

REVOLUTIONISING THE SHARIAH SECRETARIAT FUNCTION THROUGH ARTIFICIAL INTELLIGENCE: PROSPECTS AND CHALLENGES FOR MALAYSIA'S ISLAMIC BANKING SECTOR

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Abstract

This paper examines the potential and challenges of integrating artificial intelligence (AI) as a transformative approach to revolutionising the Shariah Secretariat function in Malaysia's Islamic banking sector. The Shariah Secretariat, as outlined by Bank Negara Malaysia's Shariah Governance Policy Document, plays a vital role in facilitating and supporting the secretarial and administrative matters of the Shariah Committee. This study examines the potential of AI to significantly enhance the effectiveness of the Shariah Secretariat, particularly through process automation, document management, regulatory reporting, and decision-making processes. However, AI integration poses critical challenges regarding the clarity of accountability, liability, and ethical considerations due to the autonomous nature of AI-driven processes. The research underscores substantial gaps in Malaysia's existing legal and regulatory frameworks governing the application of AI in Islamic banking. To address these challenges, the study suggests specific legislative changes and recommends that Malaysia's National Guidelines on AI Governance and Ethics principles be made binding to ensure transparent, ethical, and accountable AI practices within Islamic banking. Drawing on international frameworks, including the European Union's AI Act and the OECD AI Principles, this paper recommends a holistic approach to regulatory refinement in Malaysia, aiming to sustain technological innovation while safeguarding Shariah compliance, ethical standards, and public trust.

Keywords: *artificial intelligence, shariah secretariat, islamic banking, shariah governance, liability, accountability*

I. INTRODUCTION

Rapid technological advancements in AI present unique opportunities and challenges for various industries, including Islamic banking. In Malaysia, the Islamic banking industry is governed by the Islamic Financial Services Act 2013 (IFSA) and the Shariah Governance Policy Document (SGPD). The SGPD outlines the roles and responsibilities of the Shariah Secretariat, which plays an integral role in supporting the operational and administrative

process for the Shariah Committee's function. These responsibilities include coordinating meetings, disseminating the Shariah Committee's decisions, and maintaining relevant documentation. The function of the Shariah Secretariat differs from that of the Shariah Committee. The Shariah Secretariat focuses on administrative and secretarial assistance rather than substantively participating in the Shariah decision-making process. Therefore, given the extensive documentation and coordination work involved, an AI-driven solution is a practical way to revolutionise this function and enhance accuracy and efficiency.

Previous studies recognise AI's transformative role in the financial sector, which can significantly enhance efficiency in banking. Aspiranti et al. highlight the application of AI-based research tools, such as Gephi and VOSviewer, for assessing regulatory and governance aspects in Islamic banking institutions (IBIs), specifically the implementation of AI for Shariah governance in Malaysia.¹ Moreover, AI tools such as machine learning and natural language processing can create Shariah-compliant financial instruments that promote financial inclusion. In terms of the role of the Shariah Secretariat, it is always associated with the Shariah Committee of IBI. It can act as a bridge between the Shariah Committee and various departments within a bank, facilitating clear communication and the implementation of Shariah requirements. For these reasons, both the Shariah Secretariat and the Shariah Committee should adopt AI implementation to fulfil their various functions. Mohd Haridan et al. examined the crucial role of the Shariah Committee in the innovation of digital banking products. This research demonstrates that the Shariah Committee may utilise AI-driven tools, such as robo-advisory systems and blockchain technology, to facilitate prompt and efficient Shariah decision-making.² Abdullah et al. investigated the perception of Shariah Committee members towards AI technologies. The study reveals that AI technologies are generally well-received by Shariah Committee members as a means to enhance the effectiveness of the *fiqh* ruling process. The input gathered from Shariah Committee members can contribute to the development of Shariah-compliant AI solutions. However, the study also raises several concerns about the need for human supervision over AI applications to strike a balance between traditional Islamic jurisprudence practice and technological innovation.³

¹ Tasya Aspiranti et al., "Bibliometric Review of Corporate Governance of Islamic Financial Institutions Through AI-Based Tools," *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.* 8, no. 4 (2023): 12. <https://doi.org/10.26668/businessreview/2023.v8i4.1710>.

² Nurfarahin Mohd Haridan et al., "Financial Innovation in Islamic Banks: Evidence on the Interaction Between Shariah Board and FinTech," *Journal of Islamic Accounting and Business Research* 14, no. 6 (2023): 911–930.

³ Othman Abdullah et al., "AI Applications for Fiqh Rulings in Islamic Banks—Shariah Committee Acceptance," *ISRA International Journal of Islamic Finance* 16, no. 1 (2024): 111–126.

Hemmet offers an analysis of the application of AI in banking while evaluating the broader implications of AI in light of Shariah requirements. The study highlights how AI can enhance regulatory compliance and expedite transactions in Islamic fintech, particularly in areas such as zakat beneficiary classification and digital zakat distribution. In addition, it also highlights the importance of AI in digitising Shariah literature and improving compliance. It also emphasises that human reasoning and the knowledge of Islamic jurists remain indispensable in the decision-making process, while acknowledging the limitations of AI.⁴ The foregoing studies collectively demonstrate that although AI could facilitate the Shariah Secretariat's functions, its successful integration in Islamic banking necessitates a thorough evaluation of ethical issues and the value of human expertise. The literatures indicate that AI can greatly assist IBIs by streamlining compliance processes, enhancing financial reporting, and fostering innovation. It also suggests that AI could support Shariah governance, particularly the Shariah Committee. Nonetheless, previous studies do not specifically address the integration of AI within the Shariah Secretariat function.

Despite the potential benefits of AI integration in Islamic banking, it presents specific concerns, such as job displacement, cybersecurity threats, and non-adherence to Shariah requirements. Moreover, the regulatory environment is complex, featuring diverse frameworks across regions, which require unified policies to tackle compliance and governance challenges.⁵ The incorporation of AI requires careful attention to ensure that ethical principles and a thorough understanding of Islamic jurisprudence are upheld. Minaryanti emphasises that the formulation of conceptual frameworks for Shariah governance will provide practical benefits for regulators, especially in maintaining adherence to Shariah within a technology-driven context.⁶ Although AI offers considerable advantages for operational and administrative assistance within the Shariah Secretariat, it is essential to address the related problems through collaboration and the development of improved regulatory frameworks.⁷

⁴ Abdullah Hemmet, "Harmonizing Artificial Intelligence with Islamic Values - A Thoughtful Analysis of Religious, Social, and Economic Impacts of Technological Advancements," *American Journal of Smart Technology and Solutions* 2, no. 2 (2023): 65–76.

⁵ Dhruv Seth et al., "Compliance and regulatory challenges in cloud computing: a sector-wise analysis," *International Journal of Global Innovations and Solutions (IJGIS)* (2024).

⁶ Annisa Adha Minaryanti and Muhammad Iman Sastra Mihajat, "A Systematic Literature Review on the Role of Sharia Governance in Improving Financial Performance in Sharia Banking," *Journal of Islamic Accounting and Business Research* 15, no. 4 (2024): 553–568.

