

Transformation of Islamic Education in The Society 5.0 Era: Strategies for Building a Generation with Character and Global Competitiveness

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ABSTRACT

The Society 5.0 era, initiated by the Japanese government, brings fundamental changes to various aspects of life, including education, economy, social interaction, and culture. Islamic education, as a strategic pillar for character formation and Muslim identity development, is required to adapt rapidly to technological developments without neglecting the moral and spiritual values that are the essence of its teachings. This study aims to critically examine the challenges and opportunities for transforming Islamic education in the Society 5.0 era to build a generation of excellent character and global competitiveness. Using library research methods with a descriptive-analytical approach, this study examines various primary and secondary literature sources, including accredited scientific journals, classical and contemporary Islamic education books, and relevant education policy documents published between 2020 and 2026. Data collection was carried out through systematic literature searches using online journal databases such as Google Scholar, SINTA, Scopus, and various Islamic university repositories in Indonesia. The collected data were analyzed using content analysis and comparative analysis techniques to identify patterns, themes, and relationships across the literature. The results show that the transformation of Islamic education in the Society 5.0 era requires three main pillars: (1) curriculum renewal that integrates Islamic values with 21st-century competencies such as critical thinking, creativity, collaboration, and communication; (2) systematic improvement of digital competence for Islamic education teachers through mobile learning-based training and artificial intelligence assistance; and (3) the development of a digital ecosystem based on Islamic values that supports ethical technology use. The ideal Muslim generation expected from this transformation is individuals who have spiritual intelligence, critical digital literacy, cross-cultural collaborative skills, and noble character that serves as a compass in facing global dynamics. This research contributes a holistic framework for Islamic education transformation that balances technological mastery with spiritual depth and moral integrity.

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1. Introduction

We live in an era that moves far faster than previous generations ever imagined. Artificial intelligence, robotics, big data, and the Internet of Things (IoT) are no longer merely futuristic discourses—they have now permeated the very fabric of human life, including education, health, transportation, and economy (Lase, 2019; Schwab, 2017; World Bank, 2023). This rapid technological advancement has created what many scholars call a "digital tsunami" that fundamentally reshapes how humans live, work, and interact (Gleason, 2022; UNESCO, 2022). In this context, Japan introduced the concept of Society 5.0 as a vision of a society that places humans at the center of technological progress, in contrast to the Industrial Revolution 4.0, which is more oriented toward machine efficiency alone (Fukuyama, 2018; Nata, 2020; Deguchi et al., 2020). Society 5.0 aims to create a human-centered society that balances economic advancement with the resolution of social problems by integrating cyberspace and physical space (Harayama, 2017; Salgues, 2018).

The Society 5.0 era demands an education system capable of integrating technology with humanistic values (Gleason, 2022; UNESCO, 2022; OECD, 2023). Islamic education, as a subsystem of national education, must adapt to the changing times without ignoring the moral and ethical dimensions that are the core of Islamic teachings (Al-Attas, 2019; Muhaimin, 2012; Abdullah, 2018). According to the author's perspective, the increasingly rapid development of technology is unavoidable, so education is required to make various adjustments to remain relevant to the needs of modern society (Hasan, 2021; Rahman, 2020). However, this adjustment process is not sufficient through changes in learning methods or the use of digital technology alone (Wahyudin & Suhendar, 2021). Education must also provide space for character formation, strengthening spiritual values, and developing students' social attitudes (Kurniawan et al., 2023; Muttuqin, 2021; Zubaedi, 2019). This is not merely an administrative or curricular challenge, but a genuine civilizational challenge, because education bears great responsibility in shaping a generation that is not only excellent in mastering science and technology but also has noble character and strong spirituality (Muhaimin, 2012; Nata, 2020; Syamsuddin, 2021).

