

## The Impact of AI on the Spiritual Values and Character of Students: A Survey of the Qur'an and Tafsir Quraish Shihab

Musthofa<sup>1</sup>, Nailil Muna Sholihah<sup>2</sup>, Ahmad Farid<sup>3</sup>

Darunnajah University<sup>1,2,3</sup>

Email : a.farid@darunnajah.ac.id

### Abstract

This Abstract. Digital transformation marked by the advancement of artificial intelligence (AI) has had a significant impact on the world of education, including Islamic boarding schools as traditional Islamic educational institutions. Although AI presents great opportunities in learning efficiency, personalization of materials, and access to knowledge, this technology also poses serious challenges to the formation of spiritual values and character of students. This study aims to analyze the impact of the use of AI on the spiritual values and character of students and to explore the managerial approach of Islamic boarding schools in integrating the values of the Qur'an through the interpretation of Quraish Shihab. The method used is qualitative research with a literature study approach, with primary data in the form of the Qur'an and the Tafsir Al-Mishbah, and supported by secondary literature from various scientific sources. The results of the analysis show that the use of AI that is not accompanied by strengthening divine values has the potential to cause degradation of manners, spiritual independence, and personal relationships between students and teachers. However, with an adaptive-protective managerial approach and a curriculum based on Qur'anic values, Islamic boarding schools can create an ethical and spiritual AI education ecosystem. This study emphasizes the importance of the principle of technology with spirituality in responding to the challenges of the times without sacrificing the character and spirit of Islamic education.

**Keywords:** Artificial Intelligence, Spiritual Values, Character of Santri, Islamic Boarding School, Interpretation of Quraish Shihab

### Abstrak

Transformasi digital yang ditandai dengan kemajuan kecerdasan buatan (*Artificial Intelligence/AI*) telah membawa dampak signifikan dalam dunia pendidikan, termasuk pesantren sebagai lembaga pendidikan Islam tradisional. Meskipun AI menghadirkan peluang besar dalam efisiensi pembelajaran, personalisasi materi, dan akses pengetahuan, teknologi ini juga menimbulkan tantangan serius terhadap pembentukan nilai spiritual dan karakter santri. Penelitian ini bertujuan untuk menganalisis dampak penggunaan AI terhadap nilai spiritual dan karakter santri serta menggali pendekatan manajerial pesantren dalam mengintegrasikan nilai-nilai Al-Qur'an melalui tafsir Quraish Shihab. Metode yang digunakan adalah penelitian kualitatif dengan pendekatan studi pustaka, dengan data primer berupa Al-Qur'an dan Tafsir Al-Mishbah, serta didukung oleh literatur sekunder dari berbagai sumber ilmiah. Hasil analisis menunjukkan bahwa penggunaan AI yang tidak disertai dengan penguatan nilai ilahiyah berpotensi menimbulkan degradasi adab, kemandirian spiritual, dan hubungan personal santri dengan guru. Namun demikian, dengan pendekatan manajerial yang adaptif-protektif dan kurikulum berbasis nilai Qur'ani, pesantren dapat menciptakan ekosistem pendidikan AI yang etis dan spiritual. Penelitian ini menegaskan pentingnya prinsip *technology with spirituality* dalam menjawab tantangan zaman tanpa mengorbankan karakter dan ruh pendidikan Islam.

**Kata Kunci:** Kecerdasan Buatan, Nilai Spiritual, Karakter Santri, Pesantren, Tafsir Quraish Shihab

## Introduction

The advancement of technology in the era of the Industrial Revolution 4.0, which is now progressing toward the Industrial Revolution 5.0, has brought major transformations in various aspects of human life, including the field of education.<sup>1</sup> One of the most influential technological developments is Artificial Intelligence (AI). Artificial Intelligence (AI) has changed the way people work, communicate, and even learn. In the context of Islamic education, particularly within pesantren (Islamic boarding schools), the presence of Artificial Intelligence (AI) offers great opportunities to enhance the effectiveness of the teaching and learning process, while at the same time posing serious challenges to the formation of students' character and spiritual values.<sup>2</sup> Islamic Boarding School as the oldest Islamic educational institution in Indonesia, holds a central role in instilling Islamic values, building character, and shaping the personality of students based on the teachings of the Qur'an and the Sunnah. In the face of rapid technological advancement, pesantren are confronted with a dilemma regarding Artificial Intelligence (AI): on one hand, they must adapt to technological progress to enhance the quality of education; on the other hand, they must preserve the traditional and spiritual values that form the soul of pesantren education. Artificial Intelligence (AI), which offers rapid access to information, personalized learning, and administrative efficiency, carries the potential to shift values if not managed wisely.<sup>3</sup>

This phenomenon is occurring not only at the global level but also in Indonesia. Islamic boarding schools (pesantren) have begun utilizing various Artificial Intelligence (AI)-based applications, such as chatbots for religious consultations, adaptive e-learning platforms, and data-driven pesantren management systems. While the convenience and speed offered by this technology are undeniable, there are growing concerns about the degradation of manners, morals, and the spiritual independence of students (santri). The limited human interaction, dependency on machines, and the rise of an instant culture pose serious threats to the development of santri with noble character (akhlaqul karimah).<sup>4</sup> Student as the next generation who are forged in a religious environment, are required not only to master science and technology, but also to maintain the purity of morals, spirituality, and Qur'anic values. Pesantren as a traditional Islamic educational institution has a great responsibility in shaping the character of santri so that it remains in line with the values of the Qur'an, even though it is faced with the rapid flow of technological modernization. This challenge is increasingly complex along with the use of Artificial Intelligence (AI) technology which often brings instant, consumerist, and individualistic culture, which has the potential to

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<sup>1</sup> Miftah Hur Rahman Zh et al., "Needs Analysis of Development Fbo Media as a Support for Blended Learning in Al-Qur'an Hadits Lesson," *Jurnal Pendidikan Agama Islam Al-Thariqah* 9, no. 1 (2024): 16-32.

