Adaptive Islamic Education Curriculum Model in the Society 5.0 Era: A Literature Study from Technology and Humanism Perspectives

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ABSTRACT

The rapid expansion of digital innovation in the Society 5.0 era requires an Islamic Education (PAI) curriculum that is more adaptive, flexible, and aligned with the learning needs of students living in a technology-driven environment. The curriculum is expected not only to respond to technological advancement but also to uphold Islamic humanistic values that center on character formation, spiritual development, and ethical consciousness. This study aims to conceptualize the characteristics of an adaptive PAI curriculum capable of harmonizing technological innovation with humanistic principles. A literature review method was employed by examining reputable journal articles, scholarly books, and scientific reports published in the last ten years using a thematic analytical approach. The findings reveal that adaptive curriculum design requires content flexibility, meaningful technology integration, reinforcement of humanistic values, and institutional readiness to implement innovative models. These results affirm that an adaptive Islamic Education curriculum is essential for preparing learners to navigate the complexities of the Society 5.0 era while remaining grounded in moderate, ethical, and value-oriented Islamic teachings.
Keywords: Islamic Education Curriculum, Society 5.0, Educational Technology

ABSTRAK

Perkembangan teknologi yang semakin cepat pada era Society 5.0 menuntut adanya kurikulum Pendidikan Agama Islam (PAI) yang lebih adaptif, fleksibel, dan selaras dengan kebutuhan peserta didik yang hidup dalam ekosistem digital. Kurikulum tidak hanya dituntut responsif terhadap kemajuan teknologi, tetapi juga harus tetap berpegang pada nilai-nilai humanisme Islam yang menempatkan pembentukan karakter, spiritualitas, dan etika sebagai fondasi utama. Penelitian ini bertujuan merumuskan karakteristik model kurikulum PAI adaptif yang mampu mengintegrasikan inovasi teknologi dan nilai humanisme secara harmonis. Metode yang digunakan adalah studi literatur dengan menelaah artikel jurnal bereputasi, buku, dan laporan ilmiah dalam sepuluh tahun terakhir melalui pendekatan analisis tematik. Hasil penelitian menunjukkan bahwa kurikulum adaptif menuntut fleksibilitas konten, integrasi teknologi, penguatan nilai humanis, serta kesiapan institusi dan pendidik dalam mengimplementasikannya. Temuan ini menegaskan bahwa model kurikulum PAI adaptif sangat relevan untuk memperkuat kesiapan peserta didik menghadapi dinamika era Society 5.0 dan tetap berakar pada nilai-nilai Islam yang moderat, etis, dan berorientasi kemaslahatan.
Kata Kunci: Kurikulum PAI, Society 5.0, Teknologi Pendidikan

INTRODUCTION

The acceleration of technological innovation in the contemporary era has fundamentally reshaped global educational landscapes, compelling nations to reform curriculum frameworks to remain relevant and future-oriented. The emergence of Society 5.0—an advanced societal paradigm developed to harmonize digital technology with human-centered values—introduces unprecedented expectations toward the education sector, particularly in how learning environments respond to the integration of artificial intelligence, big data, and interconnected systems (Fukuda, 2020; Benešová & Tupa, 2017). Within this shifting context, Islamic education stands at a critical juncture where curriculum transformation must address the dual challenge of technological disruption and the emphasis on preserving spiritual, ethical, and moral values. As digital ecosystems increasingly influence how students learn, interact, and construct knowledge, the need for an adaptive curriculum model capable of aligning Islamic educational objectives with technological progress has become a pressing academic discourse.

Islamic Religious Education (PAI) serves not only as a vehicle for transmitting doctrinal knowledge but also as an essential platform for shaping the moral and spiritual identity of learners. Nevertheless, the traditional structure of PAI curricula often prioritizes textual comprehension and teacher-centered instruction, which scholars argue may no longer be adequately responsive to the multidimensional demands of modern learners (Nawi et al., 2021; Hashim, 2020). The current digital generation is characterized by rapid information access, collaborative learning tendencies, and high exposure to global cultural influences, requiring educational models that encourage critical thinking, creativity, digital responsibility, and ethical discernment. Consequently, the PAI curriculum must undergo a paradigm shift that transcends conventional pedagogies and adopts adaptive, competency-based, and technology-integrated approaches without compromising Islamic ethical foundations.