⁷ Gökmen Kılıç and Yavuz Türkan, "The Emergence of Islamic Fintech and Its Applications," *International Journal of Islamic Economics and Finance Studies* 9, no. 2 (2023): 212–236.

This is because the legal and regulatory framework surrounding AI remains unclear. While IFSA and SGPD outline the primary functions of the Shariah Secretariat, they do not provide precise requirements regarding the implementation of AI-driven processes. The lack of defined regulatory requirements for AI in the Shariah Secretariat function may lead to significant issues, especially regarding accountability, liability, and governance. Legal and regulatory frameworks should explicitly specify the responsibility and liability arising from errors attributable to AI systems, identifying whether it lies with the bank, the Shariah Secretariat, the Shariah Committee, or the developers of the AI systems.⁸ This is because, since AI operates autonomously, determining accountability for incorrect or non-compliant decisions made by AI is difficult.⁹ Due to that, AI has sparked essential debates concerning accountability and liability as both are fundamental aspects aimed at ensuring that the responsible parties are identifiable and answerable for the consequences of AI-driven decisions. Therefore, there is a need for legal frameworks that explicitly define the responsibilities of developers, operators, and consumers of AI-driven tools to establish liability for AI systems. Leal and Macfarland argue that internal and external audits accessible to users should be utilised to support civil liability for AI applications.¹⁰

In addition, the emphasis on transparency and ethical supervision aligns with the goals of Shariah governance, but questions arise about the current framework's capacity to incorporate audit-based accountability mechanisms. In Islamic banking, AI-driven reports are subject to heightened scrutiny regarding accountability and liability. For instance, the Shariah Committee Report in IBI's annual financial report promotes transparency and compliance, emphasising stringent disclosure practices. Therefore, integrating AI into report generation necessitates adherence to strict regulatory requirements to maintain public trust. As the environment evolves, AI systems must strike a balance between mandatory disclosures and enhanced voluntary reporting to improve accountability. Continuous evaluation of AI's role in promoting Shariah compliance is crucial, especially with regulatory advancements

⁸ Rahim, R. A., and F. Amin. "Regulating AI in Financial Services: The Malaysian Perspective." *Journal of Financial Regulation and Compliance* 28, no. 3 (2020): 345-360.

⁹ Enrico Moch, "Liability Issues in the Context of Artificial Intelligence: Legal Challenges and Solutions for AI-Supported Decisions," *East African Journal of Law and Ethics* 7, no. 1 (2024): 214-234. <https://doi.org/10.37284/eajle.7.1.2518>.

¹⁰ Tatiana Dulima Zabala Leal and Carla Angélica Gómez Macfarland, "Civil Liability and Ethics in Artificial Intelligence: A Systematic Review of Ideas from the Period 2018-2023," *IUSTA* 60 (2023), 66-93

enhancing governance frameworks.¹¹ In light of the above, existing literature falls short in providing a thorough analysis of the liability and accountability of AI in the context of the Shariah Secretariat function. An AI-driven system may contradict Shariah requirements, raising concerns regarding its responsibility for such decisions. Furthermore, the implementation of AI in Shariah Secretariat functions necessitates a thorough analysis of its potential risks, biases, and inaccuracies arising from algorithmic decision-making processes.

These issues and challenges form the basis for this study, which explores the significance of AI in enhancing the Shariah Secretariat's function while addressing the problems of accountability, liability, governance, and regulatory implications. This study attempts to address knowledge gaps by evaluating the adequacy of IFSA and SGPD in governing AI-driven processes within the Shariah Secretariat function. The paper recommends legislative amendments to enhance BNM's regulatory oversight of AI-driven operational support. This study exclusively examines the operational and administrative support function of the Shariah Secretariat as outlined in SGPD. This study does not explore the functions of the Shariah Committee, Shariah audit, or Shariah review, as these roles are distinct from those of the Shariah Secretariat. The research identifies substantial benefits of AI integration, including significant enhancements in operational efficiency and regulatory compliance. Nevertheless, it underscores challenges in clarifying accountability, liability, and ethical considerations, including critical gaps in existing legal and regulatory frameworks. To address these gaps, the study proposes targeted legislative amendments that clearly define responsibilities and ethical guidelines for AI usage, thereby promoting increased accountability and transparency.

This study employs qualitative and doctrinal legal research methods to examine the application of AI in enhancing the Shariah Secretariat's functions within the Islamic banking industry in Malaysia. This methodology is suitable for analysing legislative documents, regulatory policies, and governance frameworks, allowing for a thorough examination of the issue. Data collection relies on both primary and secondary sources. Primary sources encompass legal statutes and regulatory policies such as IFSA and SGPD. Secondary sources include peer-reviewed academic journals, reports, and books. Specifically, this research refers to two key regulatory documents in Malaysia, namely IFSA and SGPD, issued by BNM. While IFSA is a binding statute passed by Parliament, the SGPD is a regulatory policy document issued by BNM under its authority granted by the Central Bank of Malaysia Act. Although not an "Act" in a

¹¹ Nur Laili Ab Ghani et al., "The Extent of Mandatory and Voluntary Shariah Compliance Disclosure: Evidence from Malaysian Islamic Financial Institutions," *Journal of Islamic Accounting and Business Research* 15, no. 3 (2023): 443-465

legislative sense, SGPD is legally enforceable on licensed Islamic financial institutions, and non-compliance may result in regulatory breach. The SGPD outlines governance expectations, including the role of the Shariah Secretariat. No specific jurisprudence court case was identified in this study. However, future research may explore court cases related to AI in other countries' jurisdictions, particularly involving Islamic banking matters.

Following this introduction, the study reviews the roles of the Shariah Secretariat in Islamic banking. It then explores how AI can enhance these roles, such as in document management, administrative tasks, communication, regulatory reporting, and zakat management. The paper further discusses the challenges of accountability, liability, and ethics associated with AI. Additionally, it identifies gaps in Malaysia's existing regulations and proposes improvements by referencing international standards. The study concludes by summarising its findings.

II. OVERVIEW OF THE SHARIAH SECRETARIAT FUNCTION

The Shariah Secretariat plays a critical role in supporting the Shariah Committee to ensure IBIs in Malaysia comply with Shariah requirements. Shariah Secretariat serves as the administrative and operational link between the Shariah Committee and various internal departments within the IBI.¹² It facilitates the management of key responsibilities, including coordinating Shariah Committee meetings, maintaining documentation, and ensuring the effective communication of the Shariah Committee's decisions. Additionally, the Shariah Secretariat serves as a repository for all Shariah-related documents, thereby enhancing the traceability and transparency of the Shariah compliance process. This section outlines the primary functions of the Shariah Secretariat as outlined in the SGPD.¹³

The SGPD formally establishes the responsibilities of the Shariah Secretariat.¹⁴ This policy document outlines the detailed requirements for the governance of Shariah-related functions at IBI.¹⁵ The Shariah Secretariat is distinct from the Shariah Committee, Shariah audit, Shariah review, and Shariah risk management functions, as its role is primarily focused on serving as a

¹² Aziz, Rosli Abdul et al., "Best Practices for Internal Shariah Governance Framework: Lessons from Malaysian Islamic Banks," *Asian Journal of Accounting and Governance* 12, no. 1 (2019): 1-14.