<sup>2</sup> Schwab, Klaus. *The Fourth Industrial Revolution*. Jenewa: World Economic Forum, 2016, hlm. 1-5

<sup>3</sup> Wahyuddin, Agus. *Transformasi Pendidikan Islam di Era Digital*. Bandung: Pustaka Setia, 2020, hlm. 45-47

<sup>4</sup> Sauri, Syaiful. *Manajemen Pesantren di Era Digitalisasi*. Bandung: Remaja Rosdakarya, 2021, hlm. 89-91

erode the values of togetherness, simplicity, and sincerity taught in boarding school.<sup>5</sup>

In this context, the role of Islamic boarding school education management becomes very important.<sup>6</sup> Education management must be able to design strategies that are not only adaptive to changes in the times, but also protective of fundamental Islamic values. This strategy requires a solid foundation, namely principles derived from the Qur'an and reinforced by the interpretations of scholars, one of whom is Prof. Dr. M. Quraish Shihab. As a contemporary mufassir who strongly emphasizes the balance between faith and technological progress, Quraish Shihab in his various works underlines the importance of maintaining spiritual values in facing changes in the times.<sup>7</sup> In his interpretations, Quraish Shihab often emphasizes the concept of al-insan (humans) as creatures who are both intelligent and moral. He explained that the intelligence used to develop technology must always be directed towards the benefit and be subject to divine values. Increasingly developing technology such as Artificial Intelligence (AI), in Quraish Shihab's view, should not become a tool that alienates humans from God and from their human values. Therefore, Islamic boarding schools as centers for spiritual development must be able to integrate technology with strengthening character based on Al-Qur'an values.<sup>8</sup>

The urgency of character building for students in the era of Artificial Intelligence (AI) cannot be underestimated. A strong character based on Islamic values will be a fortress in responding to all forms of change offered by technology. Students must not only be intellectually intelligent, but also spiritually resilient. Without intensive character building, Artificial Intelligence (AI) has the potential to create a generation that is technologically intelligent but morally fragile.<sup>9</sup> Islamic boarding school education management needs to develop policies and learning programs based on the Qur'an, and adopt contextual interpretations as proposed by Quraish Shihab to answer the challenges of the times. With this approach, Artificial Intelligence (AI) technology can be optimally utilized as an educational tool, not as a substitute for the main values that must be instilled in students. Thus, the formation of students' characters in the digital era remains firmly rooted in Islamic values, while being responsive to the needs of the times.<sup>10</sup> Based on this phenomenon, this study aims to analyze how the use of AI technology influences the formation of the character of students, as well as how the managerial approach of Islamic boarding schools can integrate the values of the Qur'an, especially based on the interpretation of Quraish Shihab, in responding to these developments. With this analysis, it is hoped that a model of Islamic boarding school education management can be found that is able to produce students who are technologically proficient, but remain steadfast in the values of Islamic spirituality.

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<sup>5</sup> Heryadi, Yadi. *Karakter Santri dalam Era Revolusi Industri 4.0*. Jakarta: Rajawali Pers, 2019, hlm. 102-105

<sup>6</sup> Miftah Hur Rahman Zh, "Implementation of the One Day Three Sentences Technique to Improve the Arabic Ability of Students at Modern Darussalam Gontor," in *International Conference on Islam and Global Civilization*, 2021.

<sup>7</sup> Shihab, M. Quraish. *Tafsir Al-Mishbah: Pesan, Kesan, dan Keserasian Al-Qur'an*. Jakarta: Lentera Hati, 2005, hal. 123.

<sup>8</sup> Shihab, M. Quraish. *Al-Qur'an dan Sains: Sebuah Kajian Kontemporer*. Jakarta: Mizan, 2000, hal. 45-48.

<sup>9</sup> Ahsan, M. "Pendidikan Karakter di Pesantren: Implementasi Nilai Islam dalam Pembentukan Kepribadian." *Jurnal Pendidikan Islam* 12, no. 1 (2022): 75-88.

<sup>10</sup> Mubarak, J. "Integrasi Teknologi dalam Pendidikan Pesantren: Menjaga Kesenambungan Nilai Islam di Era Digital." *Jurnal Manajemen Pendidikan Islam* 18, no. 2 (2023): 99-115.

**Literature review**

In an effort to better understand the impact of artificial intelligence (AI) on the spiritual values and character of students, it is important to first review some relevant literature. This literature review aims to provide a theoretical basis and enrich the analysis with various scientific perspectives, both from the fields of technology, Islamic boarding school education, and Qur'an studies and interpretation. Among them are the following :

In 2021, Hidayatullah, Furqon wrote a book entitled *Character Education in the Digital Era: Challenges and Strategies* published by Pustaka Pelajar in Yogyakarta. Hidayatullah highlighted the challenges of character education in the digital era. He proposed a strategy to balance the use of technology with strengthening moral values. His discussion provides a foundation that in the use of AI, there needs to be control and value-based education programs to ensure that students maintain their noble character amidst the rapid flow of digitalization.

In 2020, Russell, Stuart J. & Norvig, Peter wrote a book entitled *Artificial Intelligence: A Modern Approach* published by Pearson Education in New Jersey. This book is the main reference for understanding the basic concepts, developments, and applications of AI in human life. The author explains that AI not only has an impact on the economic and technological sectors, but also brings changes to human mindsets and social interactions. From this, it is concluded that AI has the potential to influence the learning patterns of students, both in positive aspects (wider access to information) and negative aspects (reducing spiritual closeness).

In 2017, Tegmark, Max, wrote a book entitled *Life 3.0: Being Human in the Age of Artificial Intelligence* published by Alfred A. Knopf in New York. Max Tegmark discusses how humans will interact with AI in the future. He warns that without ethics and moral principles, AI could be a threat to human values. The results of his discussion are relevant to the context of Islamic boarding school students, where mastery of AI must be accompanied by strengthening morals, so that AI becomes a tool for goodness, not a cause of spiritual decline.

In 2002, Quraish Shihab wrote a book entitled *Tafsir Al-Mishbah: Messages, Impressions and Harmony of the Qur'an* published by Lentera Hati in Jakarta. Quraish Shihab in this work emphasized that the Qur'an must be a guideline in facing the challenges of the times, including technological advances. Spirituality must always be maintained so that technology does not obscure divine values. From this discussion, it is understood that students need to strengthen divine awareness in using AI so as not to get caught up in mere worldly aspects.

**Research methods**

In this study, the researcher used a qualitative<sup>11</sup> approach with a library research type.<sup>12</sup> This approach was chosen because the study seeks to understand and analyze the normative concepts contained in the Qur'an and Quraish Shihab's interpretation related to spiritual values and character formation, and to make them relevant to the development of Artificial Intelligence (AI) technology in the Islamic boarding school education environment. The data sources in this study consist of primary and secondary sources. Primary sources include the Qur'an as the main reference and the *Tafsir Al-Mishbah* by Muhammad Quraish Shihab as a contemporary interpretation rich in contextual and thematic approaches to the verses of the Qur'an. Secondary sources include books, scientific articles, journals,

<sup>11</sup> Lexy J. Moleong, *Metodologi Penelitian Kualitatif*, Remaja Rosdakarya, Bandung, 2017, hlm. 6–7.

<sup>12</sup> Zed, Mestika. *Metode Penelitian Kepustakaan*, Yayasan Obor Indonesia, Jakarta, 2004, hlm. 3–5.

and previous research results that are relevant to the topic of the influence of Artificial Intelligence (AI) on aspects of values, spirituality, Islamic education, and character formation. Data collection techniques are carried out through documentation studies, namely by collecting, reading, and recording various information related to the research theme. This process involves searching for literature from various trusted sources, both printed and electronic, in order to obtain valid and comprehensive data.

