

# Utilisation of Artificial Intelligence in Quranic Learning: Innovation or Threat?

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## Abstract

The development of Artificial Intelligence (AI) has penetrated various sectors of life, including in the realm of Islamic education, especially learning the Quran. Various AI-based applications and platforms are now available to help the process of reading, memorizing, and understanding the Quran more quickly and efficiently. This study aims to critically examine the use of AI in learning the Quran, by exploring the potential innovations offered while analyzing the potential negative impacts that may arise. The approach used in this study is qualitative descriptive, with data collection methods through literature studies, content analysis of circulating AI Quran applications (such as Tarteel, Ayat, and Muslim Pro), and limited interviews with tahfidz teachers and practitioners of Islamic educational technology. The results of the study show that the use of AI brings various benefits, including accelerating the process of correct pronunciation (tashih tilawah), providing automatic reading correction, and providing contextual interpretations that are tailored to user needs. However, there are also quite significant concerns, such as decreasing dependence on teachers (murobbi), the risk of non-authoritative interpretation of meaning, and the potential for commercialization and manipulation of religious data. This article concludes that AI is an innovative tool in learning the Quran, but it is not a substitute for traditional scientific authority. Regulation, ethics of use, and supervision by Islamic institutions are needed so that AI remains a beneficial tool and does not cause deviations in understanding the Quran.

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## INTRODUCTION

The rapid development of digital technology in the 21st century has fundamentally changed the face of human civilization, including in the realm of Islamic religion and education (Lund, 2021). One of the most revolutionary and widely discussed technologies in contemporary discourse is Artificial Intelligence (AI) (Taherdoost & Madanchian, 2024). AI is a branch of computer science that focuses on the creation of machines or systems capable of performing tasks that usually require human intelligence.

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Such as thinking, solving problems, recognizing voices, and analyzing and making decisions. The emergence of AI has not only had an impact on the economic, industrial, and health sectors, especially in the context of learning the Quran (Hidayatullah et al., 2025). This reality has consequences that are not simple, because learning the Quran is not just a cognitive process, but also spiritual, transcendental, and sanad-transmissional (Agustono et al., 2025).

The Quran as the word of God revealed to the Prophet Muhammad SAW has a central position in the lives of Muslims (Husni, 2022). It is the main source of law, a guide to life, and an instrument for forming Islamic civilization. Since the early days of Islam, the tradition of learning the Quran has been carried out through the method *divorce* and *musyafahah*, namely the direct teaching process from teacher to student with an orientation towards the continuity of sanad and maintenance of pronunciation accuracy (*tahsin*), understanding of meaning, and internalization of the spiritual values contained therein (Sahmat & Zamri, 2024). This model not only maintains the authenticity of reading and meaning, but also emphasizes the importance of manners, spiritual closeness between teacher and student, and the process of forming Islamic character (Ismail et al., 2023). In this context, the teacher of the Quran is not just an academic instructor, but also a spiritual guide (teacher) that shape the student's personality in accordance with divine values (Kurniawati, 2024).

However, along with technological advances, various AI-based digital applications and platforms are now being developed to help Muslims read, memorize, and understand the Quran (Haleem et al., 2022). Applications such as *asat intervals*, *Verse*, *Muslim Pro*, *Quran Companion*, and others offer features that include speech recognition for reading correction, memorization progress monitoring, automatic interpretation explanation, and phonetic and AI-based pronunciation training. This innovation is considered a leap in the field of Islamic educational technology, as it is able to expand access to learning the Quran globally, across geographical and demographic boundaries (Mithun & Roopadarshini S, 2024). AI enables the learning process to be more personal, flexible, and efficient, especially for the digital-native generation who are accustomed to using mobile devices and the internet in their daily activities (Ayeeni et al., 2024).

