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Reimagining Islamic Education in Artificial Intelligence Era: Integrating Technological, Humanistic, and Spiritual Dimensions

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ABSTRACT:
Artificial intelligence (AI) offers opportunities in education, including effective learning and pedagogical innovation, but also poses ethical challenges in its use, which can change the human and spiritual values that are at the core of Islamic education. This study examines how Islamic education is applied in the era of artificial intelligence, how technology, humanism, and spirituality are integrated, and analyzes it using innovation diffusion theory. The approach used is qualitative, with literature review and reflective methods. This study adopts Rogers' Theory of Innovation Diffusion. The results of the analysis show that the success of AI adoption depends not only on technical readiness, but also on the ethical awareness, pedagogical empathy, and spiritual orientation of educators. The integration of AI based on the values of maqāṣid al-sharī'ah will give rise to a human-centered and spiritual educational paradigm, in which AI technology in Islamic education must be positioned as a means of empowerment, not a substitute for the role of humans, and must guide students towards strengthening moral values and moral responsibility. Therefore, the balance between technology, humanism, and spirituality is an important foundation in restructuring Islamic education so that it remains relevant, civilized, and oriented towards the benefit of the ummah.

Key words: *Islamic Education, Artificial Intelligence, Humanistic, Spiritual, Innovation Diffusion*

INTRODUCTION

Islamic Religious Education (PAI) aims to shape individuals who are faithful, knowledgeable, and possess good character, as well as being capable of leading the world responsibly. This objective shows that Islamic education not only provides religious knowledge, but also changes the spiritual, moral, and humanitarian values within a person. This is reflected in the words of Allah SWT (QS. Al-'Alaq: 1-5) which emphasize the importance of knowledge based on awareness of God, as well as the hadith of the Prophet SAW which places education as the path to moral perfection and civilization. In this context, Islamic education is a process that integrates the abilities of thinking (*aql*), heart (*qalb*), and action (amal) as a whole. Islamic education has an important role in shaping the spirituality of the younger generation amid the challenges of the modern world through strengthening faith, self-control in managing emotions such as patience, gratitude, and the application of the concept of *rahmatan lil- alamin*.[1] This is in line with the holistic

[1] Mitra Sasmita, Agus Fudholi, and Rahma Dilla Zainuri, 'Islamic Education As The Spiritual and Moral Foundation of The Young Generation', *Indonesian Journal of Education (INJOE)*, 4.3 (2024), 857–71 (p. 861).

vision of Islamic education, which is to develop humans comprehensively in a balanced relationship between humans, God, and the universe.

Artificial intelligence (AI) technology has dramatically changed the way we learn and teach. AI appears in the form of learning systems that can be tailored to student needs, smart tutoring systems, large-scale educational data analysis, and even digital Al-Qur'an learning platforms that use voice and learning engines. Islamic education has not been left behind in this change. Now there are many applications for translating the Al-Qur'an with the help of AI, chatbots for da'wah, and character assessment systems that pay attention to student behavior. However, this progress has had mixed effects. On the one hand, AI can make learning more efficient, personalized, and accessible. On the other hand, it also has the potential to undermine the human nature of the learning process, namely the spiritual relationship between teacher and student. There is concern that the dynamics of AI could shift the paradigm of student-teacher relationships to one based on students and AI tutors in the academic sphere.[2] In the context of Islamic religious education (PAI), this challenge is more complex because Islamic education focuses not only on knowledge, but also on affective and spiritual aspects. If AI takes on the role of teachers on a large scale, the question arises: how can we maintain authentic values, sincerity, and spiritual relationships in a learning system that relies on algorithms. In addition, the AI era also brings new social changes that disrupt traditional values, present obstacles in dealing with too much information, and cause a moral crisis among the younger generation of Muslims. Children today face two worlds: the fast-paced digital world and the spiritual world that requires deep thought. If Islamic education cannot connect the two, then a generation will emerge that is technologically savvy but poor in spirit and feeling.

Based on the results of a survey conducted by Tirto and Jakpat of 1,501 high school and university students, 86.21% admitted to using AI assistance to complete their assignments.[3] In 2023, based on the results of a UNESCO survey, less than 10% of schools and universities had formal guidelines on AI.[4] Islamic education can become trapped in religious formalities that lack spiritual meaning if it is unable to respond to digital changes in a comprehensive manner. Rapid technological advances pose risks to the emotional and spiritual aspects of students, which are often neglected in the learning process. One of the biggest challenges for teachers in using AI is the tension between teachers who have full control in the classroom and AI that will take complete

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[2] Elochukwu Ukwandu and others, 'The Future of Teaching and Learning in the Context of Emerging Artificial Intelligence Technologies', *Futures*, 171 (2025), p. 1.

[3] Alfons Yoshio Hartanto and Fina Nailur Rohmah, 'Makin Marak Siswa Pakai AI Untuk Mengerjakan Tugas', *Tirto*, 2024 <https://tirto.id/penggunaan-ai-di-dunia-pendidikan-makin-marak-dan-merata-gZax>.