The data analysis technique used is content analysis. This technique was chosen to study and interpret the contents of the text in depth, especially the texts of the Qur'an and the interpretation of Quraish Shihab related to spiritual values, morals, and character. The analysis was carried out through several stages: first, identifying verses of the Qur'an that are relevant to the concept of spiritual values and character. Second, interpreting the meaning of the verses based on the thoughts and interpretations of Quraish Shihab, taking into account the current socio-cultural context. Third, analyzing the relationship between the meaning of the verses and the phenomenon of the development of AI in the world of education, especially in the Islamic boarding school environment. Fourth, drawing conclusions regarding the potential positive and negative impacts of Artificial Intelligence (AI) on the formation of spiritual values and character of students. With this approach, the research is expected to provide theoretical contributions in understanding the dynamics of social change due to modern technology from the perspective of the Qur'an and contemporary interpretations, as well as providing practical insights for the development of Islamic boarding school education in facing the era of artificial intelligence.

## Results and Discussion

Artificial Intelligence (AI) technology has brought about major changes in the world of education, including in Islamic boarding schools. Faster access to information and ease in personalizing learning make this technology very attractive to students. With Artificial Intelligence (AI), students can easily access various learning materials, from classic books to modern literature, without having to be tied to time and place. This speed certainly provides convenience in obtaining knowledge that previously could only be obtained through a longer and more intensive process.<sup>13</sup> *Artificial Intelligence (AI) provides enormous benefits and challenges that must be faced by Islamic boarding schools in integrating this technology. The basic values of Islamic boarding schools that have been the foundation of the education of students, such as patience, sincerity, manners towards teachers, and simplicity of life, can be threatened by the existence of Artificial Intelligence (AI) technology. Artificial Intelligence (AI) which tends to be based on efficiency and fast results can risk reducing the importance of values that teach patience in the learning process. In the world of Islamic boarding schools, the learning process that is full of perseverance and sacrifice is an integral part of character education, which cannot always be juxtaposed with the instant methods offered by technology.*<sup>14</sup> In addition, dependence on technology can also reduce the direct relationship between students and teachers. In Islamic boarding schools, this relationship is very important because teachers are not only teachers of material, but also spiritual and moral guides. Artificial Intelligence (AI) technology, although it can provide answers or

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<sup>13</sup> Wayudi, Teguh, *Kecerdasan Buatan dalam Pendidikan: Peluang dan Tantangan*, Penerbit Bumi Aksara, Jakarta, 2021, hlm. 45.

<sup>14</sup> Sahal, Ahmad, *Pendidikan Pesantren: Antara Tradisi dan Modernisasi*, Pustaka Pelajar, Yogyakarta, 2019, hlm. 88

solutions, this technology cannot replace the role of a teacher in providing guidance on life values that are deep and substantial. For example, in Islamic boarding school teachings, there are Islamic boarding school values such as sincerity in learning and respecting teachers are values that cannot be learned from machines, but from human interactions that occur in the Islamic boarding school environment.

Another challenge is the shift in values in the lives of students who prioritize simplicity. A simple life, full of togetherness and distancing oneself from luxury is part of the identity of Islamic boarding schools that is difficult to maintain in the digital era. Artificial Intelligence (AI) technology can encourage a more individualistic and materialistic lifestyle, which is contrary to the basic principles of Islamic boarding schools which teach life without relying on the outside world and focus more on learning and spirituality. Therefore, it is important to maintain a balance between the application of technology and the basic principles that exist in Islamic boarding schools.<sup>15</sup> Quraish Shihab's interpretation in his interpretation emphasizes the importance of maintaining balance in facing the changing times. According to him, technology must be seen as a means to improve the quality of life and not as a tool that destroys noble values in society. In this context, Islamic boarding schools as educational institutions that have an identity and noble values, must be able to utilize technology wisely. Technology must be utilized to improve the quality of learning without sacrificing aspects of character that have been carefully maintained. Artificial Intelligence (AI) if used properly can be a tool that supports more efficient teaching and learning, while still maintaining the essence of character education in Islamic boarding schools.<sup>16</sup> In a world increasingly influenced by technological sophistication, the phenomenon of dependence on artificial intelligence devices (AI) is beginning to show its impact on various aspects of life, including in religious learning. For students who are students in the pesantren tradition, the process of religious learning should not only focus on textual understanding, but also on the formation of deep spirituality. With the presence of Artificial Intelligence (AI), there is a tendency that they begin to rely more on technology to obtain religious information instantly without having to go through the process of contemplation (*tafakkur*) which should be the core of understanding religious teachings. This has the potential to reduce the depth of their understanding of the substance of religious teachings.<sup>17</sup>

Students who should receive religious education that prioritizes holistic understanding, namely that which includes intellectual and spiritual aspects, are threatened with losing this spiritual dimension. When religious information can be obtained with just a few clicks on a digital device, the tendency to only understand religion textually becomes stronger. An understanding of religion that is limited to text can trap students in a rigid understanding, without being able to feel the deep meaning contained in each religious teaching. In order to understand Islamic teachings in their entirety, a person needs to have spiritual depth obtained through contemplation and inner experience that cannot be replaced by technology. This also creates a distance between students and the spiritual experience they should experience. In the pesantren tradition, spirituality is built through direct interaction with religious texts, either in the form of interpretations, hadiths, or classical books. This process not only involves textual understanding, but also the application of teachings in everyday life that involves deep contemplation. Like the situation

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<sup>15</sup> Rahardjo, M. Dawam, *Pesantren dan Pembaharuan*, LP3ES, Jakarta, 2018, hlm. 132.

<sup>16</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah: Pesan, Kesan dan Keserasian Al-Qur'an*, Lentera Hati, Jakarta, 2002, jilid 1, hlm. 23.

<sup>17</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 2, hlm. 77

where students more often access religious information through Artificial Intelligence (AI) devices, they lose the opportunity to engage in the critical thinking and reflection process needed to understand and absorb religious teachings more deeply.<sup>18</sup>

This tendency also raises the potential for shallow and fragmented understanding of religion. Without a strong spiritual experience, the understanding of religion obtained is limited to information received from technology, without any fear and love for God (khauf and raja'). In this case, they may be able to memorize verses or hadiths, but do not feel the spiritual depth of what they learn. Allah says in Surah Al-A'raf verse 179:

وَلَقَدْ ذَرَأْنَا لِجَهَنَّمَ كَثِيرًا مِّنَ الْجِنِّ وَالإِنسِ لَهُمْ قُلُوبٌ لَّا يَفْقَهُونَ بِهَا وَلَهُمْ أَعْيُنٌ لَّا يُبْصِرُونَ بِهَا وَلَهُمْ آذَانٌ لَّا يَسْمَعُونَ بِهَا أُولَئِكَ كَالْأَنْعَامِ بَلْ هُمْ أَضَلُّ أُولَئِكَ هُمُ الْغَافِلُونَ

*Meaning:*

*Indeed, We have created many of the jinn and mankind for Hell (because of their misguidance). They have hearts with which they do not understand (the signs of Allah), and eyes with which they do not see (the signs of Allah), and ears with which they do not hear (the signs of Allah). They are like cattle, even more misguided. Those are the ones who are heedless.*"<sup>19</sup>

