

SUPERIOR ISLAMIC EDUCATION REFORM THROUGH AI DIGITAL TRANSFORMATION BRIDGE: OPPORTUNITY OR CHALLENGE?

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ABSTRACT

The era of digitalization is marked by the presence of a sophisticated technological dimension. The technological greatness of the 5.0 era can make Islamic education more superior by empowering an artificial digital transformation or Artificial Intelligence (AI). AI is interpreted as a revolutionary technology that seeks to integrate the relationship between humans and machines. This study aims to explore the compatibility of AI digital transformation which is used as an alternative bridge for superior Islamic education reform and review two different points of view; challenge or opportunity. This research is a qualitative method using a retrospective-analysis approach, collecting some data obtained from research at EBSCO, Google Scholar and Scopus. The results found that the existence of AI has provided significant opportunities for the development of technology-based religious learning methods, AI can support teachers to analyze student data more efficiently with the help of sophisticated computer algorithms, AI is so prospective for personalization in Islamic education. AI features can spark students' thinking innovations, among AI-savvy web; Intelligent Tutoring System (ITS), Personalized Learning, Smart Content this is a form of response to the presence of the phenomenon of digital transformation. On the other hand, the existence of AI in the Islamic education sector backfires and has challenges that have a negative impact such as the shifting of the central role of "Teacher" education as an educational service provider; dependence on excessive use of AI resulting in a decrease in students' critical analytical abilities, fading academic morality, AI is at risk of privacy data theft by some individuals. Thus, it is hoped that practitioners and academics of Islamic education can formulate special policies and pay great attention to current digital transformation so that the existence of AI can be internalized as a bridge to consistently superior Islamic education reform.

Keywords: AI, Challenges, Islamic Education, Opportunity.

INTRODUCTION

In the world of education, the emergence of the digital transformation phenomenon has led to new benchmarks in assessing educational progress. Education is considered advanced and developed, not only based on its input or output, but how far technology is utilized as an educational facility. Salsabila, et.al., (2020) explained that there are at least four reasons why technology determines the quality of education, namely: 1) technology is able to present learning facilities ranging from planning, management to assessment of learning resources, 2) technology makes learning more effective and efficient, 3) technology can overcome complex learning problems in an

integrated and comprehensive manner through various disciplines, and 4) technology spurs innovation and new ideas in the world of education. One of the technologies that are now being applied in education is AI (Artificial Intelligence). Artificial Intelligence, together with Big Data and the Internet of Things, emerged in the 4.0 era. AI means artificial intelligence and comes from computer algorithms. In this case, the computer is designed in such a way as to have a human-like thinking mechanism. The advantages of AI over natural intelligence are that it is more permanent and consistent, rigorous, easier to disseminate and duplicate, and effective and efficient in solving problems and making decisions (Jaya, 2018). Meanwhile, the drawback of AI is that everything can be at risk of breaches and theft of privacy data. In addition, as a computer machine, AI can experience errors or errors, because it is very dependent on the strength of the internet signal.

Islamic education in the digital era has a fundamental role in improving the quality of the nation's generation. In accordance with the name 'Islam' embedded behind the word 'education', the purpose of Islamic education is in accordance with the sharia itself, which essentially, has a vision-mission to increase the potential of human emotional and spiritual nature, so that a generation of faith and noble character towards others, noble character, active and disciplined, and ready to build Islamic civilization and civilization of the country that is resilient and peaceful in the changing times (Munir, & Syar'i, 2021). As a response as well as an effort to advance Islamic education, the presence of AI can be both an opportunity and a challenge in the spirit of superior educational reform.

