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The Transformation of Islamic Education Governance Human-Centered Artificial Intelligence: Siyāsah Shar'iyyah and Smart Governance Perspectives

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ABSTRACT

As *artificial intelligence* (*AI*) becomes increasingly integrated into Islamic educational institutions, it is changing the decision-making patterns of education administrators, while efficiency-driven algorithmic systems must still be reconciled with humanitarian principles and spiritual values. In response to this issue, this study aims to design a model for the transformation of Islamic educational governance that not only focuses on technocratic progress but also remains grounded in religious principles and humanism. This study employs a qualitative conceptual-normative library research approach. Data were collected through an in-depth literature review of three main theoretical pillars: Ibn Taymiyyah's *Siyāsah Shar'iyyah*, Ben Shneiderman's *Human-Centered AI* (HCAI) theory, and Mujamil Qomar's Islamic educational management (IEM) concept, reframed in this study as Smart Islamic Educational Governance. The findings yielded the Compass–Control–Context governance model, which positions *Siyāsah Shar'iyyah* as the ethical compass (*amānah*, *'adl*, and *maṣlaḥah*), HCAI as the mechanism of human control (human oversight, transparency, accountability, and data security), and *Smart Islamic Educational Governance* as the adaptive and contextual implementation. This framework positions artificial intelligence as a digital guide that enhances human capabilities (*augment human capability*) rather than replacing them, while maintaining harmony in both vertical (*ḥablu min Allāh*) and horizontal (*ḥablu min an-nās*) relationships. This renewal of the governance system is a strategic step toward realizing the principles of justice (*'adl*) and the public good (*maṣlaḥah*) within the digital Islamic education ecosystem.

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INTRODUCTION

Advances in *artificial intelligence (*AI) within the global education bureaucracy have created transformative momentum that is driving educational institutions to reexamine their management practices, decision-making processes, and the delivery of educational services. AI is no longer confined to the classroom but has permeated various aspects of institutional governance, ranging from academic administration, resource management, educational data analysis and performance monitoring to evidence-based policy formulation. In this context, the use of AI should ideally not be aimed at replacing human roles, but rather at strengthening the capacity of educators, educational staff, and institutional administrators to deliver educational services that are more effective, inclusive, transparent, and responsive. This aligns with global trends that prioritize human agency, data protection, equity, and accountability as key principles in the development of AI in education (Kosmanto et al., 2026).

In the context of Islamic education, these developments present a dual challenge. On the one hand, Islamic educational institutions need to adapt to technological advancements to improve administrative efficiency, the quality of decision-making, and institutional competitiveness. On the other hand, these institutions are required to uphold the fundamental values of Islamic education, which are rooted in human relationships, spirituality, moral responsibility, and integrity (Fian Khofifatul, 2025). Therefore, the

transformation of Islamic education management in the AI era cannot be understood merely as a process of administrative digitization, but rather as a fundamental change in leadership, organizational governance, data-driven decision-making, human resource capacity building, and the improvement of educational services that remain oriented toward the holistic development of the individual (Warisno, Anshori, Hidayah, & Dwianto, 2025a).

The need to formulate AI governance that aligns with the characteristics of Islamic education is becoming increasingly urgent, given the current state of readiness of madrasahs in Indonesia. Data from the Ministry of Religious Affairs of the Republic of Indonesia (2023) indicate that only 17.4% of madrasahs have AI-supporting infrastructure, while less than 10% have established ethical protocols for digital learning (Rifai, An, Maksum, & Vambudi, 2025). Other research indicates that of the more than 50,000 madrasahs in Indonesia, approximately 65% still rely on inefficient manual management systems for curriculum administration and supervision, while only 12% have adopted AI in their management systems. These limitations are not only related to technological resources but also include gaps in teachers' digital competencies, limited professional development, and a misalignment between technological innovation and education policy (Holmes et al., 2022). Thus, the readiness of madrasahs for digital transformation must be viewed as an institutional issue encompassing infrastructure, human resources, regulations, organizational culture, and value orientation.

