

RESEARCH

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Management Of Artificial Intelligence (AI) Integration in Islamic Religious Education: Innovation Strategies and Strengthening Spiritual Values in Madrasah

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Abstract

This study examines the management of artificial intelligence (AI) integration in Islamic Religious Education at madrasahs, focusing on innovation strategies and the strengthening of spiritual values. The study employed a qualitative descriptive approach at MA Al-Amiriyah Blokagung Banyuwangi. Data were collected through interviews, observation, and documentation involving the headmaster, teachers, students, and pesantren administrators. Data analysis used the interactive model of Miles and Huberman, while data validity was ensured through triangulation and member checking. The findings reveal the formation of an integrative AI-spiritual management model in which AI functions as a supportive educational tool while remaining grounded in Islamic values and ethics. The study also identifies the transformation of teachers into “spiritual-tech educators” who combine digital competence with spiritual responsibility. Furthermore, AI demonstrates a dual impact by improving students’ cognitive understanding and learning engagement while also presenting challenges to spiritual reflection if not properly guided through value-based and ethical educational management strategies.

Keywords: Artificial Intelligence, Educational Management, Madrasah, Spiritual Values.

Introduction

The integration of artificial intelligence (AI) in Islamic religious education at madrasahs has become a necessity due to the rapid development of digital technology (Mohideen, 2025; Zuhriyeh et al., 2025; Syakhrani, 2026). This phenomenon reflects changes in the educational system that demand innovation in order to remain relevant to contemporary developments. Today’s students live in an environment that is closely connected to technology; therefore, conventional learning approaches alone are considered less effective in increasing their engagement and understanding of religious values.

This can be observed through the increasing use of digital platforms, AI-based learning applications, and educational policies that encourage digital transformation in educational institutions, including madrasahs (Hayati & Ushalli, 2024; Warisno et al., 2025). In addition, various studies have shown that AI can support personalized learning and broaden access to Islamic knowledge resources (Zaharah et al., 2024; Amilusholihah & Ramadhan, 2025). Nevertheless, concerns remain regarding the possible decline of the spiritual dimension if technology is not balanced with the strengthening of religious values.

The management of AI integration in madrasahs therefore needs to be strategically and carefully designed, not only focusing on technological innovation but also ensuring that spiritual values remain the main foundation of Islamic religious education (Assingkily & Ahmad, 2025; Hidayat, 2025). Based on a review of literature over the last five years, it can be concluded that the integration of AI in Islamic religious education has become a rapidly growing area of study (Mundofi, 2025; Susanto & Kiftiyah, 2025). Several literature review-based studies demonstrate that AI has significant potential to improve learning quality, particularly through personalization of materials, increased interactivity, and easier access to Islamic learning resources.

Explained that the use of AI can increase students' active participation in Islamic Religious Education (PAI) through adaptive approaches tailored to individual needs. Similarly, emphasized that although AI offers significant innovation, its implementation in Islamic education must still consider ethical and spiritual aspects so that it does not deviate from the objectives of Islamic education (Djazilan et al., 2024; Faizudin et al., 2025).

Found that AI integration in the PAI curriculum can support Society 5.0-based learning, although it still faces challenges related to infrastructure and teacher competence. Other studies also indicate that AI can enhance student engagement in madrasahs through more innovative digital learning media (Manurung, 2025; Nasution et al., 2025). Additionally, concluded that the successful implementation of AI largely depends on policy readiness, teacher training, and well-directed educational management. Thus, the existing literature generally confirms that AI integration in Islamic religious education should not only focus on technological advancement but must also be balanced with strengthening spiritual values as the main foundation of learning.

The novelty of this study lies in its approach to managing AI integration in Islamic Religious Education, which does not merely focus on the use of technology but also combines learning innovation strategies with the strengthening of spiritual values in an integrated manner within madrasahs. Unlike previous studies that emphasized the benefits and challenges of AI, this research offers an integrative model that balances technological, managerial, and spiritual aspects as distinctive characteristics of Islamic education.

The urgency of this study lies in the pressing need to properly and systematically manage the integration of AI in Islamic religious education. Although AI offers effective and adaptive learning innovation, its use without proper management risks reducing the essence of spiritual values in madrasah education.

Based on the novelty of this research, there remains a gap between the utilization of technology and the strengthening of Islamic values. Therefore, this study is important in formulating management strategies capable of integrating AI while preserving and strengthening students' spirituality, enabling madrasahs to adapt to technological developments without losing their identity.

The objective of this research is to formulate a management model for AI integration in Islamic religious education at madrasahs that can optimize learning innovation while strengthening spiritual values, as well as provide recommendations for balanced implementation strategies.