The spirit presented in reforming Islamic education is realized through the reconstruction of the conception of Islamic education that is more adaptive and accommodating to the times. While the 'reform' itself includes how every element of education, starting from the system, aspects of learning, and everything related to it can be adapted to the needs of the global community. Global citizenship is symbolized by some as a post-globalization generation, an instant generation, and a generation that prioritizes results over process. These indications may lead to further problems, namely moral degradation or multidimensional crisis, even ethical-academic crisis (Setyawati, et.al., 2023). Being in the midst of actual problems and issues, Islamic education must collaborate and integrate with technology, one of which is by utilizing AI.

As a digital technology, AI provides opportunities for Islamic education in terms of expanding accessibility, developing interactive and innovative learning strategies and methods, and strengthening religious understanding. Technology makes it easy for citizens around the world to be able to access knowledge related to Islam such as the Qur'an, Hadith, and books of interpretation very easily through gadgets or the internet. In addition, the development of multimedia-based learning media, both visual and audiovisual, such as animations and images, allows religious materials to be represented in a more interesting way. Digital platforms and social media also facilitate educators and learners to interact and discuss and exchange ideas directly despite limited space and time. (Hajri, 2023)

AI has an impact on the world of Islamic education, one of which is the authenticity of content scattered on social media and the internet. This is related to academic ethics which are increasingly eroded due to AI. Academic ethics from an Islamic perspective includes several values, including honesty, integrity, and responsibility that must be upheld by academics, such as learners, educators, lecturers,

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students, and educational institutions as a whole. In this context, digital technology such as AI creates the potential for cheating such as plagiarism and dishonesty, which actually damages the image of Islamic education itself. Therefore, supervision is needed from all fronts so that this challenge can be minimized as much as possible, namely by increasing the ability of educators in terms of digital literacy and related education. Islamic education is also important to perfect the morals of the digital generation and prevent them from going in the wrong direction (Pratiwi, et. al., 2023).

Based on reference searches by previous research, there are titles similar to this topic: First, entitled "*Reform of Islamic Education in Madrasahs*" by Abdul Aziz, et al. This article discusses the reform system of Islamic education in Indonesian Madrasahs and produces findings that Islamic education in Indonesia has a significant impact on Indonesian education, both ideologically and practically (Aziz & Iswantir, 2022). Next, an article entitled, "*Islamic Education Reform in Indonesia in the 20th and 21st Centuries*" by Misnatun. In Misnatun's article, it is concluded that the 20th century saw a reformation in Islamic education marked by the emergence of reformers' thoughts regarding educational methods and materials. Then, in the 21st century, the renewal or reform that is echoed is about solving the problems of 21st century life, especially in the formation of superior human resources (Misnatun, 2022). research by Putra Pratama & Zulhijra, entitled "Islamic Education Reform in Indonesia" The results of the research article state that Islamic education requires innovation, reform, and renewal of educational models that must be realized responsibly and continuously. Some aspects that are of concern for renewal efforts are the professionalism of educators, curriculum, and knowledge methodology used in Islamic education (Pratama, I., 2019).

The exposure of the preliminary studies above has not yet been specifically discussed regarding the reform of superior Islamic education by utilizing AI or artificial intelligence. Therefore, researchers are interested in taking the title: "*Reforming Superior Islamic Education Through the AI Digital Transformation Bridge: Opportunity or Challenge?*". The purpose of this research is to explore the compatibility of AI digital transformation as an alternative bridge for the reform of excellent Islamic education and review two different perspectives; challenges or opportunities.

METHODOLOGY

This research is a qualitative method, which is research that starts from existing data and theories as supporting material until it ends up becoming a theory (Nasution, 2023). Furthermore, the type applied is a literature study. Due to the type of literature study, there are primary and secondary sources as the main and additional references to meet the needs of research data. The primary source used in this research is a book entitled, "Artificial Intelligence" by Jamaaluddin and Indah Sulistyowati. While the secondary sources used are several related journal articles. Data collection and analysis techniques use a retrospective-analysis approach, namely the collection of some data obtained from research in EBSCO, Sinta, Google Scholar and Scopus.