According to Tafsir Quraish Shihab, this verse reminds us that understanding that is not accompanied by the use of reason and heart will lead someone to spiritual emptiness. Without contemplation and contemplation in interpreting the verses of the Qur'an, our understanding will be shallow and detached from the appreciation that it should be. This is a warning for us not to be too dependent on technology, but to maintain spiritual depth in religion.<sup>20</sup> This erosion of spirituality is not something that cannot be overcome. It is important for Islamic boarding schools and religious educational institutions to continue to maintain a balance between utilizing technology and strengthening the spiritual aspect in education. Students need to be given space to meditate, reflect, and feel closeness to God through various spiritual practices that cannot be replaced by any technological device. Thus, a deeper understanding of religion, which is not only limited to texts but also spiritual experiences, can be well maintained amidst the ever-growing technological advances.<sup>21</sup>

Quraish Shihab's Interpretation as a Normative Foundation reminds us that human reason, despite its extraordinary potential, must always be subject to divine values. In this context, Quraish Shihab emphasizes the importance of controlling reason with principles derived from God's revelation. Humans, although given the freedom to think and innovate, must realize that all their powers of thought will only find the true truth if they are in line with religious values. Therefore, reason is not only a tool for seeking knowledge, but must also function as a vehicle for getting closer to God.<sup>22</sup> In a world that is increasingly developing rapidly, technology, including Artificial Intelligence (AI), is often a tool that accelerates human work. However, Quraish Shihab reminded that technology should not be made the ultimate goal, but rather must be used as a means to strengthen faith and improve

<sup>18</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 3, hlm. 134

<sup>19</sup> QS. Al-A'raf :179.

<sup>20</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 4, hlm. 301

<sup>21</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 6, hlm. 77

<sup>22</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 7, hlm. 112.

human life. Technology and Artificial Intelligence (AI) if not supervised with spiritual values, can distance humans from the true purpose of their lives, namely to worship and get closer to Allah. Therefore, there must be strong moral and ethical supervision so that technology is used wisely.<sup>23</sup> One example of the application of divine values in technological development can be found in the teachings of the Koran. Allah says in Surah Al-Alaq verses 1-5:

إِقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ ۚ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ بِالْقَلَمِ ۗ عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ

Meaning:

"Read in the name of your Lord who created. He created man from a clot of blood. Read, and your Lord is the Most Gracious, who teaches by the pen. He teaches man what he did not know." This verse shows the importance of science taught by God, and the emphasis on learning that is useful for the lives of mankind. Technology, in this case, can be one of the means to increase human understanding of life and creation, but must remain within the corridor of revelation.<sup>24</sup>

Tafsir Quraish Shihab explains that the values contained in the Qur'an provide clear direction on how humans should utilize their intellect.<sup>25</sup> In his interpretation, he emphasized that the knowledge taught by God is not only intended to expand intellectual insight, but also to strengthen man's relationship with God. Technology and innovation must be in line with that goal, which is to bring oneself closer to God, not to distance oneself from Him. Therefore, in the face of the progress of the times, the supervision of the use of technology should prioritize the moral principles contained in the revelation.

In this context, technology and Artificial Intelligence (AI) can be used as a tool to strengthen faith. Along with technological advances, we can use Artificial Intelligence (AI) to understand and apply the values of the Qur'an in everyday life, for example through the development of applications that can assist in the study of interpretation or in spreading moral messages from religion. Thus, technology becomes a means that supports the spiritual journey of humanity, as long as it remains within the framework of divine values that have been outlined by Allah. Islamic boarding schools as Islamic educational institutions that have an important role in shaping the character of students, are required to continue to innovate in the face of the development of the times. In this context, educational policies based on the teachings of the Qur'an become very important.<sup>26</sup> The policy should not only be adaptive to the development of technology, such as Artificial Intelligence (AI) but also protective of the moral and spiritual values that form the basis of santri moral formation. Curriculum development and education systems that combine the needs of technology with Islamic principles will create a beneficial balance for future generations.

One of the main challenges in pesantren education management is how to deal with the rapid development of technology. Artificial Intelligence (AI) and digital technology has changed many aspects of life, including in the world of education. With the rapid development of technology, pesantren must maintain the principles of morality and spirituality taught in the Qur'an. For example, the use of technology

<sup>23</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, jilid 7, hlm. 115

<sup>24</sup> QS. Al-Alaq : 1-5

<sup>25</sup> M. Quraish Shihab, *Tafsir Al-Mishbah*, Lentera Hati, Jakarta, 2002, Jilid 15, hlm. 388.

<sup>26</sup> M. Quraish Shihab, *Membumikan Al-Qur'an*, Lentera Hati, Jakarta, 2005, hlm. 212.

in learning should ensure that values such as honesty, simplicity, and humility remain awake. This is what is called the adaptive-protective approach, which is the ability to adapt to the development of the times without sacrificing the basic values of Islam. In the Qur'an, Allah says in Surah Al-Baqarah verse 269:

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

Meaning:

He (Allah) grants wisdom to whom He wills. Whoever is granted wisdom has indeed been granted much good. None can take a lesson (from it) except the ignorant."<sup>27</sup>

This verse reminds us that hikmah (wisdom) is something very important in facing the development of the times, including in the world of education. The educational policy adopted by pesantren should reflect this wisdom, by choosing and using technology that can support the learning process without neglecting the moral and spiritual values that should be instilled in student. Tafsir Quraish Shihab in interpreting the verse explains that wisdom does not only mean deep knowledge, but also the ability to apply that knowledge in the right way.<sup>28</sup> In the context of pesantren, this means that pesantren must be able to utilize technology to improve the quality of education, but not at the expense of moral values that have been taught by the Prophet Muhammad SAW. For example, the use of technology in teaching and learning should be implemented in a way that educates, maintains ethics, and avoids things that can damage the spirituality or morality of students. Thus, the Al-Qur'an-based education policy that is adaptive to the development of technology and protective of the moral values and spirituality of santri is an important step to prepare santri to become individuals who are not only intellectually intelligent, but also have strong character.<sup>29</sup> Pesantren as an educational institution must be able to navigate the challenges of the times wisely, in order to produce a balanced generation, that is intelligent, with noble character, and able to face various changes in the world with wisdom.

Facing the challenges of an increasingly complex age, pesantren as an Islamic educational institution must be able to adapt to the changes that occur. One aspect that needs to be observed in facing this change is the reformulation of pesantren education management.<sup>30</sup> Effective pesantren education management will greatly determine the success in producing a quality generation that is ready to face the dynamics of modern life. This reformulation does not only cover administrative aspects, but also how pesantren manage human resources, curriculum, and other supporting facilities to be more relevant to the needs of the times. In the reformulation of pesantren education management, the first thing that needs to be noted is the strengthening of the pesantren organizational structure. A well-structured organization will simplify the management of pesantren and provide space for the development of santri. The pesantren leader, in this case the kiai or nanny, must be able to be a figure who not only manages the administration, but also sets an example in attitude and action. In addition, the role of other managers must be clear so that each activity runs in accordance with the goals that have been set.

