

## ARTIFICIAL INTELLIGENCE (AI) IN ISLAMIC FINANCE: A MAQASID AL-SHARIAH PERSPECTIVE

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### Abstract:

The integration of Artificial Intelligence (AI) in Islamic finance presents both opportunities and challenges, particularly in ensuring compliance with Maqasid al-Shariah. This paper provides a conceptual analysis of how AI-driven financial services align with the five key dimensions of Maqasid al-Shariah-preservation of religion, life, intellect, wealth, and lineage. While AI enhances efficiency, financial inclusion, and risk management in Islamic finance, ethical concerns arise regarding algorithmic transparency, fairness, data privacy, and the potential for *gharar* (excessive uncertainty) and *riba* (usury). This paper explores the necessity of developing AI governance frameworks rooted in Shariah principles to ensure that technological advancements contribute to justice, social welfare, and economic stability in the Islamic finance industry. The study concludes that a Maqasid-based approach to AI in Islamic finance is crucial for maintaining ethical integrity, fostering innovation, and ensuring sustainable financial growth.

### Keywords:

Artificial Intelligence, Technologies, Islamic Finance, Maqasid al-Shariah, Ethics, Governance

### Introduction

In recent years, Artificial Intelligence (AI) is transforming multiple industries, including finance, by improving aspects of risk management, operational efficiency, and decision-making (Berg et al., 2020). However, the use of AI in Islamic finance raises critical questions

about its compatibility with the Islamic values and regulatory system, which are still in process of development and still lacking adequate research in existing literature.

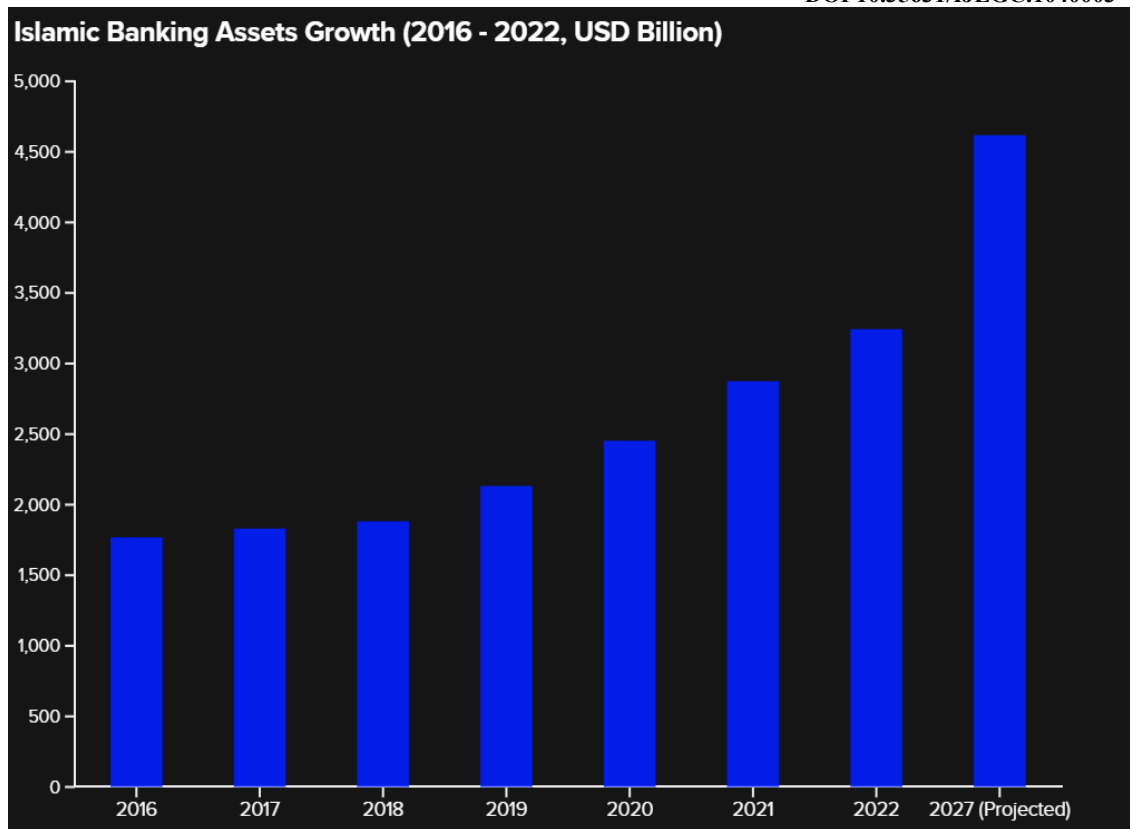
Islamic finance, as per the Shariah principles, has begun integrating AI technologies in recent years to improve financial services based on Shariah principles (Saba et al., 2019). With the sector growing, currently valued at \$4.5 trillion and is projected to reach \$6.67 trillion by 2027, as shown in Figure 1 by Hasan and Mohamed (2024), there is a need for AI applications to be aligned with Maqasid al-Shariah (objectives of Islamic law) including the protection of wealth such as excluding *gharar* (speculation) and *riba* (interest), as well as to promote risk-sharing and justice in society Dusuki and Bouheraoua (2011), since the adoption of AI in Islamic finance could accelerate this growth even further.