RESULT AND DISCUSSION

Artificial Intelligence (AI): Cutting-edge Educational Facilities in the Digital Age

The era of digital transformation was originally understood through an economic and business perspective, which definitively leads to a deep transformation in business

and organizational activities. Digital transformation is a transformation that is interpreted as a model, capability, and process to maximize opportunities and change by utilizing technology. Royyana in Latifah and Ngalimun defines digital transformation as a multifaceted transformation of an organization or business, ranging from strategy, process, structure, human resources to technology adoption in improving performance (Latifah, L., & Ngalimun, 2023). Essentially, digital transformation is believed to be the driving factor of change in all aspects of human life based on the use of digitalization and technology. Based on this explanation, the digital transformation journey can enable the use of AI technology as a habit and foundation in organizational management (Tulungen, et.al., 2022).

Artificial Intelligence (AI) is derived from the Latin word '*intelligo*', meaning '*intelligence*' or 'I understand'. Intelligence means the ability to understand and execute actions (Jamaaluddin, 2021a). Bambang in Muarif argues that AI is part of the realm of computer science that deals with how to make computers have human-like intelligence, such as the ability to learn, recognize patterns, and the ability to make decisions (Muarif, et.al., 2023). The concept of AI (*Artificial Intelligence*) itself has been well known and widely practiced in several major world companies, such as UNESCO, Amazon, and Microsoft. Quoting Bill Gates' statement in Ary Sri Tjahyanti, AI will be very useful for education. Especially around two years ago, when the world was hit by a pandemic, that the role of AI was enormous, which was able to transform education which was originally in buildings or schools with physical form into the virtual world (Tjahyanti, & Gitakarna, 2022).

UNESCO says that with technology, education can have higher accessibility and quality. With the sophistication of technology, students can access all kinds of knowledge in the world more concisely and educators can also provide more active-interactive learning methods, strategies and media (Zakaria, et.al., 2023). The emergence of the term AI itself coincides with the industrial era 4.0, as stated by Batubara in Liza Zahara that AI is a product of the 4.0 era which many industries utilize in development efforts or life facilities. AI is artificial intelligence in the form of hardware and software, computer programs, and machine learning (Liza, et.al., 2023).

Based on the opinions of experts, AI (*Artificial Intelligence*) has the following definitions.

1. Norvig and Russel: Artificial intelligence is categorized in two main dimensions, namely thinking and acting.
2. Knight and Rich: AI is a subset of computer science that seeks to make computers act like humans or even more so.
3. H. A Simon: Artificial intelligence is the study of computers so that they can do things better than humans (Jamaaluddin, 2021a).

From the various definitions from the explanation above, it can be concluded that AI is a technological product of the industrial era 4.0 which originates from computer algorithms and was created with the aim that computer systems can imitate human thinking mechanisms or even better than them. As an advanced technology, artificial intelligence has advantages over natural intelligence. (Kurniawan, 2020) categorizes some of them, namely easier to disseminate and duplicate, multitasking skills that are faster and more accurate than humans, more accurate and consistent, more cost efficient, and can be documented. Jamaaluddin, (2021) mentioned the advantages of AI, among others, AI can be used repeatedly and cannot be changed back (permanent), AI

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also applies the principle of neutrality, regardless of who the user is so that it can decide cases without certain considerations.

Quoting the perspective of Mambu, et.al., (2023) in the current era AI contains many benefits in various fields, especially education. There are at least five roles of AI, which are as follows:

1. Personalization of learning. AI can assist educators in identifying learners' potentials and weaknesses, so that they can provide content according to the needs of each individual learner. With personalization, learners can increase their role and motivation in learning, and achieve better learning outcomes.
2. Data management and efficiency. The application of AI in learning can relieve educators in grouping, filtering, and analyzing learner data more effectively and efficiently. AI provides deep insights into individual learners' progress and needs and helps educators make more accurate and accountable decisions.
3. Improved learning effectiveness. AI features that can analyze data in a sophisticated way are instrumental in identifying learning patterns and recognizing the individual needs of learners so that learning methods can be adjusted efficiently. In addition, AI can provide feedback to educators in improving learning strategies to achieve better learning outcomes.
4. Effective feedback. AI can make it easier for educators to provide quick feedback during learning, so as to minimize the weakness of students' understanding.
5. Preparing the generation of the digital era. The utilization of AI by educators can indirectly introduce and familiarize students in interacting with technology. With that, educators and learners will be ready to face challenges and opportunities in the digital era.