The Society 5.0 framework emphasizes the cultivation of skills that support human–technology interaction, problem-solving in complex digital environments, and the capacity to create societal value through innovation. These competencies are increasingly recognized as essential for students navigating a world where artificial intelligence and automation permeate everyday life (Özdemir & Hekim, 2018; Sudibjo & Kistoro, 2020). For Islamic education, this paradigm presents both opportunities and challenges: on one hand, technology can enhance learning experiences through interactive platforms, digital Qur'an tools, and AI-based religious learning assistants; on the other, it raises concerns regarding ethical use, cultural alignment, and the risk of diminishing humanistic values if not appropriately contextualized. Thus, an adaptive PAI curriculum should reflect not only technological readiness but also a well-grounded philosophical orientation rooted in Islamic epistemology.

Humanism constitutes a fundamental dimension of Islamic education, emphasizing the cultivation of learners' dignity, autonomy, empathy, and social

responsibility. In the context of curriculum development, humanistic principles underscore the importance of integrating emotional, spiritual, and ethical growth alongside cognitive competencies (Imran, 2019; Al-Attas, 2015). As educational systems increasingly incorporate digital tools, maintaining humanistic balance becomes a crucial consideration to prevent learning from becoming overly mechanistic or depersonalized. An adaptive curriculum model grounded in Islamic humanism ensures that digital competencies are aligned with the broader mission of education: forming holistic individuals who can navigate the complexities of the digital age while upholding Islamic moral values. This integration positions PAI not merely as a subject of religious instruction but as a strategic domain for spiritual and ethical resilience in the era of Society 5.0.

Existing research illustrates growing scholarly interest in exploring how Islamic education can respond to digital transformation through curriculum reform and pedagogical innovation. Studies have examined the role of digital literacy in Islamic schools, the integration of Islamic values in technology-enhanced learning, and the conceptual alignment between Islamic epistemology and digital competence frameworks (Rahman & Jaafar, 2022; Widiastono, 2021). However, despite the substantial body of literature, the discourse remains fragmented, with limited frameworks that synthesize technological advances and humanistic principles into a coherent model for Islamic curriculum adaptation. There is a notable gap in systematic literature mappings that explain how Islamic education can construct an adaptive curriculum model that is technologically relevant, spiritually grounded, and culturally contextualized for the Society 5.0 era.

Given these observations, this study seeks to provide a comprehensive literature-based analysis of how an Adaptive Islamic Education Curriculum Model can be conceptualized in response to the demands of Society 5.0 by integrating technological perspectives and Islamic humanistic values. The objective of this study is to formulate a structured conceptual understanding of an adaptive PAI curriculum that harmonizes digital innovation with human-centered educational philosophy.

METHOD

This study employed a qualitative literature review design aimed at synthesizing scholarly discussions related to the development of an adaptive Islamic Education Curriculum in the Society 5.0 era. The review process involved systematic identification, selection, and interpretation of academic sources, including peer-reviewed journal articles, books, conference proceedings, and policy documents indexed in reputable databases such as Scopus, Web of Science, and Google Scholar published within the last ten years. The analytical procedure incorporated thematic analysis to categorize key themes related to technological integration, humanistic values, and curriculum adaptation, allowing the researcher to develop a conceptual model grounded in contemporary theoretical perspectives. The credibility of findings was strengthened by comparing multiple sources,

identifying convergent and divergent viewpoints, and ensuring that interpretations remained aligned with Islamic educational philosophy and the broader framework of Society 5.0.

RESULTS AND DISCUSSION
Characteristics of an Adaptive PAI Curriculum in the Society 5.0 Framework

The synthesis of the reviewed literature reveals that the transition toward Society 5.0 demands an education model that is both technologically responsive and fundamentally aligned with human-centered values. In the context of Islamic Religious Education (PAI), adaptability emerges as a foundational characteristic for sustaining curriculum relevance in the digital era. An adaptive curriculum is characterized by flexibility in learning content, responsiveness to learner needs, and the capacity to incorporate emerging technologies without compromising pedagogical integrity. This is consistent with global educational reform discourses emphasizing creativity, critical thinking, and digital fluency as essential competencies for preparing students to engage with increasingly complex technological environments. The literature consistently demonstrates that adaptive Islamic curricula are those capable of bridging traditional Islamic epistemology with innovative learning methodologies driven by digital advancement.