These readiness issues are intertwined with ethical and governance challenges. The development of AI applications tends to outpace the establishment of regulatory frameworks, oversight mechanisms, and ethical guidelines that can steer their responsible use (Irmawati & Markarma, 2025). In Islamic education, this issue becomes even more complex because AI is not only related to work efficiency but also to educational objectives, the relationship between teachers and students, and the process of character development (Sawari & Shamsuddin, 2025). A statement by Arskal Salim, Secretary of the Directorate General of Islamic Education at the Ministry of Religious Affairs, that AI is capable of performing the function *of knowledge transfer* but is not fully capable *of* performing *value transfer*, underscores the fundamental boundary between computational capabilities and the humanistic nature of the educational process. Without an adequate theological and ethical foundation, the use of algorithms risks reducing teachers and students to mere objects of measurement within information systems and quality dashboards, without considering their dignity, social context, emotional needs, and spiritual dimensions.

On that basis, AI governance in Islamic education must be established through an approach that does not separate technological innovation from moral responsibility. Such governance must be able to address questions regarding who is responsible for algorithmic decisions, how fairness is ensured in data usage, to what extent teachers and institutional administrators have control over the system, and how decisions generated by AI can be explained and accounted for. From an international perspective, principles such as human control, transparency, clarity, nondiscrimination, data protection, and auditability are viewed as essential elements in the responsible implementation of AI in education. However, for Islamic educational institutions, these principles need to be discussed in light of Islamic normative sources so that the resulting governance framework not only meets technical standards but also possesses ethical legitimacy and contextual relevance (Pahrudin, Irwandani, Aridan, & Barata, 2025).

The transformation of Islamic education management in the AI era faces various obstacles, including limited digital literacy, inadequate technological infrastructure, data security concerns, ethical issues, and organizational resistance to change. The urgency of developing AI governance in Islamic educational institutions is becoming increasingly apparent as the challenges faced grow more complex. Without a strong theological and ethical foundation, algorithmic systems have the potential to reduce the dignity of teachers and students to mere statistical data on quality *dashboards* lacking adequate spiritual value (Kurniawan & Kamalie, 2025). Therefore, a governance framework is needed that can integrate Islamic ethical principles, a *human-centered* approach, and contextual Islamic educational management strategies to ensure that digital

transformation truly serves the common good of the Muslim community, rather than merely pursuing technocratic sophistication. The importance of developing AI governance in Islamic educational institutions is becoming increasingly critical given the challenges faced. Without a strong theological and ethical understanding, algorithmic systems have the potential to reduce the roles of teachers and students to mere statistical data in quality improvement efforts, lacking adequate spiritual value (Nguyen, Ngo, Hong, Dang, & Nguyen, 2023).

Although numerous studies on AI in Islamic education have been conducted, the majority of previous research remains limited to technical applications in learning or micro-level ethical analysis to date, few studies have formulated a macro-level governance framework that synthesizes classical Islamic ethical teachings with modern digital governance. Therefore, this study aims to fill this gap by proposing the Compass–Control–Context model, a transformative, theocentric-anthropocentric governance model that synthesizes these three perspectives. The model positions *Siyāsah Shar'iyyah* as the ethical Compass, HCAI as the mechanism of human Control**,** and *Smart Islamic Educational Governance* as the Context of implementation. The novelty of this research lies in its effort to reconfigure the concept *of amānah* as the basis for human and institutional accountability in AI management, as well as the concept *of 'adl* as a principle of justice in the design, use, and evaluation of algorithmic systems. These two concepts are then linked to Ben Shneiderman's HCAI principles, which emphasize human control, transparency, clarity, and safety in interactions between humans and AI systems. Furthermore, all these principles are contextualized through Mujamil Qomar's concept of *Smart Islamic Educational Governance* so that they can be applied in a manner sensitive to the diversity and real-world conditions of madrasahs in Indonesia.