The application of AI (artificial intelligence) in education can be grouped into three paradigms, namely 1) AI-directed, the position of learners as recipients, 2) AI-supported, the position of learners as collaborators, and 3) AI-empowered, the position of learners as leaders. Prasetyo, A. A., & Rosyid, (2022) emphasized that the development of AI is currently heading towards the third paradigm, where learners can reflect on the learning that has been done and direct AI to adapt to themselves. Thus, the application of AI in education in the digital era can make teaching and learning activities between educators and students more effective and efficient.

Artificial Intelligence (AI) Bridge to Excellent Islamic Education Reform: Linkage of Supporting Features

The term reform is closely related to modernization, renewal, tajdid, and tajaddud. Modernization is a way of thinking and working based on the correct sunnatullah (fitrah). Meanwhile, tajdid is a response in the form of a purification movement to a deteriorating situation that focuses on the past. Then tajaddud is a response in the form of a purification movement that focuses on the future. Both terms (tajdid and tajaddud) have similarities in terms of anti-stagnation of the Islamic tradition and differences in focus or paradigm. Tajdid views that the Prophet and his closest generation are the best generation so that they should be used as examples and standards of life. While the tajaddud movement is more paradigmatic so that Muslims must be modern and contextual without eliminating the spirit and values of religiosity.

Reform is also closely related to the term renewal, which in Arabic is interpreted as *tajaddud* as mentioned earlier, which is a movement and thought to adapt Islamic understanding to the advancement of science and technology (Hidayati, 2020). Wahib, (2021) said that the term 'reform' in the Islamic world refers to the renewal movement of the last few centuries. Wahib argues that Islam basically already has this culture, which in the language of the Qur'an is interpreted by the term 'islah' which means against deviation (reconciliation). In connection with the era of globalization that is being faced, complex problems arise in human life. As a necessity, education requires the latest innovations and breakthroughs in every aspect to remain consistent in achieving progress. Education reform should be carried out comprehensively, starting from the aspects of curriculum, infrastructure, and the application or utilization of technology in learning activities (Ningsih, et.al., 2022).

Reforms in education basically follow in the footsteps of the development of the industrial revolution, which is a dynamic in the world economic order that indirectly changes the education order. Now, the industrial revolution has reached era 5.0 whose emergence is characterized by a technology-based and human-centered society. In addition, the 5.0 era is characterized by the use of Internet of Things, Artificial Intelligence, and Big Data technologies. Therefore, in the context of education, the presence of this technology will have an impact on the development of the creativity of educators and students as well as academics. One example is the National Examination which is held computer-based and PPDB (Admission of New Learners) which is carried out online (Kusuma, 2021).

In providing a point of view related to the condition of Islamic education in the digital era, there are at least two paradigms. First, Islamic education in terms of characteristics has fundamental differences with general education, namely that Islamic education recognizes the principle of recognizing the potential and ability of a person to develop in terms of knowledge, experience, and personality as a form of responsibility to God and society. Islamic education stands on the footing of the Qur'an and Hadith along with a set of culture. Islamic education also has the goal of forming a perfect human being (*kaffah*) who fears Allah in order to achieve happiness in this world and the hereafter. Considering the nature of Islamic education, the reality that occurs now is still far from the word 'superior education'. Islamic education is considered unable to create resources that are balanced between intellectual, emotional, and spiritual, even the output of Islamic education itself sometimes cannot become social experts or religious experts because the learning system for each field does not run focused and maximized (Aziz, A., Iswantir, 2022).