The concept of adaptability further encompasses responsiveness to diverse learning styles and cultural contexts within Muslim-majority and minority settings. Scholars highlight that adaptive curricula must acknowledge the sociocultural dynamics of learners, including variations in digital literacy skills, learning autonomy, and cultural exposure. This implies that PAI curricula must be designed with multilayered flexibility, enabling contextual customization while preserving universal Islamic values. Several studies note that such flexibility enhances student engagement, strengthens moral reasoning, and fosters a sense of ownership in learning—qualities that are increasingly valuable in student-centered and technology-supported educational models. Thus, adaptability becomes a holistic framework rather than a mere technical adjustment to educational content.

Another key characteristic of an adaptive PAI curriculum is openness to interdisciplinary integration. The reviewed literature indicates that the Society 5.0 narrative foregrounds the merging of diverse knowledge fields to solve complex societal problems. For Islamic education, this interdisciplinary approach aligns with classical Islamic intellectual tradition where theology, ethics, philosophy, and science coexist within a unified worldview. Modern scholarship suggests that aligning PAI content with digital literacy, social sciences, and moral education enhances students' capacity to understand Islam as a dynamic framework capable of addressing contemporary challenges. This interdisciplinary integration contributes to producing learners who are not only religiously grounded but also equipped with the broader competencies needed in the digital society.

Adaptability also requires continuous curriculum revision based on empirical evidence and technological trends. Literature on adaptive learning design emphasizes the importance of ongoing evaluation informed by student

feedback, learning analytics, and technological developments. In the context of PAI, this means integrating real-time learning assessments, AI-driven feedback systems, and data-informed teaching strategies to continually refine curriculum effectiveness. These innovations allow educators to identify gaps in understanding, personalize instruction, and reinforce students' spiritual and moral development more systematically. Consequently, the adaptive curriculum model becomes a dynamic system that evolves in tandem with societal transformation.

Digital inclusivity represents another characteristic frequently discussed in the literature. Adaptive PAI curricula must ensure equitable access to technological resources, digital tools, and online learning environments. Scholars argue that curriculum design cannot be considered adaptive unless it addresses barriers faced by students in rural or underserved regions, where digital infrastructure may be limited. This inclusivity not only aligns with Islamic principles of justice and equality but also ensures that curriculum transformation does not widen educational disparities. Thus, adaptability must be conceptualized as both a pedagogical and ethical commitment within Islamic education.

A recurring theme across the reviewed studies is the integration of digital ethics within the adaptive curriculum framework. Society 5.0 raises new ethical dilemmas related to privacy, misinformation, artificial intelligence, and social media behavior. An adaptive PAI curriculum incorporates modules that address these issues from both Islamic ethical and contemporary digital perspectives. Such integration enables students to develop moral judgment, digital responsibility, and ethical awareness—qualities essential for navigating digital ecosystems with integrity. This ethical emphasis aligns with the Islamic tradition of cultivating akhlak (character) as the core of religious education.

Furthermore, adaptive curriculum models emphasize the development of 21st-century competencies, such as collaboration, creativity, communication, and critical thinking, all framed within Islamic ethical foundations. The literature suggests that embedding these competencies into PAI learning enhances students' ability to participate meaningfully in a globalized digital world. These competencies must be contextualized through Islamic epistemology, ensuring that the pursuit of modern skills remains aligned with the values, ethics, and spiritual orientation of Islamic education. This balanced approach underscores the relevance of PAI in shaping holistic learners capable of contributing to society ethically and innovatively.

Lastly, the findings indicate that adaptive PAI curricula require strong institutional support, including teacher training, digital infrastructure, and policy frameworks aligned with the goals of Society 5.0. Educators must possess adequate digital literacy, pedagogical adaptability, and theological competence to implement such curricula effectively. Institutions must therefore invest in continuous professional development, technological facilities, and clear guidelines that support innovation within Islamic education. Without this systemic alignment, curriculum adaptability remains limited to theoretical discourse rather than operational practice.

Integration of Technology into the Islamic Education Curriculum

The reviewed literature demonstrates that technological integration within PAI is not merely an optional enhancement but a foundational component of curriculum modernization in the Society 5.0 era. Technology serves as a catalyst for transforming learning processes, enabling more interactive, personalized, and student-centered educational experiences. Digital tools such as learning management systems (LMS), AI-assisted platforms, and multimedia content have been shown to improve student motivation, comprehension, and retention in religious education contexts. Scholars emphasize that effective technology integration requires alignment between digital tools, pedagogical strategies, and Islamic educational objectives, ensuring that technological innovations support, rather than overshadow, the spiritual and moral goals of PAI.