[4] UNESCO, 'UNESCO Survey: Less than 10% of Schools and Universities Have Formal Guidance on AI', *UNESCO*, 2023 <https://www.unesco.org/en/articles/unesco-survey-less-10-schools-and-universities-have-formal-guidance-ai>.

control of the classroom.[5] On the other hand, the use of AI without religious and ethical values can cause education to become inhumane, where humans are only considered as users of the system, not as individuals who learn independently and have values. Islamic education now faces a major challenge, namely how to teach AI ethics based on Islamic values such as amanah, ihsan, and maslahah, so that technology can truly benefit humans, rather than being a tool to control or exploit them. Therefore, efforts are needed to reconstruct Islamic education so that it can combine technological, humanistic, and spiritual aspects in a balanced manner and in accordance with the context.

This study offers a concept of how Islamic education can change in line with the era of artificial intelligence without losing its spiritual identity. This research attempts to bridge the gap between technological developments and human values by using an approach that combines technological literacy, human-centered education, and spiritual awareness. This approach is expected to contribute to the development of a relevant Islamic educational mindset in the digital age and to assist curriculum developers, educators, and Islamic educational institutions in determining fair, innovative, and balanced learning policies between machine intelligence and moral and spiritual intelligence. Thus, this article not only attempts to read the dynamics of changes in Islamic education amid the AI revolution, but also offers an epistemological repositioning: that technology must be placed within the framework of humanity and spirituality, not the other way around. This is the urgency of "reorganizing" Islamic education so that it remains a moral and intellectual force in guiding humanity towards a just, civilized, and God-fearing civilization.

Methods

This study uses library research methods. Library research is research that uses written materials such as manuscripts, books, magazines, newspapers, and other documents.[6] The emphasis of library research is to find various theories, laws, arguments, principles, opinions, ideas, and so on that can be used to analyze and solve the problems being studied.[7] The data sources for this study were obtained from various books and scientific journals related to Islamic education in the AI era and its relationship with the balance between technology, humanism, and spirituality, as well as literature on the description of democracy in education in the contemporary era. Another method is to adapt Rogers' theory of innovation diffusion to analyze the balance between

[5] Ed.D Miguel A. Cardona, Roberto J. Rodríguez, and Kristina Ishmael, *Artificial Intelligence and the Future of Teaching and Learning* (Washington DC: Office of Educational Technology, 2023), p. 31.

[6] Rahmadi, *Pengantar Metodologi Penelitian* (Banjarmasin: Antasari Press, 2011), p. 15.

[7] Abdul Rahman Sholeh, *Pendidikan Agama Dan Pengembangan Untuk Bangsa* (Jakarta: PT RajaGrafindo Persada, 2005), p. 63.

technology, humanism, and spirituality through five stages of innovation decision-making, namely knowledge, persuasion, decision, implementation, and confirmation.

The data collection techniques and tools used are documentation with literature data collection in the form of books, journal articles, and other related documents. Data analysis in this study uses content analysis. [8] The steps in data analysis are (1) reducing or sorting books, articles, and other related documents that are relevant to the theme of the article; (2) displaying data that is easily reduced in the article text; and (3) analyzing the reduced data using theories from previous research.

Result

Artificial Intelligence (AI)

Artificial intelligence is a branch of computer science that focuses on developing machines that can mimic, simulate, or even surpass human thinking abilities. According to Rickh and Knight, it is defined as the study of how to make computers do things that humans can currently do better. Meanwhile, Winston defines it as the study of computation that enables a person to understand, reason, and act.[9] The goal of AI is to understand the principles that enable intelligent behavior in both natural and artificial systems.[10] This is done by analyzing natural and artificial agents, formulating and testing the substance needed to build intelligent agents, designing, building, and experimenting with computational systems.

The term artificial intelligence first appeared in 1956 at the Dartmouth conference. However, the concept of artificial intelligence existed before that, with scientists conducting research on the development of artificial intelligence over the years. In 1900, experts such as George Boole, Alfred North Whitehead, and Bertrand A. W. Russell proposed mathematical theories that became the basis for computers or artificial intelligence. In 1930, Alan Turing invented the Turing Machine and the Turing test theory, which is now applied in CAPTCHA tests. The 1950s marked the era of digital computers. John McCarthy, Marvin Lee Minsky, Herbert Alexander Simon, Allen Newell, and Edward Albert Feigenbaum began to formulate the term AI. In 2001, Steven Spielberg released a film titled Artificial Intelligence about David, an android programmed to be like a child.[11]

AI can be used in various fields, including transportation, banking, and even education. The algorithms used in education are machine learning and deep learning. The applications of AI

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[8] Klaus Krippendorff, *Content Analysis An Introduction to Its Methodology* (SAGE Publications, Inc, 2004), p. 3.

[9] Stuart J. Russell and Peter Norvig, *Artificial Intelligence A Modern Approach*, Third Edit (New Jersey: Pearson Education, 2010), p. 2.

[10] David L Poople and Alan K Mackworth, *Artificial Intelligence: Foundations of Computational Agents*, Third Edit (Cambridge: Cambridge University Press, 2023), p. 4.