This synthesis aims to develop a governance model that does not place technology at the center of decision-making, but rather as an instrument under human control and guided by values. In the proposed model, AI serves to support analysis, improve efficiency, and enhance service quality, while final decisions remain the responsibility of human actors who possess moral, professional, and institutional capacity. Thus, AI governance is evaluated not only based on the accuracy or efficiency of the system but also on the system's ability to ensure fairness, uphold human dignity, protect data, provide corrective mechanisms, and advance the goals of Islamic education. This orientation aligns with a humanistic approach to AI governance in education, which prioritizes human agency, inclusion, fairness, and dignity.

Based on this background, this research article aims to design the Compass–Control–Context model, an integrated governance model that positions *Siyāsah Shar'iyyah* as the ethical Compass, HCAI as the operational Control for transparency and human oversight, and *Smart Islamic Educational Governance* as the Context of implementation. Academically, this research contributes to expanding the study of Islamic educational governance by linking classical Islamic thought, contemporary technology ethics, and institutional transformation strategies. Practically, the resulting model is expected to serve as a reference for the Ministry of Religious Affairs, madrasah administrators, educators, and policymakers in designing and implementing AI that is not only technocratically efficient but also morally responsible, contextually relevant, and spiritually meaningful. Thus, the digital transformation of Islamic education can be directed toward maintaining a balance between the relationship between humans and Allah (*ḥablu min Allāh*) and the relationship among humans (*ḥablu min an-nās*) in the era of algorithmic administration

RESEARCH METHODOLOGY

This study employs a qualitative, conceptual-normative *library research* approach to examine the synthesis between *Siyāsah Shar'iyyah*, *Human-Centered Artificial Intelligence* (HCAI), and *Smart Islamic Educational Governance*. Primary data sources include the book *al-Siyāsah al-Shar'iyyah* by Ibn Taymiyyah, the book HCAI by Ben Shneiderman (2022), and works by Mujamil Qomar on the transformation of Islamic education. Secondary sources were obtained from journal articles, books, and policy documents related to AI governance and technology ethics, which were retrieved through Google Scholar, Scopus, DOAJ, and Sinta. The literature selection considered the relevance, credibility, recency, and authenticity of the documents (Creswell, 2013a).

Data collection was conducted using documentation and critical literature review techniques. All relevant literature was carefully read, recorded, and categorized using a literature review matrix based on themes, key concepts, and their contributions to the formulation of the governance model. This study focuses on the integration of the values of *amānah*, *'adl*, and *maṣlaḥah* in *Siyāsah Shar'iyyah* with the HCAI principles of human control and transparency to formulate a strategy for the institutional transformation of Islamic education. This process relies on conceptual textual analysis without using statistical synthesis (Braun & Clarke, 2006). After the data are mapped into a thematic matrix, the next step is to conduct an in-depth analysis to identify conceptual relationships between variables.

The data analysis phase combines qualitative content *analysis* and thematic analysis through coding procedures, cross-source synthesis, and the drawing of conclusions (Creswell, 2013b). The concepts of Islamic leadership and ethics were systematically correlated with the HCAI principles of accountability and then contextualized within the framework of madrasah governance in Indonesia. To ensure the validity of the interpretations, this study employed source and theoretical triangulation by critically and rigorously comparing primary sources, academic literature, and policy documents.