¹³ Item 14.1. Bank Negara Malaysia (BNM). Shariah Governance Policy Document. Kuala Lumpur, Malaysia: Bank Negara Malaysia, 2019.

¹⁴ Babak Naysary et al., "A Comprehensive Appraisal of Sharī'ah Governance Practices in Malaysian Islamic Banks," *ISRA International Journal of Islamic Finance* 12, no. 3 (2020): 381-400.

¹⁵ Imran Hussain Minhas, "Shariah Governance for Islamic Financial Institutions," in *Shariah Governance in Islamic Banking Institutions*, ed. Shafullah Jan and Muhammad Ismail (Routledge, 2023), 152-175.

crucial support to the Shariah Committee, facilitating its effective functioning. Officers undertaking responsibilities under the Shariah Secretariat must possess Shariah qualifications.¹⁶ According to SGPD, the Shariah Secretariat's primary role is to undertake administrative and secretarial functions to support the Shariah Committee. This includes coordinating Shariah Committee meetings in a manner that promotes the Shariah Committee's sound decision-making. The Shariah Secretariat must ensure that accurate minutes of Shariah Committee meetings are maintained to record the Shariah Committee's decisions, including key deliberations and Shariah justification provided by Shariah Committee members during meetings. Shariah Secretariat also coordinates the Shariah Committee's succession plan, including the appointment and reappointment of Shariah Committee members.¹⁷

Additionally, effective communication and information dissemination are essential for the successful implementation of Shariah governance. The Shariah Secretariat serves as a bridge between the Shariah Committee and other stakeholders within the bank, including the Board and management. It ensures that Shariah-related information and the Shariah Committee's decisions are disseminated accurately and effectively, facilitating informed decision-making at all levels of the bank. As the custodian of the Shariah Committee's decisions and the Shariah Committee meeting coordinator, accurate documentation and record-keeping are paramount. The Shariah Secretariat is responsible for maintaining detailed records and a comprehensive documentation trail of all the Shariah Committee's decisions and Shariah-related matters. These records not only serve as a crucial reference for a bank's operations but also ensure continuity and consistency in the Shariah Committee's decisions. Another key role of the Shariah Secretariat is to provide day-to-day Shariah advisory support to relevant parties in the bank. However, the scope of advice is restricted and subject to delegation mandated by the Shariah Committee. The areas of delegated responsibility must be reported to the Shariah Committee, and they shall be fully accountable for the decisions and implications that arise from those responsibilities.¹⁸ In certain IBIs, the Shariah Secretariat is also in charge of managing zakat matters in terms of calculation and distribution. Table 1 below summarises the key roles of the Shariah Secretariat function:

¹⁶ Malaysia, Bank Negara Malaysia (BNM). Shariah Governance Policy Document, 2019, item 14.2.

¹⁷ Malaysia, Bank Negara Malaysia (BNM). Shariah Governance Policy Document, 2019, items 12 and 14.

¹⁸ Malaysia, Bank Negara Malaysia (BNM). Shariah Governance Policy Document, 2019, item 10.9.

Table 1.
Key Roles of the Shariah Secretariat

Key Roles	Descriptions
Coordination	Coordinate the Shariah Committee meetings, promote sound decision-making
Documentation	Maintain accurate minutes of the Shariah Committee meetings and record the Shariah Committee's decisions
Succession Planning	Coordinate the Shariah Committee's succession plans, appointments and reappointments of Shariah Committee members
Communication	Ensure effective dissemination of Shariah-related information and Shariah Committee's decisions
Record-Keeping	Maintain detailed records and documentation trail of all Shariah Committee's decisions
Advisory Support	Provide day-to-day Shariah advisory support, subject to Shariah Committee delegation
Zakat Management	Managing zakat related matters such as calculation and distribution

Source: Author's own

III. INTEGRATING AI INTO SHARIAH SECRETARIAT FUNCTION

The integration of AI in the Shariah Secretariat function signifies a transformative change in the landscape of Islamic banking. In the context of Islamic banking product innovation, the initiative to reform is a result of creativity and the role of knowledge in driving innovative thinking. More precisely, the process of blending expertise and creativity will produce new concepts and approaches to explore novel innovative solutions in accordance with Shariah requirements.¹⁹ For that reason, as IBIs increasingly adopt digital solutions, the role of Shariah Secretariat also evolves to incorporate AI technologies that enhance compliance, efficiency, and transparency. This evolution necessitates a fundamental shift, aligning with current technological demands to ensure that financial practices comply with Shariah requirements. Based on the functions of the Shariah Secretariat, the next section of this paper will analyse key areas where AI can be integrated into the Shariah Secretariat's functions.

III.A. AI in Document Management and Retrieval

AI-driven systems, especially those that apply Natural Language Processing (NLP), can revolutionise the way Shariah Secretariats handle their core functions. For instance, AI-powered document management systems can efficiently classify, retrieve, and store documents, while NLP algorithms can review Shariah contracts using accurate Shariah-compliant language. As such,

¹⁹ Mohamad Syafiqe Abdul Rahim and Ahmad Hidayat Buang, "The Theory of Product Innovation and Its Application in Islamic Banking," *Journal of Islamic Finance* 10, no. 2 (2021): 112-123.

AI reduces the time and effort required for manual document management by automating the classification, indexing, and retrieval of a Shariah Committee's decisions, Shariah Committee meeting minutes, and matters related to the Shariah Committee's succession plan. This facilitates swift access to critical information, especially when the Shariah Committee needs to review precedents or cross-reference previous decisions with existing rulings. AI tools can also ensure accuracy in document interpretation, minimising human error in compliance-related and administrative tasks.²⁰

III.B. Process Automation for Administrative Efficiency

AI implementation can significantly enhance productivity within the Shariah Secretariat by automating routine tasks associated with meeting management, including scheduling, preparing meeting agendas, and taking minutes. Research indicates that organisations that successfully integrate AI tools experience improved operational efficiency and reduced administrative burdens, allowing employees to focus on other essential tasks.²¹ Robotic Process Automation (RPA), for example, can streamline repetitive administrative tasks, such as scheduling meetings, sending reminders, and tracking deadlines. These systems can integrate seamlessly with existing communication tools to ensure that all relevant parties are notified promptly, and meeting agendas and documents are disseminated effectively.²² By automating these operational aspects, the Shariah Secretariat can focus on more critical tasks, such as preparing minutes of the Shariah Committee meeting.

III.C. Supporting Decision-Making with AI

The role of the Shariah Secretariat does not mandate them to make any Shariah decision, as the responsibilities reside with the respective Shariah Committee of the bank. However, the role of the Shariah Secretariat is pivotal in supporting the Shariah Committee's decision-making process. This includes preparing relevant research and input to substantiate proposals or issues discussed at the management level, before presenting them to the Shariah Committee. Hence, the function of the Shariah Secretariat is closely associated with that of the Shariah Committee in terms of decision-making regarding Shariah-related issues. For instance, AI technologies, such as Robo-Advisors,

²⁰ Adel Sarea and Muhamad Muda Hanefah, "Shariah Governance in Islamic Finance: The Role of Artificial Intelligence in Enhancing Compliance," *Journal of Islamic Finance* 12, no. 3 (2021): 45-60.

