



OPPORTUNITIES AND CHALLENGES OF AI INTEGRATION IN ISLAMIC EDUCATION MANAGEMENT TOWARDS OBE CURRICULUM

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Abstract:

Artificial intelligence (AI) is rapidly reshaping higher education, and Islamic Education Management (MPI) programs are no exception. At the same time, the global move towards Outcome-Based Education (OBE) demands a more measurable, student-centered approach to learning. However, little attention has been paid to how these two forces—AI and OBE—can work together within the unique context of Islamic higher education. This study seeks to fill that gap by exploring the opportunities and challenges of integrating AI into MPI programs transitioning towards OBE-based curricula. Using a library-based research method, this study draws on academic journals, conference proceedings, and policy documents published between 2020 and 2026. The findings suggest that AI holds considerable promise: it can personalize learning pathways, automate routine administrative tasks, support data-driven assessment of student outcomes, and strengthen institutional quality assurance for global recognition. However, these benefits are accompanied by real challenges, including inadequate digital infrastructure, limited AI competence among educators, concerns over data privacy and algorithmic bias, and a deeper tension between AI-driven efficiency and the spiritual, humanistic values at the heart of Islamic education. Beyond identifying these opportunities and challenges, this study offers practical guidance for MPI leaders, policymakers, and curriculum designers. It proposes a phased integration model with three key pillars: building human capacity, developing ethical AI frameworks aligned with Islamic values, and fostering institutional collaboration. Ultimately, this study argues that the path to global recognition for MPI programs lies not in rushing technological adoption but in pursuing a strategic, gradual, and value-centered transformation that preserves the essence of Islamic education while embracing the benefits of digital innovation.

Keywords: *Artificial Intelligence, Outcome-Based Education, Islamic Education Management, Digital Transformation, Curriculum Design.*

INTRODUCTION

The landscape of higher education is undergoing a profound transformation, driven by two powerful forces: the rapid advancement of artificial intelligence (AI) and the global shift towards Outcome-Based Education (OBE). AI has emerged as a transformative force in education, reshaping pedagogical practices, administrative processes, and strategic decision-making across the educational spectrum (Holmes, Bialik, & Fadel, 2019). At the same time, OBE represents a fundamental reorientation of curriculum design, instruction, and

assessment towards demonstrable student achievement and competency mastery (Harden, 2002). These two forces are increasingly intersecting, presenting both unprecedented opportunities and significant challenges for higher education institutions worldwide.

In Islamic higher education, this convergence is particularly significant. Islamic Education Management (MPI) programs prepare graduates for leadership roles in Islamic educational institutions, and they must navigate the dual demands of global academic standards and the preservation of Islamic values, ethics, and educational traditions (Abdullah, 2017). Implementing OBE-based curricula in Islamic higher education requires a delicate balance between meeting international accreditation standards and preserving the spiritual, moral, and humanistic dimensions that distinguish Islamic education from purely secular models (Abdullah, 2017). The integration of AI into this framework adds another layer of complexity, requiring careful consideration of how technological efficiency can be harmonized with Islamic educational principles.

The challenges facing Islamic educational institutions in adopting AI-driven models are well-documented. Research involving 1,120 teachers across *madrasahs*, *pesantrens*, and Islamic private schools reveals moderate teacher readiness for AI adoption, with ICT literacy emerging as the strongest predictor of readiness (Pahrudin, Irwandani, Aridan, & Barata, 2025). Studies also highlight infrastructure deficits, professional development gaps, and policy misalignment as primary obstacles (Ansori, Damyati, Amara, & Dhestyani, 2025). Furthermore, concerns over the authenticity of knowledge transmission and the continuity of scholarly transmission (*sanad*) in Islamic scholarship raise important ethical questions about AI integration (Mukhsin, Mutaqin, Saway, Kiki, & Hamid, 2026).

The tension between AI-driven efficiency and the spiritual, humanistic values at the core of Islamic education poses a significant challenge. Islamic education has traditionally focused on oral transmission, memorisation, and close teacher-student relationships through *madrasah* systems and knowledge circles (*halaqah*) (Abdullah, 2017). The integration of AI risks weakening these cherished aspects of Islamic pedagogy, including personal mentorship and spiritual growth through teacher-student bonds. Educators have raised concerns that over-reliance on AI could undermine the affective and spiritual elements of the teacher-student relationship, potentially eroding the concept of *ta'dib* (moral discipline) that develops through human mentorship (Mastiyar, Mulyapradana, Prayetno, & Hasim, 2026).

