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Negotiation of Spirituality and Technocracy: The Future of Islamic Education Management in the Era of Society 5.0

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ABSTRACT

This article aims to analyze the relationship between spirituality and technology in the transformation of Islamic Education Management in the era of Society 5.0 and formulate an adaptive, humanistic, and sustainable paradigm of Islamic education management. This research uses a qualitative approach with a conceptual-critical type of research through *the library research method*. Data was obtained from various internationally and nationally reputable scientific literature in the last five years relevant to the theme of Society 5.0, digital transformation of education, spirituality, and Islamic education. The results of the study show that digital transformation in Islamic education cannot be understood solely as technological modernization but must be balanced with the strengthening of ethical values, spirituality, and educational humanism. Spirituality has a strategic position as an ethical foundation in directing the use of technology to remain oriented towards the formation of human beings, strengthening manners, and building the character of students. Based on the results of the analysis, this study offers a *paradigm of the Spiritual-Technological Islamic Educational Management Framework* that integrates *spiritual governance*, *ethical technology*, *humanistic leadership*, and *digital educational ecosystem* as an alternative model for future Islamic education management. This research contributes to expanding the discourse of Islamic education management through futuristic and interdisciplinary approaches and provides a conceptual foundation for the development of Islamic educational institutions that are adaptive to technological developments without losing their moral and spiritual identity.

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INTRODUCTION

The development of digital technology in the last two decades has fundamentally changed the structure of human life, including in the education sector. Advances in Artificial Intelligence (AI), big data, Internet of Things (IoT), cloud computing, and cyber-physical systems have driven the birth of a new paradigm of global education based on intelligent technology and digital data integration. In this context, the concept of Society 5.0 is present as a construction of a new civilization that places humans at the center of technological development through the simultaneous integration of physical and virtual spaces. This concept emphasizes that technology not only serves as an instrument of industrialization, but also as a medium to holistically improve the quality of human life (Ahmad, Umirzakova, Mujtaba, Amin, & Whangbo, 2023). This human-centered orientation reflects the original conception of Society 5.0 as a societal model that merges physical and cyber space through the optimal use of big data, the Internet of Things, and artificial intelligence to maximize

human well-being and sustainable development (Narvaez Rojas, Alomia Peñafiel, Loaiza Buitrago, & Tavera Romero, 2021).

This transformation gave birth to the Education 5.0 paradigm that integrates artificial intelligence, adaptive learning, virtual learning environment, blockchain education, and data-driven governance in the modern education system (Ahmad et al., 2023). In practice, global educational institutions are starting to develop a smart education ecosystem through the use of AI tutors, automated assessment systems, pedagogic chatbots, and hybrid learning systems that are slowly replacing some of the conventional pedagogic functions. This change does create huge opportunities for educational efficiency, accessibility, and flexibility. However, the acceleration of digitalization also gives birth to increasingly complex epistemological, ethical, and humanitarian problems. (Bulathwela, Pérez-Ortiz, Holloway, Cukurova, & Shawe-Taylor, 2024) warn that an uncritical, techno-solutionist narrative surrounding the deployment of AI in education risks widening existing educational inequalities rather than resolving them, a caution that is equally relevant for the digitalization of Islamic education.

The dominance of technology in modern education is slowly forming what is called educational technocracy, which is an education system that relies too much on administrative logic, data performativity, digital efficiency, and market orientation. Education is no longer understood as a process of humanization of humans as a whole, but is reduced to an instrument of human resource production based on mere technical competence. Altınpulluk (2022) emphasized that the digital transformation of education often results in the depersonalization of pedagogic relationships due to the dominance of technological systems in the learning process. Educational interaction moves from ethical-humanistic relations to mechanistic-digital relations that tend to ignore the moral, emotional, and spiritual dimensions of humans.

This phenomenon is increasingly seen in the contemporary digital generation that grows up in a culture of hyper-connectivity, information instantiation, and unlimited technology consumption. Various phenomena such as the degradation of digital ethics, cyberbullying, mental health crises, virtual individualism, and the weakening of the moral authority of educational institutions show that technological progress is not always in line with the strengthening of human character and spirituality. Modern education tends to produce individuals who are technologically superior but spiritually and emotionally fragile. From a critical perspective, this condition shows that the main challenge for future education is not just a question of mastering technology, but how to maintain the dimensions of humanity and spirituality in the midst of the dominance of digital civilization (Rizal, Ginanjar, & Nurhasan, 2025).