RESULTS AND DISCUSSION

The context of understanding Ibn Taymiyyah's work, *al-Siyāsah al-Shar'iyyah fī Iṣlāḥ al-Rā'ī wa-al-Ra'iyyah* indicates that technology-based Islamic educational governance cannot be oriented solely toward administrative efficiency but must be grounded in public service, justice, and the common good. In the context of artificial *intelligence* (*AI*), the concept *of amānah* is recontextualized as the principle of human accountability for all technological processes and outputs. AI is positioned purely as a technical instrument based on human-designed parameters, not as a moral agent holding authority (Meherab et al., 2025). herefore, *amānah* demands clarity regarding *human accountability*, *decision* traceability (*or audit trail*), data protection, and the obligation to rectify algorithmic harm. Furthermore, the principle *of 'adl* (justice) guides the use of AI to avoid data bias and discrimination in mapping needs and evaluating madrasah performance. Meanwhile, the principle *of maṣlaḥah* serves as an evaluative criterion that ensures the use of AI has a tangible impact on improving service quality and fostering students' character development.

Although *Siyāsah Shar'iyyah* provides a strong ethical foundation, this theological framework does not yet provide technical operational mechanisms such as algorithm audits or system transparency. These limitations are bridged by translating normative values into concrete and measurable AI governance indicators (Rifai, An, Waston, Maksum, & Vambudi, 2025). The principle *of amānah* is realized as accountability through the designation of human responsible parties, the provision of *audit trails*, and the implementation of decision-correction procedures. The principle *of 'adl' is translated* into measures to mitigate data bias, transparency regarding algorithmic criteria, and the provision of *grievance mechanisms* for affected parties. Meanwhile, the principle *of maṣlaḥah* focuses on periodic monitoring of the technology's impact on the quality of educational services, which is complemented by the principle *of karāmah al-insāniyyah* to protect users' professional autonomy and prevent humans from being reduced to mere quantitative statistical scores. This operational translation serves as the primary foundation for formulating the *Human-Centered AI* (HCAI) framework in the subsequent analysis phase (Razzaq & Razzaq, 2026a).

Paradigma *Human-Centered Artificial Intelligence*: Redefinisi Kontrol dan Otoritas Insani dalam Ekosistem Pendidikan Digital

The *Human-Centered Artificial Intelligence* (HCAI) framework proposed by Shneiderman (2022) suggests that artificial intelligence technology should be developed to empower humans, not to replace human authority. Within the Islamic education ecosystem, this principle positions teachers, madrasah principals, and policymakers as the primary actors, while AI serves as a tool to support analysis and provide

data-driven recommendations (Shneiderman, 2022). The balance between computer automation and *human control* is key to ensuring that AI systems remain transparent, understandable, and subject to oversight, as well as allowing for human intervention when necessary. This principle of balance is then operationalized into four pillars of AI-based madrasah governance. Based on a literature review, there are four fundamental HCAI principles that can be operationalized in madrasah governance: human control, transparency, accountability, and data security. The first principle of human control emphasizes that high-risk decisions, such as teacher performance evaluations, scholarship recipient selection, and the identification of students at risk of dropping out, must not be determined entirely by machines. Educators and policymakers need to have the time, competence, and authority to review AI outputs, identify anomalies or potential discrimination, and intervene when necessary especially in situations that require empathy and deep pedagogical consideration (Nauntika & Dartim, 2025).

For such human oversight to be carried out effectively, there must be openness regarding how the system works. This is at the core of the principles of transparency and clarity. These principles require the provision of logical explanations regarding the types of data, algorithmic criteria, and the system's limitations so that educators, students, and parents can understand and respond to them rationally. In practice, evidence generated by AI must be distinguished from human professional judgment, clear appeal channels must be provided, and technical accuracy must not be automatically equated with substantive fairness (Muksin, Musli, Yusra, & Afandi, 2026). Thus, transparency is not only technical in nature, through *model cards* and feature explanations but also institutional, ensuring that the decision-making process is traceable and accountable to the madrasah community.

Process openness, built through transparency, must be supported by binding accountability mechanisms. Therefore, the principle of accountability is a logical consequence of human oversight and transparency. Accountability requires a clear structure of responsibility at every stage of AI use. This principle can be realized through process documentation, recording of data changes, algorithm audit procedures, and correction pathways for system errors. Such documentation includes the purpose of AI use, the origin of training data, human oversight strategies, and records of decision changes. With these mechanisms in place, the decision-making process can be traced back for the purposes of both internal and external audits(Razzaq & Razzaq, 2026b). System errors can be detected early, corrected procedurally, and prevented from evolving into institutionalized discriminatory practices.