Second, along with the need to revitalize the identity and morality of the nation's generation, the urgency of Islamic education in the digital era is increasing. The concept of religion-based education is widely applied in educational institutions and has successfully become a branding that is in demand by a number of groups. This indicates that the existence of Islamic education is quite strong in the eyes of the community. As an effort to humanize humans based on the teachings of the Qur'an and Hadith, Islamic education is principled so that human character is formed perfectly in accordance with the *fitrah* or potential entrusted by God to him.

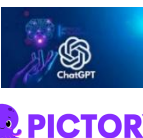
From the two perspectives above, researchers analyze that Islamic education in the digital era has certain sides that need to be taken more seriously, especially after the many theories that say about the decline of Muslims. According to Dr. Djamali in Wahib,




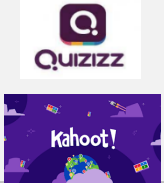
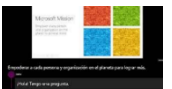
the phenomenon of the decline of Muslims actually occurs due to several factors: 1) the decline of religion, 2) the decline of morals, 3) the backwardness of science and technology, and 4) social, economic, political, and health backwardness as well as the management of education globally. In response to this, Islamic education in the era of digital transformation faces challenges and is required to be able to find a way out, namely with educational reform efforts, because this is significantly related to the engineering of a nation in the future (Wahib, 2021). Education reform is a necessity because times and technology are always evolving, so modernization is needed so as not to be left behind by civilization (Romli, 2021).

As mentioned earlier, education reform has a wide scope, starting from the curriculum, learning system, education management, and even the quality of educators. Junaidin, (2021) provide three main competencies that must be possessed by an educator in the current era, namely technological literacy, lifelong learning principles, and providing meaningful and enjoyable learning. These three things must be a gap that should be filled by educators in transferring knowledge and values to students, so that students will be eroded by negative values when surfing the internet and social media. In this case, the role of an educator is to direct, guide, and provide education so that students can avoid these things.

One of the most important terms in education reform efforts is the pairing of the word 'learning' with 'technology base', factually information and communication technology is the main key that determines the success and speed of scientific development. Anggraini also mentioned that information and communication technology is one of the main causes of the birth of a new education paradigm in the 21st century (Anggraini, W., & Hubaidah, 2021). Technology-based learning today has become a phenomenon found in many educational institutions, one of which is the application of AI (*artificial intelligence*) applications in learning. In several references found by researchers, AI-based applications in learning have various types, namely *ChatGPT, Pictory AI, Chatbot, Voice Assistant, Machine Learning, Smart Content, Automatic Assessment, Personalized Learning, Adobe Illustrator, Quizizz, Kahoot!*, and *Presentation Translator*. Various types of applications can functionally assist students in seeking knowledge or insights as much and as widely as possible through gadgets and the internet and assist educators in developing learning media that is fun, effective and efficient. In addition, AI-based applications make it very easy for educators to provide learning evaluations in a very varied way. Through AI, the learning system can achieve a high success rate. Here's a list of smart AI features that can facilitate the implementation of the learning process.

Table 1. AI Applications in Learning

AI-based Learning App	
Types of AI applications	Deskripsi
ChatGPT Pictory AI 	One type of chatbot developed by OpenAI that functions as a personal assistant that can provide recommendations, answers, information, and instructions as well as analysis of complex problems. ChatGPT provides answers in the form of dialogs such as chats with users and is also able to translate foreign languages with different accuracy for each language. Pictory AI is an AI application that is useful for creating videos, especially learning videos (Tamsir, et al., 2023)