Artificial intelligence technologies such as robo-advisors, machine learning, and automated risk assessment have played a significant role in enhancing customer service, financial decision-making, and fraud detection (Arner et al., 2017). However, fears of bias in AI algorithms, data privacy risks, lack of transparency, and the possibility of AI transactions having aspects of *riba* or *gharar* still remain (Ali et al., 2024). Thus, to counter these challenges, there is a requirement for an effective AI governance framework grounded on Islamic financial ethics. Oseni and Ali (2019) said that this would help in stimulating innovation while making sure that AI will be Shariah-compliant.

While AI is currently widely applied to conventional finance, its application within Islamic banking remains in its beginning stages and heavily underexplored. Most research focuses on blockchain and Fintech but less has focused on AI's role in achieving Maqasid al-Shariah (Kammer et al., 2021). As a global hub for Islamic finance, Malaysia has embraced Fintech innovations in Islamic banking with great fervour and therefore presents an interesting case study to examine the use of AI in facilitating the industry.

The purpose of this study is to discuss the future prospect of AI application in Islamic finance within the paradigm of Maqasid al-Shariah by identifying its opportunities and challenges. This study explains how AI can be used to support risk management, financial inclusion, and moral governance with potential compliance risk. This study aims to provide thoughtful insights from the regulators', financiers', and policymakers' recommendations and thereby inform the AI governance debate for Islamic finance. This paper also aims to provide recommendations on how AI-driven developments can remain in alignment with Maqasid al-Shariah's economic and ethical objectives. The research questions to be answered at the end of the paper are presented as follows:

1. What are the opportunities and challenges of AI application in Islamic finance from the perspective of Maqasid al-Shariah?
2. How can AI governance frameworks be developed to ensure alignment with the ethical and economic objectives of Maqasid al-Shariah?



**Figure 1: The Growth of Islamic Finance Assets**

Source: Hasan and Mohamed (2024)

## Literature Review

### *The Application of AI in Financial services*

AI has also significantly transformed financial services by improving risk management, decision-making, and efficiency. Some of the technologies that have streamlined banking processes and enhanced customer experiences include machine learning, natural language processing, and robo-advisors (Arner et al., 2017). In conventional banking, AI is highly used in credit risk evaluation, fraud detection, and algorithmic trading, leading to faster and more accurate financial transactions (Berg et al., 2020). However, despite of these advancements, AI-driven financial services are faced with challenges of algorithmic bias, ethical concerns, and regulatory compliance (Adeyelu et al., 2024). There is a need to resolve these concerns for the advancement of fair and transparent financial systems.

### *AI in Islamic Finance: Ethical and Shariah Compliance Considerations*

Islamic finance, as instructed by Maqasid al-Shariah, is based on ethical principles that ban *riba* (usury), *gharar* (excessive uncertainty), and immoral financial practices. AI application in Islamic finance must be in accordance with these principles to enable Shariah compliance (Shalhoob, 2025). Shalhoob (2025) emphasise in a study that AI-powered tools, such as Shariah-compliant robo-advisors and automatic credit risk assessment systems, can be employed to enhance efficiency without undermining Islamic ethical standards. Nonetheless, ethical concerns have been cited with respect to ethical problems like data privacy infringement, bias in algorithms, and the unintended inclusion of non-halal financial products

in AI-driven decision-making (Oseni & Ali, 2019). To solve such problems, strict oversight and AI governance frameworks tailored for Islamic finance must be required.

