

Artificial Intelligence and the Future of Islamic Economics: Toward an AI-Maqashid Framework and a Shariah AI Audit for Islamic Banking

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ABSTRACT

Artificial intelligence (AI) is transforming Islamic banking by enhancing data management, service delivery, risk assessment, fraud detection, and decision-making. However, AI adoption must extend beyond efficiency and accuracy to address justice, transparency, wealth protection, Shariah compliance, and public welfare. This study examines the opportunities and risks of AI in Islamic banking and develops a Shariah-aligned conceptual approach using qualitative library research and conceptual analysis of scholarly literature, regulations, governance standards, and institutional reports. The findings indicate that AI can improve operational efficiency, risk management, asset protection, and financial inclusion, while creating risks related to algorithmic bias, limited explainability, privacy, model risk, third-party dependency, and excessive automation. The study proposes an AI-Maqashid Framework integrating technological efficiency, justice, transparency, hifz al-mal, Shariah governance, human oversight, and maslahah, alongside a Shariah AI Audit covering data, bias, explainability, protection, compliance, oversight, and welfare outcomes.

INTRODUCTION

Digital transformation has reshaped the banking industry. Initially, digitalization largely involved moving services from physical branches to electronic channels, including mobile banking, online banking, digital onboarding, and electronic payments. Technology is now used not only to digitize manual processes but also to identify behavioral patterns, estimate risk, automate work, and support decision-making. Artificial intelligence is one of the most influential technologies in this transition. AI systems can process large volumes of data, identify patterns, classify information, generate predictions, and produce recommendations. Advances in machine learning, natural language processing, computer vision, and generative AI have broadened the range of potential applications.

In finance, AI can improve operational efficiency, regulatory compliance, product personalization, and advanced analytics. It can also amplify existing vulnerabilities, including model risk, cyber risk, poor data quality, dependence on technology providers, and concentration among third-party service providers. The Financial Stability Board identifies third-party dependencies, market correlations, cyber risk, model risk, data quality, and governance as material vulnerabilities arising from financial-sector AI (Financial Stability Board, 2024). These developments are especially significant for Islamic banking. Islamic banks must remain efficient and competitive while ensuring that their operations conform to Shariah principles. Accordingly, AI should not be assessed only by how quickly it operates or how much cost it removes; a more fundamental question is whether AI is used fairly, transparently, safely, and in a manner that advances *maslahah*.

In Indonesia, the Financial Services Authority issued Governance of Artificial Intelligence in Indonesian Banking on 29 April 2025. The guidance provides a minimum reference for responsible AI development and deployment while emphasizing risk management and prudential principles (Otoritas Jasa Keuangan, 2025). It addresses AI across the technology life cycle and banking business cycle, including customer service, product development and pricing, compliance, risk management, fraud prevention, and data analytics. Within Islamic banking, AI can support front-office activities such as chatbots, personalized services, and customer-needs analysis; middle-office activities such as risk assessment, KYC, AML, fraud detection, compliance monitoring, and early-warning systems; and back-office activities such as document processing, reconciliation, reporting, and data analysis.

AI may be particularly valuable in managing troubled financing. It can support risk scoring during financing assessment, identify early signs of deterioration during monitoring, help distinguish temporary payment distress from unwillingness to pay during collections, simulate restructuring options, and prioritize recovery cases. However, these applications raise difficult questions. Who is responsible when an AI recommendation harms a customer? Should a customer receive a meaningful explanation for a financing rejection? Is differentiated collection treatment based on relevant risk or on historical bias? May a bank delegate restructuring or collateral decisions entirely to a machine?

These questions demonstrate that AI is not merely a technical issue; it also concerns justice, wealth protection, transparency, trust, and moral responsibility.

These conceptual and ethical questions are compounded by an observable empirical phenomenon: AI adoption across the Islamic financial industry remains markedly uneven. Panel evidence from Islamic financial institutions in Pakistan, Malaysia, and Turkey shows that AI diffusion is shaped less by technology availability than by regulatory support, Shariah-compliance integration, and perceived risk, producing wide disparities in AI readiness across jurisdictions (Iqbal et al., 2026). A comparable gap emerges between banking systems: Islamic banks continue to trail conventional banks on fintech and AI adoption indices, even though Islamic banks appear to gain greater stability benefits once such technologies are adopted, a pattern that Meero (2025) explains through the Resource-Based View and Financial Stability Theory rather than through efficiency considerations alone. The urgency of closing this gap is reinforced by the literature itself: a systematic review of publications on FinTech and AI adoption in Islamic banking documents a marked surge in research output since 2019, concentrated in dual-banking jurisdictions such as Indonesia, Malaysia, and the wider MENA region, which the authors read as confirmation that governance and ethical-integration questions have outpaced practical guidance for institutions (Zainudin & Hidayatulloh, 2025). At the level of theory, existing technology-acceptance frameworks have likewise struggled to accommodate the normative dimension of Islamic banking: extending the Technology Acceptance Model with an Islamic financial literacy construct, Amir et al. (2026) find that user confidence in AI-supported Islamic banking services remains only moderate, and that acceptance becomes durable only once users can evaluate AI features through a Shariah-based lens rather than through usefulness and security alone. These findings are consistent with industry-level evidence: a 2025 survey of banking and capital-markets executives found that AI's perceived impact varies sharply by business function, with front-office and risk-related applications advancing far faster than governance and audit functions (Statista, 2026). Taken together, these phenomena indicate that the central problem facing Islamic banking is not whether AI diffuses, but why its diffusion continues to outpace the governance, literacy, and audit mechanisms needed to keep it aligned with Shariah objectives, a gap that existing adoption and Maqashid-oriented studies have yet to close in an integrated manner.