<p>Chatbot</p> 	<p>A system that can provide answers to any question, especially in the field of education. Chatbot applies the Artificial Intelligence Markup Language (AIML) method which has a function to create a knowledge-based question input system. With a chatbot, computers can have the ability to understand conversations in natural language (Guntoro, et al., 2020).</p>
<p>Voice Assistant</p> 	<p>A device based on the Internet of Things (IoT), it has a feature as a substitute voice in reciting information without having to read it first. In the field of education, this device is particularly helpful for people with disabilities, who may be limited in certain ways (Rheinata, et al., 2022).</p>
<p>Machine Learning</p> 	<p>A type of AI that is operated by computers through certain algorithms without human intervention. Machine-learning works by transforming data into patterns and inputting them into the system then detecting the core problem. After that, the data that has been collected is analyzed and will result in decisions, predictions, or suggestions. Examples of application in the field of education are plagiarism-checker (accurate plagiarism detector), e-rater (essay grader) (Raup & Zaqiah, 2022).</p>
<p>Smart Content</p> 	<p>Part of an IoT-based application that in the field of education functions to provide reading material content from new books, the latest materials, and as a search engine for information relevant to learning. (Rhamadani Putri Supriadi et al., 2022).</p>
<p>Automatic Assesment</p> 	<p>One of the features in AI is that it can make it easier for educators to evaluate learning outcomes. This application can detect sentence structure and word by word properly and correctly. Example of application: Grammarly (Rheinata, et al., 2022). In addition, this application can create questions and correct questions automatically as found on the kejarcita platform. This feature only requires educators to select the type of subject, class, level, difficulty level, number of questions to be able to directly share the questions with students and receive correction results.</p>
<p>Personalized Learning</p> 	<p>Advanced AI features allow learners to be personally served like a personal assistant. AI manages learning activity data which is then processed to provide alternative solutions in learning as needed (Rheinata, et al., 2022)</p>
<p>Quizizz Kahoot!</p> 	<p>Basically, these applications are a form of evaluation of student learning outcomes, having features to provide games (games) in the form of short questions with a certain duration of time that can be shown directly through the projector screen by the educator in the classroom. Learning with games like this can certainly spur high learning motivation for students.</p>
<p>Presentation Translator</p> 	<p>Similar to voice-assistant, this application also prioritizes voice in its features and has the specification of presenting a text from a different language to the desired language, so that users can use it to listen to books or foreign language references easily without having to read directly.</p>

Artificial Intelligence (AI) & Islamic Education: Challenge or Opportunity?

Based on the description above, AI-based technology is in line with efforts to reform Islamic education that excels in the era of digital transformation. In this discussion, we will be more specific in describing some of the features of AI, which can answer all general questions and translate languages. This feature can be found on

Chatbot platforms such as *ChatGPT*. This feature can make it easier to complete a task in a very short time, such as creating a work by simply inputting the required data such as background, plot, and other detailed instructions. The *ChatGPT* feature becomes an important tool when educators find it difficult to frame effective questions for learners. Therefore, creativity and innovation will be inspired by the Chatbot's answers. Thus, educators will also continue to learn and improve their ability to prepare, implement, and evaluate learning (Hadian, T., & Rahmi, 2023b).

Digital literacy is a benchmark for successful learning in the current era. The useful features mentioned above will support the process of students' understanding of Islamic learning materials. The advantages of AI that are easily accessible anytime and anywhere provide the reality that questions about Islamic material can be answered through AI, without having to meet the educator first. *ChatGPT* operates on the GPT algorithm which has been trained over billions of words in documents from many sources. This work process generates the semantics, syntax and context of the language being used. *ChatGPT* is now available not only in English, but in many world languages, including Bahasa Indonesia. To complete a particular task or answer a question, *ChatGPT* proceeds using an "autoregressive language modeling" technique. This method allows *ChatGPT* to discover the context of the given input, so that the intended result matches the user's request. In addition, this method allows *ChatGPT* to predict the next word in a string of text based on the previous words, and to do so iteratively to form coherent paragraphs (Rachbini, W., Evi, T., 2023). Setidaknya terdapat beberapa tugas yang dapat dilakukan oleh *ChatGpt*, sebagai berikut:

Table 2. Features of *ChatGPT*

ChatGPT Features	Application
<p><i>Answer general questions. ChatGPT is able to provide answers related to science, history, facts, and other general topics.</i></p>	<p>Question: Name the maqashid shar'iyah in the Islamic view! ChatGPT Answer: Maqashid al-Syari'ah is an important concept in Islam that refers to the goals or purposes of Islamic law (Shari'ah). These objectives are designed to achieve the benefit and good of mankind. There are five maqashid al-Shari'ah that are recognized by Islamic scholars and scholars as the main objectives of Islamic law. Here are the five maqashid al-Syari'ah:</p> <p style="text-align: center;"><i>Hifz al-Din</i> (حفظ الدين), <i>Hifz al-Nafs</i> (حفظ النفس), <i>Hifz al-'Aql</i> (حفظ العقل), <i>Hifz al-Nasl</i> (حفظ النسل), <i>Hifz al-Mal</i> (حفظ المال)</p> <p>The concept of maqashid al-Syari'ah aims to direct the implementation of Islamic law in a more holistic and contextual manner, prioritizing human benefit and welfare. These principles also help in addressing social developments and new situations that may not be directly addressed by existing Islamic law.</p>
<p><i>Translating languages. ChatGPT has pretty good accuracy when it comes to translating one language to</i></p>	<p>Question: What is the meaning of the following hadith text: تَبَسُّمُكَ فِي وَجْهِ أَخِيكَ صَدَقَةٌ ChatGPT Answer: This hadith comes from the Prophet Muhammad and reads: تَبَسُّمُكَ فِي وَجْهِ أَخِيكَ صَدَقَةٌ Meaning: "Your smile to your brother is charity." In this hadith, the Prophet Muhammad taught the importance of smiles in Islam. He describes that when a person smiles at his brother or anyone else, it is</p>

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another, even though it is not his specialty.

considered an act of charity. In other words, giving a smile to others is a form of good deed that brings rewards in the eyes of Allah. This hadith emphasizes the social and ethical values of Islam. A smile is considered a simple yet valuable way to bring happiness to others, build good relationships, and establish harmonious cooperation in society.

In the context of Islamic education reform, AI plays two positions at once, namely as an opportunity and a challenge. The opportunity is that AI can act as a media, evaluation tool, and personal assistant that is sophisticated and accurate in its duties so as to help improve the effectiveness and efficiency of learning as mentioned in the table of AI features above. In Islam, humans are required to be ulul albab (intelligent and knowledgeable) and open to knowledge. Of course, this spirit is in accordance with the utilization of AI technology in the world of Islamic education. The word of Allah QS. Ali Imran verses 190-191 and QS. Al-Baqarah: 269:

إِنَّ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لآيَاتٍ لِّأُولِي الْأَلْبَابِ الَّذِينَ يَذْكُرُونَ اللَّهَ قِيَامًا وَقُعُودًا وَعَلَىٰ جُنُوبِهِمْ وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بَاطِلًا سُبْحَانَكَ فَقِنَا عَذَابَ النَّارِ

Meaning: "Surely in the creation of the heavens and the earth and the alternation of the night and the day are signs (of Allah's greatness) for the intelligent, (i.e.) those who remember Allah while standing, sitting, or lying down, and think about the creation of the heavens and the earth (saying), "O our Lord, You have not created all this in vain. Glory be to You. Protect us from the punishment of hell."