In the context of Islamic Education Management, the problem has a deeper complexity. Islamic education is not only oriented towards knowledge transfer and academic competency development but also aims to form kamil people through the integration of knowledge, manners, morality, and spirituality. The concept of Islamic education developed by (Al-Attas, 1980) places education as a process of instilling adab (ta'dib) in order to form civilized human beings and have a balance between intellect and spirituality. In this paradigm, education is not just about creating productive human beings, but human beings who have a transcendental sense of ethics and responsibility.

However, the global flow of digitalization has posed new challenges for Islamic educational institutions, including Islamic boarding schools, madrasas, and Islamic universities. Islamic educational institutions are required to be able to adapt to technological developments in order to remain relevant in global educational competitions. Digital learning, smart classrooms, hybrid education, and AI-based learning are strategic needs that cannot be avoided (Kristia Fatmasari, 2026). However, the transformation also raises concerns about the weakening of the spiritual identity and humanistic traditions of Islamic education. The shift in the learning model from teacher-centered to digital-centered learning has the potential to reduce the pedagogic authority of teachers as moral and spiritual figures in Islamic education. (Holilah, Research, & 2024, 2024) similarly observe that the digital-era transformation of Islamic education management produces uneven implications for learning quality, depending heavily on institutional readiness and the depth of value integration that accompanies technological adoption.

Recent research shows that the digital transformation of Islamic education is often still instrumental and administrative without being balanced by strengthening the ethical and spiritual dimensions. (Rohmatul Fauziyah, Nuzilatus Shoimah, Hikmawati, & Rohanah, 2026) found that the adoption of technology in Islamic education tends to be technically oriented and has not been fully integrated with Islamic ethical values and pedagogy in a systematic manner. Meanwhile, Ifan, Ali, Jamali, & Wasalmi (2026) emphasized that technological disruption in the Society 5.0 era forced Islamic education to reorient its paradigm in order to remain able to maintain spiritual values and Islamic identity in digital learning. These findings align with (Huda, M., Borham, A. H., & Dewantara, 2024), who note that while digital technologies open considerable opportunities for expanding access and pedagogical innovation in Islamic education, they simultaneously introduce challenges related to curriculum authenticity, teacher readiness, and the safeguarding of religious values in increasingly mediated learning environments.

Other research also shows that the transformation of Islamic Religious Education learning in the Society 5.0 era requires the simultaneous integration of digital technology and spiritual literacy so that education does not lose the moral dimension and character of students (Rizal et al., 2025). In fact, the use of AI in Islamic education presents a new ethical dilemma related to learning personalization, scientific authority, and humanization of technology-based education (Zarkani et al., 2024). Thus, the main problem of Islamic education in the era of Society 5.0 is not only the problem of technological adaptation, but how to negotiate the relationship between spirituality and technology in a proportionate and sustainable manner.

On the other hand, Islamic education actually has philosophical and ethical capital that is very relevant in answering the crisis of dehumanization of modern education. The concept of human beings, prophetic education, Islamic humanism, and spiritual intelligence are epistemological foundations that can be an ethical basis for the development of future educational technology. This shows that Islamic education does not have to be anti-technology, but rather needs to direct technological developments to remain within a humanist ethical and spiritual framework.

However, academic studies on the relationship between spirituality and technology in the management of Islamic education are still relatively limited. Most of the previous

research focused more on the technical aspects of education digitalization such as e-learning, virtual classrooms, and technology-based learning transformation (Arini Rochyati, 2025). Other research discusses the spirituality of Islamic education more normatively without critically associating it with the transformation of digital civilization and Society 5.0. In addition, the discourse of Society 5.0 in education generally develops from the perspective of technological innovation and system efficiency, but still minimally touches on the dimensions of Islamic spirituality and humanism in a critical and futuristic manner.