[11] Hindarto, Sumarno, and Mochmad Alfan Rosid, *Buku Ajar Kecerdasan Buatan / Artificial Intelegent (AI)* (sidoarjo: UMSIDA Press, 2022), p. 8 <https://doi.org/10.21070/2022/978-623-464-034-2>.

include virtual tutors and chatbots, automatic assessment and instant feedback, predictive analysis, adaptive learning, improved access to education, data-based learning, and gamification of learning.[12]

The challenges of using AI arise with several ethical issues, including privacy and security. These issues encompass data collection, data protection from leaks or cyber attacks, algorithmic bias and fairness, dependence on technology and essential skills, the role of humans vs. machines and its impact on teachers' work, uneven digital access, transparency, and accountability.[13] Although this tool is easy to use, the text it generates raises several problems, including false references, reduced word count, repetition in content, and a lack of understanding of context.[14]

The Concept of Integrating Between Technology, Humanism, and Spirituality

UNESCO has announced a policy in response to the development of AI and diverse education. There are three approaches to responding to the use of AI. The three approaches are independent, integrated, and thematic.[15] One of these three approaches can be adopted. Malaysia and Argentina are using the integrated approach. In 2016, Malaysia used the hashtag #mydigitalmaker, which integrates computational thinking into its education program. This movement formed a cross-sector collaboration between the private sector, public sector, and academics to "help create a digital curriculum development tailored to the Ministry of Education's policies." Meanwhile, Argentina launched the "Aprender Conectados" program, which aims to integrate digital learning at all levels of compulsory education. This program proposes that all schools integrate programming and robotics by 2019.

At the global level, many educational institutions have already established policies covering the use of AI. One example is the policy implemented by the Massachusetts Institute of Technology (MIT), which includes ethical guidelines for the use of AI in educational settings. MIT has established guidelines on how lecturers should use AI-based tools and issues that need to be considered, such as student privacy and transparency in data use. At the university level, the University of California has developed policies on the application of technology and data in the classroom. The program covers student data protection and the fair and transparent use of technology. Furthermore, there are guidelines for lecturers on how to integrate AI into teaching and research ethically. In Indonesia, educational institutions have also begun to formulate policies

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[12] Ainurrafiq Dawam and others, *Micro Teaching Di Era AI* (Jakarta Selatan: Publica Indonesia Utama, 2024), pp. 127–29.

[13] Imroatus Sulthoniyah and others, *Peran AI Dalam Pembelajaran* (Bandung: Naba Edukasi Indonesia, 2025), pp. 67–68.

[14] Frank Kehoe, 'Leveraging Generative AI Tools for Enhanced Lesson Planning in Initial Teacher Education at Post-Primary', *Irish Journal of Technology Enhanced Learning Vol*, 7.2 (2023), p. 173.

[15] UNESCO, *AI and Education Guidance for Policy-Makers* (France: United Nations Educational, Scientific, and Cultural Organization, 2021), p. 28.

related to the use of AI. The Ministry of Education and Culture has published guidelines that encourage universities to develop policies on the use of technology, as well as procedures for collecting, storing, and using data.[16]

The integration of information and communication technology in education can improve the quality of education through information sources and media that can be used in learning.[17] Technology makes it easier for students to master various subjects and increase their competitiveness in this competitive era. For educators, information and communication technology can be used to stimulate creativity in the use of learning methods so that students do not get bored. Currently, many educators still rely on lectures as the main medium for delivering material, including in Islamic education. As a result, students can become bored, which in turn can affect the classroom atmosphere and make it less conducive to learning. Through the integration of Islamic values in technology, Islamic education is not only relevant in content, but also has advantages in method. It is important for educational institution administrators to continuously evaluate, develop, and adapt this technology in line with the needs of the times and the mission of Islamic education. In this way, AI will become a strong partner in building a generation of Muslims who are intelligent, moral, and ready to face global challenges.[18]

Innovation Diffusion Theory

The theory of innovation diffusion is a theory that discusses how new ideas or concepts and technologies spread within a culture. The theory of innovation diffusion is a combination of the words diffusion and innovation. In the Big Indonesian Dictionary, the word diffusion means the spread or permeation of something in the form of culture, technology, or ideas from one party to another, while innovation means the introduction or recognition of new things, namely an update. According to Rogers, diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system. According to Rogers, the innovation decision process involves five steps, namely (1) knowledge, (2) persuasion, (3) decision, (4) implementation, and (5) confirmation.[19]

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[16] Kariono, *Transformasi Peran Dosen Di Era Artificial Intelligence Inovasi Dan Tantangan* (Yogyakarta: Jejak Pustaka, 2024), p. 245.

[17] Zalik Nuryana, 'Pemanfaatan Teknologi Informasi Dalam Pendidikan Agama Islam', *Jurnal Tamaddun*, 19.1 (2018), 75–86 (p. 75).

[18] Husna Mahmudah and others, *AI Dan Pendidikan Islam:Integrasi Teknologi Dan Spiritual* (Banyumas: Wawasan Ilmu, 2025), p. 136.

[19] Everett M Rogers, *Diffusion of Innovations*, Third Edit (New York: The Free Press, 1983), p. 164.