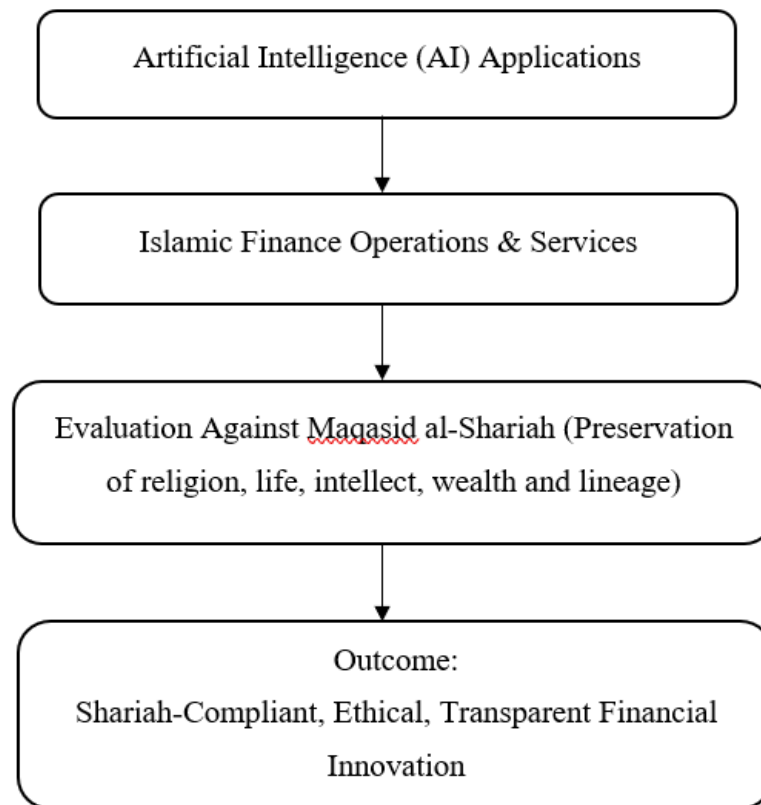
### ***Maqasid al-Shariah and AI Governance in Islamic Finance***

The Maqasid al-Shariah principles provide a structured framework of defining the role of AI in Islamic finance. Dusuki and Bouheraoua (2011) state that the principles are moral guidelines to make sure that AI projects comply with Islamic principles that cover:

1. Preservation of religion (*din*): AI applications should adhere strictly to Shariah principles and avoid supporting non-Shariah compliant financial transactions.
2. Safeguarding life (*nafs*): Consumers must be safeguarded against unethical AI practices that can lead to economic harm or exploitation.
3. Safeguarding intellect (*aql*): AI has to be employed ethically so that algorithms are transparent and free of tricks or manipulative tactics.
4. Safeguarding wealth (*mal*): Economic transactions via AI must provide fairness, transparency, and risk-sharing and eradicate immoral profit-making mechanisms.
5. Protection of lineage (*nasl*): AI must not bring about growth of economic or social inequalities but keep financial systems equitable and just.

Based on such ethics, Kammer et al. (2021) state that AI in Islamic finance owes a duty to enhance financial inclusion positively, to promote risk-sharing facilities, and to contribute towards sustainable economic advancement. To do that, proper governance mechanisms need to be framed. However, without the regulation of AI, it can be against Shariah values or instil bad monetary policies. Therefore, embedding regulation of AI based on Maqasid al-Shariah is necessary so that Islamic finance innovation with technology turns out to be ethical, open, and Islam-friendly.

### *Conceptual Framework for AI in Islamic Finance*



**Figure 2: Conceptual Framework for AI In Islamic Finance**

Source: Author's own

The conceptual framework as shown in Figure 2 above suggests that any technological advancement, including AI, must be aligned with the higher objectives of Maqasid al-Shariah in order to be acceptable in Islamic finance. It ensures that technologies use in Islamic finance do not merely seek efficiency but also promotes the elements of justice, welfare, and ethical standards. Overall, the use of technologies in Islamic finance is permissible but must be aligned with Islamic principles and ethics, as recommended by the teachings of Islam.

### **Methodology**

This study adopts a qualitative research approach to explore the role of AI in Islamic finance from a perspective of Maqasid al-Shariah. The study utilises the conceptual analysis approach, employing a broad review of literature and content analysis of AI application within the industry. This approach provides a clear explanation of how AI technologies align with Shariah principles and impact financial ethics, transparency, and governance. The study employs secondary data sources to analyse the application of AI in financial inclusion, risk management, and Shariah compliance. Academic journals, industry reports, regulatory policies, government reports, and credible sources on Islamic banking, AI ethics, and Fintech are used to obtain data. The statistics are insightful into AI-driven solutions such as credit risk management, robo-advisory products, and automated surveillance of compliance, which are now playing a major role in Islamic banking institutions.