Method

This study employed a qualitative approach with a descriptive research design, aiming to deeply analyze the phenomenon of artificial intelligence (AI) integration in Islamic Religious Education at Islamic schools (madrasahs) (Ayton, 2023; Chand, 2025). The object of this study is Madrasah Aliyah (MA) Al-Amiriyyah Blokagung Banyuwangi as an Islamic educational institution where the implementation and management of AI integration in Islamic Religious Education learning takes place. The selection of MA Al-Amiriyyah was based on its characteristics as a pesantren-based madrasah that possesses strong Islamic scholarly traditions while also adapting to developments in educational technology.

The informants in this study consisted of several parties who play strategic roles in managing and implementing AI integration at MA Al-Amiriyyah Blokagung Banyuwangi. The key informant was the headmaster, who provided information regarding policies and the direction of AI integration development and spiritual strengthening.

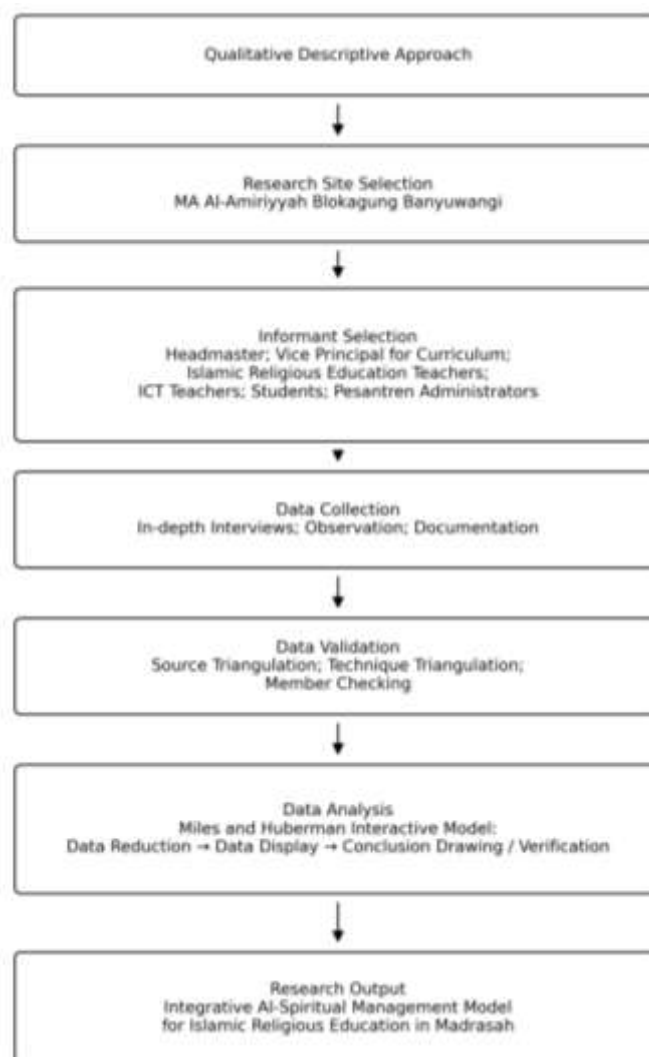


Figure 1. Research Method Flow

The main informants included the vice principal for curriculum affairs and Islamic Religious Education teachers directly involved in planning and implementing AI-based learning. In addition, ICT teachers acted as technical informants who provided insights regarding technological support systems used in the school. Students, as direct users, served as important informants in revealing learning experiences and the impact of AI use on understanding and spirituality.

To strengthen data validity, this study also involved pesantren administrators as triangulation informants who provided perspectives on Islamic values in the use of technology (Amilusholihah & Ramadhan, 2025; Setiawan & Ekaningsih, 2025). This study employed a qualitative approach with descriptive research methods aimed at understanding in depth the phenomenon of AI integration in Islamic religious education at madrasahs. Primary data were obtained from the headmaster, Islamic Religious Education teachers, and educational staff, while secondary data consisted of documents, policies, and related literature.

Data collection techniques included in-depth interviews, observation, and documentation studies to obtain comprehensive information (Chand, 2025; Setiawan et al., 2025; Nasution et al., 2025)). Data analysis employed the interactive analysis model of Miles and Huberman, which includes data reduction, data presentation, and conclusion drawing. The validity of the data was examined through source and technique triangulation, as well as credibility testing through member checks to ensure the validity and accuracy of the research findings.

