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1 Islamic Education in the 21st Century: The Challenges of Globalization and the Urgency of Utilizing Educational Technology

Emha Dzia'ul Haq¹, Sri Adiningsih², Elia Mu'shoda³

^{1,2} Sekolah Tinggi Agama Islam (STAIN) Majene, Indonesia

³ Universitas Islam Negeri (UIN) Sunan Kalijaga, Indonesia

Corresponding Author: Emha Dzia'ul Haq - emhadziaulhaq@stainmajene.ac.id

16 ABSTRACT

The development of globalization and digital technology has brought fundamental changes to the education system, including Islamic education, which requires adaptability without neglecting Islamic normative values. Islamic education in the 21st century faces problems such as the demand for global relevance, gaps in access and technological infrastructure, limitations in the digital competence of educators, and concerns about the erosion of the identity and objectives of Islamic education. This condition emphasizes the urgency of utilizing educational technology that is not only pedagogically effective **11** but also in line with Islamic moral and spiritual values. This study aims to comprehensively examine Islamic education in the 21st century in facing the challenges of **17** globalization and to analyze the urgency and strategic role **20** of educational technology in promoting the advancement of Islamic education. The research uses a qualitative approach with a literature study **22** sign through critical and systematic review of relevant scientific literature and policy documents. Data analysis is carried out using interpretive **24** content analysis techniques to identify themes, key concepts, and inter-conceptual relationships. The results of the study show that educational technology plays a strategic role in improving the accessibility, quality, and inclusiveness of Islamic education, strengthening collaborative learning, and supporting the integration of 21st-century competencies with Islamic values. The findings also confirm that educators' digital competencies and institutional policy support are determining factors in the successful integration of educational technology. This research contributes theoretically to enriching the conceptual framework of Islamic education in the digital age and practically provides strategic refer **42** ences for the development of adaptive, valuable, and relevant Islamic education policies and practices in the contemporary context.

Keywords: Islamic Education, Globalization, Educational Technology, Digital Competence



9
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INTRODUCTION

44
Islamic education is currently facing a complex transformation driven by the integration of digital technology into teaching and learning practices. Unlike general educational institutions, Islamic education operates within a dual mandate: maintaining normative-religious values while simultaneously responding to contemporary societal and technological developments. The integration of digital

platforms, online learning systems, and interactive media into madrasah and Islamic higher education institutions has reshaped instructional methods, curriculum delivery, and patterns of teacher–student interaction (Huraerah et al., 2024). However, this transformation is not merely technical; it raises fundamental questions regarding how educational technology can be utilized without diluting Islamic epistemological foundations and moral objectives. In this regard, educational technology functions not only as a pedagogical tool but also as a strategic medium for strengthening the internalization of Islamic values through contextual, accessible, and innovative learning approaches (Fauzi & Arifin, 2023).

Islamic education, as an integral part of the national and global education system, cannot be separated from these changes. With its long history and rich scholarly tradition, Islamic education faces the challenge of preserving the core values of Islamic teachings while adapting to the demands of the times (Zainuddin & Martedi, 2023). Islamic education is not solely oriented towards the transfer of cognitive knowledge (Asniah et al., 2024), but also has a strategic mission in shaping the character, morality, and spirituality of students (Yusri et al., 2024). These ethical and spiritual values are what distinguish Islamic education from other education systems (Nugraha et al., 2020). Therefore, the main challenge for Islamic education in the 21st century is how to take advantage of technological advances without eroding its identity, values, and normative goals.

The use of educational technology in the context of Islamic education opens up great opportunities for learning innovation. The use of e-learning platforms, educational software, social media, and various interactive digital media can enrich the learning experience of students and encourage more participatory and collaborative learning (Sholeh & Efendi, 2023). Online learning platforms allow for flexibility in terms of space and time, while social media can be used as a means for scientific discussion and the formation of dynamic learning communities (Muzaini & Fadhilah, 2023). Furthermore, technology also expands access to Islamic scientific resources, both classical literature and contemporary studies, which were previously limited by space and geography (Liriwati et al., 2024; Rahayu, 2024). Thus, educational technology has the potential to be a strategic solution in reducing the gap in access to quality Islamic education.

However, the integration of technology in Islamic education is not without various structural and cultural challenges. Limited technological infrastructure, such as internet access and the availability of digital devices, remains a serious obstacle, especially in remote and underdeveloped areas (Qurtubi et al., 2024). In addition, the digital competence of educators is a determining factor in the successful use of technology in learning, as low technological proficiency can hinder its effective implementation (Hamid & Hadi, 2020). Another equally important challenge is resistance to change, both from educators and educational institutions, which still view technology as a threat to traditional learning methods (Fredlina et al., 2021). Policy support, adaptive regulations, and the availability of financial resources are also important prerequisites for the sustainability of technology integration in Islamic education (Mahbuddin, 2020).