Recent scholarship has begun to connect AI with Islamic finance. Mohd Najib et al. (2025) argue that AI can improve efficiency, financial inclusion, and risk management while creating concerns about algorithmic transparency, fairness, privacy, gharar, and Shariah compliance. Zulkepli et al. (2026) similarly describe AI as a *wasilah* for realizing Shariah objectives while emphasizing the need to address privacy, data misuse, and algorithmic opacity. Existing studies nevertheless leave important gaps. Some provide broad descriptions of AI benefits and risks, while others connect AI to Maqashid al-Shariah without operationalizing these values in financing, monitoring, collections, restructuring, and recovery; AI governance and Shariah governance also tend to be discussed separately.

This study starts from the premise that AI in Islamic economics should be treated as a means rather than an end: technology is an instrument, while the ultimate objectives are justice, rights protection, institutional sustainability, and public welfare. Accordingly, the paper develops two conceptual contributions, namely an AI-Maqashid Framework and a Shariah AI Audit. These considerations motivate four research questions that guide the remainder of the paper: how AI can be applied across Islamic banking business processes; what risks AI creates for justice, transparency, wealth protection, and Shariah compliance; how an AI-Maqashid Framework can balance technological efficiency with the values of Islamic economics; and how a Shariah AI Audit can be used to evaluate AI systems in Islamic banking. Correspondingly, the study pursues five objectives: to identify potential uses of AI across Islamic banking processes, to analyze the benefits and risks of AI from a Maqashid al-Shariah perspective, to develop an AI-Maqashid Framework, to formulate a Shariah AI Audit concept, and to clarify human responsibility for AI-supported decisions. In pursuing these questions and objectives, the study makes four contributions. It offers a conceptual contribution through the AI-Maqashid Framework and a governance contribution through the integration of AI governance and Shariah governance, complemented by a methodological contribution through the Shariah AI Audit and a practical contribution through the mapping of AI applications in financing, monitoring, collections, restructuring, recovery, fraud detection, KYC/AML, and customer service.

LITERATURE REVIEW

Artificial Intelligence in Financial Services

AI includes technologies that enable systems to perform tasks that have traditionally required human cognitive capabilities, such as pattern recognition, classification, language processing, forecasting, and recommendation generation. In finance, AI has evolved from process automation toward decision augmentation. Systems not only execute repetitive tasks but also help people interpret information and select among alternatives. This does not mean that AI is invariably superior to human judgment: AI is strong at processing large data sets and identifying patterns, while humans remain better positioned to understand context, consider exceptional circumstances, and bear legal and moral responsibility. The appropriate relationship is therefore one in which AI augments rather than replaces human judgment.

Responsible AI and AI Risk Management

AI requires governance throughout the entire model life cycle. A model that performs accurately at development may deteriorate when economic conditions, customer behavior, or data quality change. The NIST AI Risk Management Framework organizes AI risk management into four functions: Govern, Map, Measure, and Manage. It also identifies validity, safety, accountability, transparency, explainability, privacy, and the management of harmful bias as characteristics of trustworthy AI (Tabassi, E., 2023).

For Islamic banking, the AI life cycle should include business-need definition, data collection, model development, validation, Shariah review,

deployment, monitoring, and model improvement or retirement. Shariah review should not be postponed until development is complete; Shariah principles should be considered by design.

Maqashid al-Shariah

Maqashid al-Shariah explains the objectives of Shariah in promoting benefit and preventing harm. A widely used formulation includes the protection of religion, life, intellect, lineage, and wealth. In banking, hifz al-mal should not be interpreted only as protecting the bank's assets. It also encompasses customer funds, personal and financial data, the right to an explanation, the right to fair treatment, and the sustainability of the broader financial ecosystem.