Based on these conditions, there is a significant research gap in the study of contemporary Islamic education management. First, there has not been much research that discusses the simultaneous negotiation of spirituality and technology within the framework of Society 5.0. Second, the study of Islamic education is still normative and administrative dominant and has not been developed in a futuristic and interdisciplinary manner. Third, there is no conceptual model of Islamic education management that explicitly integrates spiritual governance, ethical technology, humanistic leadership, and digital educational ecosystem in the face of global digital transformation. This gap is also implicit in the work of (Hidayah, Patimah, …, & 2023, 2023), who document that Islamic educational institutions confronting Society 5.0 have so far prioritized structural and infrastructural adaptation over the systematic articulation of a governance paradigm capable of holding spiritual and technological imperatives together.

Departing from these conditions, this article argues that the future of Islamic education cannot be built through a dichotomous approach between spirituality and technology. Technology is an inevitable necessity of modern civilization, but technological development must also be directed through ethical and spiritual values so as not to give birth to the dehumanization of education. Therefore, a new paradigm of Islamic education management is needed that is not only adaptive to technological developments, but also able to maintain the moral, spiritual, and humanitarian dimensions of Islamic education in a sustainable manner.

This article aims to analyze how the relationship between spirituality and technology is negotiated in the era of Society 5.0 and formulate a future model of integrative, humanistic, and sustainable Islamic education management. Specifically, this article discusses: (1) how technological transformation is affecting the Islamic education management paradigm; (2) how spirituality can be the ethical foundation in digital education; and (3) how to manage future Islamic education management models that are able to integrate technology, humanism, and Islamic spiritual values simultaneously.

The novelty of this article lies in the offer of a conceptual paradigm in the form of *the Spiritual-Technological Islamic Educational Management Framework*, which is an Islamic education management model that integrates spiritual governance, ethical technology, humanistic leadership, and digital educational ecosystem within the framework of Society 5.0. In contrast to previous research that tends to separate the discourse of technology and spirituality, this article places both as integrative elements in the development of future Islamic educational governance.

A critical comparative examination of prior studies reveals important limitations that this article seeks to address. Studies such as those by Kristia Fatmasari (2026) and Arini Rochyati (2025) have made significant contributions by documenting the adoption of digital

technologies in Islamic educational settings; however, they remain predominantly descriptive and technically oriented, offering limited theoretical analysis of how these technologies interact with the ethical and spiritual foundations of Islamic pedagogy.

Research by (Rohmatul Fauziyah et al., 2026) provides valuable curriculum-level perspectives but does not extend to governance models or leadership frameworks. Similarly, while (Zarkani et al., 2024) raise critical questions about AI ethics in Islamic education, their scope does not encompass a comprehensive management paradigm. The present article addresses this gap by synthesizing these fragmented strands into a unified, theoretically grounded framework that connects digital governance, spiritual values, and humanistic leadership within the Society 5.0 context.

In terms of practical benefits, this research holds direct relevance for multiple stakeholder groups. For practitioners including school principals, pesantren leaders, madrasa administrators, and Islamic university rectors the ST-IEMF offers an actionable conceptual map for designing digital transformation strategies that preserve the spiritual mission of Islamic education. For policymakers in the Ministry of Religious Affairs and Ministry of Education, the framework provides a normative foundation for drafting regulations and institutional standards that integrate ethical technology governance into the national Islamic education system. Furthermore, teacher educators and curriculum developers may find the framework's humanistic leadership component relevant to the design of professional development programs aimed at equipping educators with digital-spiritual competencies for the Society 5.0 era.

Theoretically, this research makes several contributions to the scholarship of Islamic education management. First, it extends the concept of spiritual governance previously discussed in fragmented terms in the literature on Islamic leadership, (Anwar, 2024) into a comprehensive management framework applicable to digital educational institutions. Second, it advances the discourse of educational humanism within the Society 5.0 paradigm by positioning Islamic philosophical concepts such as *adab*, *insan kamil*, and prophetic education as operationalizable ethical anchors rather than merely normative ideals. Third, the study contributes a futuristic and interdisciplinary methodological lens integrating the future studies approach with conceptual-critical analysis that is still underutilized in the field of Islamic education management research. This direction is further substantiated by Arar, Cansoy, Türkoğlu, and Utku (2026), whose systematic review of Islamic educational leadership identifies spiritual constructs such as *taqwa* and *amanah* as recurring but theoretically underdeveloped dimensions of administrative practice, reinforcing the need for the kind of integrative framework advanced in the present article.