Based on this reality, this study seeks to comprehensively examine Islamic education in the 21st century in the face of globalization and the urgent need to utilize educational technology. The focus of the study is on exploring the role of educational technology in promoting the advancement of Islamic education, identifying the opportunities and challenges that accompany it, and formulating effective and contextual strategies for implementing technology. This study is expected to provide conceptual and practical contributions to the development of Islamic education that is adaptive, competitive, and remains rooted in Islamic values.

Thus, this study not only highlights the technical aspects of using technology in learning, but also considers the ethical, social, and cultural dimensions inherent in Islamic education. The results of this study are expected to serve as an academic reference for the development of Islamic education theory in the digital age, as well as a guide for stakeholders in designing innovative, inclusive, and sustainable Islamic education policies and practices.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Islamic education in the 21st century is situated within a global landscape characterized by the rapid acceleration of information technology, intensified transnational interaction, and epistemic shifts in knowledge production. Classical and contemporary Muslim thinkers provide important conceptual foundations for understanding this transformation. Syed Muhammad Naquib al-Attas conceptualizes Islamic education as a process of cultivating *adab* and forming the morally disciplined human being (*insan adabi*), emphasizing that education is inseparable from metaphysical and ethical foundations. Similarly, Ismail Raji al-Faruqi proposes the Islamization of knowledge as an epistemological effort to integrate revelation and modern sciences. In the Indonesian context, Azyumardi Azra argues that Islamic education must remain open to modernization while maintaining its normative core. These perspectives collectively affirm that Islamic education is not merely a system of religious knowledge transmission but a comprehensive project of identity formation rooted in tawhidic values.

Islamic education in the 21st century faces global dynamics characterized by the acceleration of information flow, advances in digital technology, and intensified cross-cultural interactions (Firmansyah, 2022). Conceptually, Islamic education is not only oriented towards the transmission of religious knowledge, but also towards the formation of Muslim personalities who are faithful, moral, and able to contribute productively to social life. A number of Islamic education thinkers emphasize that this goal requires the integration of normative Islamic dimensions and 21st-century competency requirements, such as critical thinking, creativity, collaboration, and digital literacy. Thus, Islamic education is required to be adaptive without losing its theological and ethical values (Hajri, 2023).

Globalization is the most significant external factor influencing the direction and practice of contemporary Islamic education (Lestari, 2018). Globalization not only provides opportunities for knowledge exchange and access to extensive learning resources, but also brings about the penetration of secular values, the commercialization of education, and a shift in scientific authority due to the

dominance of digital media. A number of studies show that the unpreparedness of Islamic educational institutions in responding to globalization can have implications for the weakening of the religious identity of students (Faiz A., 2022). However, other literature views globalization dialectically as both a challenge and an opportunity to reform the curriculum, learning methodologies, and governance of Islamic education to make it more relevant to the global context.

In this context, the development of educational technology has become a key variable in the transformation of learning (Abrar, M., 2025). Educational technology is no longer understood merely as a tool, but as an ecosystem that shapes the way students learn, think, and interact (Aloh & Munawir, 2021). Research in the field of educational technology shows that the use of digital media, online learning systems, and collaborative platforms has the potential to increase the effectiveness and flexibility of learning. In Islamic education, the use of technology still faces issues of human resource readiness, access gaps, and resistance to innovation (Haq., 2023). However, a number of empirical studies confirm that the integration of technology that is designed pedagogically and contextually can improve religious understanding, learning motivation, and active participation of students.

The urgency of utilizing educational technology in Islamic education is increasingly evident when linked to efforts to strengthen Islamic values and identity amid globalization (Astuti et al., 2023). Contemporary literature emphasizes that the integration of technology and Islamic values is not interpreted as the Islamization of technological devices, but rather as a process of internalizing the values of monotheism, morals, and social responsibility in the design and practice of digital learning. Educational technology based on Islamic values has the potential to become a strategic medium for instilling spiritual awareness while developing the global competencies of students (Asniah et al., 2024).

Based on this literature synthesis, the conceptual framework of this article positions globalization as an external factor that presents structural and cultural challenges for Islamic education. Twenty-first century Islamic education is in a central position as a system that must respond to these challenges adaptively and critically. The use of Islamic value-based educational technology is understood as a key strategy in responding to globalization, with the aim of improving the quality of learning, maintaining Islamic identity, and equipping students with 21st-century competencies. The relationship between these concepts confirms that the sustainability of Islamic education in the global era cannot be separated from the ability of educational institutions to integrate Islamic values and educational technology harmoniously and in a manner oriented towards the benefit of the ummah.