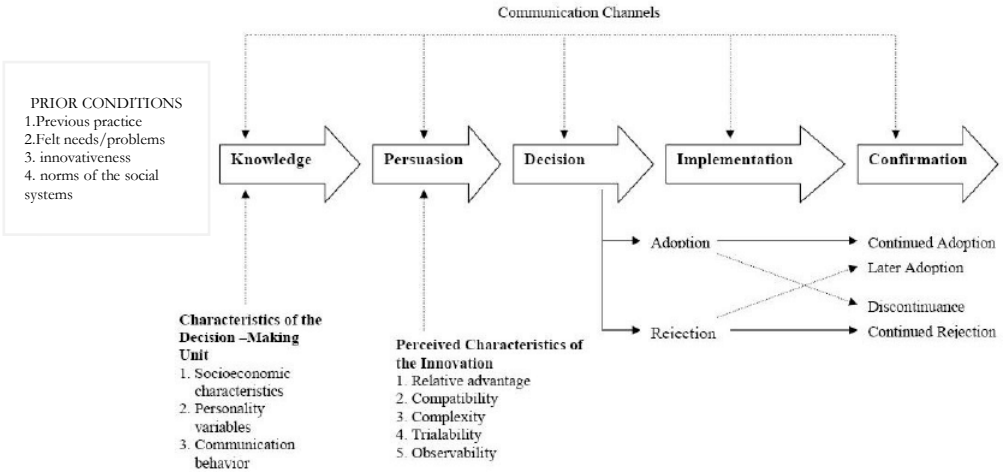

Figure 1. Innovation diffusion process

The knowledge stage of the innovation decision process begins with the knowledge stage, which is the stage where a person becomes aware of an innovation and wants to know how it works. Awareness in this case means being open to learning new information.[20] The persuasion stage is the process of making a decision about innovation, where individuals form attitudes that either support or oppose the innovation. In the persuasion stage, individuals become more psychologically involved with the innovation; they actively seek information about the new idea. At this stage, important behaviors include where they seek information, what messages they receive, and how they interpret the information received. Thus, selective persuasion is important in determining individual behavior in the persuasion stage, because it is at this stage that general perceptions about innovation are formed.

The decision-making stage in the innovation decision-making process occurs when an individual (or other decision-making unit) engages in activities that lead to the choice to adopt or reject the innovation. Adoption is the decision to take full advantage of the innovation as the best available action. Rejection is the decision not to adopt the innovation. The implementation stage occurs when individuals use an innovation. Implementation involves real behavioral change, because new ideas are actually put into practice. In the confirmation stage, individuals (or other decision-making units) seek reinforcement for the innovation decisions they have made, but they may reverse these decisions if confronted with conflicting messages about the innovation. The confirmation stage continues after the decision to adopt or reject for an indefinite period of time. The integration of technology acceptance models, innovation diffusion theory, and constructivist

[20] Dini Putri Haryanto, 'Inovasi Pembelajaran', *Perspektif Ilmu Pendidikan*, 16 (2007), p. 104.

approaches can provide a deep understanding of teachers' perceptions in adopting ChatGPT for exploration and adaptation processes.[21] This theoretical framework provides insights into the future integration of AI tools such as ChatGPT in professional development and transformative learning.

Discussion

Islamic Education in the Age of Artificial Intelligence

The age of artificial intelligence, often referred to as AI, has brought about major changes in human life, including in the world of Islamic education. AI technology not only has the ability to facilitate the learning process, but also acts as a cognitive partner that can stimulate thinking, analysis, and personalize the learning experience of students. In the context of Islamic education, the emergence of AI presents new opportunities to enhance learning effectiveness through adaptive systems, extensive information analysis, and learning resources, thereby simplifying and supporting the learning process.

The benefits of AI include improving access to religious teachings, increasing religious literacy, and optimizing administrative processes in Islamic schools. The potential use of AI in Islamic education can provide convenience in the form of personalized learning, namely the provision of learning materials tailored to the needs and interests of students. Furthermore, it provides quick and extensive access to learning resources, with simulation and visualization features that support learning materials.[22] The use of AI in learning can facilitate Al-Qur'an learning, discussions, and academic skills through adaptive feedback, interactive learning tools, and automatic assessment.[23] The research conducted an analysis of smart learning that applies big data and AI to identify at-risk students and provide them with timely treatment. This aims to improve the quality of teaching and student learning outcomes. Teachers can identify and discuss topics of concern to students, including non-judgmental feedback and the learning environment.[24]

The challenges in the context of Islamic education are the lack of interaction between teachers and students or between students themselves, which slows down and reduces the formation of values

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[21] Yonit Nissim and Eitan Simon, 'The Diffusion of Artificial Intelligence Innovation: Perspectives of Preservice Teachers on the Integration of ChatGPT in Education', *Journal of Education for Teaching International Research and Pedagogy*, 51 (2025), p. 381.

[22] Umar Samsudin, 'Exploration of Artificial Intelligence (AI) in Increasing Student Collaboration in Digital-Based Islamic Education Learning', *Al-Hayat: Journal of Islamic Education*, 9.1 (2025), pp. 222–23.

[23] M Sukron Djazilan, Afib Rulyansah, and Jauharotur Rihlah, 'Why AI Is Essential for the Future of Islamic Education : A Call for Ethical and Effective Implementation', *Edukasia: Jurnal Pendidikan Dan Pembelajaran*, 5.2 (2024), 201–16 (p. 201) <https://doi.org/10.62775/edukasia.v5i2.1373>.