These three principles of human control, transparency, and accountability, will only be meaningful if the data underlying decision-making is well protected. Therefore, data security serves as the fourth principle and the technical foundation for the entire HCAI framework. The security principle focuses on protecting the personal data and privacy of madrasah students. Restricting access, conducting regular security testing, and ensuring that educational data is not used for purposes beyond learning are both technical and ethical obligations to prevent harmful discriminatory effects. In evolving regulations such as *the EU AI Act*, high-risk systems in the field of education are designed to enable effective human oversight during operational processes, including through adequate interfaces and role-based access controls (Lee, Yoon, & Lee, 2026). Thus, data security is not only about encryption and access controls, but also about governance that limits the use of data to legitimate, relevant, and proportionate pedagogical purposes.

Once these four technical and humanistic principles have been mapped out, the next question is how the HCAI framework can be linked to the religious values that characterize madrasah governance. The relationship between HCAI and *Siyāsah Shar'iyyah* is complementary in nature. HCAI provides operational procedures to ensure that AI is designed in a safe, transparent, and accountable manner, while *Siyāsah Shar'iyyah* offers a theological orientation regarding the purpose of exercising such authority to realize *amānah, 'adl,* and *maṣlaḥah*. Thus, HCAI addresses the technical mechanisms of governance, while *Siyāsah Shar'iyyah* provides ethical direction and boundaries for its application. This synthesis expands the scope of HCAI from merely technical and humanistic guidelines to a comprehensive model of educational governance

grounded in both religious and institutional principles. Through this framework, madrasah policies are not only directed toward procedural compliance but also carry normative and religious significance.

Aksentuasi *Smart Islamic Educational Governance*: Harmonisasi Profesionalisme Digital dan Transformativitas Nilai-Nilai Keislaman

The study of the third pillar of this transformation centers on the *Smart Islamic Educational Governance* framework, which asserts that the achievement of Islamic educational goals in empirical reality depends heavily on management factors as the primary determining variable (*independent variable*). According to Mujamil Qomar, significant progress in Islamic educational institutions requires a solid integration of epistemology, Islamic Educational Management (IEM), and educational *consciousness*. In the digital realm, smart governance is understood as an effort to lead and manage institutions in an Islamic manner by optimizing technology-based learning resources to achieve efficiency and effectiveness (Qomar, 2007). On this basis, the adoption of *artificial intelligence* (*AI*) should not be viewed as a blind acceptance of Western technology but must be guided by ideal values rooted in the Qur'an and Hadith as its primary foundation (Kutbaniyah, Rosyiddah, Afiyati, Fauzi, & Ghazy, 2026). The application of digital technology in madrasah administration should reflect the distinctive character of Islamic Educational Management (IEM), which is theocentric and anthropocentric in nature that is, it harmonizes the relationship between the divine and the human in a balanced manner. This framework requires harmonization between the dimensions *of ḥablu min Allāh* (theological orientation) and *ḥablu min an-nās* (humanistic aspect) in every algorithm-based policy formulation (Lustia, Sukarman, & Khoiruddin, 2026). This type of smart governance possesses tangible transformative power, where automation is utilized to reform counterproductive work patterns, leadership styles, and even mindsets, making them more adaptive and responsive to the changing times. Through this approach, the adoption of artificial intelligence architecture in Islamic education management carries out a mission of emancipation that guides institutions from disorder toward a superior, professional, and civilized bureaucratic system (Warisno, Anshori, Hidayah, & Dwianto, 2025b).