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<sup>27</sup> QS. Al-Baqarah : 269

<sup>28</sup> Shihab, M. Quraish, *Tafsir Al-Mishbah*, Jilid 2, hlm. 232

<sup>29</sup> Zuhri, Muhammad, *Manajemen Pendidikan Islam di Era Digital*, hlm. 95.

<sup>30</sup> Ali Imron, *Manajemen Pesantren*, Bumi Aksara, Jakarta, 1997, hlm. 67

Second, the importance of integrating pesantren curriculum with the needs of the modern world becomes a challenge of its own.<sup>31</sup> As an Islamic educational institution, pesantren has a wealth of tradition in teaching religious knowledge. However, in the context of globalization, pesantren must be able to integrate relevant general sciences, such as technology, science, and economics. Thus, santri not only become religious members, but also have competence in other fields that can support the well-being of society and the country. Curriculum reformulation that includes religious and general knowledge is an important step in facing this challenge. Furthermore, in reformulated pesantren management, human resource management (HR) becomes a key element. Good HR management in pesantren will create a conducive environment for the education process. This includes the quality of teaching given by the ustadz and ustadzah, as well as the development of their skills in teaching. In addition, it is also important to improve the quality of santri's life, so that they not only master knowledge, but also have good character in accordance with Islamic values. No less important in the reformulation of pesantren education management is the management of supporting resources, such as facilities and technology.<sup>32</sup> The use of technology in the learning process will be very helpful to overcome the limited resources in pesantren. For example, with a digital platform, pesantren can expand access to learning, even for santri who live in remote areas. In addition, adequate supporting facilities will increase the comfort of learning for santri, which in turn can improve the quality of education as a whole.

### **1. Creating an AI educational ecosystem based on Qur'anic values:**

Technology-based education, especially Artificial Intelligence (AI), is becoming increasingly relevant in this digital era. Technology and Artificial Intelligence (AI) provide many benefits and major challenges arise in how to integrate spiritual values, especially the values contained in the Qur'an, to direct their use. In the context of Islamic education, the development of an educational ecosystem based on Qur'anic values is very important. The use of Artificial Intelligence (AI) that is not accompanied by spiritual understanding can give rise to ethical, moral, and even negative impacts on the character of the next generation.<sup>33</sup> The importance of Qur'anic values in the development of Artificial Intelligence (AI) technology is not only related to the achievement of technological progress, but furthermore, how the technology can be used to improve the quality of human life in accordance with the guidance of Allah SWT. As Muslims, we are taught to always prioritize the values of goodness, justice, and balance in every aspect of life, including in the development of science and technology. In this case, AI education must be adjusted to these principles.<sup>34</sup>

One of the main principles in the Qur'an that must be upheld in creating an Artificial Intelligence (AI) education ecosystem is the principle of akhlaq or morality. Technology, including Artificial Intelligence (AI) must be developed and used for good purposes and those that lead to the welfare of humanity, not to destroy or

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<sup>31</sup> Asep Sapa'at, *Manajemen Pendidikan Pesantren Modern*, RajaGrafindo Persada, Jakarta, 2014, hlm. 45

<sup>32</sup> Muhammad Zuhri, *Manajemen Pendidikan Islam di Era Digital*, hlm. 103.

<sup>33</sup> Azra, Azyumardi. *Pendidikan Islam: Tradisi dan Modernisasi Menuju Milenium Baru*, Logos Wacana Ilmu, Jakarta, 1999, hlm. 88.

<sup>34</sup> Al-Attas, Syed Muhammad Naquib. *Islam and Secularism*, ISTAC, Kuala Lumpur, 1993, hlm. 15.

exploit. For example, the Qur'an teaches that everything created by Allah is for the benefit of humanity, but must be used wisely and responsibly.<sup>35</sup>

In surah Al-Baqarah verse 164, Allah says :

إِنَّ فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ وَالْفُلْكِ الَّتِي تَجْرِي فِي الْبَحْرِ بِمَا يَنْفَعُ النَّاسَ وَمَا أَنْزَلَ اللَّهُ مِنَ السَّمَاءِ مِنْ مَّاءٍ فَأَحْيَا بِهِ الْأَرْضَ بَعْدَ مَوْتِهَا وَبَثَّ فِيهَا مِنْ كُلِّ دَابَّةٍ وَتَصْرِيفِ الرِّيْحِ وَالسَّحَابِ الْمُسَخَّرِ بَيْنَ السَّمَاءِ وَالْأَرْضِ لَآيَاتٍ لِقَوْمٍ يَعْقِلُونَ

Meaning:

"Indeed in the creation of the heavens and the earth, and the alternation of night and day, and the ships that sail on the sea carrying that which is useful to mankind, and the water that Allah sends down from the sky with which He revives the earth after its death, and all kinds of animals that He has created on the earth, and the movement of the winds and the clouds that He controls between the heavens and the earth, there are indeed signs for a people who use reason." This verse shows that everything in the universe, including technology, is Allah's creation that has a noble purpose if used in the right way.<sup>36</sup>

The principle of humanity in the Qur'an is also very relevant in the development of the AI education ecosystem. AI technology should be used to improve human welfare, not to replace or degrade human dignity. Therefore, every policy in the development and implementation of AI in education must be based on the principles of justice and equality. AI should not widen the gap, but should be a tool that helps improve the social and economic conditions of humanity.<sup>37</sup> In addition, the value of responsibility in the Qur'an is also very important in the context of developing an Artificial Intelligence (AI) education ecosystem.

Allah says in the Al-Quran surah Al-Isra' verse 70 :

وَلَقَدْ كَرَّمْنَا بَنِي آدَمَ وَحَمَلْنَاهُمْ فِي الْبَرِّ وَالْبَحْرِ وَرَزَقْنَاهُمْ مِنَ الطَّيِّبَاتِ وَفَضَّلْنَاهُمْ عَلَى كَثِيرٍ مِمَّنْ خَلَقْنَا تَفْضِيلًا

Meaning:

Indeed, We have honored the children of Adam and carried them on land and sea. We have provided them with good things and have preferred them above many of those whom We have created, with perfect superiority.<sup>38</sup>

This verse reminds us that humans are glorified by God and given the responsibility to care for and manage this world wisely. Therefore, educators and technology developers must be responsible for the impact caused by AI on society and future generations.<sup>39</sup> AI-based education driven by Qur'anic values should also prioritize justice. This teaches that we must avoid discrimination and ensure that every individual has the same opportunity to access quality education, including AI-

<sup>35</sup> Al-Qaradawi, Yusuf. *Nilai dan Moral dalam Pendidikan Islam*, Pustaka Al-Kautsar, Jakarta, 2005, hlm. 34

<sup>36</sup> Departemen Agama RI. *Al-Qur'an dan Terjemahannya*, CV. Diponegoro, Bandung, 2000, hlm. 26

<sup>37</sup> ardar, Ziauddin. *Exploring Islam and Science: Toward a Postmodern Perspective*, Grey Seal, London, 1989, hlm. 50.