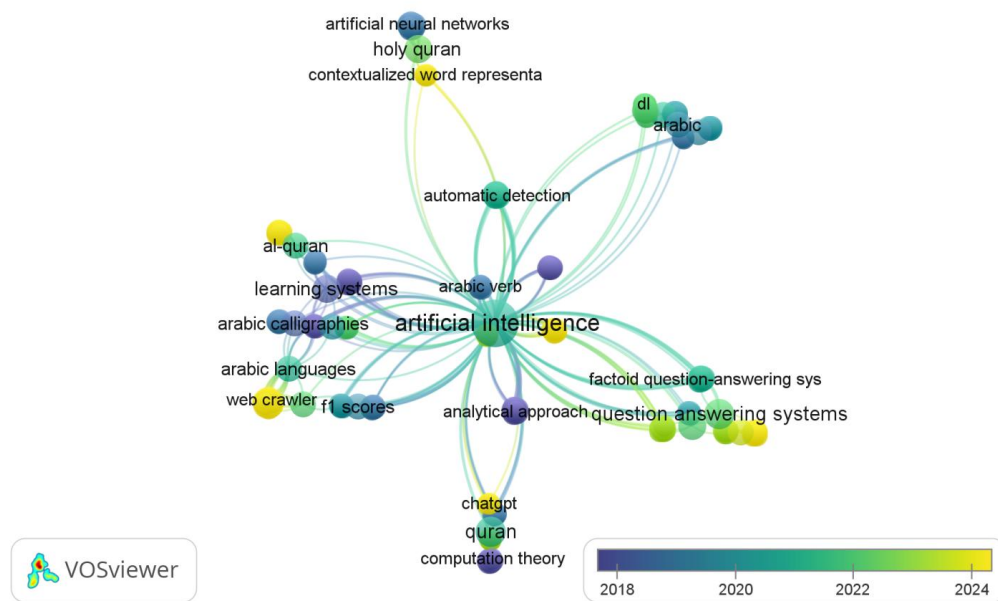
Despite its positive impact, the use of AI in learning the Quran is not free from a number of epistemological, pedagogical, and ethical challenges (Miftahun & Basyarahil, 2025). One of the main concerns is the potential shift in the role of teachers as legitimate scientific authorities. When students rely more on machines in learning to read and understand the Quran, the transcendental relationship between students and teachers is at risk of being severed. Moreover, the AI system basically works with statistical databases and algorithms, not based on the methodology of interpretation and *ulumul Quran* that has been built scientifically and systematically in the Islamic scientific tradition. This opens up opportunities for misinterpretation, reduction of meaning, and contextual understanding that is not in accordance with the principles of *maqashid al-syari'ah* (Adnan, 2025).

Another aspect that also deserves attention is the issue of ethics and data security in the use of AI-based applications for learning the Quran (Khan et al., 2025). Many of these applications are developed by non-Muslim entities or commercial companies that are not always oriented towards the welfare of the community, but rather oriented towards user monetization and data utilization. In situations like this, there is the potential for information manipulation, misuse of

religious data, and even content distortion that can threaten the sanctity of the text of the Quran itself (Jagatheesaperumal et al., 2022). In addition, the presence of AI that automatically suggests interpretations or contexts of verses can also give rise to algorithmic biases that stem from certain cultural and ideological assumptions, which are not in line with authoritative classical or contemporary interpretation methodologies (Haleem et al., 2022).

Therefore, this article raises a crucial issue regarding the extent to which the use of Artificial Intelligence in learning the Quran can be categorized as a beneficial innovation or actually contains the potential for threats to the purity of Islamic teachings and methodology. Using a descriptive qualitative approach, this article seeks to explore the positive side of the use of AI technology in facilitating learning the Quran, especially in terms of efficiency, personalization of learning, and increasing reading accuracy through digital feedback (Doyle et al., 2020). However, at the same time, this article also criticizes the problematic dimensions that accompany the use of AI, including the degradation of teacher authority, the risk of interpretation deviation, and ethical problems related to the management and dissemination of religious data. The analysis in this article is based on a literature study of relevant literature, both from the disciplines of computer science, Islamic education, and classical and contemporary Islamic studies, and is complemented by a content analysis of AI-based Quran applications that are popular among the Muslim community. In addition, this article also refers to the views of a number of tahfidz teachers and practitioners of Islamic educational technology to obtain a contextual empirical perspective. Thus, this article does not only present a theoretical study, but also compiles a critical reflection that can be used as a basis for formulating policies, regulations, and ethical standards for the use of AI in the field of Quranic education.

In addition, this article is also equipped with a bibliometric analysis using VOSviewer software to map research trends related to the use of Artificial Intelligence (AI) in the context of the Quran, as in Figure 1. This analysis was carried out by accessing data from the Scopus database in the period 2018 to 2024, using the keywords “Artificial Intelligence” and The Quran. This process aims to identify dominant keywords, collaborations between researchers, and networks of related topics that develop in the global scientific discourse on the integration of AI and Quranic studies. The results of this mapping provide a visual and systematic picture of the direction of research development and show the extent to which this topic has received academic attention at the international level. This approach complements literature studies and content analysis, in order to present more comprehensive and scientifically data-based arguments.