METHOD

This study uses a qualitative approach with a conceptual-critical research type to analyze the relationship between spirituality and technology in Islamic Education Management in the era of Society 5.0. The research focuses on the study of paradigms, thought transformation, and reconstruction of Islamic education management models in the midst of accelerating educational digitalization. The method used is library research by utilizing various scientific sources in the form of reputable international journal articles, academic books, proceedings, and reports of global institutions relevant to the theme of

Society 5.0, artificial intelligence, digital education, spirituality, and contemporary Islamic education.

Literature searches were conducted across multiple electronic databases, including Google Scholar, Scopus, DOAJ (Directory of Open Access Journals), SINTA (Science and Technology Index Indonesia), and selected institutional repositories. The search terms employed included, but were not limited to: "Islamic education management," "Society 5.0," "digital transformation in Islamic education," "spirituality in education," "educational technocracy," "humanistic leadership in education," "artificial intelligence in Islamic education," and "ethical technology in education." These terms were applied both individually and in Boolean combination (e.g., "Islamic education AND digital transformation AND Society 5.0") to maximize retrieval coverage while ensuring thematic specificity.

The inclusion criteria for source selection were as follows: (a) published between 2020 and 2026 to ensure currency within the five-year window; (b) written in English or Indonesian; (c) peer-reviewed journal articles, indexed academic books, or credible institutional reports; (d) directly addressing at least one of the following themes: digital transformation of education, Islamic education management, spirituality in educational settings, Society 5.0, or humanistic leadership in education. Sources were excluded if they: (a) were non-peer-reviewed opinion pieces or blogs; (b) addressed digital technology in non-educational contexts without clear relevance to Islamic education; or (c) were duplicates retrieved across multiple databases. The initial search yielded approximately 280 candidate sources, of which 87 were selected for full-text review. Following thematic relevance screening and quality assessment, a final corpus of 26 primary sources was retained for systematic analysis and citation in this article.

Data collection was carried out through systematic literature review by selecting and reviewing the literature of the last five years that has theoretical and conceptual relevance to the research focus. The data was then analyzed using content analysis to identify key patterns, concepts, and trends related to the transformation of digital education and the spirituality of Islamic education. For the content analysis phase, a literature review matrix was developed to systematically organize each source according to six dimensions: (1) research focus, (2) theoretical framework employed, (3) key findings, (4) implications for spirituality or technology governance, (5) methodological approach, and (6) limitations. This matrix served as the primary instrument for identifying patterns, convergences, and gaps across the literature.

In addition, this study also uses critical discourse analysis to critically examine the dominance of modern educational technocracy and its implications for the value of humanism and spirituality in Islamic education. For example, when analyzing policy documents and academic literature on digital education governance, CDA was applied to identify how technocratic language (e.g., "efficiency," "data performance," "smart system") systematically marginalizes discourse on teacher moral authority, spiritual pedagogy, and humanistic learning relationships.

This discursive analysis helped reveal the ideological assumptions embedded in the dominant narratives of educational digitalization and to articulate an alternative, spirituality-centered counter-discourse. To strengthen the conceptual construction of the research, the

future studies approach is used in formulating the *Spiritual-Technological Islamic Educational Management Framework* model as an alternative paradigm for the development of adaptive, humanistic, and spiritual value-based Islamic education management in the Society 5.0 era.

The future studies approach, as articulated by (Bell, 1997) and elaborated in educational contexts by (Inayatullah, 2008), is a systematic methodology for constructing anticipatory knowledge about possible, probable, and preferable futures. In the context of this research, it was applied to identify the most plausible trajectories of Islamic educational governance in the Society 5.0 era and to formulate normative principles for a preferred future in which technology serves humanistic and spiritual ends. This approach is particularly suited to conceptual-critical research that seeks not only to analyze existing conditions but to propose transformative models for institutional change.