²¹ Nurlia Nurlia et al., "AI Implementation Impact on Workforce Productivity: The Role of AI Training and Organizational Adaptation," *Escalate: Economics and Business Journal* 1, no. 1 (2023): 01-13.

²² Abdullah Rahman and Siti Noor Hafiza, "The Role of AI in Streamlining Islamic Financial Operations," *ISRA International Journal of Islamic Finance* 15, no. 2 (2023): 134-145.

have the potential to streamline Shariah compliance processes and enhance the efficiency of financial transactions.²³

Moreover, Explainable AI (XAI) tools can also support the Shariah Secretariat by providing transparent and interpretable analyses of complex compliance scenarios. XAI refers to techniques and tools that make the decision-making processes of AI models understandable, transparent, and interpretable to humans. These tools help identify risks, justify outcomes, improve trust and facilitate communication with stakeholders by breaking down complex algorithms into simpler insights, making them an essential support for decision-making in critical areas. Unlike traditional “black-box” AI systems, XAI offers insights into how decisions are made, enabling the Shariah Secretariat to understand and validate AI-generated recommendations before presenting them to the Shariah Committee. This ensures that all decisions align with Shariah requirements while maintaining accountability and transparency.²⁴ Moreover, the use of XAI ensures that AI-generated decisions are auditable and traceable.²⁵

III.D. Enhancing Communication and Coordination

AI-powered communication tools can enhance communication between the Shariah Secretariat, the Shariah Committee, the Board and other departments within the bank. For instance, chatbots or virtual assistants can handle routine inquiries about the Shariah Committee’s decision, freeing up the Shariah Secretariat’s resources for more critical tasks. Moreover, workflow management systems can track the progress of Shariah-related matters, ensuring the timely implementation of the Shariah Committee’s decisions.²⁶ With this integration, the Shariah Secretariat’s task will be significantly simplified, particularly in expediting the Shariah Committee’s determinations and matters related to Shariah, and disseminating them to all key stakeholders more efficiently and effectively. This typically involves the routine escalation of information, such as on a monthly basis.

²³ Nurfarahin Mohd Haridan et al., “Financial Innovation in Islamic Banks: Evidence on the Interaction Between Shariah Board and FinTech,” *Journal of Islamic Accounting and Business Research* 14, no. 6 (2023): 911–930.

²⁴ Ezieddin Elmahjub, “Explainable Artificial Intelligence in Islamic Ethical Decision-Making,” *Philosophy & Technology* 36 (2023): 73–89

²⁵ Hassan Yaacob and Abba Ya’u, “AI Liability in Islamic Financial Institutions: Addressing the Accountability Challenge,” *Journal of Islamic Finance* 45, no. 2 (2023): 147–165.

²⁶ Yaacob and Ya’u, “AI Liability,” 147–165.

III.E. Improving Escalation of Report

The Shariah Secretariat is responsible for preparing a draft of the Shariah compliance report for the Shariah Committee to be disclosed in the annual financial statement. To achieve this, it needs a well-structured and efficient process to form its opinion on the IBI's compliance with Shariah. The integration of AI technologies can significantly improve reporting quality, real-time monitoring, and risk management, which are vital for adhering to Shariah requirements and banking practices. AI can automate processes and advanced data analytics, thereby enhancing the quality of IBI's reporting.²⁷ Furthermore, it is crucial to have a robust governance framework to ensure the ethical application of AI technologies, which is essential for maintaining Shariah compliance while enhancing accountability in financial reporting.²⁸ This dual focus on governance and technology is vital for IBI to navigate the modern economic landscape while upholding its ethical principles.

III.F. Enhancing Zakat Monitoring and Reporting

AI can significantly contribute to the integration of AI in the Shariah Secretariat function, particularly in the management of zakat. Although Shariah Secretariat does not assume the role of an official zakat collector (*`amil*) in collecting and distributing zakat, it is responsible for managing the bank's zakat calculation and payments to the zakat authority. Furthermore, in the arrangement of where IBI is appointed as an agent by the Zakat Authority to distribute zakat to selected zakat beneficiaries (*asnaf*), the Shariah Secretariat is involved in managing the distribution of zakat to *asnaf*. AI can enhance the efficiency of zakat fund data distribution, thereby optimising zakat management.²⁹ The transparency and traceability offered by AI can significantly improve the governance of zakat, ensuring that funds are allocated in accordance with Shariah principles. This is because AI can minimise risks and fraud while ensuring compliance with Shariah principles.³⁰

²⁷ Hisham O. Mbaidin et al., "The Role of AI Integration and Governance Standards: Enhancing Financial Reporting Quality in Islamic banking," *Decision Science Letters* 13, no. 1 (2024): 83-98.

²⁸ Lawrence Damilare Oyeniyi et al., "The Influence of AI on Financial Reporting Quality: A Critical Review and Analysis," *World Journal of Advanced Research and Reviews* 22, no. 1 (2024): 679-694.

²⁹ Najihah Omar and Khairil Faizal Khairi, "Zakat and Blockchain: A Review," *International Journal of Islamic Economics and Finance Research* 4, no. 2 December (2021): 60-66.

³⁰ Mohammad Zen Nasrudin Fajri et al., "Mapping Islamic Fintech Research: A Bibliometric Analysis," in *Islamic Fintech (Present and Future)*, ed. Khoirul Umam, Atika Rukminastiti Masrifah, and Ahmad Suminto (Unida Guntor Press, 2022), 1-28.

IV. ISSUES AND CHALLENGES IN INTEGRATING AI-DRIVEN SHARIAH SECRETARIAT FUNCTION

Shariah Secretariat faces challenges due to rapid technological advancements and the growing complexity of financial products. While the regulation clearly defines Shariah Secretariat's fundamental roles, it does not address its responsibilities concerning AI-driven processes. The ever-increasing use of AI-driven decision support systems for document classification, process automation, and compliance monitoring necessitates that the Shariah Secretariat assume a more active role in AI oversight and accountability. This shift necessitates further clarification of the Shariah Secretariat's role within BNM's regulatory framework to ensure that it is adequately equipped to handle the complexities of AI-driven processes. This section elaborates on the key issues and challenges facing IBI in revolutionising the Shariah Secretariat function to meet the expectations of technological advancement in integrating AI into the daily work environment.

IV.A. Liability And Accountability of AI Within the Shariah Secretariat Function

As elaborated in the previous section, the integration of AI within the Shariah Secretariat function offers significant opportunities for efficiency and enhanced productivity. However, it also raises critical questions regarding liability and accountability in ensuring compliance with both Shariah requirements and operational integrity. One of the main challenges in implementing AI within Islamic banking is ensuring that the Shariah Secretariat is equipped to oversee AI applications effectively. Therefore, enhancing the independence and monitoring capabilities is essential to mitigate these risks.³¹

Accountability in the context of AI integration within Shariah Secretariat involves ensuring that all actions, decisions, and outcomes generated by AI systems can be traced back to responsible parties. While AI systems can automate and support many administrative tasks, they do not function autonomously in the complete absence of human oversight. The Shariah Secretariat maintains supervisory authority over AI tools. Human personnel are responsible for initiating AI processes, reviewing AI-generated outputs, and ensuring that any reports or insights derived are in line with Shariah requirements. In this context, AI plays a "decision-support" rather than "decision-making" role. This concept is vital in preserving the principles of amanah (trustworthiness) and mas'uliyah (responsibility) required in Shariah, where the accountability

³¹ Naji Mansour Nomran et al., "Shari'ah supervisory board characteristics effects on Islamic banks' performance: Evidence from Malaysia," *International Journal of Bank Marketing* 36, no. 2 (2018): 290-304.

ultimately remains with the human operator or institution, not the AI system. These two principles demand that those who deploy and operate AI systems uphold their responsibility and moral obligations. Accountability involves establishing a framework that allows for the auditing and assessment of all AI-driven processes and their outcomes for compliance purposes.