**Fig 1. Artificial Intelligence Keyword Analysis in Teaching the Quran**

Based on the results of bibliometric analysis using VOSviewer on publications from the Scopus database in the period 2018 to 2024 with the keywords "Artificial Intelligence" and The Quran, a visualization of the keyword network map (keyword co-occurrence) was obtained which shows the close relationship between themes. Artificial Intelligence with various concepts related to learning the Quran. In the map, the keyword "artificial intelligence" is in a central position and is directly connected to terms such as "al-quran", "quran", "holy quran", "arabic languages", and "learning systems", indicating that the integration of AI in the study and learning of the Quran is a topic that is increasingly receiving attention in global scientific literature. Keywords such as "chatGPT", "automatic detection", and "question answering systems" also show that the AI approach is not only limited to the technical aspects of Arabic linguistics, but also develops towards interactivity, contextual understanding, and the ability to answer religious questions automatically.

Furthermore, the association with the terms "contextualized word representation", "arabic verb", and "artificial neural networks" indicates significant developments in the application of machine learning models and natural language processing (NLP) to support the teaching of the Quran, especially in the aspects of tashih tilawah, understanding of tafsir, and recognition of classical Arabic language structures. The color spectrum seen from the graph (blue to yellow) also reflects the trend of publication time, where most of the connections relevant to AI and Al-Quran actually emerged significantly in the period from 2021 to 2024, indicating that this discourse is still relatively new but developing very rapidly. The dominance of contemporary terms such as "chatgpt" and "dl (deep learning)" is also evidence that the digital transformation in learning the Quran has now entered the era of generative artificial intelligence.

Thus, this analysis confirms that the use of AI in learning the Quran is not

just an experimental issue, but has become a mainstream in scientific studies that connect advanced technology with Islamic scientific traditions. This emphasizes the importance of formulating policies, ethical guidelines, and integrative strategies so that the use of AI truly provides benefits without ignoring authoritative values and manners in teaching the Quran (Mazingue, 2023). Ultimately, this article emphasizes that AI should be positioned as a tool (*mu'in*) in supporting the process of learning the Quran, not as a substitute (*bad*) the authority of Islamic science and pedagogy that has been maintained since the time of the prophet. The integration of AI in learning the Quran must be based on the principles of caution, scientific supervision, and solid Islamic manners (Stimpson & Calvert, 2021). Synergy between technological advances and Islamic scientific traditions is needed so that learning the Quran in the digital era remains true to the values of revelation, maintains the sanctity of the text, and strengthens the quality of knowledge and spirituality of the people. Therefore, the active involvement of Islamic institutions, academics, and Muslim technology developers is needed to oversee the development of AI that is beneficial, trustworthy, and in accordance with the *maqashid sharia* in the field of Quran education.

## METHODS

This article uses a descriptive qualitative approach to explore in depth the use of Artificial Intelligence (AI) in learning the Quran and its potential positive and negative impacts (Rony et al., 2024). This approach was chosen because it is able to describe the phenomenon holistically and contextually, and allows the author to explore the meanings and perceptions that develop in the community of users of Islamic educational technology. The data in this article were obtained through a literature study of various relevant scientific sources, both in the form of international and national journals, conference articles, books, and religious fatwas that discuss the integration of technology and Islamic education, especially the Quran. In addition, a content analysis was also carried out on a number of AI-based applications that are widely used by the Muslim community, such as *asat intervals*, *Verse*, and *Muslim Pro* (Morshidi et al., 2024). The analysis focuses on the features, functions, and pedagogical approaches offered by these applications in supporting the process of reading, memorizing, and understanding the Quran. As a complement, this article also utilizes data from limited interviews (semi-structured) with a number of *tahfidz* teachers and practitioners of Islamic educational technology to obtain empirical views and responses to the presence of AI technology in Quran learning. Triangulation techniques are used to ensure data validity, namely by comparing the results of literature reviews, application content analysis results, and interview results (Bans-Akutey & Tiimub, 2021). Through this method, this article seeks to provide an objective and comprehensive understanding of the existence of AI as part of the digital transformation in Quran education, as well as the ethical and pedagogical implications that accompany it. This approach is expected to be able to provide a conceptual contribution to the development of technology-based Islamic education policies and practices that adhere to authoritative values and scientific ethics.