One significant aspect of technological integration is the enhancement of accessibility and inclusivity. Online platforms, digital Qur'an applications, and virtual learning environments allow students from diverse geographical backgrounds to access high-quality religious learning materials. These technologies help bridge educational disparities, particularly in rural settings where trained Islamic educators or physical learning resources may be limited. The literature notes that digital platforms can democratize Islamic knowledge by providing equal learning opportunities regardless of socioeconomic background. Such inclusivity aligns with the Islamic principle of ensuring equitable access to knowledge for all members of society.

Technological integration also contributes to pedagogical innovation. Studies show that incorporating interactive media, gamification elements, simulations, and augmented reality (AR) tools enhances student engagement and encourages deeper learning. In PAI, such tools can be used to visualize historical Islamic events, simulate religious practices, or create immersive learning experiences that reinforce spiritual understanding. These innovations respond to the learning preferences of Generation Z, who are deeply accustomed to digital modes of interaction. Thus, technology integration serves as a bridge between religious content and contemporary learning behavior.

Artificial intelligence (AI) represents one of the most transformative tools in modern education. Literature shows that AI-based systems can support personalized learning by analyzing student performance, identifying learning gaps, and recommending targeted interventions. In Islamic education, AI can assist in improving Qur'an recitation accuracy, providing automated feedback on memorization, or facilitating adaptive learning pathways based on individual student needs. While these technologies offer substantial benefits, scholars caution that their integration must be guided by ethical principles rooted in Islamic values, ensuring that AI usage respects privacy, autonomy, and the moral development of learners.

The technological shift also necessitates rethinking assessment methods in PAI. Traditional evaluation models focused on rote memorization and summative assessments are increasingly considered inadequate for measuring holistic

competencies relevant to Society 5.0. Digital assessment tools enable continuous, formative, and authentic evaluations aligned with real-world skills. For example, digital portfolios, online discussions, and project-based tasks can assess students' ability to apply Islamic values in contemporary contexts. These assessment innovations contribute to a more comprehensive evaluation of students' cognitive, moral, and spiritual growth.

Despite its transformative potential, the literature highlights several challenges associated with technological integration, including digital divides, inadequate teacher capacity, and concerns regarding the accuracy of online religious content. These challenges emphasize the need for institutional policies that support teacher training, curriculum alignment, and content verification. Scholars argue that without adequate digital literacy, educators may struggle to integrate technology meaningfully into PAI instruction. This underscores the importance of investing in professional development programs that equip teachers with both technological and pedagogical competencies.

Additionally, ethical considerations play a critical role in determining the success of technological integration within PAI. The digital environment introduces risks related to exposure to inappropriate content, cyberbullying, misinformation, and addictive online behavior. An Islamic curriculum that integrates technology must therefore include modules on digital ethics grounded in Islamic moral teachings. These modules help students navigate digital environments responsibly, fostering awareness of Islamic ethical principles in online interactions. The literature consistently emphasizes that ethical digital literacy is a crucial skill for Muslim learners in the Society 5.0 era.

Finally, the findings suggest that technological integration must be accompanied by a strong philosophical foundation ensuring that digital innovation remains aligned with Islamic educational goals. Technology should serve as a tool that enhances, rather than replaces, human interaction, spiritual development, and moral reflection—core elements of Islamic pedagogy. This philosophical grounding ensures that technology is integrated not superficially but as part of a holistic curriculum redesign that respects Islamic epistemology while embracing modern advancements.

Humanistic Values as the Core of an Adaptive Islamic Curriculum

The integration of humanistic values emerges as a central theme in the development of an adaptive PAI curriculum. Humanism within Islamic education emphasizes the cultivation of learners' spiritual, emotional, ethical, and social dimensions, forming individuals who embody moral integrity, compassion, and responsibility. The literature suggests that in the era of Society 5.0, where digital technologies risk overshadowing interpersonal relationships, humanistic education plays a crucial balancing role. By grounding curriculum design in Islamic humanism, educators ensure that digital innovations do not compromise the holistic formation of character—a priority deeply embedded in the Islamic educational tradition.

