

## “Digitalization and Humanization: Sustainable Islamic Education in the Era of Technological Revolution”

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### Abstrak

Digitalization and Humanization: Sustainable Islamic Education in the Era of Technological Revolution The rapid development of digital technology in the era of the 4.0 industrial revolution and toward Society 5.0 has brought significant changes to the world of education, including Islamic education. Digital transformation is not only changing the way teachers teach and students learn, but also demands a paradigm shift in understanding the essence of education, which is centered on human values. This article aims to analyze the relationship between digitalization and humanization in building a sustainable model of Islamic education amidst the current of technological revolution. This research employs a qualitative approach thru the method of literature review (library research), examining various up-to-date literature sources related to the integration of Islamic values in digital learning practices. The study results indicate that digitalization offers significant opportunities for learning innovation, expanding educational access, and enhancing 21st-century competencies in Muslim learners, such as critical thinking, collaboration, and creativity. However, without a humanizing touch that emphasizes spiritual values, ethics, and social responsibility, Islamic education risks falling into a mechanistic pattern that loses its transcendental dimension. Therefore, an integrative and holistic Islamic education paradigm is needed, which balances technological mastery with the development of noble morals and character. This article recommends strengthening Islamic-valued digital literacy for teachers and students, developing a value-based curriculum, and implementing learning that integrates technology and spirituality as steps toward adaptive, civilized, and sustainable Islamic education.

**Keywords:** digitalization, humanization, Islamic education, sustainability, technological revolution

### Introduction

In the era of globalization and rapid technological revolution, education is undergoing substantial transformation. Digital technologies, including the internet, mobile devices, online learning platforms, artificial intelligence (AI), augmented reality (AR), and adaptive learning systems, have become an integral part of the teaching and learning process at various educational levels. The digitalization of

education not only facilitates access and efficiency but also demands new competencies such as digital literacy, critical thinking, online collaboration, and adaptation to rapid change. For example, the concept of "Education 5.0" describes how technology is not merely a tool, but part of an integrated, human-centric learning ecosystem (Ahmad et al., 2023)

In the context of Islamic education, the challenges and opportunities of digitalization are becoming increasingly apparent. On one hand, technology allows for the delivery of religious material in a more interactive way, with wider access and more flexible learning methods. For example, the article "Technology-Based Islamic Education: Building Inclusive, Adaptive, and Future-Ready Learning Foundations" shows that technology-based Islamic education can expand access, create personalized learning experiences, and support adaptive teaching methods (Purnama Sari et al., 2024a). However, on the other hand, the humanization aspect, namely the enforcement of spiritual values, morals, manners, Islamic identity, and social responsibility, tends to be neglected in the overly technical and instrumental digitalization process. Studies such as "Ethics from the perspective of the Qur'an-Sunnah and the impact of the digital world on students' ethics in modern times" show how the digital world threatens students' moral ethics when not accompanied by a strong value framework (Mohammad -Abdur et al., 2022).

More specifically, sustainable Islamic education requires that the learning process not only focuses on technical skills and technological mastery, but also on the long-term sustainability of Islamic values—namely, how students not only become digitally "connected" but also "civilized," becoming responsible caliphs and maintaining a balance between knowledge, faith, and action. The study "Transforming Islamic Education for Environmental and Social Sustainability" emphasizes the importance of integrating Islamic values (such as khalifah, maslahah, and justice) into Islamic education to support sustainable development (Hajar, 2024).

At the operational level of elementary schools, this emphasis becomes increasingly important. Elementary school, as the initial level of education, is the foundation for students' character, attitudes, and habits. If the digitalization of

learning is implemented without attention to humanization and the sustainability of Islamic values, children could become active technology users but lack depth of values and a proper understanding of moral and social responsibility in using technology. In fact, the literature shows that even tho Islamic learning technology has begun to be used, there are still obstacles such as infrastructure readiness, teacher competence, and curriculum relevance. For example, the article "Digitalization Strategies for Learning in Enhancing 21st Century Skills in Islamic Education" shows that integrating ICT in Islamic education improves the learning experience, but challenges such as teacher and infrastructure readiness are still significant (Nilamsari, 2025).