[24] Stephen J.H. Yang and others, 'Human-Centered Artificial Intelligence in Education: Seeing The Invisible Through The Visible', *Computers and Education: Artificial Intelligence*, 2 (2021), p. 3.

in the teaching and learning process. [25] Furthermore, this also includes changes in social interaction, increased academic pressure, and the potential for a decline in critical thinking skills.[26] AI quickly prepares answers and solutions to questions asked, so that students become less accustomed to critical and independent thinking. The negative impacts of AI include dependence on AI, which leads to a lack of creativity, laziness, decreased social interaction, and data hacking.[27] However, AI-based image generators pose potential risks if students use them without parental or teacher supervision. Some AI-based websites allow users to freely create images with any command, while others are strictly monitored. AI presents ethical challenges, the main one being how to ensure that AI development is in line with Islamic principles, which emphasize a holistic, moral, and spiritual approach to education.[28] To ensure that AI is not only innovative but also morally and religiously acceptable, an optimal balance between ethical management and technological advancement must be maintained. [29] AI does not have the ability to understand the spiritual and moral essence of Islamic teachings, so there is a risk of misinterpretation.[30]

It is also important to ensure that the academic information systems used comply with ethical and sharia principles. Students' and teachers' personal data must be managed with great care to prevent misuse. The use of artificial intelligence (AI) must be consistent with Islamic morals, including in decision-making related to students. For example, even though the system can provide recommendations, the final decision must remain in the hands of individuals who understand the context and show empathy. Digital ethics must be embedded in the technological competence of Islamic educational institutions to ensure that the use of AI does not conflict with the values taught. Overall, AI-based academic information systems are a strategic innovation that can strengthen the role of Islamic educational institutions in the digital age. Their implementation is not only to improve administrative efficiency, but also to enrich the learning experience of students and strengthen the relationship between schools, families, and communities.

The Concept of Integrating Technology, Humanism, and Spirituality in Islamic Education and Analysis of Innovation Diffusion Theory

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[25] Rusdi Kasman and Abd Madjid, 'Opportunities and Challenges of Artificial Intelligence and Their Implications in Islamic Education', *Intiqad: Jurnal Agama Dan Pendidikan Islam*, 16.1 (2024), p. 11 <https://doi.org/10.30596/19308>.

[26] Feri Sulianta, *Kolaborasi AI Dan Manusia Dalam Dunia Pendidikan*, 2025, p. 74.

[27] Juni Sahla Nasution and others, 'Dampak Negatif Penggunaan AI Terhadap Mahasiswa Dalam Proses Pembelajaran', *Jurnal Pendidikan Dan Riset*, 3.1 (2025), 35–42 (p. 40).

[28] Taufikin, *Ethics of Artificial Intelligence in Islamic Education* (Bandung: Penerbit Feniks Muda Sejahtera, 2025), p. 6.

[29] Ella Gorian and Noor Dzuhaidah Osman, 'Digital Ethics of Artificial Intelligence (AI) in Saudi Arabia and United Arab Emirates', *Malaysian Joutnal of Syariah and Law*, 12.3 (2024), 583–97 (p. 583).

[30] Nazih Sadatul Kahfi, 'Artificial Intelligence in Islamic Religious Education : Balancing Learning Efficiency And Safeguarding Spiritual Integrity In Indonesian Higher Education', *INJECT Interdisciplinary Journal of Communication*, 10.1 (2025), 643–60 (p. 656).

Integration of technology and humanism

A humanistic approach can improve interpersonal relationships, support moral and spiritual development, and provide better integration with technology. [31] Humanism in education is based on the belief that students should be treated as individuals with unique needs, strengths, and potential. Humanism emphasizes respect, empathy, and the development of students as whole persons. Humanistic concepts need to be integrated into Islamic education to shape well-rounded and balanced individuals in the digital age. Humanistic education in the digital age is important in promoting social awareness and ethics in the use of technology. Students must be able to master the ethics and responsibilities of using technology. In this case, educators also need to maintain close emotional and psychological relationships with students, ensuring that students interact and receive emotional support. In the learning process, reflection and feedback are important, especially when using technology, because both need to be carried out intensively. The transformation of techno-humanistic learning focuses on combining the principles of constructivism, ethical awareness, and collaboration between teachers and students in realizing sustainable and adaptive learning that responds to the challenges of the times.

The Human-Centered AI Pedagogy (HCAIP) framework positions AI as a support in improving teacher-student relationships, in which educators act as pedagogical designers, ethical guides, and community builders. In this model, students transition from passive consumers of technology to critical agents who have the power to actively engage with AI devices and explore.[32] Educator training should focus on AI literacy and instilling human values such as empathy, creativity, and ethical decision-making.[33] The role of teachers is not only to teach, but also to facilitate, partner, guide, and ensure that the human dimension is not neglected by the dominance of technology.[34] In Islamic education, the techno-humanistic paradigm provides a path for the development of digital education policies that balance technological literacy, Islamic values, and character development.

Integration of Spiritual and Technology

Sufi values such as zuhud, ikhlas, and mahabbah play an important role in building individual awareness so that people do not get caught up in technological materialism, but continue

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[31] Zaenal Abidin and others, 'Humanistic Approach in Islamic Education: Building Emotional and Spiritual Intelligence in the Digital Age', *Zabags International Journal of Islamic Studies*, 1.1 (2024), 29–35 (p. 29).

[32] Purnomo M Antara and others, 'Beyond the Algorithm : Towards a Human - Centered AI Pedagogy', *International Journal of Research and Innovation in Social Science (IJRISS)*, IX.IIIS (2025), 7651–60 (p. 7651) <https://doi.org/10.47772/IJRISS>.

[33] Desak Gede and Chandra Widayanthi, 'AI in Vocational Education : Balancing Digital Skills and Humanism', *Indonesian Journal of Educational Inquiry*, 1.1 (2024), 1–10 (p. 9).

