

Integration of Artificial Intelligence (AI) in Islamic Religious Education Curriculum: Opportunities and Challenges in the Digital Era

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ARTICLE INFO	ABSTRACT
Volume: 4 ISSN: 2963-5489	Islamic Religious Education (PAI) plays a crucial role in shaping the younger generation to excel not only intellectually but also spiritually and morally. This study examines the integration of Artificial Intelligence (AI) into the Islamic Religious Education (PAI) curriculum as an opportunity and challenge in the digital era. Using a descriptive qualitative approach, data were collected through observation, interviews, and documentation to examine the role of AI in supporting religious learning. The results indicate that AI offers significant potential to strengthen PAI learning through personalized materials, interactive media, and efficient classroom management. However, the study also identified several challenges, including limited infrastructure, low teacher digital literacy, and ethical issues and the relevance of content to Islamic values. Therefore, AI integration has the potential to improve the quality of religious education, but its success is largely determined by the readiness of educators, educator policies, and ethical regulations based on Islamic principles.
KEYWORD	
Artificial Intelligence, Islamic Religious Education, Curriculum, Opportunities, Challenges	

1. Introduction

Artificial Intelligence (AI) is increasingly woven into everyday life and is now a reliable tool for simplifying work and saving time. (Salim and Aditya's study , 2025) noted a surge in AI use since 2018 in Islamic learning, including Quranic learning, manuscript digitization, and the development of AI-based Islamic media. The presence of AI has not only revolutionized industry and public services but has also had a significant impact on the field of education, including Islamic Religious Education (PAI). With the complexity of the times, the integration of AI into the PAI curriculum is a crucial issue that needs to be seriously studied to remain relevant to the needs of modern society.

Islamic Religious Education (PAI) plays a crucial role in shaping the younger generation to excel not only intellectually but also to possess spiritual and moral fortitude. Challenges arise when Islamic values must be deeply instilled amidst the rapid flow of digitalization that shapes the mindsets and learning styles of today's generation. Various forms of artificial intelligence (AI) are being implemented, such as educational chatbots, adaptive learning platforms, automated evaluation systems, and the development of interactive digital content. In the context of religious education, AI holds great potential to deliver a more personalized, in-depth, and enjoyable learning experience, enabling the delivery of Islamic values in a more relevant and effective manner (Zulrahman, 2023).

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However, the application of artificial intelligence (AI) in religious education still faces several fundamental challenges. (Anisa Rahmawati and Syabina Najla Amirah , 2020) emphasize that one of the main concerns is the diminishing spiritual dimension when technology takes over the human role. Islamic religious education should not only focus on delivering material, but also on shaping the hearts and souls of students. In this regard, the role of teachers as moral role models and spiritual guides remains irreplaceable by machines. Furthermore, other issues that require attention include data privacy, the potential for misuse of information, and the lack of specific regulations regarding the use of AI in Islamic religious education . In terms of facilities and infrastructure, not all educational institutions have access to technology or competent teaching staff in the field of AI, so the integration of this technology still requires serious attention.

Based on the description above, the purpose of this paper is to examine and describe the developments and challenges in the integration of Artificial Intelligence (AI) into Islamic Religious Education (PAI), and to emphasize the importance of using technology wisely in order to maintain the spiritual and moral essence of Islamic religious education in the digital era.

2. Literature Review

Artificial intelligence (AI) is a form of human intelligence simulation applied to machines, enabling them to think and act intelligently. Its development is currently very rapid, encompassing significant improvements in both hardware and software (Iskandar et al., 2023).

The use of various AI-based tools and resources in the curriculum allows students to explore complex themes in a more interactive and engaging way. The presence of AI can bridge traditional values with technological innovation, making the learning process not only more personalized and adaptive to individual needs but also enhancing students' appreciation and connection to their faith. Ultimately, AI integration plays a crucial role in preparing the younger generation to be relevant and competitive in an increasingly digital world (Muhamad Hadzqi et al ., 2024).

3. Methodology

This study uses a descriptive qualitative approach to explore in-depth the opportunities and challenges of integrating Artificial Intelligence (AI) into the Islamic Religious Education (PAI) curriculum. The subjects included PAI teachers, school/madrasah principals, and students, while the object of the study was the process of integrating AI into the PAI curriculum. Data were collected through in-depth interviews, observation, and documentation, thus obtaining a comprehensive picture of the use of AI in Islamic religious learning.