Thus, the urgency of research on the theme "Digitalization and Humanization: Sustainable Islamic Education in the Era of Technological Revolution" becomes highly relevant in the context of current educational developments. Amidst the rapid current of digitalization, there is an urgent need to formulate an Islamic education model that is not only responsive to technological advancements but also remains grounded in Islamic humanistic values and spirituality. The emerging gap lies in the lack of integration between the aspects of digitalization and humanization in Islamic education, where most educational innovations still focus on technological aspects (such as efficiency, access, and interactivity), while the development of students' character, morals, and spiritual awareness is potentially marginalized. Therefore, this research is important to explore how digitalization can be directed to become a means of strengthening Islamic humanistic values, not merely an instrument of educational modernization.

### **Metode**

This research uses a qualitative approach with the library research method. This approach was chosen because the topic being studied emphasizes conceptual and reflective analysis of the phenomena of digitalization and humanization in the context of Islamic education. According to (Creswell & Creswell, 2023) A qualitative approach allows researchers to understand the deep meaning of social phenomena thru the interpretation of various data sources, such as texts, documents,

and previous research findings. The literature review method was conducted by examining various relevant scientific sources, such as books, national and international journal articles, seminar proceedings, and research reports that discuss digitalization, humanization, and sustainable Islamic education. Data was collected thru documentation techniques, which involved identifying, reviewing, and recording important information from various literature sources. This step is in line with the opinion (Zed, 2004) In the Literature Review Research Method, it is stated that literature research aims to obtain a strong theoretical foundation for the development of conceptual analysis.

The data obtained were then analyzed descriptively and analytically, by describing the content of the literature and linking it to the context of Islamic education in the era of the technological revolution. This analysis was carried out thru the process of categorizing, interpreting, and synthesizing data to find patterns of relationships between digitalization, humanization, and the principle of sustainability in Islamic education. Thus, the results of this study are not only descriptive but also offer a new conceptual framework for the development of Islamic education that is adaptable to technological advancements without losing its human values and spirituality.

## **Pembahasan**

### **Integrating Digitalization and Humanization in Islamic Education Learning**

The development of digital technology has shifted the paradigm of Islamic education from conventional learning to a more open, collaborative, and interactive learning ecosystem. Digitalization allows learners to access Islamic knowledge sources from various online platforms, such as interactive tafsir applications, educational preaching videos, and Islamic value-based learning management systems. This creates new opportunities for strengthening religious literacy in a way that is more contextual and relevant to the needs of the times. However, the implementation of digitalization cannot be separated from the basic principles of Islamic education, which emphasize a balance between the mastery of knowledge

and the formation of noble character. According to (Purnama Sari et al., 2024), Technology in Islamic education should not be viewed merely as a tool, but as a means to strengthen students' spiritual values, morality, and social responsibility.

The integration of digitalization and humanization demands a pedagogical approach that places humans at the center of learning (human-centered learning). In the context of Islamic education, this means developing a learning process that integrates intellectual intelligence with spiritual and emotional intelligence (Diana et al., 2024) stating that digital learning in Islamic education needs to be directed toward value-based digital learning, which is a technology-based learning model that still contains dimensions of manners, morals, and social empathy. Teachers play an important role as mediators between technology and values, ensuring that digital interactions do not erode human values, but rather enrich students' spiritual experiences thru meaningful content and activities.

Furthermore, this integration can also be realized thru learning designs that wisely and ethically utilize technology. For example, the use of interactive applications that present exemplary stories in Islam, social ethics simulations, or project-based learning platforms that encourage students to take real social action (Baigabylov et al., 2025) affirming that humanization in digital learning can be achieved if technology is used to cultivate students' moral and spiritual awareness, not merely to enhance cognitive competence. In this context, digitalization serves as a "bridge of values," not a "replacement of values." This means that technology helps expand the reach of Islamic education without shifting its core meaning and purpose: the formation of civilized human beings.

In addition, (Muslim, 2024) highlighting that the integration of digitalization and humanization demands a curriculum that is reflective of social changes and technological developments. The Islamic education curriculum in elementary schools must be able to combine technology-based learning with the strengthening of Islamic character thru reflective activities, spiritual mentoring, and digital social practices. For example, when students use social media for learning projects, teachers should guide them to present content that prioritizes ethics, empathy, and

responsibility. Thus, digitalization is not only a means of "accessing knowledge," but also of "spreading values."