## RESULT AND DISCUSSION

### Innovation Analysis in the Utilization of AI in AI-Quran Learning



The use of Artificial Intelligence (AI) technology in learning the Quran has made a very significant contribution to increasing the effectiveness and quality of Islamic education (Yulianto & Haya, 2023). The innovations brought by AI in various fields of Quran learning include pronunciation, memorization, and understanding of interpretation. This technology not only facilitates access but also improves the overall quality of learning (Economics et al., 2023). In recent years, various AI-based applications have been introduced to support Quran learning, from correct pronunciation (tahsin tilawah), to understanding the meaning of holy verses. These innovations have the potential to have a major impact on Quran education in this digital era (Ayeti et al., 2024).

One of the main innovations brought by AI in learning the Quran is in the field of pronunciation (Fithriyah, 2024). AI-based applications such as Tarteel, Ayat, and Muslim Pro use speech recognition technology (*voice recognition*) which is very sophisticated to check the reading of the Quran automatically. This technology is able to detect errors in tajweed, pronunciation of letters, as well as errors in the length of letters and makharijul letters. For example, applications such as Tarteel use sophisticated algorithms to compare the user's reading with standard readings that are in accordance with the correct rules of tajweed. In this case, AI allows learners to correct their reading errors in real-time, without the need for direct guidance from a tahsin teacher. This is very useful for those who want to improve their reading of the Quran independently. As in the hadith of the Prophet SAW which means:

*"Whoever reads the Quran well, he will have two rewards; one for reading and one for correcting any reading that may be wrong."* (HR. Bukhari and Muslim).

This hadith underlines the importance of correct recitation of the Quran (Shakeer, 2023). With AI technology, Muslims can improve their pronunciation according to the correct rules of tajwid, strengthen the quality of their worship, and enrich their understanding of how to read according to Islamic teachings (Naufal et al., 2024). In addition, AI also brings innovation to memorizing the Quran, especially in helping the tahfidz process. One AI-based application can create a structured memorization schedule and monitor the progress of the user's memorization (Agustina & Marhamah, 2023). This technology can analyze the extent of a person's memorization and provide recommendations for verses that need to be repeated based on the user's level of mastery and frequency of forgetting. This gives students the freedom to learn independently, reduces dependence on tahfidz teachers, and helps them maintain memorization more effectively. In this case, AI technology plays an important role in facilitating the memorization process, without reducing the quality and depth of the memorization itself (Ionescu & Diaconita, 2023). In the Quran, Allah SWT says what it means:

*"And say: 'My Lord increase me in knowledge.'"* (QS. Ta-Ha: 114).

This verse teaches Muslims to continue seeking knowledge and increasing their knowledge capacity, including in terms of mastery of the Quran. AI can help accelerate this process by providing more efficient and organized tools (Pearson, 2023). Another innovation presented by AI is in the development of understanding of the interpretation of the Quran. By using Natural Language Processing (NLP)

technology, AI-based applications allow users to ask about the meaning of the verses, the background to the revelation of the verses, and their relevance to today's social and cultural context. With the existence of AI applications, interpretations that were previously only accessible to a limited circle can now be easily obtained by anyone. For example, applications such as Al-Quran Explorer provide explanations of interpretations from various famous scholars, both from classical and contemporary sources. This broader understanding of interpretation is very important for understanding the context of the verses of the Quran in everyday life. As in the word of Allah SWT which means:

*"Verily this Al-Quran gives guidance to a straighter path..."*(QS. Al-Isra: 9).

This verse shows that the Quran is a guide to life for Muslims in all ages. With the help of AI technology, good and correct interpretation can help people to better understand and practice the instructions contained in the Quran. Overall, the use of AI in learning the Quran opens up great opportunities to increase the effectiveness and accessibility of Quran education (Miftahun & Basyarahil, 2025). The innovation presented by AI not only makes it easier for Muslims to improve their reading, memorizing, and understanding of the Quran, but also makes it easier to expand the reach of this education, without geographical and physical limitations. Thus, AI plays a role in accelerating the process of Quranic literacy among Muslims and improving the quality of Quranic teaching as a whole (Basir, 2024). As emphasized in the hadith of the Prophet Muhammad SAW which means:

*"The best of you are those who learn the Quran and teach it."* (HR Bukhari).