Justice in Islamic Economics

Justice does not necessarily require identical treatment. Customers with different levels of risk may receive different treatment, provided that the distinction rests on relevant factors, remains proportionate, can be explained, and is accountable. This study describes algorithmic justice as justifiable differentiation, namely differentiated treatment grounded in legitimate risk considerations rather than bias or irrelevant proxies.

Shariah Governance

Shariah governance comprises the structures and processes that ensure that Islamic financial institutions operate in accordance with Shariah principles. The role of a Shariah supervisory board should extend beyond product and contract approval; AI requires oversight of data acquisition, model behavior, customer treatment, and the consequences of algorithmic decisions. Recent work points toward a transition from ex post review to life-cycle-based Shariah oversight (Bin-Armia & Kambakov, 2026).

Explainability, Transparency, and Accountability

Explainability is the ability to communicate why a system produced a particular output. It becomes especially important when AI affects financing rejection, fraud flags, restructuring, or collection treatment. The Bank for International Settlements notes that limited explainability in complex models can challenge transparency, accountability, compliance, customer trust, and model-risk management, while also recognizing possible trade-offs between model performance and explainability (Pérez-Cruz et al., 2025). Transparency does not require a bank to disclose source code; it requires the bank to communicate the principal factors underlying a decision in understandable terms.

METHODOLOGY

This conceptual study uses a qualitative approach based on library research and conceptual analysis. The design is appropriate because the study does not test statistical relationships; instead, it develops an integrated argument and governance framework for AI use in Islamic banking.

Sources

This study draws on four complementary bodies of source material. The first consists of peer-reviewed studies on AI, Islamic banking, Islamic finance, Maqashid al-Shariah, Shariah governance, explainable AI, and responsible AI, which provide the conceptual vocabulary used throughout the analysis. The second consists of regulations and guidance issued by the Indonesian Financial Services Authority, which anchor the discussion in the prevailing supervisory context for Indonesian banks. The third consists of standards and reports published by international and industry bodies, including the National Institute of Standards and Technology, the Financial Stability Board, the Bank for International Settlements, and the Islamic Financial Services Board, which supply globally recognized reference points for AI risk management and Shariah governance. The fourth consists of the broader literature on model risk, data governance, algorithmic bias, fairness, and human oversight, which informs the risk dimensions incorporated into the proposed framework. Together, these sources allow the study to connect technical AI-governance concepts with the normative concerns that are distinctive to Islamic banking

Analytical Procedure

The analysis proceeds through five interrelated steps. It begins with identification, in which the study maps AI use cases across the main Islamic banking business processes, from marketing and financing to collections, restructuring, recovery, fraud detection, and customer service. Each use case is then subjected to benefit-risk mapping, in which its operational benefits and its potential harms to banks and customers are assessed side by side, rather than in isolation. The resulting benefits and risks are subsequently linked, through Maqashid mapping, to the substantive values of justice, transparency, hifz al-mal, Shariah compliance, trust, and maslahah, so that technical outcomes are read against normative criteria rather than efficiency alone. This mapping provides the basis for framework development, in which the identified relationships are synthesized into the AI-Maqashid Framework presented in Section 5.2. Finally, through oversight design, the dimensions of that framework are translated into the concrete audit questions and stages that constitute the Shariah AI Audit presented in Section 5.3. Read together, these five steps move the analysis from descriptive mapping toward a governance instrument that can be applied in practice.

RESULTS

Mapping AI Use Cases

Before examining individual business processes in detail, it is useful to view AI adoption in Islamic banking as a whole, since the same underlying technology recurs across marketing, financing, monitoring, collections, restructuring, recovery, fraud control, compliance, customer service, and Shariah review, each with its own configuration of benefit and risk. Table 1 summarizes representative AI use cases across these main areas of Islamic bank operations, together with the potential benefit and the primary risk associated with each use case.

Table 1. AI use cases across Islamic banking processes, with associated benefits and risks.

Area	AI use case	Potential benefit	Primary risk
Marketing	Customer profiling	More relevant services	Privacy and manipulation
Financing	Risk scoring	Faster assessment	Bias and discrimination
Monitoring	Early-warning system	Earlier intervention	False positives
Collections	Customer segmentation	More appropriate treatment	Disproportionate treatment
Restructuring	Scenario analysis	More structured alternatives	Failure to consider contract context
Recovery	Case prioritization	Focus on priority cases	Over-automation
Fraud	Anomaly detection	Faster detection	Incorrect customer flagging
KYC/AML	Transaction monitoring	Stronger compliance	Poor data quality
Customer service	Chatbots and generative AI	Faster responses	Hallucination
Shariah review	Document screening	More efficient review	Misinterpretation of requirements

Nearly every AI benefit has a corresponding risk. The central question is therefore not merely whether AI can be used, but why it is used, who may be affected, and who remains accountable.