Results and Discussion

Formation of an Integrative AI-Spiritual Management Model in Madrasahs

The findings indicate the establishment of an educational management model that integrates the use of artificial intelligence (AI) with the reinforcement of spiritual values within the madrasah context. This model emerges as a response to the need to maintain a balance between technological advancement and the religious character of Islamic education. In its implementation, AI is positioned as a supportive tool that enhances access to knowledge and improves the effectiveness of academic processes, while remaining grounded in the framework of Islamic values, ethics, and educational objectives. Therefore, technology is not regarded as a substitute for the primary role of education, but rather as an instrument that strengthens character formation and religious understanding.

In addition, the findings highlight the strengthening of the teacher's role as both a guide in the use of technology and a mentor in fostering students' moral and spiritual awareness. Teachers are not only responsible for pedagogical functions but also play a crucial role in instilling ethical principles in the use of AI, ensuring its alignment with Islamic values. Furthermore, madrasahs develop a consciousness-based control approach that emphasizes responsibility, academic integrity, and independent learning in the use of technology. These practices reflect a holistic educational management approach, where the integration of technology and spirituality operates in harmony without diminishing the identity of the madrasah as a value-based educational institution.

The use of artificial intelligence (AI) in madrasahs is therefore understood as a supportive learning tool that must be guided in accordance with Islamic values. As stated by the head of the madrasah,

"AI may be used, but it must remain within the boundaries of Islamic values and educational objectives."

Teachers also perceive AI as a facilitative tool that enhances the learning process, yet it cannot

replace their primary role in guiding students. As one teacher stated,

“AI is helpful, but students must continue to think independently and not rely on it entirely.”

From the students’ perspective, AI is perceived as facilitating the completion of assignments; however, they are still guided to use it responsibly. As one student stated,

“We are allowed to use AI, but we should not simply copy without understanding.”

Based on the interview findings, it can be interpreted that the use of artificial intelligence (AI) in madrasahs is not positioned as an autonomous entity, but rather as an instrument that is inherently bound to the values and objectives of Islamic education. The statement from the head of the madrasah reflects a strong institutional awareness that technological integration must remain under the guidance of religious norms, ensuring that its application continues to support the development of students’ character and moral conduct. In this context, technology is not merely perceived as a technical tool, but as an integral component of a value-oriented educational process.

Furthermore, the perspectives of both teachers and students reveal the construction of a shared understanding regarding the boundaries and functions of AI in the learning process. Teachers play a crucial role in maintaining a balance between the convenience offered by technology and the necessity of fostering independent thinking, while students begin to internalize a sense of responsibility in its use. This indicates that the implementation of AI in madrasahs is not solely driven by efficiency, but is also directed toward the cultivation of ethical awareness and learner autonomy, in alignment with the principles of Islamic education that emphasize the integration of knowledge and moral values.

Transformation of Islamic Religious Education Teachers into “Spiritual-Tech Educators”

The findings indicate a shift in the role of Islamic Religious Education teachers, who are no longer confined to the traditional function of content delivery but have evolved into key actors integrating technological advancement with Islamic values. In the context of AI-based learning, teachers not only utilize technology as a tool to enhance the effectiveness and adaptability of instruction, but also actively guide its use to ensure alignment with moral principles, ethical standards, and the objectives of Islamic education. This underscores that technological integration in madrasahs is not value-neutral, but requires strong pedagogical engagement to maintain an orientation toward character building and the spiritual development of students.

Table. 1 Key Themes in the Transformation of Islamic Religious Education Teachers into Spiritual-Tech Educators

No	Main Theme	Description
1	Dual Competence as the Key	Teachers are required to master technology while maintaining their role as moral and spiritual mentors.
2	AI as a Tool, Not the Goal	The use of AI is emphasized to remain within the framework of Islamic values.
3	Adaptive Role Transformation	Teachers demonstrate readiness to continuously learn and adapt to technological developments.
4	Strengthening Ethical Control	Teachers play a role in preventing the misuse of AI, such as plagiarism and excessive dependence on technology.
5	Emergence of a New Professional Identity	The concept of <i>Spiritual-Tech Educator</i> reflects the integration of digital competence and spiritual responsibility

Furthermore, this transformation gives rise to a new professional construct of teachers as *spiritual-tech educators*, referring to educators who are capable of combining digital competence with spiritual responsibility. Teachers are expected not only to master technological tools but also to cultivate ethical awareness in their use, enabling students to develop not only cognitively but

also in their moral maturity in responding to technological advancements. Consequently, the role of teachers becomes increasingly complex and strategic, as they occupy a central position in bridging digital innovation with the internalization of Islamic values.