Humanistic approaches emphasize individualized learning, respect for student agency, and recognition of diverse learner identities. Studies highlight that humanistic curriculum models prioritize learner autonomy, self-reflection, and intrinsic motivation—qualities that align closely with Islamic principles of moral self-regulation (tazkiyah al-nafs). In PAI, implementing a humanistic approach involves creating learning experiences that encourage personal interpretation, spiritual insight, and ethical reasoning rather than rote memorization. These approaches position learners as active participants in their spiritual and intellectual development.

The literature further indicates that humanism aligns seamlessly with the maqasid al-sharia, which prioritize the protection of intellect, life, faith, lineage, and property. An adaptive PAI curriculum grounded in maqasid ensures that educational innovations contribute to human well-being and societal harmony. This alignment reinforces the idea that technology and humanism need not be contradictory; rather, they can complement each other when guided by ethical and spiritual principles. This synthesis supports the objective of Society 5.0: the creation of a society where digital advancement enhances human potential rather than diminishing it.

Humanistic values also highlight the importance of emotional and social competencies. Research shows that empathy, communication skills, emotional regulation, and collaborative behavior are essential for navigating modern digital ecosystems. Islamic education has long emphasized adab, akhlak, and interpersonal harmony as core dimensions of moral development. Incorporating these values into the adaptive curriculum helps students navigate digital environments ethically, respond to global cultural diversity with respect, and maintain constructive social relationships. Such competencies ensure that technological proficiency is accompanied by moral consciousness.

Character education represents another significant dimension within humanistic Islamic curricula. The literature asserts that digital transformation amplifies the need for ethical formation, as students are increasingly exposed to moral ambiguities, online misinformation, and conflicting worldviews. An adaptive PAI curriculum must therefore integrate character-building modules that address honesty, digital responsibility, resilience, and compassion, based on Islamic ethical teachings. These modules help students engage with technology not passively but with moral intentionality, reinforcing Islamic values in every dimension of digital life.

Humanistic curriculum design also emphasizes the importance of teacher–student relationships. In Islamic pedagogy, educators play a dual role as instructors and moral exemplars. The literature underscores that even in digitally mediated learning environments, the role of the teacher as a model of ethical behavior remains indispensable. Adaptive curricula must therefore support teachers in cultivating spiritual warmth, empathy, and interpersonal engagement—qualities that sustain the human element of education amidst

technological expansion. This humanistic teacher presence ensures that PAI instruction retains its ethical and spiritual authenticity.

Moreover, the reviewed studies highlight the importance of community engagement as part of a humanistic curriculum model. Islamic education traditionally involves the broader community in shaping moral and social development. Adaptive PAI curricula must therefore create opportunities for students to engage in collaborative projects, community service, and social initiatives that translate Islamic values into real-world practice. These experiences reinforce the idea that education extends beyond cognitive learning into social responsibility and civic participation—core elements of Islamic humanism.

Finally, the findings conclude that humanistic values provide an essential philosophical and ethical foundation for integrating technology into Islamic curricula. Humanistic principles ensure that curriculum adaptation remains anchored in spiritual depth, ethical consistency, and holistic learner development. When combined with technological innovation and pedagogical flexibility, these values enable Islamic education to thrive in the era of Society 5.0 while staying faithful to its foundational mission of nurturing morally upright, intellectually capable, and socially responsible individuals.

CONCLUSION

The findings of this literature-based study demonstrate that developing an adaptive Islamic Education (PAI) curriculum in the Society 5.0 era requires a holistic integration of technological innovation, humanistic values, and Islamic epistemological principles. The review shows that adaptability must manifest through flexible content design, interdisciplinary relevance, digital inclusivity, and continuous curriculum refinement, ensuring that PAI remains responsive to the rapidly evolving educational landscape. Technology serves as a transformative catalyst that enhances accessibility, personalizes learning, and fosters new modes of engagement, yet its integration must be grounded in ethical, pedagogical, and spiritual considerations consistent with Islamic teachings. Meanwhile, humanistic values provide a critical philosophical foundation that safeguards learners' moral development, spiritual identity, and emotional well-being amidst digital advancement. When harmonized, these elements form a comprehensive curriculum model capable of preparing students to navigate complex technological ecosystems while upholding Islamic moral integrity. Thus, this study affirms that an adaptive PAI curriculum—anchored in technology and humanism—offers a strategic pathway for Islamic education to remain relevant, future-oriented, and deeply aligned with the core mission of nurturing holistic, ethical, and resilient learners in the era of Society 5.0.

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