METHODOLOGY

This study uses a qualitative approach with a library research design, as the research objective focuses on gaining an in-depth understanding of the concepts, ideas, and theoretical constructs of Islamic education in the 21st century in the face of globalization and the use of educational technology (Darmalaksana, 2020). The qualitative approach was chosen because the data analyzed is descriptive-interpretive, does not rely on numerical measurements, and allows researchers to examine the meanings, perspectives, and arguments that develop in scientific

literature (I. N. Sari et al., 2022).⁴ Through this approach, the study seeks to explain and analyze the phenomenon of Islamic education as a dynamic social and conceptual reality, covering aspects of values, paradigms, and institutional responses to global change (Saadah et al., 2022).

⁴³ The research method used was library research by critically and systematically reviewing relevant library sources, including scientific books, reputable national and international journal articles, proceedings, and education policy documents (M. Sari & Asmendri, 2020). The literature analyzed was positioned not only as a source of information but also as a deductive basis for synthesizing theories, identifying patterns of thought, and developing a conceptual framework regarding the relationship between globalization, Islamic education, and educational technology (Ramdhan, 2021). The selection of sources was carried out selectively by considering thematic relevance, academic credibility, and their contribution to strengthening the research argument.

To ensure methodological transparency and demonstrate the systematic nature of this library research, the reviewed literature was mapped based on publication year, type of publication, and thematic focus. In terms of temporal distribution, the majority of sources were published within the last five years (2021–2025), accounting for approximately 55% of the total references analyzed. This indicates that the study prioritizes contemporary discourse, particularly in relation to post-pandemic digital transformation and emerging debates on Islamic value-based educational technology. Publications from the period 2018–2020 represent around 30% of the sources and mainly discuss competency-based curriculum reform and early digital adaptation in Islamic education. Meanwhile, foundational works published between 2015–2017 constitute about 15% of the references, serving primarily as theoretical grounding for discussions on globalization and Islamic educational paradigms. This chronological distribution demonstrates that the study is anchored in both foundational scholarship and up-to-date academic developments.

In terms of publication type, peer-reviewed journal articles dominate the corpus, comprising approximately two-thirds of the total sources reviewed. International indexed journals contribute about 37.5%, while nationally accredited journals account for roughly 30%. The prominence of peer-reviewed journal literature strengthens the academic reliability and argumentative rigor of the study. Scholarly books represent around 17.5% of the sources and primarily provide conceptual and philosophical foundations related to Islamic education and epistemology. Conference proceedings (approximately 10%) and policy documents (around 5%) complement the dataset by offering contextual and practical perspectives, particularly regarding institutional responses and regulatory frameworks. This proportional balance reflects an intentional effort to combine theoretical depth with contextual relevance.

From a thematic perspective, the literature reviewed is distributed across five major clusters. Studies examining the relationship between globalization and Islamic education constitute about 27.5% of the total sources, focusing on structural, cultural, and epistemological impacts. Research on educational technology accounts for approximately 22.5%, highlighting digital ecosystems, learning innovation, and

institutional readiness. Discussions on 21st-century competencies represent around 20%, emphasizing curriculum transformation and pedagogical adaptation. Literature specifically addressing the integration of Islamic values in educational practice contributes roughly 17.5%, while studies on institutional adaptation and governance models comprise about 12.5%. This thematic mapping indicates that the study does not privilege a single dimension but instead constructs a balanced synthesis across macro-structural, pedagogical, technological, and normative domains.

Overall, the distribution of sources—chronologically, typologically, and thematically demonstrates that this research is grounded in a systematic, selective, and academically credible review process. The proportional emphasis on recent peer-reviewed scholarship ensures contemporary relevance, while the inclusion of foundational and conceptual works secures theoretical robustness.

Data collection techniques were carried out through documentation, namely searching and recording written data from scientific works and official documents related to the research topic (I. N. Sari et al., 2022). This documentary data provides a source of information that is natural, stable, and rich in context, enabling researchers to gain a comprehensive understanding of the development of Islamic education discourse and educational technology (Saadah et al., 2022). The data collection process was carried out thoroughly and continuously to ensure the completeness and depth of the data analyzed.