With the support of AI, the process of learning and teaching the Quran becomes more effective and easily accessible to anyone (Naufal et al., 2024). However, of course, this technology must be used wisely and accompanied by proper supervision so that it remains in accordance with Islamic teachings and does not reduce the essence of true teaching of the Quran.

### **Threat Analysis of AI Utilization in Al-Quran Learning**

In this sophisticated digital era, the use of technology, including Artificial Intelligence (AI), has brought many innovations in various aspects of life, including in the world of education (Yulianto & Haya, 2023). One area that is now getting more attention is learning the Quran (Hidayatullah et al., 2025). AI offers easy access, efficiency in the learning process, and practicality in facilitating students of the Quran to memorize, read, and understand this holy text. However, behind all the benefits offered, there are also a number of threats that need to be taken seriously, so that the use of AI in learning the Quran remains in the right corridor and in accordance with Islamic teachings.

One of the biggest threats that arises with the use of AI in learning the Quran is the loss of the role of the teacher (murabbi) in the learning process (Saihu Made, 2021). In the tradition of Islamic education that has lasted for centuries, teachers play a very important role, not only as teachers, but also as spiritual guides who shape the character and morals of students (Risnawaty, 2023). Teachers in Quran education not only transfer knowledge about reading and interpreting the Quran, but also provide examples in practicing these teachings in everyday life.

Direct interaction between teachers and students in learning the Quran is very important in shaping the personality of a student, because this involves not only cognitive aspects, but also emotional and spiritual aspects (Made, 2021). In a hadith narrated by Al-Bukhari and Muslim, the Messenger of Allah SAW said which means:

*"Indeed I was sent to perfect noble morals."*(HR. Al-Bukhari)

This hadith underlines the importance of character in learning the Quran. Therefore, direct interaction with teachers who have manners, knowledge, and experience is something that cannot be replaced by any technology (Risnawaty, 2023). Teachers, as guides who understand the challenges and character of each student, have an important role in teaching the Quran with compassion and understanding. Excessive reliance on AI-based applications can reduce the human closeness between teachers and students, which is very important in forming the character of a student or student. Although technology can support the learning process, the depth of the relationship between teachers and students in religious education cannot be replaced by machines.

In addition, although AI can access interpretations from various sources, this technology still has limitations in understanding and interpreting the meaning of the Quran as a whole (Pöchhacker, 2022). As we know, the Quran is not just a text that can be understood through word-for-word translation. The Quran has a very deep context, involving history, culture, and the conditions of society when the verses were revealed (asbabun nuzul). AI works based on algorithms that rely on data analysis, but it cannot understand the social, historical, and cultural context in depth. Understanding the Quran that only relies on statistical algorithms risks producing distorted or too literal interpretations, without considering the conditions of the times and the purpose of the revelation of the verses. Allah SWT says in the Quran which means:

*"And when you ask them about something, then say: 'That is what will be explained to you from the knowledge of your Lord'."*(QS. Al-Isra: 9)

This verse reminds us that a correct understanding of the Quran requires a deep appreciation of the religious knowledge conveyed by scholars. In this case, AI cannot replace the depth of understanding possessed by scholars who understand the context of the verses as a whole, both in terms of language, history, and the social situation behind the revelation (Muhyidin, 2022). The use of AI in interpretation, without supervision from competent interpretation experts, risks producing wrong or misleading understanding, especially for those who do not have an adequate background in religious knowledge.

In addition, privacy and data security issues are important issues that need to be considered in the use of AI in learning the Quran (Khan et al., 2025). Many applications used in learning the Quran collect personal data of their users, such as voice recordings, reading patterns, and their learning habits. This data is often used to personalize the learning experience, but if not managed wisely, it can pose a risk of misuse of personal data. In this open digital world, it is not uncommon for the collected data to fall into the wrong hands, or be misused for commercial interests



that are not in accordance with the principles of da'wah (Boppana, 2023). The Prophet Muhammad SAW said in a hadith which means:

*"Indeed, every charity depends on the intention, and everyone will get what he intended."*(HR. Al-Bukhari and Muslim)

