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Risk Management Strategy In Islamic Banks: An Artificial Intelligence Approach

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ABSTRACT
The development of digital technology has brought significant changes to the banking industry, including Islamic banking. One crucial aspect that has gained attention is risk management, considering that Islamic banks operate based on Sharia principles, which avoid riba (interest), gharar (uncertainty), and maysir (gambling). This study discusses risk management strategies in Islamic banks using an Artificial Intelligence (AI) approach as an innovative solution to enhance the efficiency and effectiveness of risk mitigation. AI offers several advantages, such as predictive analytics, anomaly detection, and automation in managing credit, liquidity, operational, and Sharia compliance risks. By leveraging AI technology, Islamic banks can identify risk patterns more quickly, optimize profit-sharing-based financing decisions, and improve compliance with applicable regulations. This research employs a qualitative descriptive approach through literature review and secondary data analysis to illustrate how AI can be applied in Islamic banking risk management. The findings indicate that integrating AI into the Islamic banking system not only strengthens resilience to risks but also supports transparency, operational efficiency, and customer trust. However, this study is limited by its reliance on secondary data and literature sources, which may not fully capture real-time implementation challenges faced by Islamic banks. Therefore, AI-based risk management strategies represent a strategic step to enhance the competitiveness of Islamic banks in the digital era.

Keywords: Risk management, islamic banks, artificial intelligence, sharia compliance.

A. INTRODUCTION

Islamic banking plays an important role in the economy as a financial institution that operates based on Sharia principles. However, like conventional banking, Islamic banks also face various risks, such as credit risk, liquidity risk, operational risk, and market risk. The complexity of risk in Islamic banking is increasing in line with technological advancements and global economic dynamics. Therefore, more innovative and adaptive risk management strategies are required to ensure that Islamic banks remain competitive and sustainable.

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Risk management is a crucial aspect of the financial sector, where sound decision-making can determine the sustainability and stability of an institution. In an increasingly complex financial world, financial institutions are challenged to accurately identify and assess risks. Risks may arise from various sources, including market fluctuations, regulatory changes, and customer behavior. With the growing volume of data and market complexity, traditional approaches are often inadequate. (Sunaryo et al., 2024).

One approach that is gaining increasing attention in banking risk management strategies is the use of Artificial Intelligence (AI). AI technology is capable of processing large volumes of data, identifying risk patterns, and providing more accurate predictions and recommendations compared to conventional methods. In the context of Islamic banking, the application of AI has the potential to enhance the effectiveness of risk management while maintaining compliance with Sharia principles.

Several studies have examined the application of technology in Islamic banking risk management. For example, Rizki Listyono Putro et al. (2025) conducted a study aimed at analyzing the level of customer user experience in banking services through the use of artificial intelligence (AI). (Putro et al., 2025).

The study by Alqahtani and Mayes in 2018 compared the effectiveness of risk management strategies between Islamic and conventional banks. Their research focused on analyzing how these two types of banks handle and manage the risks they face—namely market, credit, operational, and liquidity risks—while taking into account the fundamental differences in their underlying principles. (F. Alqahtani & Mayes, 2018).

The study by Diawati et al. in 2022 examined the various risks faced by Sharia-based fintech services (peer-to-peer lending) during the COVID-19 pandemic and the mitigation strategies implemented. The main focus of the study was PT. Alami Fintek Sharia and how the company managed risks to ensure the smooth distribution of financing. (Diawati et al., 2022)

In addition, a study conducted by Layla Nurkhasanah, Setiyawan Gunardi, E.S. Gustanto, and M. Arif Kurniawan (2023) discussed the influence of third-party funds, non-performing finance, and return on assets on *murabaha* financing in Islamic commercial banks during the COVID-19 pandemic. The findings of this study provide insights into how these factors contribute to the stability of Sharia-compliant financing during an economic crisis. (Nurkhasanah et al., 2023).

On the other hand, technological developments in Islamic banking have entered the era of Islamic Banking 5.0, as discussed in a book written by Edo Segara Gustanto, M. Adi Wicaksono, and Januariansyah Arfaizar (2024). The book explores how technology and digital financial innovations are influencing the operations and strategies of Islamic banks in addressing challenges in the modern era. (Gustanto et al., 2024).

However, these previous studies have mainly focused on technical aspects or comparisons with conventional banks, without specifically exploring how AI can be holistically applied to Islamic banking risk management strategies. This paper seeks to fill that gap by examining how an AI-based approach can be comprehensively implemented in the risk management strategies of Islamic banks from technical and policy aspects to compliance with Sharia principles.