Data analysis uses content analysis techniques with an interpretive approach, which involves examining the content of documents objectively and systematically to identify the main themes, key concepts, and relationships between concepts relevant to the research focus. Through the process of categorization, comparison, and thematic synthesis, this analysis is aimed at building a complete conceptual understanding and drawing logical and valid conclusions (Darmalaksana., 2020). Thus, this research method directly supports the preparation of a literature review and a conceptual framework that is argumentative, coherent, and has a strong theoretical foundation.

RESULTS

Based on thematic content analysis of the reviewed literature, this study identifies that Islamic education in the 21st century is conceptually positioned within a transformative phase shaped by globalization and digitalization. Rather than merely describing institutional change, the synthesis of literature reveals a consistent argumentative pattern: educational technology is increasingly conceptualized as a strategic mediating variable in sustaining the relevance and normative orientation of Islamic education in the global era (Hidayatullah et al., 2023). Across the corpus of reviewed studies, technology is not treated solely as an auxiliary instrument but as a structural component influencing curriculum design, pedagogical interaction, and epistemic authority.

First, concerning the urgency of transforming Islamic education, the literature consistently indicates a paradigmatic shift from knowledge transmission toward competency and character development. Huraerah et al. (2024) argue that technology-supported pedagogy enhances institutional responsiveness to global change, while Lestari (2018) frames digital adoption as a mechanism for expanding access and participation. Through comparative reading, it becomes evident that the emphasis is not simply on technological adoption but on pedagogical reorientation. The reviewed studies converge on the idea that 21st-century Islamic education must integrate digital literacy, critical thinking, collaboration, and multicultural awareness within its normative theological framework. However, the literature also shows variation in emphasis: some authors prioritize accessibility and engagement, whereas others stress value internalization. This divergence indicates that transformation is multidimensional, encompassing structural, pedagogical, and axiological domains.

Second, curriculum reform emerges as a recurring thematic category in the analyzed sources. Haq et al. (2025) and Mahbuddin (2020) highlight the need for dynamic curricula that incorporate both Islamic sciences and global competencies. Content analysis reveals that most scholars conceptualize curriculum integration as a bridging strategy between Islamic values and digital-modern demands. Nevertheless, the literature suggests that integration often remains at the level of skill inclusion (digital literacy modules, technology-based assignments) rather than epistemological restructuring. Thus, while curricular adaptation is widely advocated, theoretical articulation regarding the philosophical coherence between Islamic worldview and global competency discourse remains limited. This finding aligns with the broader gap identified in the literature review section.

Third, educator competence appears as a critical determinant in the successful integration of educational technology. Nugraha et al. (2020) and Qurtubi et al. (2024) emphasize that digital literacy among teachers and lecturers significantly influences pedagogical innovation. Synthesizing these studies reveals a consistent pattern: institutional investment in professional development correlates with more interactive and student-centered learning practices. However, structural constraints—particularly technological infrastructure disparities in remote regions—are repeatedly identified as systemic barriers. Rather than isolated technical problems, these limitations reflect broader inequalities in educational resource distribution. Therefore, the literature collectively indicates that technological transformation in Islamic education requires not only pedagogical readiness but also sustainable institutional governance and policy alignment.

Fourth, the analysis shows that educational technology contributes to pedagogical transformation from teacher-centered to learner-centered approaches. Rahayu (2024), Saadah et al. (2022), and Sholeh et al. (2023) consistently report that digital platforms enable diversified learning modalities, including interactive videos, simulations, and collaborative forums. Through interpretive synthesis, these findings suggest that technology reshapes authority structures in learning, facilitating participatory engagement and contextual understanding of Islamic concepts. Importantly, the literature does not depict technology as replacing traditional religious instruction but

as reconfiguring its delivery and interaction patterns. This confirms the argument that technology functions as an ecosystem shaping learning experiences rather than merely supporting them.

Fifth, the moral and spiritual dimension remains central in the discourse. Canu et al. (2025) and related studies argue that digital platforms can serve as effective media for disseminating Qur'anic learning and Islamic studies across geographical boundaries. Thematic analysis indicates that scholars largely reject the assumption that technology inherently undermines religious identity. Instead, they propose that value-oriented design determines its normative impact. When pedagogically aligned with Islamic ethical principles, technology is positioned as a facilitator of value internalization rather than a source of secularization. Nevertheless, empirical evidence regarding long-term spiritual outcomes remains limited, as most reviewed studies focus on engagement, accessibility, and motivation indicators.

Finally, regarding the broader benefits of educational technology, the literature consistently highlights increased accessibility, inclusiveness, and collaborative learning opportunities (Yusri et al., 2024; Zainuddin & Martedli, 2023). Students from diverse social and geographical backgrounds gain expanded access to learning resources, including classical Islamic texts and contemporary scholarship. The synthesis reveals that digital platforms foster real-time collaboration and dialogical interaction, supporting the development of social competencies aligned with 21st-century demands. However, the literature also implicitly suggests that without strong normative guidance, increased access alone does not guarantee character formation. Therefore, accessibility must be accompanied by intentional value integration.