Financing Assessment

AI can analyze character, capacity, capital, collateral, economic conditions, payment history, cash flow, and transaction patterns, which can accelerate assessment and improve consistency. The concern is that models learn from historical records that may embody structural inequality. A model may reproduce an old pattern and make it appear objective because the output is numerical. Banks must therefore distinguish legitimate risk differentiation from unjustified discrimination.

Early-Warning Systems

AI can identify changes in transaction patterns, balances, payment delays, cash flow, and customer behavior. A system alert should not be treated as a conclusion; it is an indication that requires verification. An effective early-warning system should support earlier assistance rather than accelerate negative labelling.

Collections

AI can support treatment based on the customer's circumstances rather than days past due alone. A minor delay may warrant a reminder, temporary cash-flow stress may justify a persuasive approach, financial distress may require a restructuring assessment, and verified noncooperation may warrant escalation under established procedures. The principal value of AI is its potential to help distinguish inability to pay from unwillingness to pay. Nevertheless, classification should not become the sole basis for action, because illness, job loss, disasters, or business disruption may not be fully visible in the data.

Restructuring

AI can simulate term extensions, installment scenarios, repayment capacity, recovery prospects, and the risk of renewed deterioration. Restructuring decisions should not be delegated entirely to an AI system, since they affect the underlying contract, the parties' rights, internal policy, and regulatory requirements. Model outputs should therefore be treated as recommendations subject to business, risk, legal, compliance, and Shariah review.

Recovery

AI can support collateral analysis, recovery estimates, case prioritization, document summarization, and complexity assessment. Decisions involving litigation, collateral enforcement, or the disposal of customer rights must remain subject to human determination. Recovery efficiency must not displace proportionality and due process.

Fraud Detection and KYC/AML

AI is well suited to detecting unusual transactions and can support hifz al-mal by protecting bank and customer assets. Overly sensitive systems may generate excessive false positives and wrongly characterize legitimate customers as suspicious. Freezing, rejection, and escalation decisions therefore require review and correction mechanisms.

Generative AI in Customer Service

Generative AI can provide continuous customer support, but it can also produce convincing yet inaccurate responses. Risk controls should include an approved knowledge base, controlled responses, audit trails, escalation, and human handoff. AI may communicate approved Shariah information, but it should not issue independent religious rulings.

Comparative Literature Analysis

Table 2 presents a comparative analysis of recent studies linking AI with Islamic finance and Shariah governance, together with the remaining gap addressed by the present study.

Table 2. Comparative analysis of recent literature on artificial intelligence, Islamic finance, and Shariah governance.

Source	Focus	Contribution	Remaining gap
(Mohd Najib et al., 2025)	AI and Maqashid	Maps AI to the five Shariah objectives	Limited treatment of collections and recovery
(Ahmad & Zainan, 2025)	AI and Shariah governance	Connects governance, maqashid	AI, and No operational audit instrument
(Zulkepli et al., 2026)	AI as wasilah	Emphasizes transparency, justice, and welfare	Broad evaluative approach
(Bin-Armia & Kambakov, 2026)	Institutional design	Advocates life-cycle oversight	Limited focus on troubled financing
(Hamel, 2026)	AI integration framework	Connects efficiency, risk, and governance	No audit framework
(Azwar et al., 2026)	Bibliometric and regulatory analysis	Maps research and institutional risks	Not focused on individual customer decisions
(Islamic Financial Services Board, 2023)	AI risk management	Govern, Map, Measure, Manage	No Shariah dimension
(Financial Stability Board, 2024)	Financial stability	Identifies systemic vulnerabilities	No Maqashid analysis
(Otoritas Jasa Keuangan, 2025)	Banking governance	AI Responsible AI guidance	Not specific to Islamic banks

Studies published in 2025 and 2026 increasingly connect AI with Maqashid al-Shariah and Shariah governance. Accordingly, this paper does not claim novelty merely from combining the terms AI and Maqashid; its more specific contribution lies in integrating troubled-financing processes with a proposed Shariah AI Audit.

Research Gaps and Novelty

Read together, the studies summarized in Table 2 point to five gaps that the existing literature has yet to close. The first is a business-process gap: the literature rarely follows AI use across the full sequence from financing assessment to collections, restructuring, and recovery, treating these stages as

separate topics rather than as a connected process. The second is a governance-integration gap, in which AI governance emphasizes model risk, fairness, explainability, data governance, and accountability, while Shariah governance emphasizes contracts and Shariah principles, so that the two have rarely been operationalized in a unified oversight mechanism. The third is a customer-treatment gap: limited attention has been given to how AI affects the treatment received by customers in financial distress, even though this is precisely where algorithmic decisions carry the greatest consequence for individuals. The fourth is a decision-accountability gap, in which the boundary between AI recommendations and human responsibility for material decisions remains underdeveloped. The fifth is an auditability gap, since few studies treat AI systems as objects of Shariah audit covering data, models, decisions, and customer outcomes together.