Conversely, AI presents remarkable opportunities for Islamic education. It can assist in developing personalised learning pathways for each student, making education more attuned to individual needs (Holmes, Bialik, & Fadel, 2019). It can manage routine administrative tasks, freeing time for teachers and administrators to engage more meaningfully with students. It can also monitor student progress in real time and supply data that helps educators identify what is effective and what requires improvement. For MPI programmes seeking to adopt OBE, these tools could be transformational, allowing more accurate assessment of student outcomes and more efficient institutional management (Illiyyin, Na'imah, Nasim, Nihayatuzzain, & Listrina, 2025).

The adoption of Big Data and AI in Islamic educational institutions has been demonstrated to enhance management decision-making efficiency, allowing for quicker, more precise decisions in resource allocation and educational programme planning (Elihami, Masuwd, Sheerly, Ismail, Sitonda, & Sudirman, 2024). AI-supported financial analysis enhances transparency and supports long-term financial planning, thereby strengthening institutional

financial stability. Furthermore, AI enables institutions to develop more personalised learning approaches, with student data offering clear guidance for designing curricula tailored to individual needs. This method not only boosts the student learning experience but also improves overall academic outcomes (Wardani, Arsanti, Setiana, Azizah, & Wahyuningrum, 2025).

Literature Review

Previous studies have explored various aspects of AI and OBE in Islamic education from different perspectives. Research on OBE implementation in Indonesian Islamic postgraduate programmes has shown notable achievements, including high employment rates for graduates and curricula aligning with national standards (Illiyyin, Na'imah, Nasim, Nihayatuzzain, & Listrina, 2025). However, challenges remain, such as infrastructure limitations, varying levels of digital competence among faculty members, and resistance to change (Mohone, Budiono, & Pateda, 2024). Additionally, studies have looked into developing OBE-based teaching materials for Islamic teacher education, highlighting the need for a curriculum that equips graduates for 21st-century challenges while upholding Islamic values (Mohone, Budiono, & Pateda, 2024).

Research on AI in Islamic education has examined opportunities for pedagogical innovation while stressing the importance of ethical frameworks aligned with Islamic values (Yaqin, 2025). Studies on students' perceptions of AI in Islamic studies show that although most students actively use AI tools, they emphasise the need for ethical guidelines and the integration of Islamic moral values in its usage (Mukhsin, Mutaqin, Saway, Kiki, & Hamid, 2026). Likewise, research into digital transformation in Islamic educational institutions underscores the significance of leadership in balancing innovation with faith-based principles (Wardani, Arsanti, Setiana, Azizah, & Wahyuningrum, 2025). These studies collectively indicate that while AI presents considerable opportunities for Islamic education, its adoption must be guided by careful ethical considerations.

The relationship between AI and OBE in Islamic education has received limited attention in existing literature. While some studies have explored data-driven approaches in Islamic quality management and educational technology (Elihami, Masuwd, Sheerly, Ismail, Sitonda, & Sudirman, 2024), and others have examined AI-based curriculum reconstruction for Islamic religious education (Mukhsin, Mutaqin, Saway, Kiki, & Hamid, 2026), few have specifically addressed how AI can support the transition to OBE in Islamic Education Management programmes. Research on AI-based communication strategies for language education in Islamic universities has demonstrated AI's potential to enhance learning outcomes while preserving Islamic values (Wardani, Arsanti, Setiana, Azizah, & Wahyuningrum, 2025), suggesting that similar approaches could be applied to MPI programmes.

Research on teacher readiness for AI adoption in Islamic educational settings shows moderate levels of preparedness, with ICT literacy being the most significant predictor of successful implementation (Pahrudin, Irwandani, Aridan, & Barata, 2025). This highlights the need for professional development and capacity building as essential steps for AI integration. Furthermore, using fishbone diagram analysis, studies have identified several factors influencing AI integration in Islamic higher education, including infrastructure, human resources, curriculum design, and institutional culture (Ansori, Damyati, Amara, & Dhestyani, 2025). These insights offer a valuable framework for understanding the systemic challenges faced by Islamic educational institutions.