Wahbah al-Zuhaili interpreted that the creation of the heavens and the earth, the height and breadth of the sky, the earth with its boundaries, its feasibility as a place of life and the determination of its elements, as well as other wonders that exist throughout the universe are signs of Allah's power for people who have good brain intelligence. Those who think are those who can understand, consider, and examine all the mysteries of the heavens and the earth and take various kinds of wisdom that contain the power of His knowledge, majesty, and goodness. Thus, the above verse emphasizes that people of reason are required to always pay attention and appreciate the signs of nature as a form of Allah's power (Zuhriyandi, & Alfannaja, 2023).

يُؤْتِي الْحِكْمَةَ مَنْ يَشَاءُ ۚ وَمَنْ يُؤْتَ الْحِكْمَةَ فَقَدْ أُوتِيَ خَيْرًا كَثِيرًا ۗ وَمَا يَذَّكَّرُ إِلَّا أُولُو الْأَلْبَابِ

Meaning: "Allah bestows wisdom upon whom He wills. Whoever is endowed with wisdom has indeed been endowed with much good. No one can learn from it except the righteous."

Hasbi Ash-Shidqiey in his tafsir, explains the word wisdom as something that refers to autonomous intelligence that is able to study everything and its causes and understand the whole problem according to its nature. In this verse, the context of ulul albab leads to a learned person who can read God's holy book, starting from the pieces of knowledge he receives, to gain wisdom (hikmah / useful knowledge) contained

therein. In addition, there is information that this wisdom is only given to whoever He wants, therefore only the select group of people / intelligent people who can open their minds and constantly learn will get it (Zuhriyandi, & Alfannaja, 2023).

Islamic education in its reform efforts in the digital era then faces challenges in terms of the application of AI in the context of learning. Adapting an opinion from Yulita (2023), AI technology holds both challenges and opportunities in the world of education. AI opportunities lie in learning independence, effectiveness, and efficiency of time and infrastructure. Meanwhile, the challenges faced are the competence of educators who must always be improved, starting from teaching, guiding, educating, assessing, and evaluating professionally and transforming science and technology through the traditions of education, research, and community service. In addition, the excessive and too dominant use of AI can have an impact on reducing the development of students' affective, cognitive and psychomotor abilities. Therefore, it is important to educate the community, especially academics, to be consistent in being 'human beings' and 'learners' without losing the element of modernity.

Another element that challenges AI in its application in the world of Islamic education is data security and privacy, as it was recently confirmed that a large number of ChatGPT accounts of more than 101,000 have been hacked by ognum and traded for credentials through the dark web. Of the many accounts, Indonesian ChatGPT user accounts were among the victims. Therefore, it is recommended to the parties involved in securing AI to improve the quality of resilience and security of users' accounts. In addition, one of the AI features can also delete conversations after completion of use, so this can be a preventive measure so that similar incidents do not recur (Hadian, T., & Rahmi, 2023).

CONCLUSION

AI (Artificial Intelligence) is a computer system engineering that makes it a machine with human-like thinking, or even more. Islamic education responds to the situation of era transformation, requiring reform or renewal in each element. The application of AI technology in Islamic education is one of the efforts to strive for the realization of these reforms. In this case, AI as a tool or facility presents both opportunities and challenges. AI brings opportunities to advance the Islamic learning system in a more sophisticated and modern way, with various features and applications that further increase the effectiveness and efficiency of learning. In addition, AI also brings challenges to Islamic educators to constantly improve their competence in the field of education and technology, where the central role of educators is increasingly complex, not only limited to guiding, directing or modeling in the real world, but the digital world. The challenges posed by AI also include the stagnation of students' affective, cognitive and psychomotor competencies due to its dominant use. Indirectly, AI is also a factor in the weak spirit to learn and the decline in the quality of education. Therefore, it is necessary to provide education related to AI and its application in Islamic education so that the elements of modernity still color the side of Islamic education without leaving the spirit of 'human' and true 'learner'. Another challenge is regarding the privacy and public security of AI which is prone to theft and cybercrime, so more sophisticated and strong application resilience is needed to anticipate this.

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