Ultimately, the goal of implementing *Smart Islamic Educational Governance* amid the rise of artificial intelligence is to achieve a harmonious integration of spiritual maturity (*īmān*), intellectual capacity, creative prowess, and moral excellence (*akhlāq*) (Azis, Musonif, Salsabila, Fatah, & Aji, 2026). This modern management paradigm, grounded in religious values, positions technology as a catalyst for fostering Muslim individuals who are adaptable and resilient in facing global challenges without severing the roots of their religious identity. Through flexible and progressive governance measures, Islamic educational institutions are believed to be capable of addressing socio-economic constraints and issues of policy discrimination by emphasizing excellence in the educational process (Ashfiya' et al., 2026). This synergy ensures that digital transformation in madrasahs does not merely focus on providing physical facilities but also strengthens the scientific foundations of management to create sustainable benefits for society.

The synthesis of Siyāsah Shar'iyyah, Human-Centered Artificial Intelligence (HCAI), and Smart Islamic Educational Governance has produced a new paradigm in Islamic educational governance that goes beyond mere technocratic efficiency. Digital transformation in Islamic educational institutions is not merely a matter of adopting software, but rather the reconfiguration of the values of amānah and 'adl into automated systems, in line with Ben Shneiderman's vision to *augment* human *capability* rather than replace it (Kosmanto et al., 2026). The principles of Siyāsah Shar'iyyah provide a more transcendent theological foundation than the purely secular Western ethical framework. Ibn Taymiyyah positions the authority of the system (AI) as the holder of a mandate (*amānah*) from God, obligated to fulfill the rights of every individual fairly, not viewed as a value-neutral, autonomous entity, but rather as an administrative instrument that reflects qualitative justice (*sunnatullāh*) that is objectively (Muhammad Haizul Falah & Durorin Nuha Achfama, 2026).

Unlike general education management, which tends to be anthropocentric, the proposed model is theocentric-anthropocentric: algorithmic policies regarding teacher transfers or promotions must maintain a balance between divine and human orientations, so that teachers' dignity is not merely reduced to numbers on *a dashboard*. Algorithmic transparency, within this framework, serves as a modern manifestation of the principle of amānah, ensuring that every automated decision is auditable; and through *a "human-in-the-loop" approach*, Islamic educational institutions can leverage the sophistication of AI without sacrificing the humanistic dimension of technology. Substantively, the proposed integrated governance model positions *Siyāsah Shar'iyyah* as the ethical Compass**,** HCAI as the operational Control**,** and *Smart Islamic Educational Governance* as the Context of implementation. The success of this transformation is measured not only by technological sophistication but also by the extent to which technology can foster a well-rounded Muslim personality that integrates spiritual, intellectual, and moral maturity, ensuring that the future of Islamic educational governance is digitally intelligent yet spiritually vibrant.

CONCLUSION

This research tackles the initial purpose of creating an AI-driven model for Islamic educational governance that amalgamates three theoretical frameworks: *Siyāsah Shar'iyyah*, Human-Centered Artificial Intelligence (HCAI), and Smart Islamic Educational Governance. The amalgamation of these three frameworks results in the Compass–Control–Context model: *Siyāsah Shar'iyyah* functions as the ethical Compass, HCAI acts as the mechanism for human Control, and Smart Islamic Educational Governance provides the Context for implementation in madrasahs. This framework converts ethical principles into functional processes: human supervision and responsibility (*amānah*), clarity and equity *('adl*), and data protection with effect assessment (*maṣlaḥah*). This frames AI not as an independent entity but as a decision-assisting instrument that stays within human oversight and accountability, guaranteeing that the digital evolution of madrasahs preserves equilibrium between vertical (*ḥablu min Allāh*) and horizontal (*ḥablu min an-nās*) connections while honoring the dignity of both educators and learners.

Theoretically, this model expands the study of AI governance in education—which has long been dominated by a secular-Western framework by incorporating the normative-religious legitimacy derived from the classical tradition of fiqh al-siyasah. Given that this research is conceptual-normative in nature and based on a literature review, the application of the model still requires testing in a real institutional context; further research is recommended to take an empirical approach or conduct case studies at madrasahs that have adopted AI to test the effectiveness and applicability of the proposed accountability and transparency indicators.