<sup>38</sup> QS. Al-Isra : 70

<sup>39</sup> Nasution, Harun. *Akhlaq dalam Islam*, Bulan Bintang, Jakarta, 1985, hlm. 102.

based education.<sup>40</sup> The application of Qur'anic values in AI education should also include aspects of innovation based on greater goals. God teaches us not only to follow tradition or the status quo, but to continue to seek knowledge and innovate for the benefit of the people. In surah Al-Alaq verses 1-5, Allah SWT commands us to read and seek knowledge. Thus, AI-based education based on Qur'anic values should encourage students to innovate in overcoming existing challenges, but still stick to the moral values taught in the Qur'an.<sup>41</sup>

It is also important to emphasize balance in the development of Artificial Intelligence (AI). Technology should be used to improve the quality of life without sacrificing human values. Artificial Intelligence (AI) should not replace the role of humans, but rather strengthen human potential in carrying out nobler tasks. As taught in the Qur'an, everything that God created in this world has a specific purpose and must be used according to wisdom.<sup>42</sup> In creating an AI educational ecosystem based on the Qur'an, we must also prioritize openness in sharing knowledge. Education based on Qur'anic values should be inclusive, where every individual, regardless of background, has the same opportunity to learn and grow. This is in line with the principle of the Qur'an which teaches that knowledge is for all mankind, as God says in Surah Al-Alaq verses 1-5. To create an AI education ecosystem based on Qur'anic values, we must always remember the importance of prayer and hard work. Every innovation that is developed, both in the field of education and technology, must always begin with a prayer to be given guidance and ease by Allah SWT. By combining hard work and Qur'anic values in the development of Artificial Intelligence (AI), we can create an education that is not only superior in terms of technology, but also dignified and beneficial for mankind.<sup>43</sup>

Thus, creating an Artificial Intelligence (AI) education ecosystem based on Qur'anic values is not just a matter of using technology, but rather how the technology is used to achieve a greater goal, namely the benefit of mankind, by sticking to the moral principles taught in the Qur'an. Technology, when driven by Qur'anic values, can be a very powerful tool to create a better world.

## **2. Encourage students to do active meditation:**

In this rapidly growing digital era, technology has become an inseparable part of human life, including the lives of santri. Gadgets, the internet, and various digital applications are present in their daily lives, both in the learning process and social interactions. Therefore, it is important to provide space for santri to reflect on their technological experience in the light of the teachings of the Qur'an. This reflection helps them understand how technology can be used as a means of worship and righteous deeds.<sup>44</sup>

The Quran teaches that everything that Allah has created on this earth, including science and technology, is for the benefit of mankind. Allah says in Surah Al-Jatsiyah verse 13 :

وَسَخَّرَ لَكُمْ مَّا فِي السَّمٰوٰتِ وَمَا فِي الْاَرْضِ جَمِيعًا مِّنْهُ ۗ اِنَّ فِيْ ذٰلِكَ لٰٰيٰتٍ لِّقَوْمٍ يَّتَفَكَّرُوْنَ

*Meaning:*

<sup>40</sup> Al-Qaradawi, Yusuf. *Fiqih Prioritas*, Pustaka Al-Kautsar, Jakarta, 2000, hlm. 112.

<sup>41</sup> Al-Attas, Syed Muhammad Naquib. *The Concept of Education in Islam*, ISTAC, Kuala Lumpur, 1980, hlm. 45.

<sup>42</sup> Sardar, Ziauddin. *Islamic Futures: The Shape of Ideas to Come*, Mansell, London, 1985, hlm. 74

<sup>43</sup> Ibn Khaldun. *Muqaddimah*, diterjemahkan oleh Franz Rosenthal, Princeton University Press, Princeton, 1967, hlm. 125

<sup>44</sup> Ahmad Rizky Mardhatillah Umar, *Teknologi dalam Perspektif Islam*, Penerbit Prenadamedia Group, Jakarta, 2018, hlm. 45.

*He has subjected to you whatever is in the heavens and whatever is on the earth - all from Him. Indeed in this are signs for a people who give thought.*<sup>45</sup>

With this understanding, students need to be invited to reflect that technology is not the end goal, but rather a tool that must be used for good. Gadgets and the internet can be a path of preaching, a learning medium, and a means of expanding Islamic knowledge. However, without the right awareness and direction, technology can also lead to useless things and even sin. Through reflection sessions, students are invited to evaluate their use of social media, whether they spend more time on useful things or on activities that neglect them. By asking questions like this, students are trained to have critical awareness and responsibility in using technology according to Qur'anic values.

Allah reminds us in the Qur'an surah Al-Isra' verse 36 :

وَلَا تَقْفُ مَا لَيْسَ لَكَ بِهِ عِلْمٌ إِنَّ السَّمْعَ وَالْبَصَرَ وَالْفُؤَادَ كُلُّ أُولَئِكَ كَانَ عَنْهُ مَسْئُولًا

*Meaning:*

*"And do not follow that of which you have no knowledge. Verily, the hearing, the sight, and the heart, all of these will be questioned about it."*<sup>46</sup>

This verse emphasizes that all our activities, including the use of technology, will be held accountable. Therefore, self-reflection is very important so that students are aware that all their digital footprints are recorded by Allah. In this reflection activity, students can be invited to write a daily journal about how they use technology in one week, analyze their habits, and make plans to improve or increase the use of technology in an Islamic way. Small group discussions can also be held so that they share experiences and inspire each other.<sup>47</sup>

In addition, it is also important to introduce the concept of "Ihsan" in technology, which is feeling supervised by Allah in every online and offline activity.

The Prophet Muhammad SAW said about Ihsan :

*"You worship Allah as if you see Him, and if you do not see Him, then indeed He sees you."* (Narrated by Bukhari and Muslim).<sup>48</sup>

With an attitude of Ihsan, santri is expected to be able to maintain their digital manners. the santri not only become intelligent users of technology, but also become intelligent, responsible, and oriented towards good values. Technology eventually became part of their path in worshiping God and spreading goodness on the face of the earth. As a space for reflection, this is a real effort to prepare a generation of santri who are not only experts in religious knowledge, but are also able to integrate technological sophistication with the values of the Qur'an, leading to knowledgeable, moral, and pious individuals.

### **3. Develop awareness of digital ethics from an early age**

In this fast-paced digital era, the world of education faces a new challenge, namely how to instill digital ethics in the young generation. The development of technology not only brings convenience, but also the risk of deviant behavior if not

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<sup>45</sup> QS. Al-Jatsiyah : 13

<sup>46</sup> QS. Al-Isra : 36

<sup>47</sup> Luthfi Hamidi, *Pendidikan Karakter di Era Digital*, Penerbit Rajawali Pers, Jakarta, 2020, hlm. 78

<sup>48</sup> Muhammad bin Ismail Al-Bukhari, *Shahih Al-Bukhari*, Penerbit Darul Fikr, Beirut, 2001, hlm.

accompanied by a strong ethical awareness.<sup>49</sup> Awareness of digital ethics is very important to form the character of students to be able to use technology responsibly. This needs to be instilled from an early age so that it becomes an integral part of their mindset and behavior in their daily lives.