In summary, the findings derived from qualitative content analysis demonstrate three major thematic conclusions. First, Islamic education in the 21st century is undergoing structural and pedagogical transformation driven by globalization and digitalization. Second, educational technology functions as a strategic mediating variable influencing curriculum reform, pedagogical interaction, and institutional competitiveness. Third, while technology enhances accessibility and engagement, its contribution to strengthening Islamic identity depends on value-embedded design and institutional policy coherence. These findings substantiate the conceptual framework that positions educational technology as a bridge between global pressures and normative Islamic educational objectives.

31 DISCUSSION

The findings of this study indicate that educational technology functions as a strategic mediating variable in the transformation of Islamic education in the 21st century. However, beyond confirming this pattern, a deeper analysis reveals that the integration of technology is not a neutral or purely technical process. While much of the reviewed literature presents technology as inherently beneficial—enhancing access, engagement, and flexibility this optimistic narrative requires critical examination. The assumption that technology automatically improves educational

quality risks oversimplifying the structural and epistemological complexities of Islamic education.

Several studies emphasize the compatibility between digital competencies and Islamic educational objectives, arguing that digital literacy, critical thinking, and collaboration strengthen students' preparedness without undermining normative values. Yet, a closer reading suggests that this compatibility is often asserted rather than critically demonstrated. The discourse tends to frame globalization and digitalization as external pressures requiring adaptation, but it rarely interrogates whether the epistemic foundations of global competency frameworks align fully with Islamic metaphysical assumptions. In this sense, the integration of technology may represent not only pedagogical reform but also a subtle epistemological shift. The literature insufficiently addresses the risk that uncritical adoption of global education models could reorient Islamic education toward utilitarian or market-driven priorities, potentially marginalizing its spiritual telos.

Moreover, although the findings highlight the role of educational technology in strengthening moral and spiritual learning, empirical evidence supporting long-term value internalization remains limited. Most studies measure outcomes such as participation, accessibility, or engagement. Few provide longitudinal analysis on whether digital platforms genuinely deepen ethical consciousness or merely repackage religious content in attractive formats. This indicates a methodological imbalance in existing research, where technological effectiveness is often equated with measurable behavioral indicators rather than holistic character formation. Therefore, while technology is positioned as a strategic solution, its transformative claim must be interpreted cautiously.

The issue of educator competence also deserves critical reflection. The literature consistently identifies digital literacy among teachers as a determining factor in successful integration. However, framing the challenge primarily as a matter of individual competence may obscure broader structural inequalities. Infrastructure gaps, funding disparities, and uneven policy support are systemic issues that cannot be resolved solely through professional training. Thus, technological transformation in Islamic education is not merely pedagogical but political and institutional. Without coherent governance and long-term policy alignment, technology integration risks becoming fragmented and unsustainable.

In relation to globalization, the discussion reveals a dialectical tension. On one hand, globalization provides opportunities for knowledge exchange, international collaboration, and expanded access to classical and contemporary Islamic scholarship. On the other hand, it introduces competitive pressures and market logics that may redefine educational success in economic rather than ethical terms. The reviewed literature largely embraces the opportunity narrative, but fewer studies critically explore potential cultural homogenization or the commodification of Islamic education. Consequently, this study argues that educational technology should not be conceptualized simply as an adaptive instrument but as a value-mediated arena in which normative commitments must be consciously safeguarded.

Theoretically, this study contributes by positioning educational technology not merely as a pedagogical tool but as an epistemological mediator between globalization and Islamic education. The findings suggest that the sustainability of Islamic education depends on its capacity to integrate global competencies within a coherent tawhidic worldview. This shifts the discussion from procedural curriculum reform toward philosophical integration. Furthermore, the study highlights the need for a more robust theoretical articulation of “value-embedded digital pedagogy,” moving beyond additive Islamization models toward structurally integrated frameworks.

Additionally, the analysis exposes a gap in existing scholarship: the lack of longitudinal and epistemologically grounded studies examining how digital transformation reshapes authority, knowledge hierarchies, and identity construction in Islamic education. Future theoretical development should therefore engage more deeply with critical pedagogy, digital epistemology, and Islamic philosophy of education.