By integrating digital and humanistic dimensions, Islamic education can present a learning model that is not trapped in the dichotomy between modernity and spirituality. The synergy of the two can actually give rise to a new paradigm called Islamic Digital Humanism, which is learning based on Islamic values but adaptable to technological advancements. This model is not only relevant for the development of 21st-century competencies, but also a real effort to maintain the sustainability of Islamic values in the ever-changing current of technological revolution. Thus, Islamic education has the potential to become the main axis in shaping a digitally literate, morally upright, and globally competitive Muslim generation.

### **Challenges and Directions for the Development of Islamic Education in the Digital Era**

The digital transformation sweeping across various sectors of life also has significant implications for the world of Islamic education. On one hand, digitalization presents incredible opportunities for curriculum development, learning media, and more dynamic and interactive methods of knowledge delivery. Access to learning resources is now increasingly open thru digital platforms such as Learning Management Systems (LMS), artificial intelligence (AI)-based applications, and religious multimedia content that is easily accessible to students. However, as emphasized by (Ari Rahmatullah Fauzi et al., 2025) In the Contemporary Islamic Education Journal, this convenience also presents a serious challenge in the form of a gap between technological mastery and the spiritual values within it. Students who are proficient in using technology may not necessarily have ethical awareness and moral responsibility in accordance with Islamic teachings.

One of the main challenges of Islamic education in the digital age is the reduction of humanistic and spiritual values due to the dominance of technological

approaches. Digitalization often places more emphasis on cognitive efficiency and academic achievement, but neglects the affective and moral dimensions of learners. As stated by (S et al., 2024) In the International Journal of Islamic Educational Research, technology-performance-oriented online learning processes can lead to the "dehumanization" of students, making them emotionally passive and disconnected from social relationships and transcendental values. This highlights the importance of digital humanization, which is the effort to make technology not a replacement for human interaction, but a means of deepening human values, spirituality, and social responsibility.

Additionally, another challenge arises from the readiness of educational human resources. Many Islamic religious teachers face difficulties in integrating learning technology due to limited digital literacy, facilities, and adequate training (Purnama Sari et al., 2024b). This condition is exacerbated by the lack of policy support that systematically encourages technology-based learning innovation in madrasas and Islamic schools. According to (Hajar, 2024a) In Transforming Islamic Education for Sustainability, strengthening teachers' digital competencies is an important prerequisite for ensuring that technology can be utilized as a tool for spiritual empowerment, not merely as an administrative or entertainment tool.

However, amidst these challenges, the direction of Islamic education development in the digital era is actually becoming more promising when approached with an integrative paradigm. Digitalization needs to be developed in a values-based manner, which means integrating technological literacy with spiritual literacy and Islamic ethics. (Siliutina et al., 2022) In the journal *Wisdom*, it is affirmed that Islamic education in the digital transformation era must move toward "ethical-tech education," where technology is directed toward strengthening human values, collaboration, and ecological awareness. Thus, the direction of Islamic education development should not only prepare a "digitally literate" generation, but also a "digitally civilized" generation that uses technology for the benefit of humanity and sustainable development.

Ultimately, Islamic education in the digital age must serve as a bridge between modernity and spirituality. Technology-based innovation needs to be accompanied

by a reaffirmation of core Islamic values such as khalifah fil ardh (vicegerent on earth), amanah (trust), and rahmatan lil 'alamin (mercy to all beings). Thru a holistic approach that balances digitalization and humanization, Islamic education can create a learning ecosystem that is relevant to the demands of the times while preserving the integrity of divine values. In this way, Islamic education has a great opportunity to become a model of sustainable education that is not only adaptable to technological changes but also rooted in the universal humanitarian principles taught in Islam.

## **Conclusion**

Digitalization and humanization in Islamic education are not two conflicting entities, but rather two dimensions that must go hand in hand to create sustainable education in the era of technological revolution. Digital transformation opens up significant opportunities to expand access, enrich learning methods, and cultivate 21st-century competencies for Muslim learners. However, without a strong foundation of spiritual, ethical, and human values, digitalization risks distancing education from its true purpose: the formation of individuals who are knowledgeable, faithful, and moral. Therefore, the future direction of Islamic education development needs to emphasize the integration of technological skills and Islamic humanistic values thru an adaptive, reflective, and value-based learning paradigm. This effort will not only strengthen the competitiveness of Islamic education on the global stage but also ensure that technological advancements align with the humanitarian mission and the sustainability of Islamic values in shaping responsible generations of caliphs in the digital world.

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