Content analysis is employed to systematically interpret these sources and to identify key themes as well as trends concerning the operational, ethical, and Shariah-compliant implications of AI. Specific focus is given to how AI technologies assist in financial inclusion, credit risk assessment, robo-advisory, and compliance monitoring that is automated. These technologies are evaluated based on their alignment with Maqasid al-Shariah objectives. By combining the qualitative insights and industry practices, this paper offers a conceptual framework to access the ethical and Shariah-compliant use of AI in Islamic finance.

## Findings

### *Opportunities of AI in Islamic Finance*

The findings of this study show that there are several opportunities for AI adoption in Islamic finance. Firstly, it can increase the financial inclusion (Alshater, 2022). AI-powered solutions, such as robo-advisors, machine learning credit scoring models, and AI-powered Islamic microfinance platforms, have the potential to improve financial access, especially for unbanked and underbanked Muslim communities (Hamadou et al., 2024). By employing other sources of information like transactional history instead of usual credit scores, AI can facilitate Shariah-compliant lending to small businesses and poor households.

Secondly, it can improve risk management function. AI can identify fraud and manage risk more effectively by identifying suspicious transactions, money laundering, and financial anomalies that may be overlooked in traditional banking systems (Kshetri, 2021; Sarea et al., 2021). AI predictive analytics can help Islamic finance institutions minimise excessive exposure to risk while maintaining Shariah compliance.

Last but not least, it enables going up in governance and compliance. Artificial Intelligence-driven Natural Language Processing (NLP) enables one to analyse legal contracts, financial statements, and fatwas in real-time for adherence to Islamic finance rules. Artificial Intelligence-driven Regulatory Technology (RegTech) is also capable of enabling the efficiency of Shariah governance frameworks to enable Islamic banks' compliance better and more conveniently (Kammer et al., 2021).

### *Challenges of AI in Islamic Finance*

Despite all its potential, the application of AI in Islamic finance is not without numerous challenges that need to be approached with caution. First and foremost, on algorithmic bias and fairness. Among the greatest concerns is algorithmic bias, wherein AI models inadvertently discriminate against groups of customers due to biases in the training data (Berg et al., 2020). This violates the fairness and justice of financial transactions in Maqasid al-Shariah. AI-driven financial services must be inclusive and non-discriminatory to ensure the promotion of Islamic finance ethical values.

Secondly, speculation risk (*gharar*) and interest-based trade (*riba*). AI-based high-frequency trading (HFT) and algorithmic investment decision-making can perpetuate over-speculation, which is prohibited under Islamic finance. Further, if AI-based financial services indirectly support interest-based borrowing, they can go against fundamental Islamic finance concepts (Hendarti et al., 2024). In order to eradicate such risks, AI applications in Islamic finance should focus on ethical investment processes and avoid over-risk-taking.

Finally, ethical challenge pertaining to data protection and ethical governance. Islamic finance has highest priority given to data privacy, transparency, and ethical treatment of personal data. However, AI technologies, especially those in use in electronic banking and automatic credit risk assessment, are based on gigantic amounts of data, which raise ethical issues concerning invasion of privacy and exploitation of clients' information (The Economic Times, 2023). Apart from that, Arsyad et al. (2025) found that the lack of governance guidelines specifically tailored for AI in Islamic finance makes ethical utilisation of data and customer confidentiality more challenging. Hence, development of effective AI governance policies in an Islamic sense is essential in overcoming these challenges.

### ***The Need for AI Governance in Islamic Finance***

As per the ethical and operational concerns pertaining to AI in Islamic finance, there should be an overall governance framework as per Maqasid al-Shariah. To begin with, there should be a guarantee of transparency and explainability. The AI models should be transparent and explainable, and their decisions should be auditable so that any biases are identified and excluded and any violation of ethics avoided. Banks must have measures in place that allow for the periodic assessment of AI models to ascertain if they are consistent with Islamic moral principles.

Second, provide a Shariah governance in AI development. For Shariah compliance, AI-based financial products must be filtered and approved by Shariah scholars and regulatory bodies. Their involvement in AI solution development and deployment can make financial services remain ethically sound and Shariah-compliant.

