58(3), 103434. <https://doi.org/10.1016/j.im.2021.103434>
- Ngafifi, M. (2014). Kemajuan Teknologi Dan Pola Hidup Manusia Dalam Perspektif Sosial Budaya. *Jurnal Pembangunan Pendidikan: Fondasi Dan Aplikasi*, 2(1), 33–47. <https://doi.org/10.21831/jppfa.v2i1.2616>
- Rizki, P., Istiarni, D., & Hadiprajitno, P. B. (2014). Analisis Pengaruh Persepsi Manfaat, Kemudahan Penggunaan Dan Kredibilitas Terhadap Minat Penggunaan Berulang Internet Banking Dengan Sikap Penggunaan Sebagai Variabel Intervening (Studi Empiris: Nasabah Layanan Internet Banking Di Indonesia). *Diponegoro Journal of Accounting*, 3(2), 1–10. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Rukmayuninda Ririh, K., Laili, N., Wicaksono, A., & Tsurayya, S. (2020). Studi Komparasi Dan Analisis Swot Pada Implementasi Kecerdasan Buatan (Artificial Intelligence) Di Indonesia. *Jurnal Teknik Industri*, 15(2), 122–133.
- Sari, D. (2023). Tantangan dan Peluang Implementasi Artificial Intelligence pada Perbankan. *Jmba - Jurnal Manajemen Dan Bisnis*, 09(01), 2. [file:///C:/Users/ASUS/Downloads/512-Article Text-684-3-10-20240109.pdf](file:///C:/Users/ASUS/Downloads/512-Article%20Text-684-3-10-20240109.pdf)
- Shiyyab, F. S., Alzoubi, A. B., Obidat, Q. M., & Alshurafat, H. (2023). The Impact of Artificial Intelligence Disclosure on Financial Performance. *International Journal of Financial Studies*, 11(3). <https://doi.org/10.3390/ijfs11030115>
- Sulistyowati, Rahayu, Y. S., & Naja, C. D. (2023). Penerapan Artificial Intelligence Sebagai Inovasi Di Era Disrupsi Dalam Mengurangi Resiko Lembaga Keuangan Mikro Syariah. *Wadiah*, 2(2), 117–142. <https://doi.org/10.30762/wadiah.v7i2.329>

Talwar, R., & Koury, A. (2017). Artificial intelligence – the next frontier in IT security? *Network Security*, 2017(4), 14–17. [https://doi.org/10.1016/S1353-4858\(17\)30039-9](https://doi.org/10.1016/S1353-4858(17)30039-9)