The integration of artificial intelligence (AI) in Islamic Religious Education has driven a transformation in the role of teachers toward a more complex and integrative form. Teachers are not only required to possess technological competence, but also to maintain their function as moral and spiritual guides, thereby creating a balance between digital advancement and Islamic values. Positioning AI as a tool rather than an end in itself underscores that technology is intended to support, not replace, the educational process. In practice, teachers demonstrate adaptability to technological developments while strengthening ethical control to prevent misuse such as plagiarism and excessive dependence. Altogether, these dynamics lead to the emergence of a new professional identity as *spiritual-tech educators*, reflecting the integration of digital competence and spiritual responsibility in the educational process.

Dual Impact of AI: Cognitive Improvement and Spiritual Challenges

The use of artificial intelligence (AI) in learning demonstrates a dual-impact characteristic that is inherently interconnected, functioning both as a catalyst for cognitive enhancement and as a potential challenge to students' spiritual development. From a cognitive perspective, AI contributes to accelerating students' understanding of learning materials, expanding access to diverse sources of knowledge, and increasing engagement in the learning process. Its presence enables learners to obtain additional explanations quickly and adaptively according to their needs, making learning more effective, efficient, and responsive to individual differences.

However, behind these advantages, the use of AI also carries implications for the depth of students' engagement with religious values. Dependence on instant outputs generated by technology may reduce opportunities for reflection and contemplation, which are essential components of Islamic Religious Education. This condition suggests that, without proper guidance, AI may shift learning orientation toward outcomes rather than the internalization of values. Therefore, this dual-impact phenomenon highlights the importance of balanced management, where the use of AI is not only directed toward enhancing cognitive achievement but also toward preserving and strengthening the spiritual dimension of the educational process.

"Students now understand materials more quickly because they can immediately search for additional explanations through AI, and topics that were previously difficult to understand become easier."

A student also explained:

"I feel greatly helped in completing assignments and understanding materials because AI provides comprehensive references."

Nevertheless, concerns emerged regarding spirituality. One teacher stated:

"If not properly directed, students tend to focus only on instant results from AI without reflecting on the values contained in religious learning."

Some students also admitted that they sometimes use AI merely to complete assignments without deeply understanding the meaning or wisdom behind the religious materials studied.

To address this issue, teachers began implementing specific strategies, such as integrating value-based reflective questions into AI-assisted assignments. One teacher explained:

"After students use AI, they are asked to write reflections about moral values or ethical messages contained in the material."

Teachers also conduct ethical supervision by reminding students about the importance of

honesty and responsibility in using technology. These findings demonstrate that AI use in learning has a dual impact that is both constructive and potentially problematic.

On one hand, AI significantly improves cognitive effectiveness through quick and diverse access to information. AI also encourages more active and independent learning engagement. On the other hand, there are risks such as spiritual superficiality, where students become oriented toward instant results without reflective processes.

The internalization of religious values may also decline if AI is used without guidance. Therefore, the success of AI utilization heavily depends on the teacher's role as controller and guide. Strategies such as digital religious reflection, integration of values in AI-based assignments, and strengthening ethical control are key to maintaining a balance between intellectual and spiritual intelligence. Overall, these findings reinforce that AI is not a threat to spirituality but rather a tool that requires value-based pedagogical management in order to provide holistic benefits.

Conclusion

This study concludes that the integration of artificial intelligence (AI) in Islamic Religious Education within madrasahs has led to the emergence of an integrative AI-spiritual management model that balances technological innovation with the reinforcement of Islamic values. AI is not positioned as a substitute for the educational process, but as a supportive instrument that enhances learning effectiveness while remaining grounded in ethical, moral, and religious principles. The successful implementation of this model is reflected in the development of value-based policies, ethical supervision, and a learning environment that emphasizes responsibility, academic integrity, and the internalization of spiritual values.

Furthermore, the study highlights a significant transformation in the role of teachers into *spiritual-tech educators*, who combine digital competence with spiritual responsibility. Teachers play a central role in guiding the use of AI, ensuring that it supports both cognitive development and moral formation. At the same time, the findings reveal that AI has a dual impact: it strengthens students' cognitive abilities through improved access to information and learning engagement, while also posing challenges to the depth of spiritual reflection if not properly managed. Therefore, the effectiveness of AI integration depends on balanced pedagogical management, where ethical guidance, reflective learning, and value-based approaches are consistently applied. Overall, AI is not a threat to Islamic education, but a strategic tool that, when properly managed, can contribute to holistic educational outcomes encompassing both intellectual and spiritual dimensions.

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