This is because the accountability for decisions made by AI systems remains a critical concern, as it raises questions about who is liable in the event of a failure to comply with regulations and Shariah requirements.³² Research indicates that stakeholders, including developers and financial institutions, may share responsibility for the consequences of AI decisions. This notion is echoed in the context of Islamic banking, where the Shariah Committee plays a crucial role in certifying compliance with Shariah, thus potentially bearing some responsibility for AI-related decisions that deviate from Shariah requirements.³³

IV.B. Shariah Compliance Considerations in AI Application

AI technologies can streamline Shariah compliance processes and enhance the efficiency of financial transactions. However, the deployment of such technologies must be accompanied by a thorough understanding of their implications on Shariah compliance. As IBI increasingly adopts AI technologies, it is imperative to establish a robust governance framework that ensures compliance with Shariah requirements while enhancing accountability in banking practices. The literature indicates that the successful integration of AI into governance frameworks is crucial for IBI to maintain Shariah compliance and improve financial reporting quality.³⁴ This necessity arises from the unique characteristics of Islamic banking, which necessitate adherence to specific Shariah requirements that govern financial transactions. Furthermore, the integration of AI must be approached with caution to avoid scenarios where automated decisions could lead to unjust outcomes, which can be contrary to the principles of Shariah.³⁵

The integration of AI technologies must align with the requirements of Shariah in Islamic banking, which prohibits practices involving *riba* (interest),

³² Mohd Haridan, "Financial innovation," 911-930

³³ M. Kabir Hassan et al., "The Effects of Shariah Board Composition on Islamic Equity Indices' Performance," *Business Ethics: A European Review* 27, no. 3 (2018): 248-259.; Hayathu Mohamed Ahamed Hilmy et al., "Legal Aspects of Shariah Governance Practices in Sri Lankan Islamic Financial Institutions: A Literature Review," *Journal of Enterprise and Development (JED)* 4, no. 1 (2022): 99-113.

³⁴ Oyeniyi et al., "The Influence of AI," 679-694.

³⁵ Nurfarahin Mohd Haridan et al., "What Do Shariah Boards Think About AI?" *Jurnal Bisnis Terapan* 7, no. 2 (2023): 115-127.

maysir (betting) and *gharar* (excessive uncertainty).³⁶ While AI can automate and reduce costs, it also necessitates a careful examination of its alignment with Shariah requirements.³⁷ For instance, the use of AI in financial transactions can enhance transparency and verifiability, thereby supporting Shariah compliance. Furthermore, the legal frameworks governing AI liability are still in the process of evolving. Current laws often fail to adequately address the nuances of AI decision-making, particularly in terms of Shariah compliance. There is an urgent need for legal systems to adapt to the unique challenges posed by AI, including establishing clear lines of accountability and responsibility among stakeholders.³⁸ This is particularly important in Islamic banking, where the principles of Shariah must be upheld without compromise, necessitating a careful balance between innovation and compliance.³⁹

IV.C. Aligning AI-driven Processes with Ethical Standards

Another significant challenge in regulating AI within the context of Shariah governance is the lack of specific regulations and frameworks that address AI technologies, ensuring they align with ethical standards and principles. This includes setting clear guidelines for the use of AI in decision-making processes, ensuring that AI systems are designed to adhere to ethical principles. This is because the ethical considerations on the application of AI in Islamic banking are significant. While AI can enhance decision-making and efficiency in Islamic banking, it also raises important ethical challenges, including ensuring Shariah compliance and managing cybersecurity risks.⁴⁰ AI systems can introduce biases and ethical dilemmas that conflict with Islamic values, such as fairness and justice. This is crucial, as the lack of ethical oversight from human wisdom can lead to practices that are not only non-compliant with Shariah but also detrimental to the trust and confidence of customers.⁴¹

The deployment of AI technologies must be guided by ethical frameworks that prioritise fairness, accountability, and transparency.⁴² This is particularly

³⁶ Catherine S. F. Ho and Nor Erna Nabila Mohd-Raff, "External and Internal Determinants of Performances of Shariah and Non-Shariah Compliant Firms," *International Journal of Islamic and Middle Eastern Finance and Management* 12, no. 2 (2019): 236-253.

³⁷ Nurfarahin Mohd Haridan et al., "Financial Innovation," 911-930; Hamadou et al., "Unleashing the Power," 131-144.

³⁸ Vahid Yazdanpanah et al., "Reasoning About responsibility in autonomous systems: challenges and opportunities," *AI & Society* 38, no. 4 (2023): 1453-1464.

³⁹ Hartinie Abd Aziz and Zuhairah Ariff Abd Ghadas, "Corporate Governance Framework for Shariah Compliant Corporation," In *International Joint Conference on Arts and Humanities 2021 (IJCAH 2021)*, pp. 528-532. Atlantis Press, 2021.

⁴⁰ Hamadou et al., "Unleashing the Power," 131-144.

⁴¹ Haridan et al., "Shariah Boards," 115-127.

⁴² Aisha Temitope Arigbabu et al., "Data Governance in AI-Enabled Healthcare Systems: A Case of the Project Nightingale," *Asian Journal of Research in Computer Science* 17, no. 5 (2024): 85-107.

important in the context of Shariah compliance, where decisions must be made in accordance with moral considerations. The development of ethical guidelines for AI in Islamic banking can help mitigate risks associated with algorithm bias and ensure that AI systems are designed to uphold Islamic values and principles.⁴³ AI technologies can assist in automating compliance checks, analysing vast amounts of data for Shariah compliance, and improving the overall Shariah governance of IBIs.⁴⁴ However, the deployment of AI must be accompanied by robust frameworks that prioritise ethical considerations. This includes addressing issues related to data privacy, algorithmic accountability, and the potential for AI to inadvertently perpetuate biases that conflict with moral principles.

IV.D. Gaps in Malaysia's Legal and Regulatory Frameworks in Governing AI

The legal and regulatory framework governing Shariah governance in Malaysia has evolved significantly since the introduction of the first law, namely the Islamic Banking Act 1983, which laid the groundwork for Islamic financial services. Subsequent amendments and new legislation, particularly the IFSA, have further strengthened this framework, ensuring compliance and sustainability within the industry. IFSA serves as the cornerstone legislation for regulating Islamic financial institutions in Malaysia. Section 28 of IFSA mandates that Islamic financial institutions ensure their operations, business, and activities comply with Shariah. The Act further emphasises the need to establish effective Shariah governance structures, including the appointment of qualified Shariah Committee members and the implementation of robust Shariah-compliant processes. Moreover, Section 29 of IFSA imposes an obligation on Islamic financial institutions to ensure that all personnel involved in Islamic financial services possess the necessary knowledge and expertise to ensure Shariah compliance. This underscores that human expertise and oversight remain central even as technology is employed.