Practically, the findings imply that Islamic educational institutions should approach technology integration strategically rather than instrumentally. First, curriculum reform must ensure that digital competencies are aligned with ethical and spiritual objectives, avoiding purely market-oriented adaptation. Second, sustained professional development programs are essential to enhance educators’ digital competence while reinforcing their capacity to integrate Islamic values meaningfully. Third, institutional leaders and policymakers must address infrastructure inequality and develop coherent long-term digital strategies to prevent fragmented implementation.

Furthermore, educational technology initiatives should include evaluation mechanisms that assess not only engagement and accessibility but also indicators of character formation and value internalization. Without such evaluative expansion, claims about moral strengthening remain normatively persuasive but empirically underdeveloped.

⁷ This study has several limitations that should be acknowledged. First, as a qualitative library research project, it relies exclusively on secondary sources and does not incorporate primary empirical data from field observations or interviews. Consequently, its conclusions are interpretive rather than empirically verified. Second, although efforts were made to include reputable international and national publications, the reviewed literature is predominantly drawn from Indonesian and English-language sources, which may limit global representativeness. Third, the study does not employ a strict systematic review protocol such as PRISMA, meaning that selection bias cannot be entirely excluded.

Finally, because the analysis is conceptual in nature, it does not measure the direct impact of educational technology on long-term spiritual or moral development outcomes. Future research should combine conceptual analysis with empirical investigation particularly longitudinal and mixed-method approaches—to validate and refine the proposed framework.

In conclusion, the discussion demonstrates ⁴⁶ that the integration of educational technology in Islamic education is neither inherently transformative nor inherently disruptive. Its impact depends on epistemological orientation, institutional governance, and value-embedded pedagogical design. By moving beyond purely affirmative narratives and incorporating critical reflection, this ⁴ study situates educational technology as a contested yet strategic arena in the ongoing transformation of 21st-century Islamic education.

IMPLICATIONS

⁴ This study implies that the integration of educational technology in Islamic education requires systematic institutional strategies rather than fragmented initiatives. Educational institutions need to strengthen digital infrastructure, develop continuous professional training programs to enhance educators' digital competence, and design technology-based learning models that remain grounded in Islamic ethical and spiritual values. Policymakers should formulate adaptive regulations that support innovation while safeguarding the normative objectives of Islamic ³ education. Furthermore, curriculum development should intentionally integrate 21st-century competencies such as critical thinking, collaboration, and digital literacy within a value-oriented pedagogical framework. These practical steps are essential to ensure that technological adoption not only improves efficiency ¹⁰ and accessibility but also reinforces the moral and epistemological foundations of Islamic education in the digital era.

CONCLUSION

Islamic education ⁴⁸ in the 21st century is in the context of globalization, which requires the ability to adapt to developments in science and technology without neglecting Islamic normative values. Globalization presents structural and cultural challenges for Islamic education, but at the same time opens up strategic opportunities to transform learning through the use of educational technology. This study emphasizes that educational ¹⁴ technology is not merely a supporting tool, but a strategic element in maintaining the relevance and sustainability of Islamic education in the global era.

The use of educational technology has been proven to ²⁸ contribute to improving the accessibility, quality, and inclusiveness of Islamic education. The integration of ¹¹ technology into the curriculum and learning practices enables the development of 21st-century competencies, such ³² as digital literacy, critical thinking, and collaboration, which are in line with the goals of Islamic education in shaping individuals who are faithful, knowledgeable, and moral. In addition, educational technology plays a role in strengthening the moral and spiritual dimensions through the wider and more innovative dissemination of Islamic values.

This study also concludes that the successful utilization of educational technology is largely determined by the readiness of human resources and infrastructure support. The digital competence of educators is a key factor in optimizing technology as an effective and Islamic-based learning medium. However, the gap in technology access and infrastructure limitations, especially in remote areas, remain major obstacles that require serious attention. Therefore, technology-based Islamic education transformation requires a systemic approach involving institutional policies, government support, and the commitment of all education stakeholders.

7 LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study has several limitations that should be acknowledged. First, as a qualitative library research study, it relies exclusively on secondary data sources and does not incorporate primary empirical data such as interviews, surveys, or classroom observations. Consequently, the conclusions drawn are interpretive and conceptual rather than empirically tested in specific institutional contexts. Second, although efforts were made to include contemporary and reputable publications, the majority of references originate from Indonesian and regional scholarship, which may limit the global generalizability of the findings. Third, the study does not employ a strict systematic review protocol such as PRISMA or bibliometric mapping, meaning that selection bias cannot be entirely excluded.