However, a significant gap exists in the literature: little attention has been

paid to how AI and OBE can work together within the specific context of Islamic higher education. Most studies have examined either AI in education broadly, OBE implementation, or Islamic education independently. Few have brought all these elements together to explore the integration of AI into OBE-based MPI programmes. This study aims to address that gap by offering a comprehensive analysis of the opportunities and challenges of this integration, providing practical guidance for programme leaders, policymakers, and curriculum designers navigating this complex area.

Aims of the Article

This study aims to address the gap by exploring the opportunities and challenges of integrating AI into Islamic Education Management programmes transitioning towards OBE-based curricula. Three main objectives guide the research: firstly, to identify the opportunities that AI integration offers for OBE-based MPI programmes; secondly, to analyse the challenges and tensions arising from this integration; and thirdly, to provide practical guidance for MPI leaders, policymakers, and curriculum designers navigating this complex landscape. By achieving these objectives, the study strives to contribute to both the theoretical understanding and practical application of AI in Islamic higher education.

Problem Solving and Research Objectives

The primary issue this study tackles is the lack of a thorough understanding of how AI can be strategically incorporated into MPI programmes to support their transition towards OBE while safeguarding Islamic values and educational traditions. This is not about rushing to implement every new technology but about developing a careful, gradual, and value-driven approach that employs AI as a tool to assist human effort in education. The study contends that integrating AI into OBE-based MPI programmes can be realised through a strategic, incremental, and value-centred transformation that maintains the core of Islamic education while embracing the advantages of digital innovation.

The path to global recognition for MPI programs does not lie in abandoning Islamic values but in finding innovative ways to incorporate digital progress while maintaining those values at the core of their work. Therefore, this study aims to establish a framework for this integration by analysing current research on AI and OBE in Islamic higher education, identifying both opportunities and challenges through an extensive literature review, proposing a phased integration model based on Islamic principles, and providing practical recommendations for programme leaders, policymakers, and curriculum designers. Through this approach, the study intends to assist MPI programmes in their pursuit of improved quality, international recognition, and meaningful educational change.

RESEARCH METHODS

This section presents the methodological framework employed in this study, covering the research approach, scope and focus, operational definitions, place and time of research, data sources and tools, data collection techniques, and data analysis procedures.

Research Approach

This study employs a qualitative research approach centred on library research as its main method. Library research is a type of qualitative study that typically involves examining library materials rather than gathering data directly from the field. This approach suits the study's goal of understanding and

interpreting the opportunities and challenges of AI integration in Islamic Education Management through analysing existing literature, without the need for direct field data collection. Data and information are gathered from various library resources, including books, academic journals, conference proceedings, and policy documents.

Scope and Focus of Research

This research explores the integration of Artificial Intelligence (AI) into Islamic Education Management (MPI) programmes that are transitioning to Outcome-Based Education (OBE) curricula. It specifically reviews the period from 2020 to 2026, capturing recent developments and current debates regarding AI implementation in higher education. The focus is confined to Indonesian Islamic higher education institutions, particularly those within the UIN (State Islamic University) system, while also considering international perspectives to provide a wider contextual understanding. The research scope is defined based on publication date range, source type, and relevance to the research questions.

Operational Definitions

The key concepts in this study are operationally defined as follows:

1. Artificial Intelligence (AI) refers to computer-based systems and algorithms designed to perform tasks that typically require human intelligence, including adaptive learning systems, automated administrative tools, and data analytics platforms applied in educational settings.
2. Outcome-Based Education (OBE) is an educational approach that focuses on measurable student learning outcomes, emphasizing what students can do upon completing their studies rather than what is taught in the classroom.
3. Islamic Education Management (MPI) refers to academic programs in Indonesian Islamic higher education institutions that prepare graduates for leadership and management roles in Islamic educational institutions.
4. Digital Transformation encompasses the process of integrating digital technologies, including AI, into educational institutions to improve operational efficiency, enhance learning experiences, and strengthen institutional quality.

Place and Time of Research

This library-based research does not have a specific physical location, as data collection involves accessing library collections and academic databases available at UIN Mahmud Yunus Batusangkar, as well as other accessible digital library resources. The research period spans publications from 2020 to 2026, ensuring that the analysis reflects current developments and recent thinking on AI integration and OBE implementation in Islamic higher education.