It is against these five gaps that the novelty of the present study should be read. The study offers two specific contributions that respond directly to them. The AI-Maqashid Framework addresses the business-process and governance-integration gaps by connecting technology with financing, monitoring, collections, restructuring, and recovery within a single conceptual model. The Shariah AI Audit addresses the customer-treatment, decision-accountability, and auditability gaps by translating Maqashid principles into audit questions that can be applied throughout the AI life cycle. In this sense, the two contributions are not offered as free-standing additions to the literature but as a direct response to the specific gaps identified above.

Proposed Framework: AI-Maqashid and Shariah AI Audit Conceptual Propositions

The preceding sections point toward eight conceptual propositions. Rather than standing as isolated statements, the propositions form a cumulative pathway: two foundational propositions concerning data quality and risk identification support four propositions concerning trust and governance, which in turn are validated through a proposition on audit-based assurance, ultimately converging on a single proposition concerning *maslahah* as the intended outcome. Figure 1 presents this pathway diagrammatically

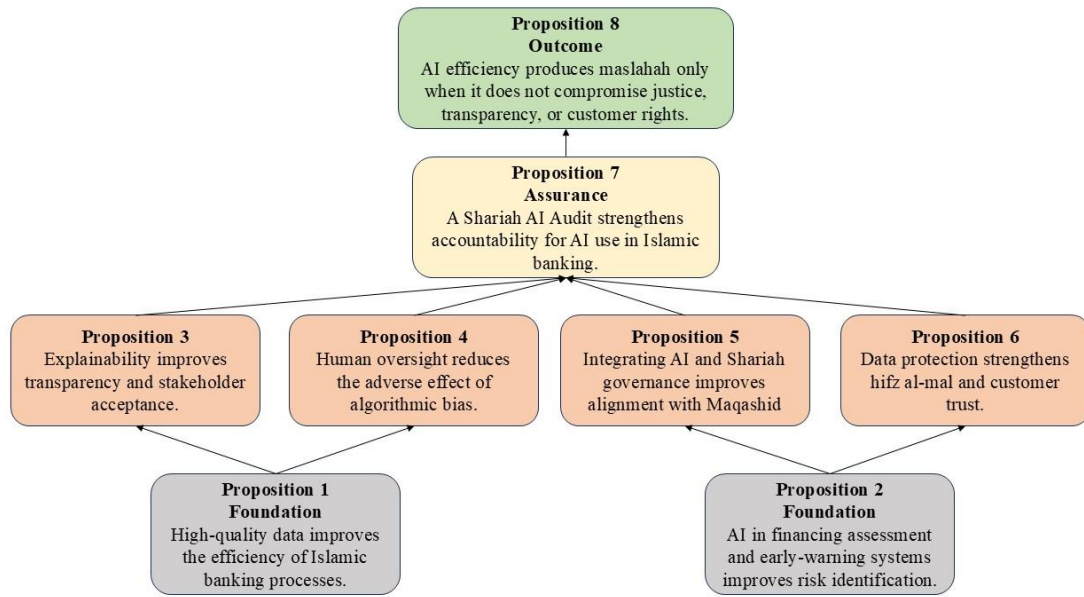


Figure 1. Conceptual propositions arranged as a tiered pathway from data and risk foundations, through trust, governance, and audit-based assurance, toward maslahah as the ultimate outcome.

Read as a whole, Propositions 1 and 2 establish that AI only creates value in Islamic banking when it is grounded in reliable data and used to sharpen the identification of financing risk. Propositions 3 through 6 then specify the conditions under which that value can be trusted, namely explainability, human oversight, the integration of AI and Shariah governance, and data protection. Proposition 7 introduces the Shariah AI Audit as the mechanism through which these conditions are verified in practice, and Proposition 8 states the normative test that the entire pathway must ultimately satisfy: efficiency counts as maslahah only when it leaves justice, transparency, and customer rights intact.

The AI-Maqashid Framework

1. Conceptual Model

Figure 2 presents the AI-Maqashid Framework as a nine-cell conceptual model, read from left to right and from the top row downward.