When AI is utilised, the Shariah Secretariat must not only rely on technology but also verify that the underlying algorithms and datasets used in AI systems are accurate. This provision underscores the importance of human oversight in the implementation of AI-driven functions. Crucially, IFSA attaches severe penalties for non-compliance, as outlined in Section 28(5), where any individual

⁴³ Etinosa Igbinenikaro and Adefolake Olachi Adewusi, "Navigating the Legal Complexities of Artificial Intelligence in Global Trade Agreement," *International Journal of Applied Research in Social Sciences* 6, no. 4 (2024): 488-505.

⁴⁴ Mahfuzur Rahman et al., "Adoption of Artificial Intelligence in Banking Services: An Empirical Analysis," *International Journal of Emerging Markets* 18, no. 10 (2023): 4270-4300.

who fails to adhere to the standards set by the regulator may be charged with an offence. Upon conviction, they may face imprisonment for a maximum term of eight years or a fine of not more than twenty-five million ringgit or both. This stringent penalty reflects the legislature's intent to hold individuals and institutions accountable for lapses in Shariah compliance. However, it does not clearly classify a deterrent against unthinkingly relying on AI without proper oversight. In principle, if AI systems were to cause a breach of Shariah law, senior management and officers should also face these sanctions, since AI itself is not a legal person under Malaysian law. This will be elaborated in the following subsection of this paper.

Complementing IFSA, BNM's regulatory framework, namely SGPD, plays a crucial role in regulating the Shariah Committee's functions, promoting a Shariah compliance culture across Islamic banking, and upholding the Shariah governance framework.⁴⁵ It establishes a regulatory framework that aims to enhance the Shariah governance structure of IFIs by ensuring that all operations are conducted in accordance with the principles of Shariah. This document emphasises the importance of governance, accountability, and effective oversight by all key organs.⁴⁶ SGPD also requires IBI to implement appropriate Shariah compliance culture and Shariah control functions. Paragraph 16.2 of SGPD emphasises the need for oversight and management of Shariah non-compliance risk. However, it fails to address whether it also covers those who apply AI. This omission contradicts the principles of governance for AI tools, which aim to mitigate risks such as bias, data breaches, and errors in decision-making.

In practice, this means that if IBI deploys AI tools in the Shariah Secretariat function, it should also oversee and control the attendant risks, such as algorithmic bias, data breaches, or erroneous fatwa interpretations, to prevent Shariah non-compliance. In addition, SGPD also emphasises the "three lines of defence" (Shariah risk management, Shariah review, and Shariah audit), which should also cover AI systems. However, it does not expressly mention this in any provision of the SGPD. For instance, implementing periodic Shariah audits on AI-driven processes to ensure compliance with Shariah principles. With clearer regulatory expectations, it can provide clarity that AI cannot operate unchecked without human oversight. Moreover, the internal Shariah control functions must be maintained to monitor AI outputs.

The above analysis underscores the significance of a comprehensive legal and regulatory framework in enabling the effective operation of the AI-driven

⁴⁵ Mohammad Azam Hussain, "The Development of the Legal Framework Governing the Shariah Committee of the Islamic Banking and Takaful Institutions in Malaysia," *International Journal of Islamic Business* 1, no. 2 (2016): 68-89.

⁴⁶ Ab Ghani et al., "The Extent," 443-465.

Shariah Secretariat function. Malaysia's legal and regulatory framework must evolve to address the unique challenges posed by AI in Islamic banking, ensuring that innovation aligns with ethical standards and Shariah compliance while fostering a secure and inclusive financial environment.⁴⁷ Implementing AI in Islamic banking presents specific challenges that necessitate a robust governance framework to ensure adherence to Shariah requirements while navigating the complexities of technological advancements.

IV.E. Limitations of Current Legal Definitions and Accountability for AI Errors

As AI becomes increasingly integrated into administrative functions, the absence of a clear legal and regulatory framework in IFSA and SGPD leaves accountability and liability issues unresolved. Moreover, the regulatory landscape remains complex, with concerns regarding data privacy, cybersecurity, and Shariah compliance.⁴⁸ Although IFSA emphasises Shariah compliance and its consequences, it does not explicitly address the accountability and liability issues that arise from non-human involvement in the application of AI. Section 2 of IFSA only specifies the definition of "person" as "an individual, any corporation, statutory body, local authority, society, trade union, co-operative society, partnership and any other body, organisation, association or group of persons, whether corporate or unincorporate." It further defines "individual" as a natural person. AI-driven systems, operating based on algorithms and data, may lead to unintended outcomes, raising questions about responsibility for errors or non-compliance. While IFSA emphasises accountability through human oversight and expertise, it does not explicitly address errors resulting from AI-specific issues, such as algorithm bias or system malfunctions. Similarly, SGPD focuses on governance and risk management but lacks specific provisions for assigning accountability in the event of AI-related errors. It does not explicitly address these issues, highlighting a potential gap in the governance framework.⁴⁹

For that reason, unlike human-driven processes, AI-based processes pose complexity in attributing responsibility when errors occur. Without a precise and comprehensive legal and regulatory framework on accountability for AI-related errors, IBIs face heightened operational and legal risks, as mistakes could result in regulatory sanctions or reputational damage.⁵⁰ Hence, the absence of explicit AI-related provisions makes it difficult to determine whether liability

⁴⁷ Kılıç and Türkan, "The Emergence," 212-236.

⁴⁸ Hamadou et al., "Unleashing the Power," 131-144.

⁴⁹ Ab Ghani et al., "The Extent," 443-465.

⁵⁰ Yaacob, Hassan, and Abba Ya'u. "AI Liability in Islamic Financial Institutions: Addressing the Accountability Challenge." *Journal of Islamic Finance* 45, no. 2 (2023): 147-165.

should be attributed to the IBI, the Shariah Secretariat, or the developers of the AI system.⁵¹ To address these gaps, enhancements to the legal and regulatory framework are necessary. For example, regulators can introduce guidelines that clarify the division of responsibility among developers, operators, and Shariah governance personnel when AI systems are employed. This accountability must be shared among key stakeholders, including the Shariah Secretariat, Shariah Committee, Board, management, and AI developers.⁵²

The principle of “command responsibility” embedded in IFSA’s requirements for human oversight can be extended to AI governance. This will ensure that senior management and Shariah Committee remain ultimately accountable for the outcomes of AI-driven systems, even as these technologies evolve. Furthermore, there should be precise mechanisms for auditing AI algorithms and ensuring transparency in their decision-making processes to establish accountability. This is particularly important in cases where AI systems make autonomous decisions that could impact customers or stakeholders.⁵³ The legal and regulatory framework must therefore include provisions for auditing AI systems and ensuring that they operate within the bounds of Shariah compliance.⁵⁴ This includes establishing protocols for reviewing AI decision-making processes and emphasising the need for precise accountability mechanisms to ensure that all actions taken by AI systems can be traced back to human decision-makers.