In addition, this study will also discuss the challenges and opportunities of AI implementation in Islamic banking, thus providing more comprehensive insights for academics, practitioners, and regulators in developing a Sharia-compliant banking system that is more adaptive to technological advancements. Therefore, this research is expected to make a significant contribution to the development of AI-based risk management strategies that are not only technologically effective but also aligned with Sharia values.

B. THEORITICAL FRAMEWORK

Risk Management in Islamic Banking

Risk management in Islamic banking has distinct characteristics compared to conventional banking, as it must still be based on Sharia principles. According to Basel III, risks in banking can be categorized into several types, such as credit risk, market risk, operational risk, and liquidity risk. However, in the context of Islamic banking, in addition to managing these risks, banks must ensure that every decision and operation they conduct does not violate Sharia principles, which are free from practices such as gharar (uncertainty) and riba (interest). These principles aim to maintain fairness, transparency, and certainty in financial transactions (Antonio, 2001).

The risks faced by Islamic banking can be classified into several types. First, credit risk, which is related to the possibility of a customer failing to meet their payment obligations as agreed upon in contracts: (1). Such as in murabahah, mudharabah, and musyarakah transactions, (2). Liquidity risk, which occurs when an Islamic bank has difficulty meeting its liquidity obligations due to an

imbalance between assets and liabilities, (3). Operational risk is inherent in every banking activity such as: financing activities, treasury and investment, operations and services, trade financing, funding and debt instruments, information technology and management information systems and HR management. Other operational risks that can occur are risks due to natural disasters (force majeure) which are often referred to as catastrophe risks, (4). Compliance risk can occur because Islamic banks do not fulfill or violate laws and regulations, applicable provisions and sharia principles. Conventional banks and Islamic banks both face compliance risks. The difference between conventional banks and Islamic banks in compliance risk is the sharia principle (Ahmed, Amr Mohamed El Tiby Grais, 2014).

In order to mitigate these risks, a sharia bank must implement risk management strategies that adhere to sharia principles. One strategy that can be used is the use of a data-based early warning system to detect potential risks in an early manner and prevent larger losses. In addition, product diversification based on sharia principles, such as murabahah, mudharabah, and musyarakah, can help reduce dependence on one type of transaction with a high risk. Another strategy is risk sharing in financing contracts, which focuses on the mutual benefits and losses between banks and customers in accordance with Islamic principles that emphasize education and fairness in business dealings (Rahim, 2014).

Artificial Intelligence in the Financial Sector

Artificial Intelligence (AI) has emerged as one of the key technologies used in the financial industry to increase efficiency and accuracy in decision-making, particularly in risk management. AI makes it possible to analyze large amounts of data quickly and accurately, which helps banks and financial institutions create more accurate statements. Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), and Big Data Analytics are some of the various types of AI used in this industry.

ML uses algorithms that can learn from historical data to predict potential risk patterns, while DL, which is based on neural networks, can detect more complex patterns in financial transactions. Natural Language Processing is used to process text data, such as news or financial reports, to analyze the sentiment and potential risks contained within. In addition, big data analytics allows for the management and analysis of larger data to make more data-driven decisions (Kumar, S., & Sharma, 2018).

AI in banking risk management covers many areas. One example is the use of AI in machine learning-based credit scoring to predict the likelihood of a customer defaulting. By using patterns from historical customer data, banks can assess credit risk more accurately. In addition, fraud detection systems use AI technology, which can identify suspicious transactions automatically and faster than conventional methods. In this case, AI analyzes unusual transaction patterns and provides early warnings of possible fraud (Ahmed, M., & Shakil, 2020).

Overall, the use of AI in risk management in the banking sector has many benefits, such as increasing operational efficiency, reducing the possibility of losses, and increasing the accuracy of decision making. However, there are several challenges that need to be addressed when implementing AI, such as the ability to manage and analyze data quickly and accurately (Ahmed, M., & Shakil, 2020).

Overall, the use of AI in risk management in the banking sector has many benefits, such as increasing operational efficiency, reducing the possibility of losses, and increasing the accuracy of decision making. However, there are several challenges that need to be addressed when implementing AI, such as the ability to manage and analyze data quickly and accurately (Miller, C. & Smith, 2022).