In Islam, ethics play a central role in every aspect of life, including the use of technology. The Quran has provided general guidelines on morals that every Muslim must uphold. Allah says in QS. Al-Hujurat verse 13 :

يَا أَيُّهَا النَّاسُ إِنَّا خَلَقْنَاكُمْ مِنْ ذَكَرٍ وَأُنْثَىٰ وَجَعَلْنَاكُمْ شُعُوبًا وَقَبَائِلَ لِتَعَارَفُوا ۗ إِنَّ أَكْرَمَكُمْ عِنْدَ اللَّهِ أَتْقَىٰكُمْ ۚ إِنَّ اللَّهَ عَلِيمٌ خَبِيرٌ

*Meaning:*

*"Wahai manusia! Sesungguhnya Kami telah menciptakan kamu dari seorang laki-laki dan seorang perempuan, lalu Kami jadikan kamu berbangsa-bangsa dan bersuku-suku agar kamu saling mengenal. Sesungguhnya yang paling mulia di antara kamu di sisi Allah ialah orang yang paling bertakwa."*<sup>50</sup>

Developing Islamic digital ethics means instilling the values of honesty, trust, responsibility, and respect for fellow technology users. Islamic digital ethics education should be taught not only in religious studies, but integrated in all subjects. Teachers have a strategic role in integrating digital ethics into the teaching and learning process. For example, in language lessons, students can be taught about the importance of using polite language on social media. In information technology lessons, students can be instructed to understand copyright and data security.

The application of Islamic values in the digital world also teaches students to guard their speech (in the form of writing or posting) from evil. As Allah says in QS. Al-Isra' verse 53 :

وَقُلْ لِعِبَادِي يَقُولُوا الَّتِي هِيَ أَحْسَنُ ۚ إِنَّ الشَّيْطَانَ يَنْزِعُ بَيْنَهُمْ ۚ إِنَّ الشَّيْطَانَ كَانَ لِلْإِنْسَانِ عَدُوًّا مُّبِينًا

*Meaning :*

*"And say to My servants, 'Let them speak that which is best.' Indeed, Satan causes dissension among them. Indeed, Satan is to man a clear enemy."*<sup>51</sup>

In Islamic digital literacy, students are encouraged to be critical of the information they receive. They are taught to verify news before spreading it, in accordance with Allah's command in QS. Al-Hujurat verse 6 :

يَا أَيُّهَا الَّذِينَ آمَنُوا إِنْ جَاءَكُمْ فَاسِقٌ بِنَبَأٍ فَتَبَيَّنُوا أَنْ تُصِيبُوا قَوْمًا بِجَهَالَةٍ فَتُصْحِحُوا عَلَىٰ مَا فَعَلْتُمْ نُدْمِينَ

*Meaning :*

*O you who believe, if a wicked person comes to you with important news, then ascertain its truth, lest you harm a people through ignorance, and then become regretful of what you have done.*<sup>52</sup>

Islamic digital ethics education is not only about what to avoid, but also about how to use technology for good. Students are invited to use social media to spread

<sup>49</sup> Ahmad Fauzi, *Etika Digital dalam Pendidikan Islam*, Penerbit Rajawali Pers, Jakarta, 2020, hlm. 45.

<sup>50</sup> QS. Al-Hujurat : 13

<sup>51</sup> QS. Al-Isra : 53

<sup>52</sup> QS. Al-Hujurat ayat 6:

da'wah, share knowledge, and inspire goodness to others.<sup>53</sup> The implementation of Islamic digital ethics education requires cooperation between schools, families, and communities. Parents need to set an example in the use of gadgets and the internet, while schools provide a relevant and contextual curriculum.<sup>54</sup> Strengthening awareness of digital ethics also needs to be complemented by creative programs, such as Islamic content creation competitions, digital literacy workshops, and healthy internet use campaigns based on Islamic values.<sup>55</sup>

In this way, students will not only become intelligent technology users, but also users with noble character. They become agents of change who are able to bring Islamic values into this vast digital world.<sup>56</sup>

Islamic digital ethics awareness is not just a preventive effort against the bad influence of technology, but a strategic step in building a digital civilization based on Qur'anic values. As Allah says in QS. Ali Imran verse 110 :

كُنْتُمْ خَيْرَ أُمَّةٍ أُخْرِجَتْ لِلنَّاسِ تَأْمُرُونَ بِالْمَعْرُوفِ وَتَنْهَوْنَ عَنِ الْمُنْكَرِ وَتُؤْمِنُونَ بِاللَّهِ ۗ وَلَوْ آمَنَ أَهْلُ  
الْكِتَابِ لَكَانَ خَيْرًا لَهُمْ ۗ مِنْهُمْ الْمُؤْمِنُونَ وَأَكْثَرُهُمُ الْفَاسِقُونَ

*Meaning :*

*You (Muslims) are the best people born to humans (as long as) you order (do) what is right, forbid what is wrong, and believe in Allah. If the people of the Bible had believed, it would have been better for them. Among them there are those who believe and most of them are wicked people.*<sup>57</sup>

#### **4. Applying the principle of technology with spirituality in every learning activity:**

In an era of rapid technological development, including the presence of artificial intelligence (AI), humans are required to be able to adapt to these changes. However, in this adaptation process, the principle of technology with spirituality must always be the main foundation. Especially in learning activities, the use of AI must not be separated from spiritual responsibility to Allah SWT.<sup>58</sup> Technology is a gift from Allah SWT given to make human life easier. Allah says in the Qur'an QS. Al-Baqarah verse 29 :

هُوَ الَّذِي خَلَقَ لَكُمْ مَّا فِي الْأَرْضِ جَمِيعًا ثُمَّ اسْتَوَىٰ إِلَى السَّمَاءِ فَسَوَّاهُنَّ سَبْعَ سَمَاوَاتٍ ۗ وَهُوَ بِكُلِّ شَيْءٍ  
عَلِيمٌ

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<sup>53</sup> Rudiansyah, *Pemanfaatan Media Sosial dalam Dakwah Digital*, Penerbit Deepublish, Yogyakarta, 2021, hlm. 58.

<sup>54</sup> Siti Rahmah, *Peran Keluarga dalam Pendidikan Digital Anak*, Penerbit Prenadamedia Group, Jakarta, 2022, hlm. 87.

<sup>55</sup> Muhammad Arif, *Kreativitas Digital Berbasis Nilai Islam*, Penerbit Bumi Aksara, Jakarta, 2021, hlm. 74.

<sup>56</sup> Lailatul Mufidah, *Generasi Milenial dan Etika Digital Islam*, Penerbit Pustaka Pelajar, Yogyakarta, 2020, hlm. 99.