4. Results and Discussion

4.1 Opportunities for AI Integration in the PAI Curriculum

AI has the potential to strengthen Islamic Religious Education (PAI) curricula through several important aspects. First, AI supports personalized learning, such as Quran applications that can detect tajwid errors and provide immediate feedback (Iqbal & Maulana, 2025). Second, AI provides interactive media, such as Islamic chatbots that help students understand Islamic jurisprudence, morals, and history, so that learning is not limited to the classroom (Hakim & Anggraini, 2024). Third, AI improves classroom management efficiency, including student data management, automated evaluation, and a variety of digital materials (Adawiyah, 2024).

4.2 Challenges of AI Integration in Islamic Education Curriculum

Several major challenges have been identified in integrating AI into Islamic Religious Education (PAI). First, limited technological infrastructure remains, particularly in areas with limited internet access and digital devices (Adawiyah, 2024). Second, Islamic Religious Education (PAI) teachers remain poorly prepared due to a lack of digital literacy, resulting in suboptimal AI utilization . Third, there is the issue of the relevance of AI content to Islamic values, as algorithms have the potential to produce answers that are not in accordance with Islamic law if unsupervised (Hakim & Anggraini, 2024).

4.3 Analysis of the Relationship between Results and Previous Theory and Research

This research supports the theory of educational technology integration, which emphasizes the alignment of curriculum, methods, and media. AI in Islamic Religious Education (PAI) has been shown to offer opportunities to strengthen Islamic value-based learning, but it also presents risks that need to be anticipated. AI can enrich Islamic education strategies, but its implementation must be supported by policies, teacher training, and ethical regulations (Anhar & Nugroho, 2025). Therefore, the opportunities and challenges of AI integration need to be managed in a balanced manner.

4.4 Implications of Research on Islamic Education Curriculum

Discussing the practical and theoretical impacts of AI integration, :

For teachers - Digital literacy and training needs;

For the curriculum – adjustment of materials and methods in accordance with technological developments;

5. Conclusion

The integration of Artificial Intelligence (AI) into the Islamic Religious Education (PAI) curriculum offers significant opportunities and also presents challenges that must be anticipated. AI helps students understand lessons through digital media that are relevant to the learning styles of the modern generation. However, challenges arise related to limited technological infrastructure and other challenges. Therefore, the implementation of AI in PAI must be carried out in a balanced manner, maintaining the spiritual dimension, strengthening the role of teachers as moral guides, and supported by regulations, educational training, and curriculum adjustments to ensure that the use of technology remains aligned with the goals of Islamic education in the digital era.

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Reference

- Hadzqi, M., Dian Ayu Havifah, Labiebatul Badriyah. (2024). Transformation of Islamic Religious Education in the Digital Era: The Role of Artificial Intelligence (AI) in Strengthening Islamic Values. *Journal of Islamic Studies*, 5(3), 894-895.
- Salim, MA, & Aditya, R. B (2025). Integration of Artificial Intelligence in Islamic Education: Trends, Methods, and Challenges in the Digital Era. *Journal of Modern Islamic Studies and Civilization*, 3(1), 74-89.
- Zulrahman, MF, & Syaputra H. (2023). Utilization of Artificial Intelligence Markup Language (AIML) and Latent Semantic Analysis (LSA) in Developing E-Education Chatbots. *INTECOMS: Journal of Information and Computer Science*, 6(1), 34-43.
- Rahmawati, A., & Syabina Najla Amira, NW (2020). Integration of Artificial Intelligence in Indonesian Higher Education: Opportunities, Challenges, and Framework for Implementation and Integration, 6(1), 114-126.
- Iskandar Octo et al., (2023). The Role of Information Technology, Artificial Intelligence (AI) at the Al-Kahfi Foundation. *IJM: Indonesia Journal of Multidisciplinary*, 1(3)60-952.
- Iqbal, M., & Maulana, H. (2025) Exploring Artificial Intelligence in Islamic Pedagogy Through a Systematic Literature Review for Cognitive and Character Education, *Journal of Education, Science, Social and Religion*, 11(1), 135-147.
- Hakim, A., & Anggraini, P. (2023). Artificial Intelligence in Teaching Islamic Studies: Challenges and Opportunities, *MOLANG: Journal of Islamic Education*, 1(2) 57-69.
- Adawiyah, R. (2025). Implementing AI in Arabic Language Learning: Challenges and Insights from Islamic Higher Education, *Al-Ishlah: Journal of Education*, 17(3), 3730-3739.
- Anhar, S., & Nugroho, P. (2025). Technology-Based Islamic Religious Education: Literature Analysis of Trends, Challenges, and Opportunities, *LITERACY: International, Journals of Social, Education, and Humanities*, 4(2), 177-202