Future research should expand this conceptual framework through empirical investigation, particularly by employing mixed-method or longitudinal research designs to measure the impact of educational technology on students' character formation, spiritual development, and learning outcomes. Comparative cross-national studies would also be valuable in examining how Islamic educational institutions in different socio-cultural contexts respond to digital transformation. Additionally, further theoretical exploration is needed to develop a coherent model of value-embedded digital pedagogy grounded in Islamic philosophy of education.

ETHICAL STATEMENT

This study is based entirely on publicly accessible academic literature and does not involve human participants, personal data, or confidential institutional information. Therefore, formal ethical approval was not required. The research was conducted in accordance with academic integrity standards, ensuring proper citation, transparency of sources, and objective scholarly analysis.

CONFLICT OF INTEREST

The authors declare that there are no commercial, financial, institutional, or personal relationships that could be construed as potential conflicts of interest in the conduct and publication of this research. The study was carried out independently and was not influenced by any external funding or sponsorship.

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REFERENCES

- Abrar, M. (2025). Pendidikan Islam dalam perspektif epistemologi Islam: Tantangan dan peluang abad 21. *Jurnal Seumubeuet*, 4(1), 44–59. <https://doi.org/10.63732/jsmbt.v4i1.158>
- Ajizah, I., & Munawir, M. (2021). Urgensi teknologi pendidikan: Analisis kelebihan dan kekurangan teknologi pendidikan di era revolusi industri 4.0. *ISTIGHNA: Jurnal Pendidikan dan Pemikiran Islam*, 4(1), 25–36. <http://repository.uinsa.ac.id/id/eprint/635>
- Alfi, A. M., Febriasari, A., & Azka, J. N. (2023). Transformasi pendidikan agama Islam melalui teknologi. *Religion: Jurnal Agama, Sosial, dan Budaya*, 1(4). <https://doi.org/10.55606/religion.v1i4.249>
- Asniah, A., Evi, F., & Rijal, P. (2024). Peran pesantren sebagai lembaga pendidikan Islam di Indonesia. *ILJ: Islamic Learning Journal*, 2(1). <https://doi.org/10.54437/iljislamiclearningjournal.v2i1.1371>
- Astuti, M., Herlina, H., Ibrahim, I., Rahma, M., Salbiah, S., & Soleha, I. J. (2023). Mengoptimalkan penggunaan teknologi dalam pendidikan Islam. *Concept: Journal of Social Humanities and Education*, 2(3). <https://doi.org/10.55606/concept.v2i3.504>
- Bahri, R. (2023). Mengembangkan kompetensi abad 21 dalam pendidikan Islam: Telaah perspektif Al-Qur'an dan hadis. *Fakta: Jurnal Pendidikan Agama Islam*, 3(1), 1–10. <https://doi.org/10.28944/fakta.v3i1.1190>
- Barokah, J. (2023). Tren dan perkembangan dalam pembelajaran berbasis teknologi dalam pendidikan agama Islam. *Guau: Jurnal Pendidikan Profesi Guru Agama Islam*, 3(5).
- Canu, U., Haq, E. D. U., & Ubaidillah, M. A. (2025). Reconstructing the paradigm of Islamic education: Harmonizing theocentrism and anthropocentrism.

