# Proceeding of International Conference on Islamic and Interdisciplinary Studies (ICIIS), 2025

ISSN: 2963-5489

Website: https://jurnal.uindatokarama.ac.id/index.php/iciis/about



# **Artificial Intelligence in Strengthening Islamic Literacy Among Millennials**

# Mustofa Kamal1\*

<sup>1</sup> Islamic Religious Education Study Program State Islamic University Datokarama Palu, Indonesia

Corresponding Author: Mustofa Kamal, E-mail: mustofakamalabdulrahman@gmail.com

# **ARTICLE INFO**

# ABSTRACT

# Volume: 4 ISSN: 2963-5489

# KEYWORD

Artificial Intelligence, Islamic Literacy, Millennial Generation Islamic Education Digital Da'wah Adaptive Learning Religious Moderation Digital Transformation. Islamic literacy is an important foundation in forming a moderate, critical, and contextual understanding of religion in the midst of digital information flows. The millennial generation as active users of technology has a great opportunity to strengthen Islamic literacy through artificial intelligence (AI). This research aims to analyze how AI can be used in increasing the access, understanding, and engagement of the millennial generation to Islamic literature and values. The qualitative method is used with a literature study and observation approach to Islamic-based AI applications. The results show that AI is able to become a literacy facilitator through interactive features, content personalization, and semantic analysis of Islamic texts. This study recommends the integration of AI in Islamic education and the development of digital da'wah platforms that are adaptive to the needs of the millennial generation.

#### 1. Introduction

The development of digital technology has transformed the way humans obtain and understand information, including in the religious realm. The millennial generation, who were born and raised in this digital era, are faced with challenges as well as opportunities to improve their Islamic literacy. In the midst of the flow of information and various religious content, the ability to filter, understand, and internalize Islamic values is very important. Artificial intelligence (AI) is emerging as a technology that uses and can help in the literacy process through data analysis, personalized learning experiences, and interactions using natural language processing (NLP). This study explores the role of AI in improving Islamic literacy among millennials, with attention to its potential, challenges, and implementation strategies.

Advances in digital technology have brought about significant changes in various aspects of human life, including in the way individuals access, understand, and internalize religious values. In the era of the industrial revolution 4.0 and towards society 5.0, artificial intelligence (AI) is one of the key technologies that is changing the landscape of Islamic education, communication, and da'wah. Al not only functions as a technical tool, but also as an interactive medium that is able to present Islamic content in a personalized, contextual, and adaptive manner to user needs.

The millennial generation, born between 1981 and 1996, is a demographic group that is very familiar with digital technology. They thrive in an environment filled with fast-paced information, social media, and artificial intelligence-based applications. Their nature of being visual, interactive, and fast in absorbing information makes AI a promising means to strengthen Islamic literacy. Islamic literacy here is not only understood as the ability to read religious texts, but also includes a critical understanding of Islamic teachings, the history of civilization, spiritual values, and responses to contemporary problems related to Muslims.

<sup>\*</sup> Mustofa Kamal is a Student Islamic Religious Education Study Program at Postgraduate School, State Islamic University Datokarama Palu, Indonesia. This paper was presented at the 4<sup>th</sup> International Conference on Islamic and Interdisciplinary Studies (ICIIS) 2025, as a presenter, organized by the Postgraduate School State Islamic University Datokarama Palu, Indonesia.

#### 2. Literature Review

Artificial intelligence is now an important element in digital literacy, including in the realm of Islamic education. Suhuf (2023) stated that AI has great potential to optimize the quality of Islamic learning through content adjustment, meaning analysis, and natural language-based interactions. However, its application needs to be balanced with ethics and supervision so as not to create a negative effect on Islamic teachings.

Research from UIN Alauddin Makassar (2023) shows that the millennial generation uses digital literacy to understand Islamic law in a more flexible way. They explore various religious sources through social media platforms and apps, which influence their views on concepts such as taqlid, madhhab, and talfiq. In addition, a study by Metro University (2022) underscores the importance of digital literacy related to religion in combating misinformation and Islam-related hoaxes. At technology can play a role in filtering out inaccurate content and strengthening the legitimacy of religious sources, especially among urban Muslim communities.

Furthermore, research by Ramadhani & Yusuf (2021) shows how the application of AI in Islamic learning can increase the effectiveness of material delivery through adaptive learning systems. In Islamic madrassas and universities, AI is applied to analyze students' learning methods, design content according to their level of understanding, and provide automatic feedback based on the analysis of the meaning of students' answers. This shows that AI does not only function as a technical tool, but also as a pedagogical collaborator that can support the process of internalizing Islamic teachings in a more personalized and effective manner.

# 3. Methodology

This study utilizes a literature research method with a qualitative descriptive approach. Data collection is carried out through international and national journals, books, research reports, and documents related to AI, Islamic literacy, and millennials. The analysis process is carried out by reducing data, categorizing and interpreting the results obtained to reach a comprehensive conclusion.