IV.F. Non-bindingness of National Guidelines on AI Governance and Ethics (AIGE)

To refine the existing legal and regulatory framework in addressing issues arising from AI adaptation, regulators in Malaysia should adopt the National Guidelines on AI Governance and Ethics (AIGE), introduced by the Ministry of Science, Technology, and Innovation (MoSTI) in September 2024. It aims to establish a framework for the development and deployment of AI-driven processes across various sectors, including finance. The AIGE outlines the following seven fundamental AI principles for the practice of responsible AI:⁵⁵

⁵¹ Mohammad Belayet Hossain et al., “From Legality to Responsibility: Charting the Course for AI Regulation in Malaysia,” *IJUM Law Journal* 32, no. 1 (2024): 397–429.

⁵² Hossain et al., “From Legality to Responsibility,” 397–429.

⁵³ Ab Ghani et al., “The Extent,” 443–465.; Nur Afiqah Amin et al., “Shariah disclosure practices in Malaysian Islamic banks using the Shariah disclosure index,” *International Journal of Islamic Economics and Finance (IJIEF)* 4, no. SI (2021): 63–86.

⁵⁴ Rosnia Masruki et al., “Shariah Governance Practices of Malaysian Islamic Banks in the Light of Shariah Compliance,” *Asian Journal of Accounting & Governance* 13 (2020).

⁵⁵ “Insight into Malaysia’s Newly Launched AI Governance & Ethics Guidelines,” *Chambers and Partners*, December 2024. <https://chambers.com/articles/insight-into-malaysia-s-newly-launched-ai-governance-ethics-guidelines>

Table 2.
AIGE Principles

Principles	Descriptions
Fairness	AI systems should be designed to avoid bias or discrimination against the target users.
Reliability, Safety and Control	AI systems should operate reliably and consistently under both normal and unexpected conditions to ensure proper access, control, and protection in critical situations.
Privacy and Security	AI systems should be safe, secure, and perform as intended, resisting compromise by unauthorised parties.
Inclusiveness	AI must be inclusive for all stakeholders to prevent unequal access that could exacerbate social divides.
Transparency	AI algorithms should be transparent to enable stakeholders to understand both the technical processes of an AI system and related human decisions and evaluate risks and address any issues that may arise.
Accountability	Developers, owners, and operators of AI should be accountable for ensuring the system's performance and compliance with AI Acts, governance, and ethical principles.
The Pursuit of Human Benefit and Happiness	AI systems should respect human-centred values, enhance quality of life, and promote happiness, while allowing human intervention so as to preserve autonomy.

Source: Author's Own

However, the non-binding nature of the AIGE limits its regulatory impact, as it operates as a set of best-practice recommendations rather than enforceable legal obligations.⁵⁶ It is argued that transforming AIGE into a legally binding framework would ensure consistent adherence to AI accountability principles across IBIs.⁵⁷ From an Islamic banking perspective, it is noteworthy that BNM and relevant authorities have yet to release a Shariah-specific governance document for AI. One potential approach is for BNM to incorporate AIGE into existing policy documents, such as an updated SGPD or a supplementary guideline, thereby explicitly mandating IBI to adhere to principles similar to those in AIGE when deploying AI in Shariah functions, such as the Shariah In the meantime, it is advisable that IBI, with significant AI initiatives, particularly those that have implemented substantial AI initiatives, take responsibility for self-regulation in accordance with AIGE guidelines. These IBIs should develop internal policies that ensure any AI application used in Shariah governance undergoes rigorous validation, documentation, and oversight, in accordance with national guidelines. By doing so, they not only prepare for potential future regulations but also mitigate current risks.

⁵⁶ Ministry of Science, Technology, and Innovation (MoSTI). “National Guidelines on AI Governance & Ethics.” September 2024. <https://jpkn.sabah.gov.my/wp-content/uploads/2024/10/THE-NATIONAL-GUIDELINES-ON-AI-GOVERNANCE-ETHICS.pdf>

⁵⁷ “Insight into Malaysia’s Newly Launched AI Governance & Ethics Guidelines.”

IV.G. Embracing New Workplace Culture and Skill Set for AI Integration

While AI offers numerous advantages, the successful adoption of AI tools depends on IBI's ability to foster a culture of psychological safety. This environment encourages employees to engage with new technologies without fear of negative repercussions, thereby enhancing their acceptance and effective use of AI-based meeting tools.⁵⁸ In the context of the role of company secretary, which can also be applied in the Shariah Secretariat function, the profile of the executive secretary, who is often responsible for coordinating meetings and managing information flow, is evolving in response to technological advancements. These professionals must adapt to the integration of AI tools that facilitate better communication and collaboration among team members.⁵⁹

Moreover, the ethical implications of AI integration in meeting handling cannot be overlooked. Concerns regarding data privacy, algorithmic bias, and the potential for diminished employee autonomy must be addressed to ensure that AI tools are implemented responsibly and ethically. Organisations should establish clear policies that govern the use of AI in meeting contexts, fostering transparency and trust among employees.⁶⁰ By doing so, they can mitigate potential negative impacts on employee morale and organisational commitment, which are essential for maintaining a productive work environment.⁶¹

The implementation of AI in meeting management not only streamlines processes but also necessitates a re-evaluation of the skills and competencies required. Furthermore, since IFSA already suggests that IBI must ensure personnel possess sufficient knowledge and expertise in Shariah, this should also encompass knowledge about AI systems. As AI tools become more prevalent, relevant staff must develop a deeper understanding of digital technologies and data management to effectively leverage these tools.⁶² This shift highlights the importance of ongoing professional development and training programs that equip employees with the necessary skills to thrive in an AI-driven workplace.

Moreover, the relevant staff should undergo training in AI ethics and oversight. BNM should encourage certification programs or workshops

⁵⁸ Peter W. Cardon et al., "Recorded Business Meetings and AI Algorithmic Tools: Negotiating Privacy Concerns, Psychological Safety, and Control," *International Journal of Business Communication* 60, no. 4 (2023): 1095-1122.

⁵⁹ Rosa Beatriz Ordonez Gutierrez, and Luisa Micaela Zambrano Moreira. "The Profile of Executive Secretaries and Their Relationship with Labor Demands: Autonomous Decentralized Government of the Canton of Portoviejo." *International Journal of Social Sciences and Humanities* 2, no. 1 (2018): 75-83.

⁶⁰ Peter W. Cardon et al., "Acceptance of AI-Based Meeting Tools: Psychological Safety as a Foundation for Smart Collaboration." *Soc.ArXiv* (November 2023). doi:10.31235/osf.io/sgxyp.

⁶¹ Cardon et al., "Acceptance of AI-Based Meeting Tools."