REFERENCES

Ashfiya', M. B., Amalia, Z. D., Burda, N., Azzahro, F., Sofanin, A., & Syafi'i, I. (2026). Transforming Educators' Competencies for Human-Centered Learning in the Era of Artificial Intelligence: A Literature Review from the Perspective of Islamic Educational Values. *Al-Ghazali: Jurnal Pendidikan Dan Pemikiran Islam*, *6*(4), 1405–1423. https://doi.org/10.69900/ag.v6i4.625

Azis, D. K., Musonif, I., Salsabila, S., Fatah, M. A., & Aji, M. (2026). *Integrating Artificial Intelligence And Humanistic Values In Islamic Elementary Education: A Case Study At Madrasah Ibtidaiyah Nu Ma'arif Karangnangka*. *15*(2), 635–654. https://doi.org/DOI:%2010.30868/ei.v15i02.10039

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Creswell, J. W. (2013a). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE.

Creswell, J. W. (2013b). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications.

Fian Khofifatul, M. (2025). Islamic education in Indonesia in a global context: Perspectives on moderation and digital transformation of artificial intelligence. *International Journal of Social Science and Human Research*, *8*(09), 7004–7013.

Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Shum, S. B., … Bittencourt, I. I. (2022). Ethics of AI in education: Towards a community-wide framework. *International Journal of Artificial Intelligence in Education*, *32*(3), 504–526. https://doi.org/0.1007/s40593-021-00239-1

Irmawati, I., & Markarma, A. (2025). *Artificial Intelligence as a Catalyst for Islamic Knowledge Transformation: Bridging Tradition and Innovation in Muslim Community Development*. *4*, 194–197. Retrieved from https://jurnal.uindatokarama.ac.id/index.php/iciis/about

Kosmanto, D., Haris, Y., Fransiska, J., Warsah, I., Warlizasusi, J., Apriani, E., & Destriani, D. (2026). Artificial Intelligence-Based Islamic Education Management: Madrasah Governance Innovation in the Digital Era. *International Journal of Education Research and Development*, *6*(1), 15–24. https://doi.org/10.52760/ijerd.v6i1.150

Kurniawan, M. I., & Kamalie, A. S. (2025). Integrasi Kecerdasan Buatan dalam Kepemimpinan Pendidikan Islam: Kerangka Tata Kelola Berbasis Maqashid al-Shariah. *Proceedings of the 3rd International Conference on Pesantren (3rd ICOP) 2025*.

Kutbaniyah, A., Rosyiddah, A., Afiyati, F., Fauzi, M. R., & Ghazy, A. C. (2026). Islamic Education In The Age Of Artificial Intelligence: Transformation, Shifting Authority, And Digital Ethics Challenges. *Proceeding International Seminar of Islamic Studies*, (0), 1877–1887. https://doi.org/10.3059/insis.v0i0.29612

Lee, H.-K., Yoon, C., & Lee, B. G. (2026). Operationalising Human-Centred AI Governance Under the EU AI Act: A Governance Framework for Human Oversight and Data Accountability. *Systems*, *14*(7), 849. https://doi.org/10.3390/systems14070849

Lustia, N., Sukarman, S., & Khoiruddin, M. (2026). Artificial Intelligence And The Future Of Islamic Education: Opportunities, Challenges, And Ethical Implications. *Proceeding Of International Conference On Education, Society And Humanity*, *4*(1), 325–336.