The challenges faced by Islamic education in the digital era are complex and multidimensional. First, the digital divide between urban and rural areas remains a significant obstacle, with many madrasas and Islamic boarding schools lacking basic technological infrastructure (World Bank, 2023; Mahmud et al., 2025; Kementerian Agama RI, 2024). Second, the digital competence of Islamic education teachers is still uneven, with a large percentage feeling unprepared to integrate technology into their pedagogy (Jaenullah et al., 2025; Majeed et al., 2025). Third, the threat of moral decadence in digital spaces—including exposure to inappropriate content, cyberbullying, online radicalism, and consumerist culture—poses serious risks to students' character development (Pakai, 2022; Utami et al., 2025). Fourth, the Islamic education curriculum has not yet fully adapted to the demands of the 21st century, particularly in integrating technology with Islamic values (Indarta et al., 2022; Kementerian Agama RI, 2024; Gunawan et al., 2025).

Despite these challenges, the Society 5.0 era also opens up unprecedented opportunities for Islamic education (Permana & Hasanah, 2024; Rahman & Aziz, 2023). Digital platforms enable the expansion of da'wah and educational outreach without geographic boundaries, reaching Muslim communities in remote areas and even across the globe (Al-Faruqi, 2020; Islamy, 2024). Artificial intelligence technology offers possibilities for personalized learning, where educational materials can be tailored to the individual needs, learning styles, and paces of each student (Pratiwi et al., 2026; Majeed et al., 2025;

Holmes et al., 2019). Mobile learning applications have been shown to increase student engagement, motivation, and knowledge retention in Islamic education by up to 25% (Jaenullah et al., 2025; Zainuddin et al., 2022). Furthermore, the digitalization of classical Islamic manuscripts and scholarly works allows the younger generation to access the rich intellectual heritage of Islam more easily and interactively (Al-Attas, 2019; Sembiring et al., 2024; Baker, 2021).

Previous studies have discussed the transformation of Islamic education in the digital era, but most still focus on partial aspects such as curriculum or teacher competence separately (Hidayah et al., 2023; Hasanah & Mulyadi, 2021). Several studies have examined the digitalization of Islamic education, but none have comprehensively formulated an integrated transformation strategy that simultaneously addresses curriculum renewal, teacher digital competence, and digital ecosystem development (Abu A'la & Makhshun, 2022; Hidayah et al., 2023; Hasanah & Mulyadi, 2021; Jaenullah et al., 2025). Indarta et al. (2022) discussed the relevance of the Merdeka Curriculum to 21st-century learning models, yet did not specifically address the Islamic values that must be the foundation of transformation. Hidayah et al. (2023) explored the transformation of Islamic educational institutions facing the Society 5.0 era, highlighting the need for institutional adaptation but lacking concrete operational steps. Jaenullah et al. (2025) emphasized the importance of Android-based mobile learning as a PAI learning medium in the era of the industrial revolution 4.0, demonstrating that technology-based learning media can increase student interest and motivation. Furthermore, Pratiwi et al. (2026) found that artificial intelligence plays a significant role in enhancing student motivation and learning effectiveness in Islamic pedagogy. Islamy (2024) confirmed that fostering religiosity and social character through Islamic educational programs is essential in the context of Society 5.0. However, none of these studies have proposed an integrated framework that simultaneously addresses curriculum renewal, teacher digital competence, and digital ecosystem development within the context of Islamic values (Nasution & Harahap, 2023; Wibowo et al., 2022).

The novelty of this research lies in offering three main pillars of transformation that integrate Islamic values, digital technology (including mobile learning and AI), and global competitiveness holistically (Sutrisno & Khoiruddin, 2024; Yasin et al., 2024). This study is significant because it addresses the urgent need for a comprehensive transformation framework that can guide Islamic education institutions, policymakers, and educators in navigating the complexities of the Society 5.0 era (OECD, 2023; UNESCO, 2022; World Bank, 2023). Without such a framework, Islamic education risks either being left behind in technological advancement or losing its spiritual essence in the rush to digitize (Al-Attas, 2019; Nata, 2020; Muhaimin, 2012).