Data Sources and Tools

The main data sources for this research include academic journals, conference proceedings, books, and policy documents related to AI, OBE, and Islamic education management. These sources are accessed through various library collections and academic databases, such as institutional repositories, the Garuda portal, and other scholarly platforms like Google Scholar, Scopus, and ERIC. Library databases offer a wide range of electronic information, including

peer-reviewed journals, books, and conference papers. Bibliographic management software is used to organise references and support the citation process. Additionally, the study considers relevant government and institutional policies concerning higher education transformation and AI implementation.

Data Collection Techniques

Data collection in this study is carried out through a systematic literature search and document analysis. The method involves identifying relevant sources using predetermined keywords, including "Artificial Intelligence," "Outcome-Based Education," "Islamic Education Management," "Digital Transformation," and "Curriculum Design." The search takes place across academic databases and library catalogues to find peer-reviewed journal articles, books, and policy documents. The materials gathered are then selected based on their relevance to the research focus and their credibility. Source evaluation considers four criteria: authority (author credentials and institutional affiliation), currency (publication date), purpose (intended audience and research objectives), and supporting evidence. Primary sources include peer-reviewed journal articles and official policy documents, while secondary sources encompass book chapters and review articles that offer context and synthesis.

Data Analysis Techniques

The data analysis in this study employs a qualitative descriptive approach, focusing on identifying themes, patterns, and relationships across the collected literature. The analysis process involves several stages: data identification, where relevant sources are selected based on the research focus; data organization, where materials are categorized according to their relevance to research objectives; data interpretation, where the content of selected sources is analyzed to identify key themes; and conclusion drawing and verification, where findings are synthesized to answer the research questions. Thematic analysis is used to identify patterns related to the opportunities for AI integration, the challenges MPI programs face, and strategies for successful implementation. This analytical approach enables the researcher to view the topic through the perspectives presented in the literature and to identify gaps and insights that inform practical recommendations for MPI leaders and policymakers.

RESULTS AND DISCUSSION

This section presents the study's findings and discusses them in relation to the research objectives and the relevant literature. The results and discussion are organized around four main themes: opportunities for AI integration in OBE-based MPI programs; challenges to be addressed; the deeper tension between technological efficiency and Islamic values; and a proposed strategic framework for moving forward.

Opportunities for AI Integration in OBE-Based MPI Programs

The findings show that AI offers significant opportunities to improve various aspects of Islamic Education Management programs as they shift to OBE-based curricula. The most promising opportunity may be in personalising learning pathways. Research consistently demonstrates that AI-based systems can provide adaptive learning experiences tailored to individual student needs, with studies indicating potential increases in learning outcomes of up to 25% (Holmes et al., 2019). In the context of MPI programmes, AI can analyse student data to identify specific learning needs, recommend suitable materials, and adjust the instructional pace accordingly. This personalisation ability directly supports

one of OBE's core principles: that education should be designed to help all students achieve intended outcomes regardless of their starting points (Biggs & Tang, 2011). Recent research in Islamic higher education confirms that both students and lecturers recognise AI's potential to enhance learning engagement and personalisation (Mukhsin et al., 2026). AI can assist in accommodating diverse student potentials through big data analysis, creating personalised learning paths that effectively promote individual talents. From the perspective of Islamic education management, AI-based personalisation functions as a tool to realise the Islamic concept of *li-kulli maqaam maqaal*—placing things in their proper context within the educational process (Yaqin, 2025).

Beyond personalization, AI offers substantial benefits in administrative efficiency. Research indicates that AI can reduce administrative burdens in Islamic educational institutions by up to 40%, allowing teachers and staff to focus more on meaningful educational activities rather than routine paperwork (Elihami et al., 2024). AI can automate attendance tracking, scheduling, reporting, and student services through chatbots and predictive analytics, creating more efficient administrative systems. In MPI programs, which often operate with limited administrative resources, this efficiency gain is particularly valuable as it frees up human capacity for the mentoring and spiritual guidance that remain central to Islamic education. AI-supported financial analysis creates greater transparency and facilitates long-term planning, thereby improving institutional financial stability and sustainability (Elihami et al., 2024).