Integration of AI in Islamic Banking Risk Management

While the use of AI for risk management in Islamic banks can improve efficiency and accuracy, two important things need to be considered: technology and Shariah compliance. In various aspects of Islamic banking operations, artificial intelligence can be used to reduce risk. AI can be used in creditworthiness assessment to create predictive models for risk and credit assessment. Using historical data and machine learning algorithms, AI can help Islamic banks assess the ability of customers to meet their obligations, thereby reducing credit risk (Ahmed, M., & Shakil, 2020).

In addition, artificial intelligence is very helpful in preventing money laundering and AML because it can detect anomalies in financial transactions faster and more accurately than conventional methods. This provides better protection for the integrity of Islamic banking operations (Kumar, S., & Sharma, 2018). On the other hand, AI also contributes to optimizing liquidity management in Islamic banks. With the help of data-driven forecasting, AI can more precisely predict liquidity needs, assisting Islamic banks in managing liquidity risk arising from market fluctuations or imbalances between assets and liabilities. This is particularly crucial in Islamic banking, as improper liquidity

management can risk violating Sharia principles, which prioritize transparency and prudence in financial transactions. By using AI, Islamic banks can make more informed decisions regarding fund allocation and anticipate potential liquidity crises (Miller, C. & Smith, 2022).

However, the implementation of Artificial Intellegence (AI) in Islamic banks faces many challenges. One of the main problems is the lack of regulations and standards for AI in Islamic finance. Although AI technology is rapidly developing, the regulations governing its use in the context of Islamic finance are still limited and have not fully accommodated Sharia compliance aspects.

Moreover, the lack of data that aligns with principles of transparency and fairness in AI usage may lead to analysis results that are not entirely fair or accurate. Therefore, there is a need to develop Sharia-compliant AI based on Islamic ethics, ensuring that the algorithms used in Islamic banks remain aligned with Sharia values, which emphasize justice, balance, and the prohibition of practices inconsistent with religious principles (Rahim, 2014).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), explains how users come to accept and use a technology. TAM posits that two main factors influence user acceptance: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). In the context of Islamic banking, TAM helps explain how stakeholders such as bank employees, regulators, and customers perceive and adopt AI-based systems for risk management. A positive perception of AI tools as useful and easy to use can accelerate their adoption in Sharia-compliant financial environments.

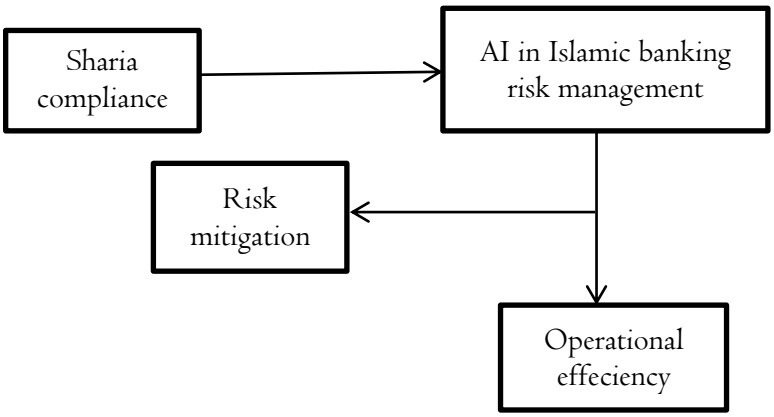
Risk Management Framework

The Risk Management Framework (RMF) provides a structured approach to identifying, assessing, managing, and monitoring risks. In Islamic banking, RMF must be adapted to comply with Sharia principles by incorporating not only conventional risks (credit, operational, liquidity) but also Sharia compliance risk. This framework emphasizes preventive and corrective actions, risk mitigation through equity-based contracts (e.g., *musharakah*, *mudharabah*), and ethical oversight to ensure risk strategies do not conflict with Islamic values.

AI Governance in Islamic Finance

AI Governance refers to the ethical, legal, and strategic oversight of artificial intelligence technologies. In Islamic finance, AI governance must ensure that the deployment of AI respects Sharia principles, such as fairness (*'adl*), transparency (*shafafiyyah*), and the avoidance of harm (*darar*). This involves the development of Sharia-compliant algorithms, bias mitigation in machine learning models, and the establishment of regulatory frameworks that align AI usage with Islamic ethical and legal norms. Effective AI governance is critical to maintain trust, legitimacy, and accountability in the digital transformation of Islamic banking.