[34] Achmad Maulidi and others, 'Techno-Humanistic Learning : A New Paradigm for Human-Centered Digital Pedagogy on Islamic Education', *Edukasia: Jurnal Pendidikan Dan Pembelajaran*, 6.2 (2025), 831–52 (p. 847) <https://doi.org/10.62775/edukasia.v6i2.1498>.

to use technology as a means to improve the welfare of the people.[35] The protection of privacy and human dignity are issues that need to be considered in the use of AI. The application of AI needs to be based on the principles of *maqasid al-shari'ah*, which places the soul (*nafs*), reason (*'aql*), and human dignity (*karamah insaniyyah*) as important aspects to be preserved.[36] *Hifẓ al-Din* (preservation of religion), AI can be strategic in spreading da'wah and understanding of Islamic values. AI-based applications can facilitate worship, such as prayer time reminders, but this requires collaboration between scholars, educators, and educational institutions in maintaining the authenticity of religious information. *Hifẓ al-'Aql* (preservation of reason), AI can support reasoning, creativity, and students' thinking skills. Islamic education needs to monitor AI as a tool to improve mindset and insight, not to reduce critical thinking or distance students from science and Islamic insight. *Hifẓ al-Nafs* (preservation of the soul/life), AI can play a positive role in supporting safety and comfort, as was the case during COVID-19 with the use of distance learning. *Hifẓ al-Mal* (preservation of wealth), in this case, AI has the opportunity to reduce educational operational costs, such as online assessments, digital content, and reduced use of printed materials. *Hifẓ al-Nasl* (preservation of offspring/generations) This *maqāṣid* is closely related to the mission of Islamic education as the heir to Islamic values and civilization for future generations. AI technology, when used wisely, can strengthen these inheritance efforts through the documentation of Islamic heritage, the digitization of manuscripts, and the preservation of Islamic scientific traditions in the form of interactive digital content.[37]

The formulation of technology ethics based on Qur'anic values is divided into three parts, namely the ethics of reason, which includes technology that can strengthen critical thinking and not make humans passive in automated systems; the ethics of science, in which technology is positioned as a product of science aimed at shaping knowledgeable humans in a meaningful way; and the ethics of trust, in which technology is developed in an accountable manner to protect users from declining social, spiritual, and epistemological aspects. These three principles are in line with *maqāṣid al-sharī'ah* and can be used as a framework for evaluating and developing AI in Islamic education.[38] With Qur'anic values as its foundation, AI ethics is not merely an instrument for regulating technological behavior, but a spiritual aspect for maintaining human dignity in the digital world. AI development must be used fairly, without discrimination, transparency, and

[35] Syarifuddin and others, 'The Importance of Spiritual Values in Religious Community Welcoming the Arrival of Artificial Intelligence Technology to Maintain the Balance of Faith and Piety with Sufism Learning', *International Conferance Of Digital Sciences And Engineering Technology*, 2024, 448–57 (p. 448).

[36] Mahmudah and others, p. 31.

[37] Iit Supriatin and others, 'Formulasi Etika Kecerdasan Buatan (AI) Dalam Pendidikan Islam : Pendekatan Maqāṣid Al-Sharī"Ah Dan Tafsir Tematik Al- Qur "An', *Halaqa Research: Journal of Islamic Education*, 1.2 (2025), 121–40 (p. 133).

[38] Supriatin and others, p. 136.

accountability. This is in line with Islamic teachings that prioritize justice ('adl), responsibility (taklif), and benefit in its use. This needs to be maintained by ensuring that AI does not replace the role of humans entirely so that it does not erode human values and spirituality. In research conducted on the application of AI in Confucianism (teaching system, ethics, morals), the role of teachers is emphasized, who not only impart knowledge but also serve as ethical and spiritual guides who apply wisdom.[39] AI can be used appropriately to complement and assist teachers in advancing ethical and spiritual principles and practices.

In the context of Islamic education, the relationship between AI and technology, humanism, and spirituality can be analyzed using the Diffusion of Innovation (DOI) theory. The use of AI can be seen as an innovation that is spreading widely in the field of education. The DOI theory provides a comprehensive framework for analyzing the use of AI in Islamic education and the integration of technology, humanism, and spirituality. The analysis of the integration of technology, humanism, and spirituality in the use of AI in Islamic education through the Diffusion of Innovation perspective is as follows:

Table 1. integration of technology, humanism, and spirituality in the perspective of the theory of diffusion of innovation

Stage	**Technology**	**Humanism**	**Spirituality**
Knowledge	PAI teachers are beginning to familiarize themselves with AI-based learning platforms. Their knowledge is limited to technical aspects and does not extend to pedagogical understanding.	Building awareness that technology (AI) is a tool that facilitates the learning process, not a substitute for teachers.	Awareness of technology utilization is based on Islamic values. All knowledge and technology are means to achieve benefits and bring us closer to Allah.
Persuasion	During the exploration stage, teachers explore the use of AI in the learning process with	This stage is aimed at seeing how AI can help build character,	Emphasis is placed on the responsible and wise use of AI.