This article focuses on three main aspects: first, identifying the challenges and opportunities faced by Islamic education in the Society 5.0 era; second, formulating appropriate transformation strategies based on Islamic values; and third, describing the ideal Muslim generation profile that needs to be born from the educational process (Permana & Hasanah, 2024; Sembiring et al., 2024; Jaenullah & Laili, 2025). By addressing these three aspects, this research aims to contribute to the development of Islamic education that is both technologically advanced and spiritually grounded, producing a generation that is competitive globally while remaining rooted in Islamic ethics and morality (Al-Faruqi, 2020; Islamy, 2024; Yasin et al., 2024).

2. Method

This research uses a qualitative approach with library research methods (Zed, 2014). This method was chosen because the study is analytical-conceptual in nature, aimed at building a theoretical framework and producing strategic recommendations based on the synthesis of relevant and up-to-date literature. The use of this method is considered appropriate because the research emphasizes the process of reviewing and analyzing various library sources, such as books, scientific journals, articles, and previous research results related to the research topic.

The data sources in this study consist of two types. First, primary sources in the form of accredited scientific journals discussing the transformation of Islamic education, Society 5.0, character education, and 21st-century competencies, published in the 2020–2026 period. Second, secondary sources in the form of Islamic education science books, policy documents of the Ministry of Religious Affairs and the Ministry of Education and Culture of the Republic of Indonesia, as well as research reports from leading educational institutions, including those from researchers at Universitas Ma'arif Lampung (Jaenullah & Laili, 2025; Jaenullah et al., 2025; Pratiwi et al., 2025).

Data collection was carried out through systematic literature searches using online scientific journal databases, including Google Scholar, SINTA (Science and Technology Index), Scopus, and various Islamic university repositories in Indonesia. The keywords used in the search included: "Islamic education Society 5.0", "PAI curriculum transformation", "digital era teacher competence", "Islamic character education", "mobile learning PAI", and "global competitiveness of Islamic education" (Al-Faruqi, 2020; Sembiring et al., 2024).

A total of 87 sources were analyzed in this study, consisting of 52 accredited journal articles (2020–2026), 19 classical and contemporary books on Islamic education, 8 Indonesian education policy documents (Ministry of Religious Affairs and Ministry of Education and Culture), and 8 international reports (UNESCO, OECD, World Bank). The selection criteria included relevance to Islamic education transformation, Society 5.0, character education, and digital competence, as well as publication within the last six years (2020–2026) for journals and reports.

The collected data were analyzed using content analysis techniques and comparative analysis (Creswell & Poth, 2018). The analysis process includes four stages: (1) identification and selection of relevant literature; (2) categorization of emerging main themes; (3) synthesis and interpretation of findings from various sources; and (4) drawing conclusions and formulating recommendations. This approach is in line with the principles of library research that emphasize depth of analysis and the ability to synthesize across sources.

3. Finding and Discussion

Findings

The results of the literature analysis show that the transformation of Islamic education in the Society 5.0 era faces four main categories of challenges.

First, the digital divide and infrastructure, where madrasas and Islamic boarding schools in remote areas lack adequate technological infrastructure, including internet connections, computer devices, and digital-based learning management systems (World Bank, 2023; Mahmud et al., 2025). This condition creates inequality in access to quality educational services and hinders the implementation of technology-based learning innovations. Although digital transformation has become a global necessity, the readiness

of educational institutions remains highly dependent on the availability of supporting infrastructure.