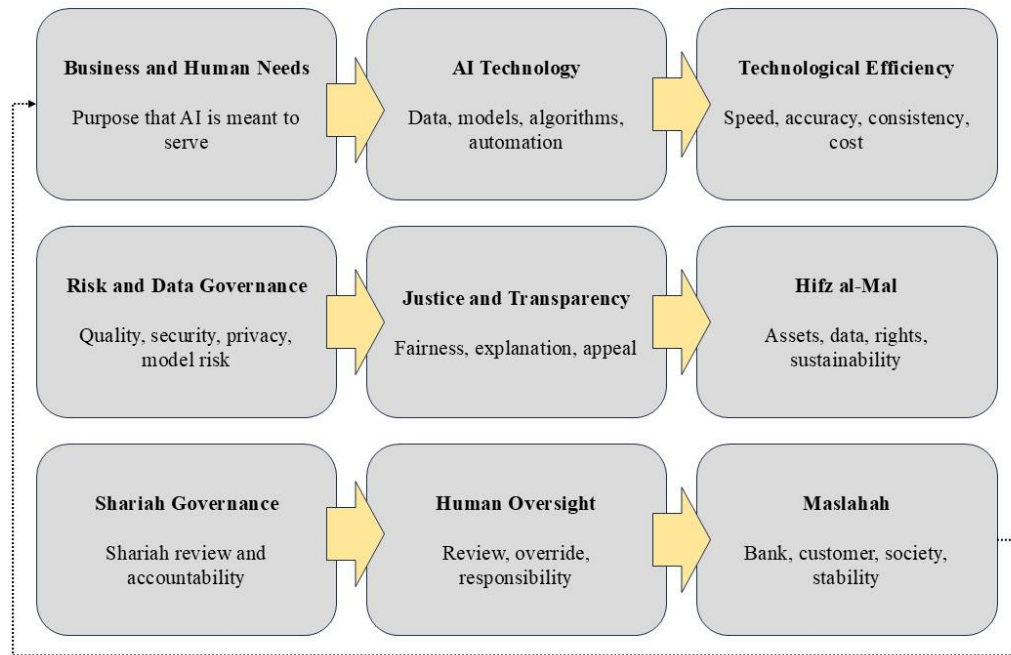


Figure 2. AI-Maqashid Framework. Continuous monitoring and audit apply throughout the system life cycle.

2. Framework Interpretation

Technology should begin with a genuine business and human need rather than a desire to deploy AI for its own sake. The resulting efficiency must pass through risk and data governance, after which outputs are tested for justice and transparency. Hifz al-mal protects assets, data, and economic rights. Shariah governance ensures that AI use remains consistent with Shariah principles, while human oversight ensures that an accountable person can review, correct, or override a recommendation. Maslahah is the ultimate outcome. It should not be presumed merely because a system is faster or less expensive.

Shariah AI Audit

1. Definition

A Shariah AI Audit is a structured examination of whether an AI system has been designed, deployed, and monitored in accordance with Shariah principles, justice, transparency, data protection, and public welfare. It does not replace information-technology audits, model validation, legal review, compliance review, or established Shariah audits; instead, it connects these functions around risks that are distinctive to AI.

2. Audit Dimensions

The Shariah AI Audit is organized around ten dimensions, each directed at a distinct source of risk identified earlier in the paper, from the legitimacy of the system's purpose to its ultimate effect on customer welfare. Table 3 sets out these dimensions together with the audit focus and the core question that each one is intended to answer.

Table 3. Dimensions of the proposed Shariah AI Audit.

Dimension	Audit focus	Core question
Purpose audit	Purpose of use	Does AI address a legitimate need?
Data audit	Data provenance and quality	Were the data obtained and used appropriately?
Bias audit	Fairness	Does the model disadvantage a group without relevant justification?
Explainability audit	Clarity	Can the basis of a decision be explained?
Privacy audit	Data protection	Are customer data protected?
Model audit	Accuracy and stability	Does the model remain reliable and monitored?
Shariah compliance audit	Shariah principles	Does the system affect contracts or parties' rights?
Human oversight audit	Responsibility	Are review and override mechanisms available?
Customer treatment audit	Customer impact	Is treatment proportionate?
Maslahah audit	Overall welfare	Do the benefits exceed the harms?

No single dimension is sufficient on its own: a system may pass a data audit while failing a bias audit, or satisfy a model audit while still producing disproportionate customer treatment. The ten dimensions are therefore intended to be applied together, so that a system is judged not only on technical performance but on whether its cumulative effect is consistent with justice, Shariah compliance, and public welfare.

3. Audit Stages

The Shariah AI Audit is not a one-time examination but a set of checkpoints distributed across the AI life cycle. Before deployment, the audit assesses the purpose, data, variables, model design, potential bias, and Shariah implications of the proposed system, so that fundamental concerns are addressed before resources are committed to development. During validation, attention shifts to performance, fairness, explainability, robustness, and the rate of false positives and false negatives, ensuring that the system behaves as intended under realistic conditions before it is placed in production. After deployment, the audit turns to model drift, customer complaints, staff overrides, data incidents, and changes in

customer treatment, since a system validated at launch can still degrade or produce unintended effects once it operates on live data. Whenever a material model change occurs, whether in the underlying data, the algorithm, the vendor, or the intended use, the audit is repeated to reassess whether the original approval remains valid. Finally, at retirement, the audit ensures that access is removed, audit evidence is preserved, data are protected, and any legacy decisions produced by the system are properly addressed. Taken together, these five stages ensure that oversight follows the system from initial design through to decommissioning, rather than being confined to a single point in time.