RESULTS AND DISCUSSION

Technological Transformation and Paradigm Changes in Islamic Education in the Era of Society 5.0

The results of the study show that the development of Society 5.0 has driven a major transformation in the global education system, including in Islamic educational institutions. The integration of artificial intelligence (AI), digital learning ecosystem, big data education, and smart educational governance has changed the educational paradigm from conventional models to intelligent technology-based learning systems and digital connectivity. (Ahmad et al., 2023) explained that Education 5.0 places technology as the main instrument in creating adaptive, personalized, and data-based learning.

In the context of Islamic Education Management, this transformation can be seen through the increasing use of hybrid learning, virtual classrooms, learning management systems (LMS), and AI-based learning in Islamic boarding schools, madrasas, and Islamic universities. Research by Kristia Fatmasari (2026) shows that the integration of digital technology in Islamic education management is starting to be directed at the development of smart learning and smart educational environments to increase the effectiveness of Islamic education governance.

In addition, the results of a study by Arini Rochyati (2025) show that the transformation of Islamic Religious Education learning based on digital technology has shifted the learning model from teacher-centered learning to student-centered learning based on digital experiences. These changes show that technology is no longer just a learning tool, but has become an integral part of the construction of the future Islamic education system.

Table 1. The Transformation of Islamic Education in the Era of Society 5.0 (Author's Synthesis)

Aspects	Conventional Education	Education Era Society 5.0
Learning System	Traditional face-to-face	Hybrid & digital learning
The Role of the Teacher	The main source of knowledge	Facilitator & digital mentor
Learning Media	Books and lectures	AI, LMS, virtual platform
Governance	Manual administration	Digital governance
Evaluation	Conventional	Data-driven assessment
Educational Orientation	Transfer knowledge	Adaptive & lifelong learning

Source: Data Processed

However, the results of the study also show that the digital transformation of Islamic education still faces various serious challenges, especially related to human resource readiness, digital literacy, technological leadership, and the integration of ethical-spiritual values in the digital learning system. (Rohmatul Fauziyah et al., 2026) emphasized that the use of technology in Islamic education still tends to be instrumental and has not been fully integrated with the dimensions of Islamic ethics, pedagogy, and spirituality.

The Crisis of Technocracy and the Dehumanization of Islamic Education

The results of the analysis show that the acceleration of education digitalization simultaneously gives birth to the phenomenon of educational technocracy, namely the dominance of technological logic, system efficiency, and data performativity in education governance. Education is increasingly geared towards a quantitative orientation based on technical achievements, while the moral, spiritual, and humanistic dimensions tend to be marginalized. Meanwhile, Habibi (2024) explained that technological disruption has forced Islamic education to reorient the paradigm in order to remain able to maintain spiritual identity and Islamic values in the midst of digital modernization.

In the context of Islamic education, the dominance of technology raises several main problems, including:

1. Weakening of the Spiritual Relationship Between Teachers And Students,
2. Reduction of the Value of Manners In Digital Learning,
3. The Rise of Virtual Individualism,
4. And The shifting of the moral authority of educational institutions.

Research by (Kabir, Kabir, & Islam, 2025) shows that various Islamic-based digital applications are still not able to fully meet the spiritual needs of users because they are more technically oriented than strengthening moral and spiritual relationships. (arXiv) The findings show that the digitalization of education without an ethical foundation has the potential to accelerate the dehumanization of education. The phenomenon of educational technocracy in Islamic education must be understood not only as a technological problem but as a fundamentally epistemological and ethical crisis. When the governance of Islamic educational institutions is increasingly driven by quantitative metrics enrollment statistics, standardized test scores, digital access rates, and administrative efficiency ratios the qualitative dimensions of Islamic pedagogy, particularly the cultivation of moral awareness, spiritual sensitivity, and interpersonal ethical conduct, are rendered invisible within institutional performance frameworks.

Hia (2025) observed that technology-mediated education tends to prioritize scalable content delivery over the relational depth that defines transformative pedagogical encounters. In the Islamic educational context, this is especially consequential, as the transmission of Islamic knowledge has historically been conceived not merely as the transfer of information but as the formation of character through sustained interpersonal engagement between the teacher (*murabbi*) and the student (*mutarabbi*). The disruption of this relationship by digital intermediaries constitutes a qualitative loss that cannot be offset by gains in educational efficiency or accessibility. (Czakon & Meyer, 2024) extend this argument at the organizational level, showing that the increasing involvement of non-human

agents in operational and decision-making processes constitutes a distinct form of dehumanization that slows, rather than accelerates, meaningful digital transformation when left unaddressed.