Another important opportunity is to improve data-driven assessment and quality assurance, which are vital for OBE implementation. OBE's focus on measurable learning outcomes requires advanced tracking and documentation systems, and AI can assist by enabling automatic assessment with real-time feedback, analysing student performance data to find areas needing improvement, and offering predictive analytics to identify students at risk of not achieving learning outcomes. Studies show that AI enhances evaluation accuracy by up to 50% (Elihami et al., 2024). This capability supports ongoing quality improvement processes essential for OBE, such as internal audits and tracer studies. Research on OBE implementation in Indonesian Islamic postgraduate programs has demonstrated notable successes, including graduate employment rates of up to 95% (Efriyanti et al., 2023). AI can further strengthen these results by providing the data infrastructure necessary to monitor and improve student achievement systematically.

Finally, AI integration provides strategic benefits for MPI programs aiming for international recognition and accreditation. AI supports the digitization of Islamic curricula, helping to align educational content with student needs and modern developments while respecting Islamic principles (Husein et al., 2022). Digital transformation through AI allows Islamic educational institutions to become more efficient, adaptable, and competitive on a global scale (Surachman & Kusmawati, 2025). Research from Indonesia, Malaysia, and Saudi Arabia shows that incorporating Islamic managerial values such as *amanah* (trust), *'actl* (justice), and *itqan* (excellence) into digital governance frameworks enhances transparency, accountability, and institutional resilience (Abdullah, 2017; Abdullah, 2020). This positions MPI programs to meet international accreditation standards while maintaining their unique Islamic identity.

Challenges in AI Integration

Despite these significant opportunities, this study highlights several major challenges that must be tackled for successful AI integration in OBE-based MPI

programs. Limitations in digital infrastructure remain a key obstacle, especially in regions outside major urban centers. Research involving 1,120 teachers across madrasahs, *pesantrens*, and Islamic private schools shows that infrastructure deficits are a major barrier to AI adoption (Pahrudin et al., 2025). Even as student access to digital tools improves, the gap between digital readiness and ethical institutionalization persists, as infrastructure and human resource skills often lag behind students' adaptability (Mukhsin et al., 2026). Many Islamic educational institutions lack reliable internet connectivity, sufficient hardware, and specialized software necessary for AI implementation, creating notable disparities between urban and rural institutions.

Limited AI competence among educators presents another significant challenge. Studies show moderate teacher readiness for AI adoption, with ICT literacy emerging as the strongest predictor of preparedness (Pahrudin et al., 2025). Many educators are not yet confident in using these technologies, highlighting the need for targeted digital training programs. Research on students' perceptions of AI in Islamic studies indicates that, while most students actively use AI tools, they emphasize the importance of ethical guidelines and integrating Islamic moral values into their use (Mukhsin et al., 2026). This points to a generational gap where students may be more prepared for AI adoption than their educators, creating additional challenges for program leaders who must bridge this divide while also developing faculty capacity.

Ethical concerns surrounding AI use in education are well-documented in the literature. Risks such as algorithmic bias, violation of student privacy, technological dependency, and the erosion of educators' professional autonomy are frequently highlighted (Holmes et al., 2019; Yaqin, 2025). Concerns over data privacy and the risk of over-reliance on technology pose significant challenges that must be addressed within an Islamic ethical framework. As one study emphasizes, AI-automated decisions must still uphold the principles of justice, fairness, and respect for students' dignity (Abdullah, 2020). Without proper safeguards, AI systems risk perpetuating existing biases, infringing on student privacy, and undermining educators' professional judgment.

Another unique challenge for Islamic higher education is integrating spiritual values with measurable competencies expected in OBE curricula. Research on OBE implementation in Islamic postgraduate programs reveals difficulties in translating spiritual and moral development into measurable learning outcomes (Efriyanti et al., 2023). This challenge is compounded by concerns that AI may be limited in addressing the affective and spiritual dimensions central to Islamic education, where character formation and spiritual development through teacher-student relationships are considered essential (Yaqin, 2025). The measurable, quantifiable nature of AI-driven assessment may not capture the holistic development that Islamic education seeks to cultivate.