[39] Charlene Tan, 'Digital Confucius ? Exploring the Implications of Artificial Intelligence in Spiritual Education', *Connection Science*, 32.3 (2020), p. 289 <https://doi.org/10.1080/09540091.2019.1709045>.

	adjustments to the academic culture.	not replace teachers entirely.	
Decision	This decision was made based on the suitability of AI in the context of Islamic education, including its relevance to the PAI curriculum, student data security, and national educational values.	Teachers consider the extent to which AI can support student learning while maintaining interaction. The principle of human-centered learning is upheld so that technology does not lead to dehumanization.	Teachers ensure that the use of AI does not conflict with the principles of *maqasid syariah,* and that its use can produce benefits and avoid harm.
Implementation	Teachers use AI to support the learning process	Teachers act as facilitators who combine technology with a dialogical and reflective approach, as per the concept of ta'lim wa tarbiyah in Islam. Implementation is not only based on cognitive performance, but also character building.	The implementation is directed so that technology becomes a medium for tazkiyah al-nafs (self-purification), for example, with applications that foster students' moral and spiritual awareness through digital reflection.
Confirmation	Educational institutions systematically integrate AI into PAI learning, while paying attention	AI-based PAI learning continues to place humans at the center (human-centered education),	The adoption of AI technology is interpreted as scientific worship through the optimization of reason

	to the ethical limits of technology use.	where empathy, social interaction, and character remain at the core of the learning process.	and technology for the benefit of humanity (*rahmatan lil 'alamin*).

The integration of artificial intelligence (AI) in Islamic Religious Education (IRE) requires a balance between technological, humanistic, and spiritual dimensions. At the knowledge stage, IRE teachers are beginning to familiarize themselves with AI-based learning platforms, but their understanding is still technical in nature. Awareness needs to be built that technology is a valuable learning tool if used in accordance with Islamic values. Furthermore, at the persuasion stage, teachers begin to explore the potential of AI while remaining oriented towards character building and moral responsibility so that its use does not lead to dehumanization. At the decision stage, educators assess the suitability of AI based on its compatibility with the PAI curriculum, ethics, and the principles of *maqāṣid al-syarī'ah*, so that its use brings benefits and avoids harm. The implementation stage requires teachers to act as facilitators who combine technology with a dialogical and reflective approach to strengthen moral and spiritual values. Finally, at the confirmation stage, educational institutions integrate AI ethically and systematically, while still placing humans at the center of learning. Thus, the adoption of AI in PAI is not only a technological transformation, but also a spiritual process to realize civilized education and rahmatan lil 'ālamīn. In the field of artificial intelligence (AI), the principles of Maqasid provide ethical guidelines to help address new challenges:[40]

1. Means and Ends Principle: This principle states that "Means are subject to the same principles as ends." If the end is in accordance with Sharia, then the means to achieve it are permissible. For example, using intelligent systems, such as medical AI, to save lives is in line with the preservation of life, one of the main objectives of Maqasid. Conversely, designing robots for idol worship is contrary to the principles of Tawhid and is not permissible.
2. Flexibility of Means and Ends: This principle allows flexibility in the methods of achieving ends, as long as they do not violate fundamental values. For example, AI in crime prevention may allow the use of surveillance technology, as long as it is used responsibly, balancing public interest with privacy protection.

[40] Fatima Ali and others, *Islamic Ethics and AI : An Evaluation of Existing Approaches to AI Using Trusteeship Ethics*, *Philosophy & Technology* (Springer Netherlands, 2025), XXXVIII, pp. 120–21 <https://doi.org/10.1007/s13347-025-00922-4>.

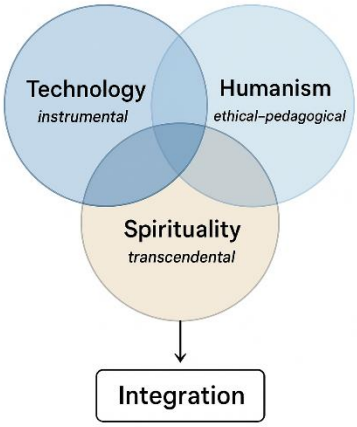

Figure 2. Techno-Human-Spiritual Integration Framework

Teachers have an important role in managing and delivering data generated from AI systems, providing empathetic and interactive feedback, and ensuring that learning is holistic. Therefore, AI needs to be positioned as a pedagogical partner that supports the learning process, not as an autonomous entity that takes over the education process.[41] Instilling Islamic ethical principles in AI policy-making is crucial so that this technology is in line with moral and social values, especially in countries with a Muslim majority. Policymakers must establish clear rules based on Maqasid al-Shariah, Adl, and Maslahah, so that ethical considerations become the main basis for developing a national strategy for AI development.[42]

In this digital age, teachers need to have strong digital skills in operating technology. Teachers' responsibilities in managing and using technology include selecting the right technology. There are several considerations that need to be made in selecting technology, including learning objectives, relevance and context of learning, sustainability and availability, ease of use, security, evaluation and review, and training and support. Then, the use of technology with its context adjusted to the learning style and interaction, teachers also have not chosen students regarding digital ethics in relation to teaching digital skills, which include digital literacy, understanding digital security, online research skills, creativity, collaboration, and digital communication, presentation skills, digital awareness, and ethics. Finally, teachers also need to evaluate the impact of technology use through data collection, analysis of learning outcomes, observation of student interactions, listening to feedback, collaboration with peers, and consideration of long-term impacts.[43]

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[41] Salim Chayati and Shindid Gunagraha, 'Ethics of Using Artificial Intelligence in the World of Islamic Education', *Journal of Education, Administration, Training, and Religion*, 6.1 (2025), 41–53 (p. 49).

[42] Uthman Mohammed Mustapha Kannike and AbdulGafar Olawale Fahm, 'Exploring The Ethical Governance Of Artificial Intelligence From An Islamic Ethical Perspective', *Jurnal Fiqh*, 22.1 (2025), 134–61 (p. 156).