The implications of educational technocracy extend to the institutional governance level. When Islamic educational leaders adopt managerial frameworks borrowed from corporate efficiency models such as key performance indicators (KPIs) for spiritual formation, data dashboards for moral development, and algorithmic systems for character assessment they risk reducing the holistic aims of Islamic education to measurable and auditable outputs. (Anwar, 2024) have noted that digital leadership in educational settings must be deliberately designed to preserve emotional and ethical intelligence, not merely optimize operational performance. The challenge, therefore, is not whether to digitalize Islamic educational governance, but how to do so in a way that strengthens rather than undermines the institution's spiritual and humanistic mission. Addressing this challenge requires a reconceptualization of educational leadership that places spiritual governance and ethical accountability at the core of digital transformation strategies.



Figure 1. The Crisis of Education in the Dominance of Technocracy

This phenomenon shows that the main challenge of Islamic education in the era of Society 5.0 is not just the ability to adapt to technology, but how to maintain a balance between digital modernization and Islamic spiritual values.

Spirituality as the Foundation of Humanization of Educational Technology

The results of the study show that spirituality has a strategic position as an ethical basis in the development of digital education. In the perspective of Islamic education, spirituality is not only understood as a religious ritual, but as a value system that shapes moral awareness, social ethics, and human orientation in the educational process.

(Rizal et al., 2025) emphasized that the concept of human resources, values-based Islamic leadership, and the integration of spirituality in digital education can build a more humanistic and sustainable Islamic education system in the Society 5.0 era. In line with that, (Rizal et al., 2025) shows that the integration of spiritual values in modern learning is able to increase moral awareness, empathy, and balance of students' character in the midst of the dominance of digital technology.

The concept of adab, prophetic education, and Islamic humanism is an important foundation in building an Islamic education system that is not trapped in technocratic reduction. Technology must be positioned as an instrument of strengthening human values, not as the main center of education. In this context, teachers still have a central position as moral and spiritual figures even though the learning process has been digitized.

Table 2. The Function of Spirituality in Islamic Education in the Digital Era (Author's Synthesis)

The Dimension of Spirituality	Functions in Digital Education
Manners	Ethical control of the use of technology
Morals	Strengthening the character of students
Tarbiyah Ruhiyah	Maintaining Spiritual Balance
Prophetic Education	Humanization of educational technology
Insan Kamil	Orientation of the formation of the whole human being

Source: Data Processed

These results show that the integration of spirituality and technology is a fundamental need in the development of future Islamic education that is both adaptive and humanistic.

Reconstruction of Future Islamic Education Management

Based on the results of the analysis, this study offers a conceptual model:

Spiritual-Technological Islamic Educational Management Framework

This model is an alternative paradigm of Islamic education management that integrates spiritual governance, ethical technology, humanistic leadership, and digital educational ecosystem in the educational governance of the Society 5.0 era.

Research by (Firnando, Khair, & Setiawati, 2025) shows that adaptive pedagogy based on spirituality and technology is able to increase student involvement, internalize Islamic values, and develop social empathy in digital learning. In addition, research by Jamalullel and Nasehudin (2025) shows that the effectiveness of digital-based Islamic education is greatly influenced by teacher readiness, technological literacy, and strengthening digital ethics based on Islamic values.