Figure 1. Integration of AI in Islamic banking risk management



C. METHODOLOGY

This research is exploratory and descriptive-analytical in nature, aiming to comprehensively understand the application of AI in the risk management of Islamic banks. (Latifah, 2023). This research explores two sources of data: (1) Primary Data: Interviews with practitioners in Islamic banking and financial technology experts (if possible), and (2) Secondary Data: Academic literature (journals, books, research reports), regulations related to Islamic banking and AI, and case studies of AI implementation in Islamic banking risk management. This study then employs data collection techniques such as: Literature Review: Analysis of previous research and relevant theories. (Ramadhan et al., 2024).

The collected data were analyzed using a qualitative descriptive-analytical approach. Primary data from interviews were thematically coded to identify key patterns, themes, and insights related to the application of AI in Islamic banking risk management. Secondary data, including academic literature, regulations, and case studies, were examined through a systematic literature review to extract relevant theories, trends, and best practices. The findings from both sources were

then triangulated to enhance the validity and depth of the analysis, providing a comprehensive understanding of the research topic.

D. RESULTS AND DISCUSSION

Risk management is one of the key components in the operations of banking, including Islamic banking. Given the nature of banking businesses, which involve managing public funds, accurate decision-making, and high risks, it is crucial for Islamic banks to have systems capable of identifying, measuring, controlling, and mitigating risks effectively. On the other hand, the application of new technologies like Artificial Intelligence (AI) in the banking sector has opened up vast opportunities to improve risk management performance. This section will analyze how AI can contribute to enhancing risk management strategies in Islamic banks.

Importance of Risk Management in Islamic Banks

Risk management in Islamic banks plays a crucial role in maintaining operational and financial stability while ensuring that all activities comply with Sharia principles. While Islamic banks operate under strict regulations similar to conventional banks, they face additional challenges associated with implementing Sharia principles in every transaction and product offered. Therefore, risk management in Islamic banks must cover various types of risks, such as credit risk, market risk, operational risk, and compliance risk. For example, credit risk relates to the possibility of a customer failing to meet their payment obligations, while market risk is related to fluctuations in asset values or the bank's liabilities that could affect financial stability (Miller, C. & Smith, 2022).

Additionally, there is operational risk, which pertains to system or human errors that could disrupt the bank's operations. One of the aspects that differentiate Islamic banks from conventional ones is the existence of Sharia risk, which is the potential misalignment between the products and transactions conducted with Sharia principles. For example, financing products involving interest or elements of ambiguity (gharar) clearly contradict Islamic law. Therefore, Islamic banks must ensure that all transactions and products offered not only manage conventional risks but also comply with Sharia principles, which emphasize justice, transparency, and the prohibition of riba (interest) and gharar (ambiguity) (Ahmed, M., & Shakil, 2020).

Islamic banks need sophisticated risk management systems to effectively manage these risks. The use of appropriate technologies, such as machine learning and artificial intelligence, can help detect potential risks more quickly and accurately. These technologies allow banks to monitor and analyze the large data sets generated from each transaction, allowing them to identify risks that could lead to significant losses and take action before they become a problem. Therefore, in addition to improving technological elements, risk management in Islamic banks must also ensure that all systems and procedures used are always in accordance with Islamic principles, which are the basis of bank operations. (Ismail, 2017a). According to Rahim, implementing a system that complies with Sharia principles is very important to maintain fairness and transparency in risk management. (Rahim, 2014).

Application of AI in Risk Management

Islamic banks have a great opportunity to improve the effectiveness and efficiency of their risk management with the use of Artificial Intelligence (AI). AI can be used to identify and manage different types of risks more quickly and accurately. In the case of Islamic banks, artificial intelligence plays a vital role in managing risk while maintaining compliance with Shariah principles.

One of the most important uses of AI is early threat detection. Islamic banks can process big data in real-time with the help of artificial intelligence. This is very helpful in identifying potential risks related to non-compliance with Shariah principles, changes in customer consumption patterns, or even market risks that can affect the stability of the bank. The speed in detecting these risks allows banks to take faster and more accurate actions, which reduces the possibility of greater losses. (A. Alqahtani, 2021).

In addition, predictive models for assessing credit risk can also be created with the help of artificial intelligence. Islamic banks can use machine learning algorithms to predict the likelihood of bad debt or default by looking at credit history, transaction behavior, and other external data. Islamic banks must ensure that all transactions and contracts comply with Sharia principles and minimize credit risks that are not in line with Islamic guidelines. This helps banks offer more targeted financing and minimize losses due to credit risk. (Rahim, 2014).