⁶² Max Bauroth et al., "tachAId—An Interactive Tool Supporting the Design of Human-Centered AI Solutions," *Frontiers in Artificial Intelligence* 7 (2024): 1354114.

on AI for Shariah compliance professionals, ensuring they are equipped to question and understand AI outputs. A knowledgeable human team is the best defence against AI-related risks. Furthermore, training on AI adaptation is of utmost importance; as employees become more familiar with AI systems, their productivity and job satisfaction can increase, leading to a smoother transition and reduced resistance to change.⁶³

V. INTERNATIONAL AI FRAMEWORK: LESSONS FOR MALAYSIA

As Malaysia refines its approach to AI, it can draw valuable lessons from international frameworks that address AI governance. Two particularly relevant frameworks are the European Union's (EU) Artificial Intelligence Act (AI Act) and the Organisation for Economic Co-operation and Development (OECD) AI Principles. These frameworks offer insights into how accountability, transparency, and ethical oversight of AI can be enforced in practice, and they highlight standards that Malaysia might emulate to ensure global alignment and best practices. Malaysia may consider emulating the approach taken by the European Union (EU) under its Artificial Intelligence Act (AI Act). The AI Act establishes clear rules for transparency, human oversight, and accountability in AI. It mandates that high-risk AI systems, including those used in financial services, must be auditable with accountability explicitly assigned to stakeholders involved in the development and use of AI.⁶⁴ Key points of the EU's AI Act are as follows:

1. Establishes comprehensive rules for AI transparency, ensuring users clearly understand how AI systems make decisions.
2. Enforces human oversight, especially for high-risk AI systems, preventing complete reliance on automated decisions.
3. Mandates accountability, explicitly identifying stakeholders responsible for developing, deploying, and managing AI systems.
4. Requires auditability of high-risk AI systems, ensuring independent reviews to verify compliance with regulations and standards.
5. Specifically addresses high-risk sectors, such as financial services, healthcare, and public safety, ensuring rigorous governance.⁶⁵

Malaysia's reliance on general laws and voluntary guidelines under AIGE is seen as insufficient compared to the EU's comprehensive regulatory approach.

⁶³ Nurlia et al., "AI implementation," 01-13.

⁶⁴ "Artificial Intelligence Act: A European Approach to AI Governance." *European Parliament Report*, 2024

⁶⁵ European Commission. "Proposal for a Regulation laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)." EUR-Lex, April 21, 2021. <https://eur-lex.europa.eu/legal-content/EN/TEXT/?uri=CELEX%3A52021PC0206>.

For Malaysia, adopting this approach, tailored to the local context, could substantially enhance the governance of AI within the Shariah Secretariat function. For example, BNM could require that any AI tool used in compliance or decision-making be subject to human-in-charge oversight, mandatory documentation, and certification that it meets specific ethical criteria, similar to the EU's conformity assessments. The AI Act essentially operationalises many of the principles found in Malaysia's AIGE (fairness, transparency, accountability) by making them legal requirements. This kind of enforceable framework may eventually be necessary to ensure AI does not outpace the ability of Malaysia's Islamic banking regulatory regime to control it.

Another important reference point is the OECD Principles on AI, adopted by 42 countries (including OECD members and others) in May 2019 and subsequently endorsed by the G20. These principles outline five key values as follows:

1. Advocate ethical development and use of AI, emphasising respect for human rights and democratic values.
2. Promote transparency and explainability by advocating that AI systems clearly communicate their capabilities and limitations.
3. Encourage accountability by placing the responsibility for AI's outcomes on human stakeholders, rather than the AI systems themselves.
4. Stress fairness, ensuring AI development and use do not result in discrimination or unjust bias.
5. Recommend international cooperation, facilitating global alignment through shared standards and collaboration.⁶⁶

For Malaysia's Shariah Secretariat, which functions in Islamic banking, the relevant principles emphasise fairness, transparency, and accountability. Fairness aligns with Islamic prohibitions on injustice (*zulm*), transparency aligns with the need for clear AI-driven Shariah-related matters, and accountability underscores the responsibility of IBI to oversee AI tools. Adopting these OECD principles would promote stronger AI governance practices such as impact assessments, human oversight of decisions, and transparency with stakeholders and regulators. Given their international acceptance, aligning Malaysian regulations with OECD standards could enhance interoperability and trust in cross-border Islamic finance operations. While these OECD Principles remain voluntary compared to binding frameworks like the EU AI Act, both emphasise critical governance dimensions (transparency, accountability, human oversight) that Malaysian regulators could adopt to

⁶⁶ Organisation for Economic Co-operation and Development (OECD), *Recommendation of the Council on Artificial Intelligence* (Paris: OECD Publishing, 2019), <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>.

strengthen Shariah governance related to AI integration. Adopting those international best practices could provide Malaysia with a robust framework for governing the AI-driven Shariah Secretariat function. This will establish clear rules on the use of explainable and transparent AI models in the Islamic banking industry, such as in the AI-driven Shariah Secretariat function.⁶⁷

The references to the EU AI Act and OECD Principles are intended to derive relevant regulatory lessons, particularly in terms of accountability, transparency, and risk mitigation. The EU AI Act is based on secular human rights principles, yet many of its core values, such as fairness (*'adl*), transparency, and human oversight, align with concepts found in Islamic governance. These shared values indicate that despite differing regulatory foundations, there are similarities in moral objectives. Therefore, selected values of the EU AI Act could serve as a reference for enhancing AI governance within the context of Islamic banking, ensuring they are adjusted to comply with Shariah principles. Future research may investigate a harmonised framework that incorporates Islamic ethical values to adapt global AI governance models.

VI. CONCLUDING REMARKS

The Shariah Secretariat, a crucial support function within IBIs, ensures compliance with the expectations as espoused under IFSA and SGPD. Its responsibilities include coordinating Shariah Committee meetings, maintaining documentation, and facilitating communication. Integrating AI into the Shariah Secretariat function can modernise document management, automate administrative tasks, and support decision-making processes. The Shariah Secretariat, responsible for supporting the Shariah Committee in IBIs, can apply AI technologies to enhance efficiency and transparency. In addition, AI-powered collaboration tools can streamline communication and workflow management, while AI integration in zakat management can optimise fund distribution and improve governance. Malaysia's legal and regulatory framework, anchored by IFSA and SGPD, provides a robust foundation for governing the Shariah Secretariat function. These frameworks emphasise the importance of Shariah compliance, human oversight, and risk management. However, there are significant gaps that need to be addressed. The evolving nature of AI technologies necessitates continuous refinement of legal and regulatory frameworks to ensure they remain relevant and effective in addressing the challenges posed by AI-driven Shariah Secretariat functions.

⁶⁷ "Insight into Malaysia's Newly Launched AI Governance & Ethics Guidelines." *Chambers and Partners*, December 2024. <https://chambers.com/articles/insight-into-malaysia-s-newly-launched-ai-governance-ethics-guidelines>

This includes enhancing accountability mechanisms, clarifying liability issues, and integrating ethical considerations into the governance of AI applications.

In addition, Malaysia should make its National Guidelines on AI Governance and Ethics principles binding to ensure transparent, ethical, and accountable AI practices in Islamic banking. This would also necessitate a comprehensive regulatory transformation, drawing inspiration from international frameworks like the European Union's AI Act and the OECD AI Principles. As the Islamic banking industry continues to innovate, it is imperative that these frameworks evolve to safeguard the principles of Shariah while embracing the potential benefits of AI. Furthermore, the alignment of AI tools for the Shariah Secretariat function demands continued dialogue among stakeholders, including the Shariah Committee and regulatory bodies, to ensure comprehensive and effective integration.

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