Table 3. Main components of the model (Author's Synthesis)

Components	Description
Spiritual Governance	Governance based on Islamic values
Ethical Technology	Ethical use of technology
Humanistic Leadership	Humanitarian-based leadership
Digital Educational Ecosystem	Integration of digital education systems
Sustainable Islamic Education	Continuous Islamic education

Source: Data Processed

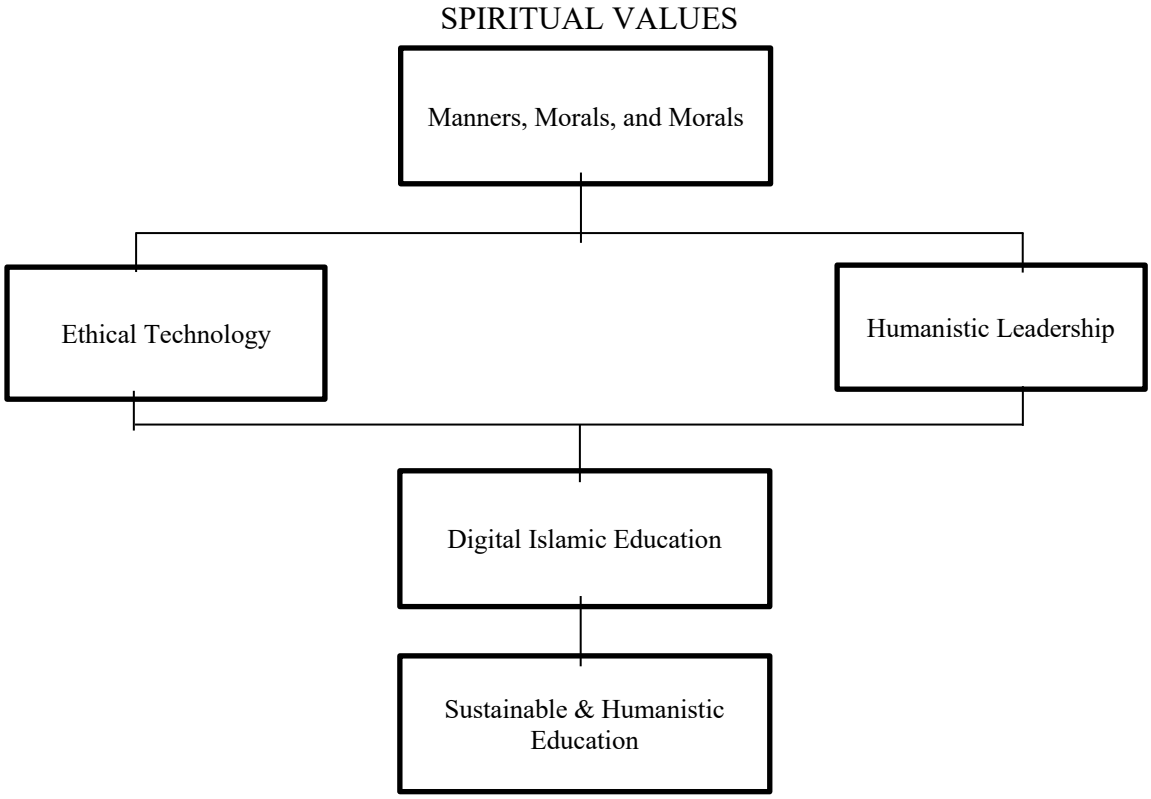


Figure 2. Spiritual-Technological Islamic Educational Management Framework

The model affirms that the future of Islamic education cannot be built through a dichotomy between spirituality and technology. Islamic education must be able to integrate the two proportionally so that it remains relevant to the development of the times without losing its ethical and spiritual identity. Theoretically, this research expands the discourse of Islamic Education Management through a futuristic and interdisciplinary approach that connects technology, spirituality, and Islamic education governance within the framework of Society 5.0.

Each component of the ST-IEMF warrants a precise operational definition. The first component, *Spiritual Governance*, refers to the systematic embedding of Islamic values — including *taqwa* (God-consciousness), *amanah* (trustworthiness), and *masuliyyah* (accountability) into all dimensions of institutional governance, from strategic planning and resource allocation to performance evaluation and policy formulation. Spiritual governance does not substitute professional management practices but rather provides the ethical foundation within which these practices operate. In the digital era, spiritual governance manifests as the deliberate prioritization of human flourishing and moral character formation over mere operational efficiency, ensuring that technology adoption decisions are evaluated not only on cost-benefit grounds but also on their implications for the spiritual mission of the institution (Shobri, Education, & 2026, 2025).