4. Accountability Structure

Because a Shariah AI Audit draws on expertise that no single function possesses on its own, it requires a clearly defined accountability structure that distributes responsibility across the bank. Table 4 sets out this structure, assigning each function, from the board and senior management down to the frontline user, a specific responsibility within the oversight of AI systems.

Table 4. Accountability structure for AI oversight in Islamic banking.

Function	Responsibility
Board and senior management	Set accountability and risk appetite
Business unit	Define the purpose and anticipated impact
Risk management	Assess model risk and operational risk
Data governance	Maintain data quality and appropriate use
Compliance and legal	Assess compliance and customer rights
IT and cybersecurity	Maintain security and system reliability
Shariah supervisory board	Assess Shariah alignment and implications
Internal audit	Provide independent assurance
Model validation	Conduct technical testing
Frontline user	Review outputs and exercise override authority

This distribution of responsibility is deliberately overlapping rather than sequential: risk management, data governance, compliance, IT, and the Shariah supervisory board each examine the system from a different vantage point, while internal audit and model validation provide independent assurance, and the frontline user retains the practical authority to review and override individual outputs. No single function is positioned to certify an AI system as Shariah-compliant on its own; accountability instead emerges from the combined judgment of these functions acting together.

DISCUSSION

Efficiency Is Not Automatically Maslahah

Business assessments often measure technological success through speed, accuracy, productivity, cost savings, and profitability. These metrics matter, but they are insufficient from an Islamic economics perspective. Mohd Najib et al. (2025) make a similar argument, cautioning that evaluating AI in Islamic finance solely by efficiency risks overlooking its implications for fairness, transparency, and Shariah compliance. A system may be efficient yet unjust. An AI collection model may increase the collection rate through aggressive treatment; numerically, the model may appear successful, but if it cannot distinguish customers who are unwilling to pay from those who are unable to pay, the outcome does not satisfy justice. This mirrors the concern raised by Zulkepli et al. (2026), who caution that AI initiatives pursued without regard for transparency and welfare fall short of their intended function as a *wasilah*.

The same issue applies to financing assessment. A model may reduce nonperforming financing by rejecting more high-risk applications; if it becomes excessively conservative and excludes otherwise viable applicants, that apparent success requires reconsideration. Such outcomes reflect the algorithmic bias and reduced financial inclusion that the Financial Stability Board identifies among the vulnerabilities associated with AI adoption in the financial sector (Financial Stability Board, 2025; Otoritas Jasa Keuangan, 2022, 2025).

Justice Does Not Mean Ignoring Risk

Justice does not require a bank to approve every application or offer relief to every customer. A bank has duties to protect funds, institutional soundness, and depositors' interests, consistent with the prudential emphasis of the Islamic Financial Services Board's guiding principles for effective Shariah supervision (Islamic Financial Services Board, 2025). The appropriate approach is therefore not to choose between efficiency and justice, but to pursue efficiency directed and constrained by justice. Differentiated treatment is justifiable when it uses relevant variables, relies on credible data, is proportionate to risk, can be explained and reviewed, provides correction mechanisms, and remains consistent with Shariah. These criteria closely parallel the characteristics of trustworthy AI identified by the NIST AI Risk Management Framework, namely validity, fairness, explainability, and accountability (Tabassi, 2023).

Responsible Efficiency

Responsible efficiency is efficiency that remains subject to justice, transparency, rights protection, and human accountability. Responsible efficiency does not reject automation; it rejects automation without accountability, a view consistent with Khoso (2024), who argue that integrating AI into Islamic banking requires embedding accountability mechanisms rather than treating automation as an end in itself.