Tension Between Technological Efficiency and Islamic Values

Beyond these practical challenges, this study highlights a deeper tension between AI-driven efficiency and the spiritual, humanistic values at the core of Islamic education. Historically, Islamic education has focused on oral transmission, memorization, and close teacher-student relationships through traditional madrasah systems and knowledge circles known as *halaqah* (Abdullah, 2017). These pedagogical approaches emphasize human connection, personal mentorship, and the transmission of moral values through lived example. The introduction of AI risks undermining these valued aspects of Islamic pedagogy. Research indicates that excessive reliance on AI could weaken the affective and spiritual dimensions of the teacher-student relationship,

potentially eroding the concept of *ta'dib*—moral discipline fostered through human mentorship (Yaqin, 2025; Mukhsin et al., 2026).

Concerns have also been raised about the shifting of scholarly authority and the possible reduction of spiritual aspects and moral character development when technology is overemphasized (Abdullah, 2020). In traditional Islamic education, knowledge transfer is closely connected to the chain of scholarly transmission known as the *sanad*, which guarantees authenticity and maintains the integrity of religious knowledge. AI-mediated learning risks breaking this chain, potentially weakening the authenticity and authority of Islamic knowledge transfer. The risk of a mismatch between technological aims and the vision of Islamic education is substantial if AI is implemented without adherence to Islamic values (Surachman & Kusmawati, 2025).

As one study aptly notes, the use of AI should be guided wisely to align with Sharia principles and the goals of Islamic education (Mukhsin et al., 2026). The integration of AI into Islamic education supervision must remain grounded in ethical principles and Islamic values to create a system that is not only technologically efficient but also spiritually and morally meaningful (Yaqin, 2025). This requires a fundamental rethinking of how technology is deployed in Islamic educational settings, ensuring that efficiency gains do not come at the expense of the human and spiritual dimensions that characterize Islamic education.

A Proposed Strategic Framework: The Phased Integration Model

Based on the findings, this study proposes a phased integration model for AI adoption in OBE-based MPI programs. The model comprises three main pillars: building human capacity, developing ethical AI frameworks aligned with Islamic values, and promoting institutional collaboration.

The first pillar highlights that the success of AI integration fundamentally relies on human resource preparedness. Literature suggests conducting thorough digital literacy assessments for faculty and staff, establishing technology-driven continuous professional development programs that cover both technical skills and pedagogical integration, forming peer learning communities to exchange best practices and lessons learned, and beginning with basic applications before moving on to more advanced AI tools (Pahrudin et al., 2025; Muzakir & Susanto, 2023). This step-by-step method helps educators to gradually build confidence and competence, thereby reducing the anxiety often linked to technological change.

The second pillar emphasizes developing ethical AI frameworks rooted in Islamic values. This involves creating AI policies guided by *maqasid al-shariah*—the higher objectives of Islamic law—and Islamic ethical principles (Abdullah, 2020). Key considerations include addressing data privacy issues with clear, transparent guidelines; ensuring openness in AI decision-making processes; maintaining human oversight of AI systems to prevent over-reliance and protect professional judgment; and positioning technology as a tool to bolster, not replace, the educator's role (Yaqin, 2025). Research indicates that integrating Islamic managerial ethics such as *amanah* (trustworthiness), *adl* (justice), *shura* (consultation), and *itqan* (excellence) into digital management systems is vital for achieving moral coherence and long-term sustainability (Abdullah, 2017; Elihami et al., 2024).

The third pillar highlights the significance of institutional collaboration for successful AI integration. Recommendations include partnering with technology providers and AI specialists to access specialized knowledge and resources, learning from best practices in other Islamic educational institutions to avoid

unnecessary duplication, engaging multiple stakeholders, such as madrasah administrators and local governments, in planning and implementation, and participating in networks and professional communities focused on AI in Islamic education (Surachman & Kusmawati, 2025; Muzakir & Susanto, 2023). Such collaboration can help address common challenges, share resources, and strengthen collective capacity for effective AI integration.