# 3.1 Data Collection Procedures

This research was carried out using a literature study method through a descriptive qualitative approach. The process consists of identifying sources that include primary literature of the Qur'an, hadith, and classical works, as well as secondary literature in the form of books, journal articles, research reports, and scientific publications. Data selection by selecting relevant, reliable, and up-to-date literature. Data collection was carried out by grouping sources based on themes, including Al in the world of education, Islamic literacy, and the millennial generation. In addition, the data is also verified to ensure validity, reduce the possibility of bias, and maintain the depth of information.

# 3.2 Analytical Framework

This study applies a combination of content analysis and thematic analysis. Content analysis is directed at literature studies that discuss the application of artificial intelligence in Islamic education, including e-learning, Islamic chatbots, and digital interpretation. On the other hand, thematic analysis was carried out by grouping research findings into three main themes: the function of AI in improving Islamic literacy, the positive influence and obstacles to its use among the millennial generation, and cooperation strategies between scholars, academics, and technology developers. The two methods are then integrated to provide a comprehensive insight into the contribution of AI in strengthening Islamic literacy.

# 4. Results and Discussion

# 4.1 AI as a Literacy Facilitator

Al can present Islamic content in a more personal and contextual way. For example, a digital interpretation application that utilizes NLP (Natural Language Processing) can offer explanations of Qur'anic verses according to questions from users, thus helping to deepen the understanding of the text thematically. Artificial intelligence has been proven to be effective in facilitating Islamic literacy through the delivery of contextually appropriate and adaptive content. Applications that utilize NLP such as Quran.com and Al Tafsir provide an opportunity for users to access explanations of Quranic verses based on

#### Artificial Intelligence in Strengthening Islamic Literacy Among Millennials

specific themes or questions, which in turn strengthens the understanding of texts relevant to modern issues. This is especially beneficial for millennials who prefer non-linear defense and adapted to current needs.

In addition to providing thematic access, AI also supports recommendation-based learning by examining search patterns and user preferences. In this way, millennials can find additional material that suits their interests, such as thematic interpretations of digital ethics after exploring verses related to morals. This personalization approach makes AI a facilitator that not only makes information, but also guides users in the process of understanding sustainable social literacy.

# 4.2 Interactivity and Engagement

Da'wah chatbots such as the "Ask Islam Bot" provide an opportunity for millennials to engage directly with AI systems in asking about aspects of Islamic law, history, and ethics, which encourages active involvement in learning activities. The use of da'wah chatbots such as "Ask Islam Bot" and "Muslim Pro Assistant" shows that AI technology can increase the involvement of the millennial generation in the Islamic learning process. They have access to communicate directly with the AI system to ask questions about Islamic law, the history of civilization, or social ethics, without having to wait for a formal study session. The interactions that occur create a learning environment that is customizable, and based on user experience, which naturally reinforces the absorption of Islamic values.

Furthermore, interaction with AI also supports the application of gamification methods in Islamic education, including interactive quizzes, simulations of figh cases, or daily challenges to read hadiths. This approach is able to increase the learning spirit of the millennial generation who like an entertaining and competitive way of learning. By combining interactive dialogue and gamification, AI not only expands access to knowledge, but also triggers emotional and cognitive engagement during the process of absorbing Islamic teachings.

# 4.3 Ethical Challenges and Validity

The main challenge involves the authenticity of the content as well as the possibility of bias in the algorithm. Cooperation between religious scholars, technology developers, and academics is needed to ensure that artificial intelligence presents information that is authentic and in line with the maqashid of sharia. Although artificial intelligence provides convenience and availability, a significant challenge lies in the accuracy of the Islamic content presented. Algorithms created without the collaboration of scholars or sharia experts have the potential to disseminate invalid or distorted information. In addition, artificial intelligence that relies too heavily on numerical data can ignore the spiritual and ethical aspects of knowledge delivery. Therefore, it is very important to have a content verification system based on Islamic scientific authority and ethical supervision in the development of digital da'wah technology.

Another equally important issue is the issue of privacy and security of user data. Applications based on artificial intelligence that collect information regarding searches, questions, and learning patterns can be abused if they are not protected by strict regulations. This demands a digital ethical framework that emphasizes Islamic principles, not only in terms of content, but also in ensuring the confidentiality of data as well as the rights of users. Thus, the application of artificial intelligence in Islamic literacy must consider aspects of sharia and global digital ethics to ensure security, justice, and sustainability in its use.