<sup>57</sup> QS. Ali Imran ayat 110:

<sup>58</sup> Ahmad Tafsir, *Ilmu Pendidikan dalam Perspektif Islam*, Remaja Rosdakarya, Bandung, 2012, hlm. 45.

**Meaning:**

*It is He (Allah) who created for you all that is on earth, then He turned to the heaven and perfected it as seven heavens.*<sup>59</sup>

This verse reminds us that all facilities, including technology, are God's creations that must be used wisely. In the context of learning, AI can help accelerate understanding, access information, and increase student creativity. However, without the values of faith, this technology can be a double-edged sword that actually brings damage. Therefore, there needs to be strong self-control based on awareness of God. Every technology-based learning activity should be intended as a form of worship.

Rasulullah SAW said,

"Indeed, charity depends on the intention..." (HR. Bukhari and Muslim).<sup>60</sup>

Learning with the help of AI, if intended to seek useful knowledge and get closer to Allah, will be a deed that is worthy of worship. The connection between technology and spirituality teaches that in using AI, we must uphold the values of honesty, justice, and responsibility. We must not use AI to deceive, cheat, or spread false information.

Allah SWT says in the Qur'an surah Al-Baqarah verse 42 :

وَلَا تَلْبِسُوا الْحَقَّ بِالْبَاطِلِ وَتَكْتُمُوا الْحَقَّ وَأَنْتُمْ تَعْلَمُونَ

*Meaning: Do not mix truth with falsehood<sup>21</sup>) and (do not) hide the truth while you know (it).*<sup>61</sup>

Integrating technology with spiritual values also means paying attention to the etiquette aspect in learning. A student must remain humble, appreciate knowledge, and respect teachers and fellow students, even though technology facilitates unlimited access to information..<sup>62</sup> The use of AI must be accompanied by a sense of gratitude. With today's technological capabilities, humans can learn faster, communicate more widely, and find solutions to various problems. Allah reminds us to be grateful in Surah Ibrahim verse 7 :

وَإِذْ تَأَذَّنَ رَبُّكُمْ لَئِن شَكَرْتُمْ لَأَزِيدَنَّكُمْ وَلَئِن كَفَرْتُمْ إِنَّ عَذَابِي لَشَدِيدٌ

**Meaning:**

*(Remember) when your Lord declared, "If you are grateful, I will surely increase you, but if you are ungrateful, then indeed, My punishment is severe."*<sup>63</sup>

*Technology also brings tests. Allah SWT says in Surah Al-Baqarah verse 155::*

وَلَنَبْلُوَنَّكُمْ بِشَيْءٍ مِّنَ الْخَوْفِ وَالْجُوعِ وَنَقْصٍ مِّنَ الْأَمْوَالِ وَالْأَنْفُسِ وَالثَّمَرَاتِ وَبَشِّرِ الصَّابِرِينَ

**Meaning:**

*We will certainly test you with something of fear and hunger, loss of wealth, lives, and fruits. Give (O Prophet Muhammad) good news to the patient..*<sup>64</sup>

<sup>59</sup> QS. Al-Baqarah ayat : 29

<sup>60</sup> Imam al-Bukhari, *Shahih al-Bukhari*, Dar al-Fikr, Beirut, 2001, hlm. 10.

<sup>61</sup> QS. Al-Baqarah: 42

<sup>62</sup> Syed Muhammad Naquib al-Attas, *Islam and Secularism*, ISTAC, Kuala Lumpur, 1993, hlm. 145.

<sup>63</sup> QS. Ibrahim: 7

<sup>64</sup> QS. Al-Baqarah: 155

In this context, testing can be a temptation to use technology irresponsibly. It is important for every student to develop spiritual integrity in himself. Making God a witness in every learning activity, even when using AI devices. The belief that God is All-Seeing and All-Knowing of our every action must be firmly embedded.<sup>65</sup> *Technology with spirituality also teaches that technology is only a tool, not a goal. The main purpose of learning is to draw closer to God, improve oneself, and provide the greatest benefit to mankind.*<sup>66</sup> Using AI for good is part of preaching with action. By using technology as a means to spread knowledge, help others, and create solutions for humanitarian problems, then we have fulfilled one of the duties of the caliphate on earth.

Allah says in the Quran, Surah Al-Baqarah, verse 30 :

وَإِذْ قَالَ رَبُّكَ لِلْمَلٰئِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً ۗ قَالُوا أَتَجْعَلُ فِيهَا مَن يُفْسِدُ فِيهَا وَيَسْفِكُ الدِّمَآءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۗ قَالَ إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ

*Meaning:*

*(Remember) when your Lord said to the angels, "I am going to place a vicegerent on earth." They said, "Do You intend to place therein one who will cause corruption and shed blood, while we glorify You and sanctify Your name?" He said, "Indeed, I know what you do not know.."*<sup>67</sup>

Humans as caliphs must manage all of God's creations, including technology, with full responsibility. As a generation living in the digital age, we cannot be blind to the development of technology, but we must also not lose spiritual values in using it. The balance between the use of technology and closeness to God is the key to success in this world and the hereafter. Thus, the application of the principle of technology with spirituality in learning activities is not just an option, but a necessity. Because this is the only way we can become intellectually intelligent and spiritually clean people,

as the prayer of the Prophet Muhammad SAW:

*"O Allah, give me beneficial knowledge, lawful sustenance, and accepted deeds." (Narrated by Ibn Majah)"*

## Conclusion

Artificial intelligence (AI) has become an integral part of the dynamics of modern education, including in pesantren. Although AI provides ease of access to information and efficiency in the learning process, use that is not accompanied by spiritual awareness and ethical control can cause the erosion of moral values, spirituality, and santri character. Pesantren as educational institutions based on Qur'anic values have a strategic role in maintaining the balance between technological progress and moral development. Tafsir Quraish Shihab provides a strong normative foundation that reason and technology should be directed towards benefit and submit to divine values. Therefore, the pesantren's managerial approach needs to be directed at an adaptive protective strategy that is adaptive to modern technology but protective of spiritual and moral values. Strengthening digital ethics, internalizing the principle of technology with spirituality, as well as encouraging the practice of meditation and courtesy in the use of technology are

<sup>65</sup> M. Quraish Shihab, *Wawasan Al-Qur'an: Tafsir Maudhu'i atas Pelbagai Persoalan Umat*, Lentera Hati, Jakarta, 2007, hlm. 112

<sup>66</sup> Azyumardi Azra, *Pendidikan Islam: Tradisi dan Modernisasi di Tengah Tantangan Milenium III*, Logos, Jakarta, 1999, hlm. 87

<sup>67</sup> QS. Al-Baqarah : 30

crucial steps. Thus, pesantren can utilize Artificial Intelligence (AI) wisely without losing its identity as a center for building character and spirituality. Boarding schools are not only able to produce a generation that is intellectually intelligent, but also spiritually strong in facing the era of technological disruption.

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