Second, the uneven digital competence of teachers remains a significant challenge. As noted earlier, approximately 60% of Islamic educators in Southeast Asia feel unprepared to face digital transformation (Mahmud et al., 2025). This issue affects teachers' ability to integrate technology into classroom instruction effectively. Jaenullah et al. (2025) emphasized that one solution to overcome this challenge is the development of Android-based mobile learning, which has been proven effective in improving the effectiveness of Islamic Religious Education (PAI) learning at SMK Ma'arif Metro Lampung. Similarly, Majeed et al. (2025) found that strengthening teachers' digital competence and integrating Artificial Intelligence (AI) into teaching practices can significantly improve instructional effectiveness in Islamic educational institutions.

Third, Islamic education faces the threat of moral decadence in digital spaces. The rapid flow of unfiltered information, exposure to inappropriate content, consumerist lifestyles, cyberbullying, and the dissemination of extremist ideologies through social media pose serious challenges to students' character development (Pakai, 2022; Utami et al., 2025). In response, Kurniawan et al. (2023) highlighted that religious character-based learning strategies can effectively strengthen students' moral resilience and foster ethical behavior in digital environments.

Fourth, the curriculum of Islamic education has not yet fully adapted to the demands of Society 5.0. Many curricula still emphasize conventional teaching approaches and have not optimally integrated digital literacy, critical thinking, creativity, collaboration, and technological competencies required in the twenty-first century (Kementerian Agama RI, 2024; Gunawan et al., 2025). Consequently, curriculum reform is essential to ensure that graduates possess both religious knowledge and future-oriented competencies.

Table 1. Challenges and Opportunities for Islamic Education Transformation in Society 5.0

No	Challenges	Opportunities	Supporting Studies
1	Digital divide between urban and rural areas	Wider reach of da'wah and education without geographic boundaries	Jaenullah et al. (2025); World Bank (2023)
2	Uneven digital competence of PAI teachers	Personalization of learning through AI technology	Pratiwi et al. (2026); Majeed et al. (2025)
3	Threat of moral decadence in digital space	Revitalization of Islamic scholarship through digitalization of classical manuscripts	Kurniawan et al. (2023); Pakai (2022)
4	Curriculum not yet fully adaptive	25% increase in knowledge retention through e-learning and mobile learning	Indarta et al. (2022); OECD (2023)

Source: Author's analysis based on systematic literature review of 44 academic sources (2020-2026), including journal articles, books, and policy documents.

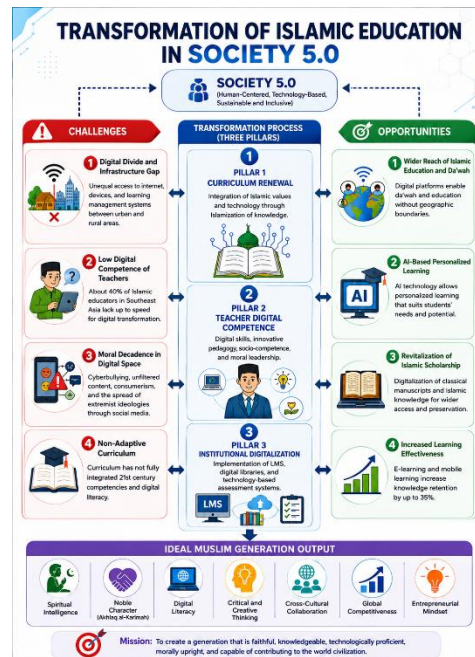


Figure 1. Challenges, Opportunities, and Transformation Pillars of Islamic Education in the Society 5.0 Era

Figure 1 illustrates the interrelationship between the challenges, opportunities, and strategic transformation pillars of Islamic education in the Society 5.0 era. The figure demonstrates that every challenge encountered by Islamic educational institutions simultaneously presents opportunities for innovation and development. For example, the digital divide can be addressed through the expansion of digital da'wah and online learning platforms, while the limited digital competence of teachers can be transformed into opportunities for personalized learning through AI-based technologies. Likewise, the threat of moral decadence can be countered through the revitalization of Islamic intellectual traditions and character education, while curriculum limitations can be overcome through the integration of e-learning and mobile learning innovations. The three transformation pillars (Curriculum Renewal, Teacher Digital Competence, and Digitalization of Islamic Education Ecosystem) work synergistically to produce the ideal Muslim generation output characterized by spiritual intelligence, critical digital literacy, cross-cultural collaboration, noble character, global competitiveness, and entrepreneurial spirit.

