Islam in the Midst of AI (Artificial Intelligence) Struggles: Between Opportunities and Threats

Ana Khoirunnisa¹*, Fathur Rohman², Hilda Aulya Azizah³, Devi Ardianti⁴, Arinta Lailatul Maghfiroh⁵, Aditya Muhammad Noor⁶

¹*,²,³,⁴,⁵,⁶Universitas Brawijaya, Malang, Indonesia

¹*anakhoirunisa@student.ub.ac.id, ²fathurohman26@student.ub.ac.id
³hildaaualyaa@student.ub.ac.id, ⁴deviardianti@student.ub.ac.id, ⁵ariantamaghfiroh@student.ub.ac.id, ⁶maditia608@student.ac.id

Abstract. Islam is a religion that accepts all forms of technological progress, including advances in artificial intelligence. However, in the development of technology, Muslims are required to adapt to anticipate the negative or positive impacts that exist. The purpose of this study is to find out the opportunities and threats that accompany the emergence of AI (Artificial Intelligence) so that AI can be used in harmony with the Islamic religion. The qualitative method was chosen in this study, by collecting secondary data which was then analyzed to answer all questions. The results of the research show that if Artificial Intelligence is developed and implemented properly, it will be very helpful for the needs of Muslims. But there are also threats including; prone to be misused to instill the values of apostasy, radicalization and terrorism. The use of Artificial Intelligence in harmony with the Islamic religion, must pay attention to ethical and moral principles in the development and application of Artificial Intelligence.

Keywords: artificial intelligence, opportunities, threats, Islam.

INTRODUCTION

Islam is a religion that covers all aspects of life. Islam teaches that natural wealth and local wisdom must be preserved. Including utilizing local wealth for the advancement of civilization in this modern era. Technology has been widely used in everyday life, including in matters of religion. Significant technological advances already exist in the field of information and communication technology, especially in machines and robotics, nanotechnology, space technology, biotechnology, and quantum computing. It is hoped that this breakthrough will be truly disruptive and bring about major changes in the way society works. Today there is a lot of use of artificial intelligence as a form of great progress in
technological civilization. Especially in the wider civilization of Islamic progress.

Islam is a religion that accepts all forms of technological progress, including advances in artificial intelligence. However, in its use, Islam emphasizes that technology must be used wisely and must pay attention to the effects on human life and the environment. In addition, artificial intelligence is not new to the Islamic world. Long before the understanding of the existence of modern civilization, it is explained in the Qur'an that Samiri is mentioned in QS Thaha; 77-78 have done the basics of artificial intelligence. This statement is not meant to prove what Samiri did right, but rather to draw a lesson from what he did, to suggest that reason can create something beyond the limits of its time.

Artificial intelligence itself is a branch of computer science where computers have the ability to do work like humans (Jaya et al., 2018). There are two research areas regarding artificial intelligence, namely about expert systems and "Natural Language Processing", this concept was developed by Alan Turing 1950 (McCarthy, 1985). The beginning of the concept of artificial intelligence was put forward by John McCarthy in 1955. According to Prof. Dr. Mohd Zakree Ahmad Nazri, artificial intelligence is a science and technique that relies on computer methods for programming an application and intelligent machines by imitating human intelligence or also called sunnatullah which maintains and regulates all of nature universe. As for the explanation from a professor in the field of artificial intelligence and Sunnatullah, he also explained that the sunnatullah referred to here are the laws or provisions of Allah. Sunnatullah is a system and rules that Allah has set for humans, animals and all living things in this world. This Sunnatullah will not and cannot be changed, and nothing can change it since Allah decreed it.

In the world of education, especially Islamic religious education, we must be able to adapt ourselves to immediately welcome various conveniences and benefits, one of which is artificial intelligence technology. Apart from being able to adapt and at the same time prepare to anticipate the negative impacts that will occur, especially the ethical and humanitarian aspects. It also requires preparation, strategies and steps that are mature and precise in anticipating artificial intelligence in its implementation in everyday life.

Through the background that has been described, the formulation of the problem can be drawn, including what are the opportunities for the emergence of AI that can be utilized for the Islamic religion. The purpose of this research is to find out opportunities for the emergence of AI that can be applied in the Islamic religion, to find out the threats that accompany AI, to
explain the use of AI that is in line with the Islamic religion.