Implementation Model

The AI-Maqashid Framework and the Shariah AI Audit can be operationalized through an eight-stage implementation model that carries a system from initial conception through to ongoing improvement. The process begins with identification, in which the bank defines the purpose, business process, users, data, model, and decisions that the system will influence, so that the scope of the initiative is clear before any technical work begins. The system is then classified by impact, distinguishing low risk applications used for administrative support, medium risk applications involving analysis that does not directly determine customer rights, and high risk applications involved in approval, rejection, fraud flags, restructuring, collections, or recovery, since the intensity of subsequent oversight should be proportionate to this classification. Once classified, the system undergoes assessment of its business, model, operational, cyber, privacy, fairness, legal, and Shariah risks, followed by validation, in which its accuracy, stability, robustness, explainability, fairness, and data quality are tested against predefined criteria. Only after validation does the system proceed to approval, in which relevant functions sign off according to the system's risk classification, and to deployment, in which controlled access, documentation, audit trails, human review, and override procedures are put in place. Deployment is not the end point: the bank continues to monitor performance, model drift, complaints, customer treatment, false positives, and human overrides, and uses this monitoring evidence to conduct the Shariah AI Audit and to improve the system on an ongoing basis. Read together, these eight stages ensure that governance is embedded throughout the system's life cycle rather than applied only at the point of initial approval, an approach that parallels the technology and banking life-cycle coverage set out in Indonesia's banking AI governance guidance Otoritas Jasa Keuangan (2023, 2025) and the Govern-Map-Measure-Manage structure of the NIST AI Risk Management Framework (Tabassi, 2023).

Practical Implications

The preceding analysis carries several practical implications for Islamic banks seeking to adopt AI responsibly. Governance of AI should not be assigned solely to the information-technology function, since the risks it raises are simultaneously operational, legal, and Shariah-related; the Shariah supervisory board should therefore participate during the design of high-impact AI systems rather than reviewing them only after deployment, in line with the shift toward life-cycle-based Shariah oversight advocated by Bin-Armia & Kambakov (2026) and the broader case for coordinated oversight across organizational functions made by Heru Muara Sidik (2026). Material decisions, such as financing approval, restructuring, or collateral enforcement, should not be fully automated, and banks should maintain an AI model inventory that records each system's purpose, owner, data sources, vendor, risk tier, and change history, so that oversight functions can identify what is in use and why. Customers, for their part, should receive a meaningful explanation for decisions that affect their economic rights, supported by appeal and correction mechanisms that allow errors to be identified and remedied, addressing the explainability trade-offs that

the Bank for International Settlements highlights in complex financial models (Pérez-Cruz et al., 2025). Where AI systems are procured from external vendors, that procurement does not transfer accountability away from the bank, which remains responsible for the outcomes the system produces, given the third-party dependencies and concentration risks that regulators have identified in financial-sector AI adoption (Crisanto, J. C. et al., 2024). Finally, the measures a bank uses to judge AI success should extend beyond efficiency to include fairness, financial inclusion, complaint rates, override rates, data incidents, and customer outcomes, so that technological performance is assessed alongside its consequences for the people it affects.

CONCLUSION AND RECOMMENDATIONS

AI has substantial potential to transform Islamic banking. It can improve efficiency, strengthen financing assessment, support early-warning systems, improve fraud detection and KYC/AML, enhance customer service, and assist in managing troubled financing. AI also creates risks. Algorithmic bias can cause unfair treatment; opaque models can reduce transparency; inappropriate data use can violate privacy; vendor dependence can weaken oversight; and excessive automation can displace necessary human judgment.

Technological efficiency does not automatically produce *maslahah*. Efficiency must be evaluated against justice, transparency, wealth protection, Shariah compliance, and human impact. The AI-Maqashid Framework treats technology as an instrument and connects efficiency with risk and data governance, justice, transparency, *hifz al-mal*, Shariah governance, human oversight, and *maslahah*. The Shariah AI Audit operationalizes the framework through examination of purpose, data, bias, explainability, privacy, model performance, Shariah compliance, human oversight, customer treatment, and welfare outcomes. AI does not bear *amanah*; human beings do. The future of Islamic economics therefore does not lie in choosing between technology and Shariah, but in connecting technological capability with justice, responsibility, and public welfare.

Limitations

This conceptual study does not empirically test the proposed framework. It does not use internal bank data or interviews with regulators, Shariah scholars, risk professionals, technology specialists, collection and recovery officers, or customers. The dimensions of the Shariah AI Audit have not yet been evaluated in a live audit. Their indicators and weights therefore require development through expert judgment and empirical validation.

FUTURE RESEARCH

Future research may develop an AI-Maqashid Compliance Index. Table 5 lists illustrative indicators for each dimension of the proposed index.

Table 5. Illustrative dimensions and indicators for a future AI-Maqashid Compliance Index.

Dimension	Illustrative indicator
Efficiency	Processing time, error rate, cost
Justice	Fairness gap, bias testing, adverse impact
Transparency	Explanation coverage, complaint resolution
Hifz al-mal	Fraud prevention, data protection
Shariah	Shariah review, noncompliance findings
Human oversight	Review rate, overrides, escalation
Maslahah	Inclusion, satisfaction, payment sustainability

The model could be examined through surveys, interviews, the Delphi method, the analytic network process, structural equation modeling, or Islamic bank case studies.

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