

The Urgency of Integrating Artificial Intelligence (AI) into the Personalization of Islamic Learning in the Industry 5.0 Era

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ARTICLE INFO	ABSTRACT
Volume: 4 ISSN: 2963-5489 KEYWORD AI, Islamic Learning.	The advancement of digital technology, particularly artificial intelligence (AI), is bringing significant transformation in education, including Islamic Religious Education (IRE) in the Industrial Revolution 5.0 era. AI integration in madrasah curricula enables adaptive personalized learning, increases student engagement, and strengthens digital literacy based on Islamic values. AI supports the development of interactive, efficient teaching methods, and assists teachers in enhancing their professionalism through customized digital training. Furthermore, technologies such as Islamic chatbots and AI-based Qur'an learning applications expand access and quality of religious education. However, AI implementation faces challenges like a not fully relevant curriculum, technology dependence, and limitations in resources and teacher competence. Therefore, a planned strategy and collaboration among educators, technology developers, and policymakers are needed to optimize sustainable AI integration. This research confirms the urgency of IRE adaptation to AI developments so that Islamic education remains relevant, inclusive, and capable of shaping a generation that is intellectually and spiritually intelligent in the digital era. AI integration is expected to be a bridge between Islamic values and technological advancement for the future progress of the ummah (Muslim community)

1. Introduction

The advancement of digital technology has triggered major changes in various fields of life, including the education sector. In the Industrial Revolution 5.0 era, characterized by a harmonious collaboration between humans and intelligent technology, the use of Artificial Intelligence (AI) has become very dominant and influences work and learning patterns. AI is not only changing the face of industry and public services but also bringing a major impact to the world of education, including Islamic religious education.

Amidst the rapid technological development, education faces the challenge of adapting to the latest innovations, including AI. Artificial intelligence offers various opportunities to improve teaching and learning methods, especially in the field of Islamic education. Artificial intelligence can transform learning methods to be more interactive and efficient. This is particularly relevant in the context of Islamic education, where engagement and deep understanding of the material are crucial. Islamic

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Religious Education has a vital function in shaping the character of students to be not only intellectually smart but also strong in spiritual and moral aspects (Bhalla, N. 2019). A major challenge arises when Islamic values must still be taught deeply amidst the rapid and widespread current of digitalization. Within this framework, education needs to respond to these changes by developing a comprehensive approach, encompassing cognitive, affective, and psychomotor dimensions. Therefore, Islamic religious education must transform to meet the needs of the digital generation who are technologically literate from an early age.

AI, if used appropriately in the IRE curriculum, can bridge Islamic values with the modern world, while simultaneously strengthening digital literacy in a religious context (Subandowo, 2022). The utilization of AI in education, especially in the context of Islamic education, requires a more planned and sustainable strategy. Further research is needed to understand how AI integration can be effectively implemented, considering technological, pedagogical, and cultural aspects. Additionally, it is important to examine how AI can be used to support inclusive and equitable learning, ensuring that all students, regardless of their background, can benefit from this technology (Nazaretsky et al., 2022). Therefore, although much research has been conducted, there are still many aspects that can be explored to ensure that AI not only improves the quality of education but also strengthens Islamic values and principles in the learning process. This research can help bridge existing gaps and provide guidance for educators, technology developers, and policymakers in effectively implementing AI in Islamic education.

2. Literature Review

Before conducting this research, the author has explored several scientific sources related to the theme to be studied, and the relevant theme is: Juwita Tri Lestari, Rani Darmayanti, Zainul Arifin 2023, with the title Integration of Artificial Intelligence in the Islamic Education Curriculum. The discussion of this article is about how in the digital era, the integration of artificial intelligence (AI) technology in education is very important to improve the quality of learning. This research emphasizes recommending collaboration between educational institutions, technology developers, and the government to realize effective AI integration. This research provides a very complex overview for the author in working on the article regarding the Urgency of Artificial Intelligence (AI) Integration for Personalized Learning of Islamic Teachings.

3. Methodology

In this article, which uses a library research approach, data analysis is carried out through content analysis. Data analysis focuses on words and does not involve numbers or qualitative methods, with data compilation based on relevant themes. To analyze the collected data, the author applies the following methods:

- First, the inductive method is used to derive general conclusions from data that share similar elements.
- Second, the deductive method is applied to reinforce existing general understanding by searching for relevant data.
- Third, the descriptive method is used to systematically, factually, and accurately describe various aspects related to the research topic.

4. Results and Discussion

4.1. Concept and Urgency of AI Integration in Islamic Religious Education Era 5.0

Currently, we are in Era 5.0, a period where artificial intelligence, the Internet of Things, big data, and various other advanced technologies are drastically changing the way humans interact and work. Consequently, education is also undergoing a significant transformation, directly impacting teaching and learning methods as well as the preparation of individuals to face future career demands. Education 5.0 provides opportunities for students to gain more relevant knowledge and skills. One characteristic of Education 5.0 is the integration between technology and the learning process (Putra, 2023).