AI also plays a critical role in managing market risk, where it is used to monitor and analyze financial market movements and commodity price fluctuations. With its ability to process large amounts of market data in real-time,

AI enables Islamic banks to make more informed investment decisions, accounting for market risks while adhering to Sharia principles in every investment decision. Moreover, when facing operational risks such as cyber-attacks or IT system errors, AI helps strengthen the cybersecurity systems of Islamic banks. The use of AI in cybersecurity is crucial in protecting the operational integrity of Islamic banks (Miller, C. & Smith, 2022).

Table 1. Summary of AI application in islamic bank risk management

Risk Type	AI Application	Impact
Credit Risk	Machine learning for predictive credit scoring and risk assessment.	Improved accuracy in assessing loan defaults and creditworthiness.
Liquidity Risk	Data-driven forecasting for liquidity management.	Optimized liquidity planning and risk management.
Operational Risk	AI in fraud detection systems and cybersecurity.	Enhanced operational security and reduced fraud risks.
Sharia Compliance Risk	AI to monitor transactions for compliance with Sharia principles.	Improved compliance with Islamic finance regulations.
Market Risk	AI-based models for market trend analysis and commodity price fluctuations.	More informed investment decisions and risk reduction.

AI in Compliance Risk

Compliance risk is one of the main challenges faced by Islamic banks, especially in ensuring that all operations and products offered are in accordance with Sharia principles and the prevailing laws of the country. Sharia compliance not only includes the prohibition of practices such as riba (interest) but also ensures that transactions and contracts are free from elements of uncertainty (gharar) and excessive speculation. Therefore, Islamic banks need a system that can monitor, analyze, and enforce compliance. In this case, AI can offer creative solutions to improve the efficiency and accuracy of compliance risk management (Ali, M. & Ahmad, 2020).

Automated audit and verification processes are one way AI can help manage compliance risk. Islamic banks can use artificial intelligence technology to automate the verification of financial transactions and product compliance with Shariah and government regulations. For instance, in financing products, AI can

be used to verify whether the contracts applied are in line with Sharia principles, identify potential violations, and ensure that the products offered are free from prohibited elements in Islam, such as interest or uncertainty (Ali, 2019). By using this technology, banks can monitor their operations more closely and consistently, which lowers the possibility of human error that often occurs in manual processes.

AI can also help oversee national regulations such as banking, consumer protection, and anti-money laundering (AML). AI can detect potential violations of the law more quickly and accurately because it can process and analyze large amounts of data in real time. For example, AI can identify suspicious transactions or those that violate AML policies and provide early warnings for further action. This is crucial to maintaining the reputation and credibility of Islamic banks and ensuring that they do not engage in actions that violate state or Islamic laws (Miller, C. & Smith, 2022).

In addition, the use of AI in compliance risk also accelerates the audit process and allows Islamic banks to conduct verification more efficiently and in a timely manner. For example, AI can automatically assess the compliance of financial products with Shariah standards and generate more accurate compliance reports. This technology increases the transparency of the audit process while helping Islamic banks maintain integrity and operate in accordance with Shariah and applicable laws (Rahim, 2014).

Implementation of Machine Learning Algorithms in Risk Analysis

In terms of risk analysis, the use of machine learning (ML) algorithms greatly enhances the performance of risk management in Islamic banks. ML has the ability to analyze very large data sets and find patterns that are invisible to the naked eye. This technique is very effective in predictive analysis, which can help Islamic banks anticipate and identify potential future hazards. As a result, Islamic banks are increasingly relying on ML in various areas of risk management, such as credit risk, market risk, and Shariah compliance (Hassan, A., & Al-Debei, 2020).

The primary use of machine learning (ML) in risk management is through sentiment analysis using natural language processing (NLP). NLP algorithms enable Islamic banks to monitor and analyze public and media opinions that are prevalent in social media and news platforms. By analyzing sentiment patterns, banks can identify potential risks that may affect economic stability, such as currency depreciation or economic crises that may impact capital markets and Sharia-compliant financial products. Early alerts of external risk variables are provided by the application of NLP in risk management, which also enables

banks to react swiftly to potentially harmful market or economic developments (Miller, C. & Smith, 2022).

ML can be applied to the management of Islamic banks' investment portfolios in addition to sentiment research. To find safer and more lucrative investment patterns, machine learning algorithms can examine past data and market trends. Islamic banks may maximize their investment portfolios, reduce possible risks, and make sure that investment choices continue to adhere to Sharia law by utilizing this data. In this regard, ML assists banks in avoiding investments that are high in risk or that contain components that are prohibited by Islamic law, such as interest (riba) or uncertainty (gharar) (Ali, 2019).