METHOD

In terms of data collection, Gill et. al. (2008) suggests that there are several types of data collection methods in qualitative research, namely observation, visual analysis, literature study, and interviews (individual or group). Qualitative methods are dynamic, meaning that they are always open to changes and additions, and replacement during the analysis process (Srivastava, A. & Thomson, S.B., 2009).

This research was conducted using qualitative methods, which is a description of an object that is studied in depth. In the qualitative method researcher is the key instrument for interpreting the phenomena that occur. The research was conducted by looking at and searching the existing literature to obtain data related to Artificial Intelligence (AI) analysis. The type of data in the research is secondary data, the researcher does not make direct observations, but uses data collection methods from several reliable sources and then analyzes the data.

RESULTS

Artificial Intelligence has various uses and benefits in terms of solving problems or looking for various things that are needed by humans. In Islam, the benefits of Artificial Intelligence if it is developed and applied properly will be very helpful for the needs of Muslims. For example, such as the development of Artificial Intelligence which can be used as a translation of the Qur'an into various languages in the world. This can make it easier for Muslims to easily understand the messages conveyed by the Qur'an. Research conducted by the Department of Informatics Engineering, Faculty of Science and Technology, UIN Sunan Gunung Djati Bandung, namely "Classification of Translations of Al-Qur'an Verses About Science using the Mobile-Based Decision Tree Algorithm". The technique used is the C4.5 Decision Tree Algorithm. Classification is done by category of verses on Biology, Physics, Chemistry. Further development can be carried out using other classification algorithms, such as Naive Bayes, KNN, CART (Setiawati et al., 2016). Then the Decision Tree C 4.5 Algorithm is also used for Classifying Ahkam verse translations based on Android (Pauji, 2016) and other topics related (Wahyudi, 2019).
With the existence of artificial intelligence, it can be used to assist scholars in giving fatwas by using Artificial Intelligence as a fatwa submission system. The substance of a fatwa is a legal opinion given by a scholar (faqih) to a person or community who is asking questions regarding the law of the case he is experiencing without being binding. Artificial intelligence is able to understand, answer questions, or carry out basic orders up to more difficult level (Adjji, 2023). By using this system, people can be helped in their problems or cases, because the system can provide solutions based on Islamic law accurately and quickly according to the case. Then there is the use of Artificial Intelligence which is utilized for da'wah. Humans in this modern era will enter a phase where they live side by side with technological advances. Social systems that change with technological advances make humans have to adapt to these changes. Under such conditions, the Islamic religion can use artificial intelligence to spread da'wah, so that it can reach the wider community. With the existence of artificial intelligence, problems that are currently happening in society can be immediately discussed and addressed by Islamic religious leaders so that people get fast information. With Artificial intelligence, da'wah activities can be carried out optimally (Sharifah et al., 2021).

The next benefit obtained is to increase the guarantee of halal products that are processed by the Halal Product Guarantee Agency (BPJPH) by continuing to look for ways to explore Artificial Intelligence that can support the development of halal services. So that it is useful to support the halal product guarantee service process, starting from socialization and training, Halal certification, Halal-oriented MSE assistance, preparation of Halal HR, web-based services to digitizing services. Furthermore, what can be done by Artificial Intelligence if realized, it can carry out halal socialization on the use of identification materials, use of materials, halal production processes, main points of halal, and up to more detailed materials. Thus artificial intelligence becomes means of accelerating and optimizing the halal business chain which in the future will have an impact on the effectiveness and efficiency of the halal industry (Fasa et al., 2020).

Artificial Intelligence-related threats to Islam

Artificial intelligence brings many opportunities for Islam but on the other hand it also brings threats to Islam if Muslims are not responsive in understanding and adopting it into the world of Islamic da'wah. Kesamaran (2013) proposes that Artificial Intelligence itself is a branch of science that studies the automation of intelligent behavior. According to Wahfiudin (2021)
artificial intelligence can be said to be a machine for learning from experience, adapting new inputs and carrying out tasks like humans. He also said that in the future it could also bring various threats can be used as a system to instill the values of apostasy, radicalization and terrorism.