The second component, *Ethical Technology*, is defined as the principled selection, implementation, and evaluation of digital technologies in educational settings based on criteria of human dignity, moral integrity, and educational purpose, in addition to functional efficiency. Ethical technology operationalizes the Islamic ethical principle of *maslahah* (public benefit) in the context of digital transformation, requiring that each technological

tool adopted in the educational system demonstrably contributes to student welfare, moral development, and the preservation of Islamic educational identity. (Zarkani et al., 2024) have highlighted the urgency of such ethical frameworks as AI-driven systems increasingly penetrate the domain of Islamic learning, raising difficult questions about personalization, authority, and the humanization of educational technology. (Romanenko, Rieznikov, Khvatova, Kovalchuk, & Romanenko, 2025) similarly argue that spirituality, anchored in values such as dignity, freedom, and responsibility, can function as a stabilizing ethical resource that allows AI to support, rather than erode, the moral autonomy and well-being of educators navigating digital transformation.

The third component, *Humanistic Leadership*, refers to an approach to educational leadership that foregrounds relational ethics, emotional intelligence, and servant-leadership (*khidmah*) in the governance of Islamic educational institutions navigating digital transformation. Humanistic leadership integrates the prophetic model of leadership characterized by wisdom (*hikmah*), compassion (*rahmah*), and justice (*'adl*) with the competencies required for digital leadership, including digital literacy, technological fluency, and data-informed decision-making (Anwar, 2024). A meta-synthesis by (Hilal, Hammad, & Gümüş, 2025) of qualitative studies on distributed leadership across Muslim-majority contexts further indicates that leadership models grounded in collective responsibility and shared moral authority are more compatible with the relational, value-laden character of Islamic educational governance than centralized, efficiency-driven leadership styles.

The fourth component, the *Digital Educational Ecosystem*, is defined as the integrated system of digital platforms, learning management infrastructures, data governance protocols, and community networks that together support the institutional delivery of Islamic education. This ecosystem encompasses not only the technological infrastructure but also the policy environment, digital literacy capabilities of educators, and the ethical norms governing data use, privacy, and academic integrity in the digital learning environment. Recent work by Syarip, M. Sirozi, & Astuti (2026) reinforces this view, proposing that an effective digital ecosystem for Islamic schools must integrate data governance and public accountability with instructional design, rather than treating administrative digitization and pedagogical innovation as separate agendas.

Regarding implementation pathways and governance implications, the ST-IEMF is intended to operate at multiple institutional levels simultaneously. At the macro level, national education policymakers and the Ministry of Religious Affairs (Kemenag) can adopt the framework as a normative reference for developing national standards for digital transformation in Islamic education, ensuring that regulatory frameworks mandate the integration of spiritual governance criteria alongside technical and managerial performance indicators. At the meso level, Islamic educational institutions including pesantren, madrasas, and Islamic universities can use the framework as a blueprint for redesigning their strategic plans, digital governance policies, and professional development programs.

Specifically, principals and rectors should consider establishing a "Spiritual-Digital Governance Committee" composed of senior educators, Islamic scholars, IT specialists, and community representatives, tasked with evaluating technology adoption decisions against the four framework components. At the micro level, individual teachers and educators can

implement the framework by developing digital learning strategies that explicitly integrate elements of spiritual literacy, ethical online conduct, and character formation into technologically mediated learning environments (Firnando et al., 2025).

CONCLUSION

The transformation of education in the Society 5.0 era has driven fundamental changes in Islamic Education Management through the integration of artificial intelligence, digital learning ecosystems, and data-driven governance. However, this digitalization simultaneously gives rise to educational technocracy, dehumanization of learning, and the marginalization of spiritual and moral values. The main challenge of Islamic education is therefore not merely technological adaptation, but how to maintain a balance between digital innovation and the spiritual dimension. This article concludes that: technological transformation has shifted institutional orientation toward technocratically managed outputs at the expense of moral formation; (2) the Islamic concepts of adab, insan kamil, and prophetic education serve as operationalizable ethical anchors for guiding technology adoption and leadership practice; and (3) the ST-IEMF integrating spiritual governance, ethical technology, humanistic leadership, and the digital educational ecosystem enables Islamic educational institutions to pursue digital transformation without sacrificing their moral and spiritual identities. Future research should prioritize empirical validation and cross-institutional application of this framework.

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