This hadith reminds us that everything that is done, including the collection and use of data, must be based on the right intention and in accordance with the principles of sincerity and trust. If the main purpose of the application used is commercialization or material gain, then learning the Quran can lose its meaning and noble values that should be the main goal in da'wah. Therefore, it is important for application developers to ensure that user data is managed safely, transparently, and in accordance with Islamic ethical principles. In addition, although AI technology can provide convenience in accessing Quran learning, excessive use can lead to dependence on technology, which reduces students' critical and independent abilities (Findlay, 2023). Learning the Quran should not only be limited to reading and memorization techniques, but also involve a deep understanding of the meaning and wisdom of the teachings of the Quran itself. Dependence on AI-based applications can reduce individuals' motivation to explore independently, both in understanding the interpretation and in practicing the teachings of the Quran. The ideal learning is one that involves active interaction with the text of the Quran, involving competent teachers, and an understanding that is not limited to technical aspects, but also spiritual (Sugiarto, 2025). As taught in the hadith which means:

*"And those who believe and do righteous deeds, they are the best of creatures."* (QS. Al-Bayyinah: 7)

This verse reminds us that the quality of faith and good deeds does not only depend on the technical or mechanical aspects of learning, but also on the quality of understanding and practice built through deep spiritual interaction (Tambak et al., 2022). Therefore, although AI can assist in the learning process, the role of competent teachers and direct interaction in deepening the teachings of the Quran cannot be replaced by technology. Overall, although AI provides various benefits in learning the Quran, we must remain vigilant against the threats posed by dependence on this technology (Findlay, 2023). It is important for us to ensure that the use of AI in Quran education is carried out wisely, while maintaining the basic principles of Islamic education, namely direct interaction between teachers and students, and a deep understanding of the text of the Quran. The use of technology must always be within a framework that supports the goals of da'wah and holistic learning, which does not only focus on technical aspects, but also on character formation and the practice of the true teachings of the Quran.

### **Innovation or Threat?**

The use of Artificial Intelligence (AI) in learning the Quran can be seen as an innovation that promises progress in the world of Islamic education, but at the same time, it also contains a number of potential threats that need to be watched out for (Danmuchikwali & Suleiman, 2020). The existence of AI technology in the world of education can open up wider opportunities in increasing the efficiency and accessibility of learning the Quran, but if not managed wisely, AI risks replacing the

essential role that has been played by teachers and scholars (Ayeni et al., 2024); (Made, 2021). Therefore, to assess whether AI provides more benefits or threats, we need to study more deeply both in terms of its positive potential and its negative impacts on the Quran education process.

On the one hand, AI offers various innovations that are very useful in accelerating and expanding the process of learning the Quran (Economics et al., 2023). The use of technologies such as automatic tashih tilawah that can provide direct feedback on reading errors, personalized memorization schedules that allow students to learn according to their abilities and needs, and increasing understanding of interpretation by using Natural Language Processing (NLP) to access more contextual and in-depth interpretations of the verses of the Quran, are some real examples of the great potential offered by AI. Such innovations make learning the Quran more accessible to various groups, including those who live in remote areas or who have limited time. In this context, AI can strengthen Quranic literacy in the digital era by providing tools that can accelerate the learning process and improve understanding of the Quran more efficiently (Pearson, 2023).

However, on the other hand, the use of AI in Quran education carries various risks that cannot be ignored. One of the main threats that needs serious attention is the loss of closeness between teachers and students in the learning process (Made, 2021). In the tradition of Islamic education, especially in teaching the Quran, teachers or murabbi not only act as teachers who transfer knowledge, but also as spiritual guides who direct students to understand and practice the teachings of the Quran in everyday life. Teachers have a very important role in shaping the character and morals of a student, who does not only rely on the transfer of knowledge, but also the noble values internalized in students through direct interaction (Risnawaty, 2023). AI, although it can provide faster and more practical learning, cannot replace this role. Excessive dependence on technology can reduce the emotional and spiritual closeness between teachers and students which is very important in building character and practicing the teachings of the Quran.