In Islam, apostasy is not a simple matter. According to Dr. Abd. Karim Zaidan (1917-2014) defines apostasy as leaving Islam, while according to Abdul Qadir Audah (1954) defines apostasy as leaving Islam and leaving (Islam) after embracing it (Zailia, 2015). In QS. al-Baqarah verse 217 talks about apostasy, according to Ibn Jarir at Tabari from the verse asserts that a person who apostates and dies without having time to repent, then all the acts of worship he has ever done will not be accepted by Allah SWT (at-Thabari, Jami’ al-Bayan fi Ta’wil al-Qur’an, volume II, p. 367) because apostates will remain in hell. Apostasy is no longer done with food donations like before, but in the future apostasy will be done using a more honorable and intelligent such as artificial intelligence (Inspiration, 2022).

It should also be emphasized that Islamization cannot be equated with Islamism or radicalism. The term Islamization according to Al Faruqi is a process of realizing knowledge about methodology, strategy as desired by the Islamic religion, namely by providing a new definition or meaning, evaluating and projecting back the goals of the Islamic religion. Meanwhile, according to Ahmad, radicalism in Islam is an understanding, attitude and action that is inconsistent with the substance of Islamic teachings (Zuhriyah, 2016).

Islam is sometimes given the impression that it is synonymous with terrorists, while Islam is a religion that teaches peace, compassion, so that fellow human beings humanize one another. Acts of terrorism themselves are not part of the Islamic religion, we must destroy this, because acts of terrorism will only cause unrest, violence and even kill each other. There is a verse in the Qur'an which prohibits the existence of terrorism "Whoever kills a human being, not because that person (kills) another person, or not because he has caused damage to the earth, it is as if he has killed all human beings" (QS. Al Maidah: 32). Therefore, based on Islamic sharia science using the theory of qiyas, which has the meaning that the crime of terrorism is the same as the crime of hirabah, which means that the punishment for the crime of terrorism is the same as the death penalty.

The use of AI that is consistent with Islam

The use of artificial intelligence that is in line with the Islamic religion must be able to
pay attention to ethical and moral principles in the development and application of artificial intelligence itself. Avoiding artificial intelligence for purposes that harm humans or damage the environment and pay attention to aspects of presence in its development and use, such as in the case of using technology that violates sharia principles. Then maintain the security and privacy of personal data for development and use so that it does not violate human rights and can respect human dignity.

Thinking rationally is a way in solving problems, in this case one can solve problems in a way that is in accordance with Islamic principles, such as *amar ma'ruf nahi munkar* and justice. Acting humanely is an action taken to be better, in this case someone can try to be better. Because after all, Allah will not change the condition of his servant if it is not accompanied by endeavor. As for acting rationally, namely actions carried out with logical reasoning, then with these actions one can achieve the goal or not. So that it can be interpreted that in acting requires careful thought, such as thinking about the impact of the action. The use of artificial intelligence can be carried out in accordance with standard provisions, so as not to cross the line and go against human logical reasoning.

**CONCLUSION**

Artificial intelligence is very profitable and beneficial for Muslims, and it should be noted that Muslims are able to master and use artificial intelligence themselves. Artificial intelligence will bring many opportunities for the Islamic religion but on the other hand it also poses a threat to the religion of Islam if Muslims are not responsive in understanding and adopting it into the world of Islamic da'wah. If it is developed and implemented properly, will be very helpful for the needs of Muslims. For example, the development of artificial intelligence that can be used as a translation of the Koran into several world languages. The next advantage is the addition of Halal Product Assurance by the Halal Product Assurance Organizing Agency (BPJPH) which continues to explore opportunities to explore artificial intelligence that can support the development of Halal services.

In the future, artificial intelligence can also present various threats, such as systems that encourage negative values such as apostasy, radicalization, and terrorism. Thus it is necessary to take action to avoid using artificial intelligence for purposes that harm humans or damage the environment and pay attention to aspects of presence in its development and use, such as in the case of using technology that violates sharia principles.
REFERENCES


Ilham, 'Muslim Attitudes Toward Apostates', *Muhammadiyah*, 2022.


Irfrans Kusmarna, 'Design and Build Course Scheduling Applications Using Particle Swarm Optimization (PSO) (Case Study of the Informatics Engineering Department, UIN Suska Riau)' (SULTAN SYARIEF KASIM RIAU ISLAMIC UNIVERSITY, 2013).


Siti Zailia, 'Apostasy in the Perspective of Shafi'i and Hanafi.' *Istinbath, 15*.1 (2015), 67–88


Zuhdiyah Zuhdiyah, 'Islamization of Ismail Raji Al-Faruqi'. *Tadrib, 2.2* (2016), 293–313.