Additionally, another area where ML significantly contributes is asset management optimization. Islamic banks frequently oversee a range of assets, such as deposits, investments, and financing. Machine learning (ML) can help analyze the many risks connected to these assets and offer suggestions for better management techniques. For instance, ML might offer insights into possible credit risks or asset value variations that may impact the bank's financial health through the use of predictive algorithms. As a result, this technology helps Islamic banks to better manage their assets, increase operational effectiveness, and lower possible losses brought on by poorly managed risks (Rahim, 2014).

Table 2. The application of machine earning in risk management in islamic banks

Implementation	Description
Sentiment Analysis	Using Natural Language Processing (NLP) to analyze news and public opinion in order to detect potential external risks.
Investment Portfolio Management	Analyzing historical data and market trends to optimize investment decisions in accordance with Sharia principles.
Asset Management Optimization	Analyzing risks associated with various types of assets and providing recommendations for effective management.

Challenges and Obstacles in AI Integration in Islamic Banks

Even though integrating artificial intelligence (AI) into risk management for Islamic banks has several advantages, there are a number of issues that need to be resolved. The lack of adequate technology infrastructure is one of the main issues, especially in developing nations. Many Islamic banks may find it difficult to get and maintain the infrastructure required to properly support AI adoption, particularly those that operate in markets with lower levels of technological innovation. For AI to function effectively and precisely, a strong and dependable

infrastructure is necessary. AI's capacity to handle vast amounts of data and produce accurate assessments will be constrained in the absence of sufficient infrastructure, which will lower the efficacy of the risk management system (Amin, 2020).

The requirement for a thorough comprehension of Sharia principles in the application of AI presents another difficulty. Islamic banks must combine this technology with the knowledge of certified Sharia scholars to make sure AI complies with Islamic legal and ethical principles. Artificial intelligence (AI) technologies are frequently created with an eye toward efficiency and revenue rather than Sharia compliance. Therefore, it is essential to have competent Sharia authorities closely monitor the use of AI in risk management to make sure that it does not contravene principles like the ban on riba (interest), gharar (uncertainty), and maysir (gambling). AI-driven choices must adhere to Sharia law and ethics, necessitating close coordination between Sharia scholars and technology specialists (Ismail, 2017).

Concerns about data security and privacy are particularly crucial when using AI to control risk in Islamic banking. Data security and privacy must be given particular consideration when using AI to gather and analyze large amounts of data, including the personal information of customers. AI systems used by Islamic banks must adhere to relevant data protection laws, such as the General Data Protection Regulation (GDPR) in Europe or comparable laws in other nations. Additionally, banks must protect data integrity to avoid personal information leaks that could endanger clients and undermine the bank's image. Data security is crucial because violating customer privacy can have serious legal and financial repercussions (Sweeney, 2020).

Table 3. Challenges in Implementing AI in Risk Management of Islamic Banks

Challenges	Description
Technological Infrastructure Limitations	Many Islamic banks, especially in developing countries, face difficulties in acquiring and maintaining the infrastructure needed to fully implement AI. Inadequate infrastructure can hinder data processing capabilities and reduce the effectiveness of AI-based risk management systems.
Alignment with Sharia Principles	Shariah academics and engineers must work closely together to customize AI systems to adhere to Shariah law. Principles like the ban on riba (interest), gharar (uncertainty), and maysir (gambling) could be broken in

	the absence of adequate integration.
Data Privacy and Security Concerns	There are serious privacy and security concerns when using AI to process massive amounts of client data. Islamic banks must maintain stringent controls and make sure that data protection laws are followed in order to prevent breaches that could harm their reputation and go against the law.

E. CONCLUSION

The use of artificial intelligence (AI) in Islamic banking risk management improves operational performance, sharia compliance, and risk identification efficacy. AI helps to maximize data-driven decision making by enabling predictive analysis, anomaly identification, and automation of risk management related to financing, liquidity, operations, and sharia compliance.

This study demonstrates how integrating AI enhances risk resilience while also fostering openness and consumer confidence. Furthermore, this study opens a new paradigm in Islamic FinTech by proposing an AI-Shariah risk management framework that blends contemporary technology with Islamic principles and law.

However, issues including a lack of cross-disciplinary specialists, changing rules, and a restricted technology infrastructure must be resolved. It is crucial that scholars, data scientists, and policymakers work together to do additional research in order to evaluate this paradigm experimentally and guarantee that the use of AI stays in line with maqasid al-shariah.

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