Lastly, develop ethical AI principles for Islamic banking. There have to be AI principles for Islamic finance that would ensure AI-based financial services do not promote *riba* (usury), *gharar* (excessive uncertainty), or immoral speculation. The principles must act as guiding lights for AI developers, financial institutions, and regulators to ensure there is fairness, transparency, and justice in the financial system.

The summary of the findings is presented in Table 1, Table 2, and Table 3.

**Table 1: Opportunities of AI In Islamic Finance**

Opportunity	Description	References
Financial Inclusion	AI can provide access to financial services for unbanked and underbanked Muslim communities.	Alshater (2022); Hamadou et al. (2024)
Risk Management Efficiency	AI can detect scam or fraud, money laundering, and financial anomalies better than traditional methods.	Kshetri (2021); Sarea et al. (2021)
Governance and Compliance	AI applications like NLP and RegTech can enhance Shariah compliance and governance efficiency.	Kammer et al. (2021)

Source: Author's own



**Table 2: Challenges of AI In Islamic Finance**

Challenge	Description	References
Algorithmic Bias and Fairness	AI might unintentionally discriminate against certain group of people, which can lead to Islamic ethics violation.	Berg et al. (2020)
Speculation Risk ( <i>Gharar</i> ) and Interest ( <i>Riba</i> )	High-frequency trading and AI investments may involve <i>Gharar</i> and <i>Riba</i> .	Hendarti et al. (2024)
Ethical Challenges (Data Privacy)	AI's reliance on data might endangers clients' privacy and confidentiality.	The Economic Times (2023); Arsyad et al. (2025)

Source: Author's own

**Table 3: The Need for AI Governance in Islamic Finance**

Governance Need	Description
Transparency and Explainability	AI decision must be auditable, understandable and ethically transparent, so that any biases are identified and excluded, and any violation of ethics can be avoided.
Shariah Governance in AI Development	Shariah scholars must involve in reviewing AI products to ensure their compliance with Islamic principles.
Ethical AI Principles for Islamic Banking	Islamic ethical principles must be developed to guide AI advancement and application.

Source: Author's own

### Limitations and Recommendations of Study

While this study provides valuable information regarding the use of AI in Islamic finance from the Maqasid al-Shariah perspective, it is not without limitations. Firstly, the study is conceptual and relies solely on secondary data and not empirical data. While it provides theoretical insights, it does not include primary data from industry practitioners, i.e., surveys or interviews of Shariah scholars, AI professionals, or Islamic finance practitioners. To fill this shortcoming, forthcoming studies must utilise empirical research, collecting firsthand inputs through surveys or interviews with pivotal stakeholders. That would give us a more tangible sense of how AI works in the case of Islamic financial institutions. More importantly, in this study, quantitative approaches have not been employed to quantify the actual effects of AI in the sector. Hence, future research is advised to use statistical modelling or case studies to cross-validate theoretical assertions and determine the role of AI more clearly. Through such methods, the researchers will be able to present a more nuanced and data-driven picture of how AI is in line with Maqasid al-Shariah and Islamic finance.

### Conclusion

AI provides Islamic finance with significant advantages such as quicker transactions in addition to enhanced fraud protection features and individualised customer care. AI has the capability to make financial services consumer-friendly and effective in addition to being Shariah-



compliant. However, AI also revealed several challenges like problem on data confidentiality as well as transparency gaps while posing threats of violations of Islamic principles by involving *gharar* and *riba*.

Development of AI technology for use under Maqasid al-Shariah requires setting up governance structures that are Shariah-compliant as well as maintaining ethical limits and transparency through incorporation of involvement from Shariah experts. Aside from this, regulatory bodies must collaborate with business leaders in a bid to construct guidelines of AI facilitating innovative development as well as ethics.

AI is indeed very useful for Islamic finance industry but must be executed carefully so as not to sabotage its objective of facilitating economic equity and justice. Islamic banks may adopt technological innovation without compromising on their religious and ethical practice principles by tying up applications to Maqasid al-Shariah.

Overall, this study extends the existing literature on the use of AI in Islamic finance. Besides, it highlights the urgent need for dedicated AI governance frameworks that consistent with Islamic principles in terms of policy implications. This study also demonstrating that empirical research has to be conducted in order to deploy AI in the sector responsibly and effectively. Therefore, future research is recommended to focus on empirical research like surveys or interviews with pivotal stakeholders in order to obtain further insights on practical aspect. This would provide us with a clearer and more concrete understanding of how AI operates within Islamic financial institutions.

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