[43] Muh. Fitrah and others, *Kecerdasan Buatan Dalam Pendidikan: Peran Guru, Literasi Digital, Dan Pengembangan Teori Kualitatif* (Sukabumi: CV Jejak, 2024), pp. 95–110.

The use of AI in Islamic Religious Education (IRE) must continue to convey moral values in learning materials, provide space for spiritual reflection, and limit digital content and interactions to only those that are educational and ethical. AI-based education in the context of Islam must be able to develop the human nature of students. Adaptive learning systems that use technology, for example, must be tailored to the nature of the students, not just based on statistical data. This requires a balance between algorithms and wisdom in designing digital education systems. By positioning technology within the framework of monotheism and manners, Islamic education in the digital age will not lose its identity.[44]

The development of inclusive and equitable AI systems is a priority. Stakeholders need to apply a balanced approach that can maximize the potential of AI as a learning support while maintaining the spiritual, ethical, and cultural foundations of Islamic pedagogy.[45] It is important to harmonize technology with Islamic principles by promoting spiritual integrity and ethics and encouraging innovation in teaching and learning methods. This strengthening includes the development of technology-based curricula that synergize religious and scientific knowledge, training programs for teachers on the effective use of digital devices, and policies to reduce negative impacts on students' character and behavior.[46] Interdisciplinary collaboration between Islamic scholars, AI developers, and education practitioners is important and prioritized to build a system that is aware of spiritual values and ethical responsibilities.[47] Islamic education can integrate technological advances without sacrificing its spiritual and moral values.

Implementation of AI in Learning in the Ponorogo Region

The implementation of AI in education in Ponorogo has begun with training sessions and workshops on AI. Several examples have been held at UIN Ponorogo, such as workshops on artificial intelligence for academic writing with speakers from UIN Syarif Hidayatullah Jakarta. Schools such as SMK Muhammadiyah 1 Ponorogo have implemented learning with coding and artificial intelligence (AI) integrated across all departments. This program includes Arduino and the Internet of Things (IoT) to build smart devices and automation systems. Python programming language is used as the basis for flexible modern coding. Prompt Engineering utilizes AI technologies such as ChatGPT, DeepSeek, and various creative AIs to produce innovative works.

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[44] Nur Syahid, 'Reconstruction Of The Philosophy Of Islamic Education In The Era Of Artificial Intelligence : Between Ethics , Spirituality ,and Technology', *IPES (Innovative Pedagogy and Education Studies)*, 2.2 (2025), 44–54 (p. 52).

[45] Agus Suryana, Ismail Mustaqim, and Ajun Rois, 'Ai-Driven Innovation In Islamic Schools: Impacts, Opportunities and Ethical Challenges', *Al-Abshar: Journal of Islamic Education Management*, 4.1 (2025), p. 88.

[46] Muslim, 'Internalizing Digital Technology in Islamic Education', *Scaffolding:Jurnal Pendidikan Islam Dan Multikulturalisme*, 6.3 (2024), 180–97 (p. 180) <https://doi.org/10.37680/scaffolding.v6i3.6309>.

[47] Said Maskur and Hasyamuddin Othman, 'Artificial Intelligence and Islamic Perspective in Student Character Assessment', *Nadwa: Jurnal Pendidikan Islam*, 19.1 (2025), 109–22 (p. 120).

The application of AI as a medium in the learning process has been implemented in several schools in Ponorogo, one of which is MIN 1 Ponorogo. The platform used is Alef Education. Alef Education is a digital platform based in Abu Dhabi, United Arab Emirates. The idea for the Alef platform first emerged in 2015 when it was conceptualized as a technology-based education model to meet the needs of the local public school system in the United Arab Emirates. From this concept, the company's vision then developed to include digital education transformation for Basic Education (Early Childhood Education/Kindergarten) to Secondary Education (Grade 12). This platform provides learning tools for mathematics and Arabic that can facilitate students. Through this platform, teachers can easily provide feedback and tailor learning to the characteristics of students.

Conclusion

The development of artificial intelligence (AI) has fundamentally changed the paradigm of education, including Islamic Religious Education (IRE). On the one hand, AI offers great opportunities through adaptive learning systems, virtual tutors, and learning behavior analysis; however, on the other hand, it poses ethical and spiritual challenges that demand a new balance between technology, humanity, and religious values. Islamic education cannot merely be a consumer of technology, but must integrate it with a vision of developing well-rounded individuals who are knowledgeable, moral, and faithful. From an Islamic perspective, knowledge and technology are a trust (*amānah)* that must be used for the benefit and preservation of life values (*maqāṣid al-sharī'ah*). Therefore, the adoption of AI in Islamic education needs to be guided by ethical (humanistic) awareness and spiritual orientation. Teachers should not be replaced by algorithms, but rather become moral guides who ensure that technology serves to humanize. The integration of these three dimensions—technology, humanism, and spirituality—promotes the realization of a balanced Islamic education. The technological dimension acts as an innovative learning tool; the humanistic dimension maintains empathy, freedom of thought, and social responsibility; while the spiritual dimension provides direction and meaning, ensuring that intelligence does not lose its awareness of God. With this balance, Islamic religious education in the AI era is not only a response to digital modernity, but also a path toward progress that is civilized, ethical, and oriented toward divine values.

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