Meherab, M. M., Rahman, M. A., Faruqui, N., Haque, S. M. A., Noori, S. R. H., Islam, T., … Polash, M. S. I. (2025). *The AI Maqasid Framework: Integrating Quranic Objectives into IR4.0 Era Teaching and Governance*. Presented at the International Conference of Quran as Foundation of Civilization (SWAT 2025). Penerbit USIM. Retrieved from https://swatfpqs.usim.edu.my/e-prosiding/

Muhammad Haizul Falah & Durorin Nuha Achfama. (2026). Ethical Artificial Intelligence in Education: Aligning Technological Innovation with Islamic Principles. *Aliansi: Jurnal Hukum, Pendidikan Dan Sosial Humaniora*, *3*(1), 88–107. https://doi.org/10.62383/aliansi.v3i1.1539

Muksin, Musli, Yusra, D. A., & Afandi. (2026). *Integration of Artificial Intelligence (AI) in Islamic Religious Learning*. *6*(1).

Nauntika, N. P., & Dartim, D. (2025). The Role of Religious Ethics in Regulating the use of Artificial Intelligence on Education. *Proceeding ISETH (International Summit on Science, Technology, and Humanity)*, 683–691. https://doi.org/10.23917/iseth.6866

Nguyen, A., Ngo, H. N., Hong, Y., Dang, B., & Nguyen, B.-P. T. (2023). Ethical principles for artificial intelligence in education. *Education and Information Technologies*, *28*(4), 4221–4241. https://doi.org/https://doi.org/10.1007/s10639-022-11316-w

Pahrudin, A., Irwandani, Aridan, M., & Barata, M. F. (2025). Teacher readiness for deep learning in Islamic education: A Rasch model analysis of challenges and opportunities. *Journal of Teaching and Learning*, *19*(4), 262–283.

Qomar, M. (2007). *Manajemen Pendidikan Islam: Strategi Baru Pengelolaan Lembaga Pendidikan Islam*. Jakarta: Erlangga.

Razzaq, S., & Razzaq, N. (2026a). Artificial Intelligence and Moral Responsibility: An Islamic Normative Approach. *Journal of Science and Knowledge Horizons*, *6*(1), 19–32. https://doi.org/10.34118/jskp.v6i1.4545

Razzaq, S., & Razzaq, N. (2026b). Artificial Intelligence and Moral Responsibility: An Islamic Normative Approach. *Journal of Science and Knowledge Horizons*, *6*(1), 19–32. https://doi.org/10.34118/jskp.v6i1.4545

Rifai, A., An, A. N., Maksum, M. N. R., & Vambudi, V. N. (2025). An ethical framework for AI in Islamic education: Synthesizing Maqashid al-Sharia and national legal regulations in Indonesia. *Revista Electrónica de Ciencia Penal y Criminología*, *27*(1). Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=10419650

Rifai, A., An, A. N., Waston, Maksum, M. N. R., & Vambudi, V. N. (2025). An Ethical Framework for AI in Islamic Education: Synthesizing Maqashid al-Sharia and National Legal Regulations in Indonesia. *Revista Electrónica de Ciencia Penal y Criminología*, *27*(1). Retrieved from https://revistacriminologia.com/manuscript/index.php/RECPC/article/view/99

Sawari, M. F., & Shamsuddin, M. M. J. (2025). Islamic Ruling on Using Artificial Intelligence in Teaching and Learning: AI Chatbots as a Case Study. *International Journal of Fiqh and Usul Al-Fiqh Studies*, *9*(3), 60–72.

Shneiderman, B. (2022). *Human-centered AI*. Oxford University Press.

Warisno, A., Anshori, A., Hidayah, N., & Dwianto, A. (2025a). Transformative Islamic education management in madrasah and pesantren integrating tradition and digital innovation. *Journal of Cultural Analysis and Social Change*, 276–289. https://doi.org/https://doi.org/10.64753/jcasc.v10i2.1596

Warisno, A., Anshori, A., Hidayah, N., & Dwianto, A. (2025b). Transformative Islamic Education Management in Madrasah and Pesantren Integrating Tradition and Digital Innovation. *Journal of Cultural Analysis and Social Change*, 276–289. https://doi.org/10.64753/jcasc.v10i2.1596