Responding to the increasing complexity and global interconnectedness, Islamic education in Era 5.0 sets relevant goals and objectives. As a development from Era 4.0, the main focus of Era 5.0 is to utilize advanced technology while simultaneously developing essential skills and values to shape future society. While the role of technology is very significant, the philosophical aspect of Education Era 5.0 consistently emphasizes the humanistic aspect in Islamic education, including the development of

social and emotional skills. This aims to shape individuals who are not only technologically proficient but also possess strong empathy, creativity, and critical thinking capacity

The Urgency of AI Integration in Islamic Religious Education (IRE) in the Society 5.0 era is crucial. If IRE does not adapt to the advancements of AI, there is a great risk of losing its relevance in guiding the ummah amidst the rapid development of the digital world. With AI, IRE can provide personalized and adaptive learning, helping every Muslim individual understand religious teachings more effectively according to their learning style and pace. Furthermore, AI becomes an important means to instill digital literacy and AI ethics from an Islamic perspective, equipping the younger generation with the ability to filter valid religious information and use technology responsibly. This integration can also enhance the efficiency and reach of da'wah (preaching), allowing the delivery of relevant religious messages to a wider audience. Ultimately, this prepares teachers and students not only as technology users but also as agents of change capable of utilizing AI for the progress of the Muslim community in this interconnected era. Without this integration, IRE will struggle to face future challenges and guide the ummah amidst the ever-changing dynamics of Society 5.0. This integration is used to improve the quality of life and achieve a socially intelligent and sustainable society (Daffa Faqiha Fawwaz Hanjowo et al., 2023).

4.2 Opportunities for AI Integration in Islamic Religious Education Era 5.0

Technology opens up great opportunities for the transformation of Islamic education. Future Islamic education will transcend the boundaries of physical classrooms, utilizing digital technology to reach more students and improve the quality of learning. Online platforms, artificial intelligence, and virtual reality will be key in delivering interactive and engaging Islamic material. Access anytime and anywhere allows for the global dissemination of Islamic values.

Islamic Religious Education (IRE) in higher education plays a vital role in shaping students' religious understanding. In this advanced technological era, the integration of artificial intelligence (AI) offers significant opportunities to enhance the quality of IRE. AI can provide benefits such as:

- Personalized and adaptive learning.
- Comprehensive religious data analysis.
- Interactive virtual tutors.
- Innovative mobile applications.

Higher education institutions and IRE lecturers have an important role in leveraging this potential of AI.

The opportunities for AI integration in Islamic Religious Education Era 5.0 are as follows:

Personalized Learning: Artificial Intelligence (AI) enables adaptive personalized learning. AI analyzes student abilities and adjusts learning materials according to each individual's level of understanding. Students with different abilities receive appropriate material, such as additional exercises for concepts that are difficult to grasp. AI also adjusts teaching methods, such as providing visual or audio material according to student preferences (Fahrudin et al., 2024).

Enhancement of Educator Professionalism: In the context of enhancing educator professionalism, AI also offers opportunities for developing the competencies of IRE teachers. Through AI-based digital training platforms, the needs for teacher skill development can be specifically analyzed, so that the training material provided can be personally customized and learning progress monitored automatically. Teachers can access training related to digital learning strategies, development of interactive media based on Islamic values, and technology-based evaluation methods that are more relevant.

AI-Based Learning Media: Chatbots and Islamic Applications: AI integration can also come in the form of Islamic chatbots capable of answering student questions anytime about Islamic material, such as fiqh (jurisprudence), tawhid (monotheism), or the history of the prophets. These chatbots are designed based on data from authoritative books such as Tafsir Al-Misbah, Shahih Bukhari, and Fiqh Sunnah. Chatbots become learning assistants that strengthen student understanding outside of formal class hours and encourage students' exploratory interest in Islamic knowledge. Applications such as "Al Qur'an Tutor" can also be used to help students learn to read and understand the Qur'an with voice recognition and automatic tajwid (pronunciation rules) correction.

4.3 Challenges of AI Integration Implementation in the Islamic Religious Education Curriculum

The utilization of artificial intelligence (AI) has had a major influence on various aspects of life, including the world of education. One field of study that is attempting to adopt AI technology in its learning process is Islamic Religious Education (IRE). Nevertheless, the application of AI in religious teaching presents a number of complex challenges. (Rozi et al., 2024) the various challenges faced in implementing AI in religious learning, along with the resulting impacts, are as follows:

Irrelevant Curriculum: Religious education curricula often do not yet reflect the latest developments in artificial intelligence. Its implementation requires adjusting the curriculum content to be relevant to technological advancements. However, this process is not easy because it requires approval and revision of the material.

Dependence on Technology: The incorporation of artificial intelligence in religious learning demands adequate mastery of technology. IRE teachers face the challenge of understanding and keeping up with the latest technological developments. They are required to dedicate time and effort to mastering the relevant technology so that AI integration runs effectively. This challenge includes external factors, namely future demands, societal perceptions, as well as the continuously and dynamically developing progress of science and technology.

Resource Limitations: The integration of artificial intelligence in religious teaching is constrained by limited infrastructure, funding, and technical skills in higher education. Many IRE teachers are not yet technologically ready, still rely on traditional methods, and consider the use of AI to be complicating. To overcome this, training, external cooperation, and the mastery of four educator competencies are needed: pedagogical, personality, professional, and social.

5. Conclusion

The integration of AI in Islamic Religious Education is crucial in the Society 5.0 era, but it is also accompanied by various challenges. A less adaptive curriculum, the difficulty of adjusting religious material with technology, and ethical issues are the main obstacles. IRE teachers need to master 21st-century skills and adjust learning methods to the digital era. Limitations in facilities, funding, and understanding of technology also slow down AI integration. Therefore, curriculum adjustment, intensive training for teachers, and competency enhancement are needed so that the utilization of AI in IRE can run optimally without neglecting Islamic values.

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