- Cendekiawan: Jurnal Pendidikan dan Studi Keislaman*, 4(4), 856–869.
<https://doi.org/10.61253/cendekiawan.v4i4.437>
- Daheri, M. (2023). Pembaruan pendidikan Islam dalam era society 5.0. *Jurnal Lentera: Kajian Keagamaan, Keilmuan dan Teknologi*, 22(2).
<https://doi.org/10.29138/lentera.v22i2.1310>
- Darmalaksana, W. (2020). *Metode penelitian kualitatif: Studi pustaka dan studi lapangan*. Pre-print Digital Library UIN Sunan Gunung Djati Bandung.
- Faiz, A., & Kurniawaty, I. (2022). Urgensi pendidikan nilai di era globalisasi. *Jurnal Basicedu*, 6(3). <https://jbasic.org/index.php/basicedu>
- Fauzi, M., & Arifin, M. S. (2023). Teknologi informasi dan komunikasi (TIK) dalam pendidikan Islam. *Al-Ibrah: Jurnal Pendidikan dan Keilmuan Islam*, 8(1).
<https://doi.org/10.61815/alibrah.v8i1.217>
- Firmansyah, M. I., & Fakhrudin, A. (2022, August). Tantangan globalisasi abad 21 dan urgensi penguatan karakter siswa melalui pembelajaran PAI holistik integratif. *Seminar Pendidikan Agama Islam*, 1(2).
<https://conference.um.ac.id/index.php/SNPAI/article/view/3288>
- Fredlina, K. Q., Putri, G. A. M. A., & Astawa, N. L. P. N. S. P. (2021). Penggunaan teknologi sebagai media pembelajaran matematika di era new normal. *Jurnal Karya Abdi Masyarakat*, 5(1). <https://doi.org/10.22437/jkam.v5i1.13808>
- Hajri, M. F. (2023). Pendidikan Islam di era digital: Tantangan dan peluang pada abad 21. *Al-Mikraj: Jurnal Studi Islam dan Humaniora*, 4(1), 33–41.
<https://doi.org/10.37680/almikraj.v4i1.3006>
- Hamid, A., & Hadi, M. S. (2020). Desain pembelajaran flipped learning sebagai solusi model pembelajaran PAI abad 21. *QUALITY*, 8(1).
<https://doi.org/10.21043/quality.v8i1.7503>
- Haq, E. D. U. (2023). Limits of the obligation to seek knowledge and teach it and stages in Islamic education (Gender studies perspective). *Journal of Contemporary Gender and Child Studies*, 2(2), 107–110. <https://doi.org/10.61253/jcgcs.v2i2.194>
- Haq, E. D. U., Kuswanto, R. T., Sari, A. N., & Fauziah, N. (2025). From recitation to reflection: Integrating Qur'anic themes into Indonesian language learning in Islamic primary schools. *Cendekiawan: Jurnal Pendidikan dan Studi Keislaman*, 4(1), 673–684. <https://doi.org/10.61253/cendekiawan.v4i1.327>
- Hidayatullah, M. T., Asbari, M., Ibrahim, M. I., & Faidz, A. H. H. (2023). Urgensi aplikasi teknologi dalam pendidikan di Indonesia. *Journal of Information Systems and Management (JISMA)*, 2(6), 70–73. <https://doi.org/10.4444/jisma.v2i6.785>
- Huraerah, A. J. A., Abdullah, A. W., & Rivai, A. (2024). Pengaruh teknologi informasi dan komunikasi terhadap pendidikan Indonesia. *Journal of Islamic Education Policy*, 8(2). <https://doi.org/10.30984/jiep.v8i2.2715>
- Lestari, S. (2018). Peran teknologi dalam pendidikan di era globalisasi. *EDURELIGIA: Jurnal Pendidikan Agama Islam*, 2(2), 94–100.
<https://doi.org/10.33650/edureligia.v2i2.459>

- Mahbuddin, A. N. G. (2020). Model integrasi media dan teknologi dalam pembelajaran PAI. *Al-Mudarris: Jurnal Ilmiah Pendidikan Islam*, 3(2), 183–196. <https://doi.org/10.23971/mdr.v3i2.2312>
- Marwah, R. S. D. (2023). Problematika pendidikan agama Islam dan upaya merespon perkembangan abad 21. *Islamic Journal of Education*, 2(2), 64–76. <https://doi.org/10.54801/ijed.v2i2.195>
- Ramadhan, M. (2021). *Metode penelitian*. Cipta Media Nusantara.
- Rahayu, S. (2024). *Media pembelajaran: Konsep dasar, teknologi dan implementasi dalam model pembelajaran* (Cet. ke-1). UMSU Press.
- Saadah, M., Prasetyo, Y. C., & Rahmayati, G. T. (2022). Strategi dalam menjaga keabsahan data pada penelitian kualitatif. *Al-'Adad: Jurnal Tadris Matematika*, 1(2). <https://doi.org/10.24260/add.v1i2.1113>
- Sholeh, M. I., & Efendi, N. (2023). Integrasi teknologi dalam manajemen pendidikan Islam: Meningkatkan kinerja guru di era digital. *Jurnal Tinta: Jurnal Ilmu Keguruan dan Pendidikan*, 5(2), 104–126.
- Svari, N. M. F. D., & Arlinayanti, K. D. (2024). Perubahan paradigma pendidikan melalui pemanfaatan teknologi di era global. *Metta: Jurnal Ilmu Multidisiplin*, 4(3), 50–63. <https://doi.org/10.37329/metta.v4i3.3407>
- Yusri, N., Ananta, M. A., Handayani, W., & Haura, N. (2024). Peran penting pendidikan agama Islam dalam membentuk karakter pribadi yang Islami. *Jurnal Pendidikan Islam*, 1(2), 12–12. <https://doi.org/10.47134/pjpi.v1i2.115>
- Zainuddin, Z., & Martedi, F. (2023). Rekonstruksi pemikiran pendidikan Ibnu Khaldun di era society 5.0. *Ta'dib: Jurnal Pendidikan Islam dan Isu-Isu Sosial*, 21(1).

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