In addition, one of the major potential threats in the use of AI is the misinterpretation of the Quran which can be misleading (Latifi, 2024). Although AI applications can access various interpretations and use sophisticated algorithms, this technology is still based on statistical and linguistic data that is mechanistic (Mozaffar et al., 2022). AI cannot capture the social, cultural, and historical context behind the revelation of the verses of the Quran, which are important aspects in correct interpretation (Abdalhusein, 2025). Without supervision from scholars or experts in interpretation, the understanding of the verses of the Quran produced by AI has the potential to be distorted, or even misinterpreted. This is very dangerous because it can lead to the spread of interpretations that are not in accordance with the meaning intended by Allah SWT. In this case, AI cannot replace the scientific authority of scholars and experts in interpretation who have a deep understanding of the context and rules of interpretation.

In addition, the issue of privacy and security of user data is also an important issue in the use of AI in learning the Quran (Khan et al., 2025). Many AI applications used for learning the Quran collect users' personal data, such as voice recordings, reading patterns, and their learning habits. This data can be used to improve the learning experience, but if not managed carefully, it can pose a risk of misuse. In an increasingly open digital world, misuse of personal data is a serious

threat, especially if these applications focus more on commercial interests than on preaching and actual religious teaching. When personal data is used for purposes that are not in accordance with Islamic principles, then learning the Quran, which should be a means of getting closer to Allah SWT, is instead trapped in material interests that ignore the values of sincerity and trust (Kismawadi et al., 2024). In this case, the use of AI needs to be regulated by clear regulations to ensure that this technology is used for purposes that are in accordance with Islamic teachings.

However, this does not mean that we should reject AI technology altogether in Quran education. AI, if used wisely and under proper supervision, can be a very useful tool to accelerate the process of learning the Quran (Setiawan, 2021). This technology should be seen *as be it*(tools), not as a substitute for scientific authority that has been held by teachers and scholars. Therefore, it is important to involve sharia experts, scholars of interpretation, and technology experts in the development and supervision of the use of AI in learning the Quran (Najiburrahman et al., 2022). With clear regulations and strict supervision, AI technology can be utilized to support Quran education that is more inclusive and relevant to the needs of the times, without sacrificing the basic values that have been taught in the tradition of Islamic education.

In order for AI to be used for benefit, there needs to be an awareness that this technology should not replace the central role of teachers and scholars in Quran education (Yasin & Billah, 2024). Teachers still play an important role in guiding students to understand the Quran comprehensively, both in terms of reading, interpretation, and practice in everyday life. With proper supervision and wise integration of technology, AI can be a very effective means of improving the quality of Quran learning in this digital era, without sacrificing the essence and spiritual values contained in the Quran (Luqmi et al., 2024). Overall, the use of AI in Quran learning is not a threat to be feared, but rather an opportunity that must be utilized carefully and with consideration. AI should be used as a tool to speed up and facilitate the learning process, but it should not replace the scientific authority and emotional closeness that has existed between teachers and students. With proper supervision, AI can be a beneficial innovation, supporting the development of Quranic education in this digital era, while maintaining and strengthening the basic values in the Islamic educational tradition (Almeida et al., 2021).

## CONCLUSION

The use of Artificial Intelligence (AI) in learning the Quran offers significant innovation, with the potential to increase the efficiency and accessibility of learning. AI applications can accelerate the process of tilawah tashih, personalize memorization schedules, and deepen understanding of interpretation through Natural Language Processing (NLP) technology. This opens up opportunities for increasing Quranic literacy, especially in the digital era. However, the use of AI also carries threats that need to be watched out for. The use of AI risks reducing the role of teachers in shaping morals and character through direct interaction, and has the potential to produce misinterpretations due to the limited contextual understanding of the algorithm. In addition, issues of privacy and misuse of user data must be a serious concern. Thus, AI should be seen as a tool that supports, not replaces, the role of scholars and teachers in learning the Quran. To maximize its benefits, clear regulations and supervision by competent parties are needed, including sharia experts and scholars of interpretation, so that AI is used wisely

without sacrificing basic values in Islamic education.

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## DECLARATIONS

### Author Contribution

**Engkizar & Azhar Jaafar:** Writing-Preparation of original manuscript, Conceptualization Data accuracy, **Rosi Guspita:** Visualization, Methodology **Albizar & Muhamad Firdaus Bin Alias:** Improve Language, Investigation.

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The data and language usage in this article have been validated and verified by English language experts and no AI-generated sentences are included in this article.

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### Conflict of Interest

The authors declare that this research was conducted without any conflict of interest in the research.

### Ethical Clearance

The place or location studied has agreed to conduct research and is willing if the results of this study are published.

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