Discussion

The findings of this study align with and extend previous research on AI and OBE in Islamic education. The opportunities identified—personalized learning, administrative efficiency, data-driven assessment, and enhanced competitiveness—are consistent with UNESCO's emphasis on AI as a catalyst for educational efficiency and improvement (Holmes et al., 2019). The challenges identified—infrastructure limitations, limited educator competence, ethical concerns, and value tensions—echo findings from studies on AI in Islamic education more broadly (Pahrudin et al., 2025; Mukhsin et al., 2026). The gap between digital readiness and ethical institutionalization noted by researchers is particularly significant for MPI programs transitioning to OBE, as they must balance technological demands with the preservation of Islamic values and traditions.

This study contributes to the literature by focusing on how opportunities and challenges intersect specifically within MPI programs implementing OBE curricula. Previous research has explored AI in education broadly, OBE implementation in Islamic higher education, and the ethical considerations of AI in religious contexts separately. This study combines these strands to deliver a comprehensive analysis of the unique landscape MPI programs must navigate. The proposed phased integration model provides practical guidance for programmer leaders, moving beyond merely identifying challenges to offering specific recommendations for action.

Notably, this study confirms that the technical benefits of AI do not automatically guarantee desired outcomes without supporting policies and human capacity (Pahrudin et al., 2025). The success of AI implementation relies heavily on clear regulations, human resource readiness, supporting infrastructure, and an ethical framework rooted in Islamic values (Yaqin, 2025; Surachman & Kusmawati, 2025). The study also supports the view that technology should be seen as a means to enhance the quality of learning and character development, rather than as a replacement for educators' roles in guiding students' moral and spiritual growth (Mukhsin et al., 2026). This aligns with the concept of "*digital tarbiyah*," in which AI fosters both cognitive and moral development when applied thoughtfully and in accordance with Islamic principles (Yaqin, 2025).

The findings of this study have significant implications for MPI program leaders, policymakers, and curriculum designers. For program leaders, the findings highlight the importance of building human capacity before investing heavily in AI tools, ensuring that educators are equipped with the necessary skills and confidence to use AI effectively. For policymakers, the findings underscore the need for clear ethical guidelines and infrastructure investment, particularly in under-resourced regions. For curriculum designers, the findings emphasize the importance of designing AI-supported learning experiences that preserve the spiritual and humanistic dimensions of Islamic education while meeting OBE's measurable outcomes.

Future research should include empirical investigations of AI implementation in MPI programs, including case studies of institutions that have successfully navigated this integration. Additionally, research on the development and evaluation of ethical AI frameworks grounded in Islamic values would contribute

significantly to this emerging field. Longitudinal studies tracking the impact of AI integration on student outcomes, educator satisfaction, and institutional performance would also provide valuable insights for evidence-based decision-making.

CONCLUSION

This study set out to explore the opportunities and challenges of integrating Artificial Intelligence into Islamic Education Management (MPI) programs transitioning to Outcome-Based Education (OBE) curricula. Through a comprehensive review of academic literature, policy documents, and institutional reports published between 2020 and 2026, the research has identified both the transformative potential and the significant obstacles facing Islamic higher education institutions in this digital transformation journey.

The findings show that AI has significant potential for MPI programs. It can customize learning pathways to suit individual student needs, automate routine administrative tasks to enable educators to focus on more meaningful engagement, support data-driven assessment of student outcomes aligned with OBE principles, and reinforce institutional quality assurance systems to boost global recognition and accreditation. These opportunities closely match the requirements of OBE, which stresses measurable student achievement and competency-based learning outcomes.

Nonetheless, the study also uncovers significant obstacles that need to be addressed. Many Islamic educational institutions still lack sufficient digital infrastructure to facilitate AI integration. Educators often have limited competence and preparedness to work with AI technologies, and ICT literacy is a crucial factor in successful adoption. Concerns over data privacy, algorithmic bias, and the ethical consequences of AI-driven decision-making raise important questions about how these systems can be implemented responsibly. Most importantly, there is a deeper tension between AI-driven efficiency and the spiritual, humanistic values at the core of Islamic education—values such as close teacher-student relationships, moral discipline (*ta'dib*), and the transfer of knowledge through personal mentorship.

The study's main argument is that achieving global recognition for MPI programs does not rely on hastening technological adoption. Instead, it depends on pursuing a strategic, gradual, and value-driven transformation that maintains the core of Islamic education while welcoming the advantages of digital innovation. Incorporating AI into OBE-based MPI programs should be guided by Islamic ethical principles, ensuring that technology supports human and spiritual development rather than detracting from it.

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