# 4.4 Potential for Integration in Islamic Education

Al can be incorporated into the Islamic education curriculum through adaptive learning systems, analysis of students' abilities, and the arrangement of materials that are in harmony with each individual's learning methods, Al has a significant capacity to be applied in Islamic education, both formal and non-formal. With an adaptive learning system, Al is able to analyze students' abilities, organize materials according to their level of understanding, and provide automated feedback. This creates a more inclusive and efficient learning process, especially in the context of Islamic education in the digital age. Several Islamic educational institutions have begun to create Al-based online learning platforms to support independent learning in the fields of fiqh, tafsir, and Islamic history. The millennial generation's response to Al in Islamic literacy is also influenced by social and cultural aspects. In a number of urban Muslim communities, the application of Al in online da'wah is considered a positive modernization step. However, in more conservative communities, there is still a rejection of the use of technology in religious aspects. Therefore, it is important to use a contextual and local values-based approach in designing Islamic literacy strategies that use Al.

Furthermore, the application of AI in Islamic education also creates opportunities for interdisciplinary collaboration, such as cooperation between religious faculties, informatics, and technology research institutions. This collaboration facilitates the development of applications that are not only technically superior, but also in accordance with sharia. If managed effectively,

Al can strengthen the position of Islamic educational institutions in shaping a generation of Muslims who are critical, moderate, and able to adapt to global challenges, without sacrificing their Islamic identity and values.

# 5. Conclusion

Artificial intelligence has significant potential in strengthening the understanding of Islam among the younger generation. With interactive features, customization, and meaning analysis, AI can serve as a strategic partner in the education and dissemination of Islamic teachings. However, the application of AI must be complemented by ethical supervision and cooperation between disciplines to remain in line with Islamic values. This research encourages the formation of an inclusive, flexible, and technology-based Islamic digital ecosystem.

This study shows that artificial intelligence (AI) has tremendous potential to increase Islamic understanding among the millennial generation. By using technologies such as Islamic chatbots, e-learning platforms, and digital translation and interpretation applications, AI can provide faster, broader, and interactive access to Islamic knowledge sources. This is in line with the characteristics of the millennial generation who are familiar with digital technology and require responsive learning methods

The use of AI not only enriches the way Islamic material is delivered, but also allows for learning adjustments based on individual needs. With advanced data analysis, AI can tailor content according to each person's level of understanding, interests, and learning style. In this way, Islamic literacy can be a more interesting, efficient, and in accordance with the times

Although it offers many opportunities, the application of AI in Islamic literacy also faces various challenges. The validity of religious content is a major concern because not all digital information can be ascertained to be true. In addition, there is a risk of dependence on technology that can reduce critical thinking skills and the tradition of learning directly from scholars. The gap in access to technology can also reduce causing unequal understanding of Islam among the community.

To ensure that the use of AI is truly effective and remains within the framework of sharia, cooperation between scholars, academics, and technology developers is needed. This collaboration is very important to ensure that the content presented remains authentic, moderate, and in accordance with the needs of the people. With a collaborative approach and clear regulations, AI can be a strategic tool in building a solid understanding of Islam while maintaining the authenticity of Islamic values amid the ever-growing global digitalization trend.

**Acknowledgments:** The author expresses his gratitude to all parties who have provided support, both intellectually and administratively, during this research process. Special thanks are addressed to the State Islamic University of Datokarama Palu for their contributions and support.

**Conflicts of Interest:** The author states that there are no conflicts of interest in this study, either financially, institutionally, or personally, that can affect the results and integration of this paper.

# References

- Aldi, Lomba Sultan., Muammar Bakry, & Abdul Wahid Haddade. (2023). Transformation of digital literacy in understanding Islamic law for millennials in Makassar City. *Proceedings of the 1st International Conference on Science and Islamic Studies*, 1, 2565-2574.
- Alimuddin, M., Sari, R. N. (2022). The Utilization of Artificial Intelligence Technology in the Development of Religious Literacy in the Digital Era. *Journal of Digital Islamic Education*, 4(1), 45-58.
- Atohillah, Sukijan., Muhammad Khakim Ashari, & Muhammad Badat Alauddin. (2023). Religious Digital Literacy of urban Muslim Society in Indonesia: A Systematic Literature Review. *Journal of Islamic Thought*, 28(2), 142-155.
- Hidayat, T., Nurhaliza, S. (2021). Islamic Literacy of Millennials in the Era of Artificial Intelligence: Opportunities and Challenges, Journal of Da'wah and Islamic Communication, 6(2), 112-127.

# Artificial Intelligence in Strengthening Islamic Literacy Among Millennials

- Al-Khalifah, H. S., (2020). Artificial Intelligence Applications in Islamic Education: Opportunities and Challenges. *International Journal of Islamic Studies*, 12, 45-60.
- Rif'ai., Mohammad Jailani, Miftachul Huda. (2024). Artificial Intelligence (AI): An Opportunity and Challenge for Achieving Success in Islamic Education in the Era of Digital Transformation. International Journal of Islamic Studies. *International Journal of Islamic Studies*, 36(2). 200-211.
- Yusof, A., & Rahman, A. (2020). Artificial Intelligence in Islamic Education: Opportunities and Challenges. *Journal of Islamic Studies and Technology*, 5(2), 45–60.

Zailani, A., (2021). Digital Transformation in Islamic Education. Yogyakarta: Deepublish.