Based on the analysis, three main pillars of transformation were formulated. The first pillar is curriculum renewal based on the integration of Islamic values and technology through the concept of Islamization of knowledge (Al-Attas, 2019; Al-Faruqi, 2020). This approach seeks to harmonize scientific and technological advancements with Islamic ethical and spiritual values, ensuring that technological development contributes to holistic human development rather than merely economic productivity.

The second pillar is strengthening the digital competence of PAI teachers in three interconnected dimensions: digital competence, innovative pedagogical competence, and moral leadership. Digital competence includes the ability to utilize educational technology, develop mobile learning applications, and integrate AI-assisted learning tools into classroom practice. Pedagogical competence involves designing student-centered, collaborative, and technology-enhanced learning experiences. Meanwhile, moral leadership emphasizes the role of teachers as ethical role models who guide students in navigating digital environments responsibly (Jaenullah & Laili, 2025; Mahmud et al., 2025)

The third pillar is the digitalization of the Islamic education ecosystem. This transformation encompasses the implementation of Learning Management Systems (LMS), digital libraries, online assessment systems, and integrated educational information systems (UNESCO, 2022; Hidayah et al., 2023). Digitalization not only improves administrative efficiency and learning accessibility but also facilitates broader collaboration among educational institutions, scholars, and learners across geographical boundaries. Overall, the findings indicate that the transformation of Islamic education in the Society 5.0 era should not be limited to technological adaptation alone. Rather, it requires a comprehensive approach that integrates technological innovation, educational reform, and the strengthening of Islamic values. Through curriculum renewal, teacher empowerment, and institutional digitalization, Islamic education can develop a sustainable transformation model capable of producing graduates who are technologically competent, morally grounded, and globally competitive while maintaining a strong Islamic identity.

4. Conclusion

The transformation of Islamic education in the Society 5.0 era is an inevitability. However, the transformation in question does not mean shedding Islamic identity and values in pursuit of the currents of modernity. On the contrary, true transformation occurs when the great values of Islam—justice, compassion, wisdom, and the spirit of scholarship—become the compass that guides us in navigating technological progress.

This study concludes three main points. First, the challenges of transforming Islamic education in the Society 5.0 era are multidimensional, including the digital divide, teacher competence, curriculum relevance, and the threat of moral decadence in cyberspace (World Bank, 2023; Mahmud et al., 2025). Second, the opportunities available are enormous, ranging from expanding the reach of Islamic education without geographic boundaries, AI-based personalized learning, mobile learning-based learning media, to revitalizing Islamic scholarship through digitalization (Al-Faruqi, 2020; UNESCO, 2022). Third, successful transformation requires three main pillars: integrative curriculum renewal, strengthening the digital competence of PAI teachers (including mobile learning development skills), and building a digital ecosystem based on Islamic values (Jaenullah & Laili, 2025; Kementerian Agama RI, 2024).

Based on the results of this study, several strategic recommendations can be formulated. The government, through the Ministry of Religious Affairs, needs to strengthen digital competency training programs for all PAI teachers evenly and sustainably, with priority on areas that are still digitally disadvantaged, including mobile learning development training as suggested by Jaenullah et al. (2025). Islamic education institutions need to develop curricula that explicitly integrate Islamic values with 21st-century skills using a contextual project-based learning approach (Indarta et al., 2022; OECD, 2023). Synergistic collaboration between ulama, academics, technology practitioners, and policymakers is needed in designing a comprehensive and scientifically-based roadmap for Islamic education transformation (Gleason, 2022; Gunawan et al., 2025).

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