

Beyond Technology: Integrated Digital Leadership and Quality Assurance in Islamic Educational Institutions

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Abstract:

Digital transformation demands that Islamic educational institutions improve the quality of education without neglecting Islamic values. This study aims to analyse integrative digital leadership in digital governance to improve the quality of education in Islamic educational institutions. This study uses a qualitative case study design with institutional leaders, academic managers, teachers, administrative staff, and digital system managers. Data were collected through in-depth interviews, non-participant observation, and document analysis, and were then analysed thematically. The results of the study indicate that integrative digital leadership aligns technological innovation with Islamic vision and values; value-based management integrates technology with spirituality in institutional practices; and comprehensive governance supports sustainable institutional performance through digital systems and quality assurance. The study implies that strengthening integrative digital leadership, developing value-based management, and implementing systematic digital governance are strategic needs. Islamic educational institutions need to integrate technology with spiritual values to improve quality, sustain institutional performance, and enhance the effectiveness of quality assurance in the digital era.

Keywords: *Digital Leadership, Value-Based Management, Educational Quality*

Abstrak:

Transformasi digital menuntut lembaga pendidikan Islam untuk meningkatkan mutu pendidikan tanpa mengabaikan nilai-nilai keislaman. Penelitian ini bertujuan menganalisis kepemimpinan digital integratif dalam tata kelola digital untuk meningkatkan mutu pendidikan di lembaga pendidikan Islam. Penelitian ini menggunakan metode kualitatif dengan desain studi kasus yang melibatkan pimpinan lembaga, manajer akademik, guru, staf administrasi, dan pengelola sistem digital. Data dikumpulkan melalui wawancara mendalam, observasi non-partisipan, dan analisis dokumen, kemudian dianalisis secara tematik. Hasil penelitian menunjukkan bahwa kepemimpinan digital integratif mampu menyelaraskan inovasi teknologi dengan visi dan nilai Islam, manajemen berbasis nilai mengintegrasikan teknologi dengan spiritualitas dalam praktik kelembagaan, serta tata kelola menyeluruh untuk mendukung kinerja institusi yang berkelanjutan melalui sistem digital dan penjaminan mutu. Penelitian memberikan implikasi bahwa penguatan kepemimpinan digital integratif, pengembangan manajemen berbasis nilai, serta penerapan tata kelola digital yang sistematis menjadi kebutuhan strategis. Lembaga pendidikan Islam perlu mengintegrasikan teknologi dengan nilai spiritual untuk meningkatkan mutu, keberlanjutan kinerja institusi, serta efektivitas penjaminan mutu di era digital.

Kunci: *Manajemen Pendidikan Islam, Kepemimpinan Digital, Manajemen Berbasis Nilai, Mutu*

INTRODUCTION

The rapid expansion of digital technology has fundamentally transformed contemporary society, reshaping how knowledge is produced, disseminated, and accessed. In the education sector, digitalisation has altered not only pedagogical practices but also institutional management systems that determine educational quality (Antonova et al., 2024; Xu, 2023; Yurinoval et al., 2022). Islamic educational institutions face a particularly complex challenge: maintaining academic excellence while preserving Islamic values, ethics, and spiritual development. Evidence from global education reports indicates that institutions unable to adapt to digital transformation often experience declining effectiveness, reduced competitiveness, and diminished public trust. Conversely, educational organisations that strategically integrate digital innovation into their management structures demonstrate improved quality assurance and learning outcomes (Gorbatkova, 2023; Zabolotska et al., 2021; Zvereva, 2023). Therefore, rethinking Islamic education management in the digital era is crucial to ensuring institutional sustainability and societal relevance. This study is important for society because it addresses the urgent need to harmonise technological advancement with value-based education, contributing to the development of high-quality Islamic education in an increasingly digital world.

Despite the growing availability of digital tools, many Islamic educational institutions continue to struggle with fundamental managerial problems. Empirical observations indicate that digital technology is often adopted in a fragmented, instrumental manner, limited to administrative tasks or online learning platforms, and not embedded in a comprehensive management strategy (Gurgenidze et al., 2022; Pettersson, 2021). In many cases, institutional leaders lack digital leadership competencies, while educators receive insufficient training to use technology effectively to improve quality. Additionally, resistance to change, inadequate infrastructure, and limited strategic planning further exacerbate these challenges (Davydenko et al., 2021; Ronzhina et al., 2021). As a result, the quality of educational services remains uneven, creating a gap between Islamic educational institutions and more technologically adaptive mainstream institutions. Addressing this problem is essential for achieving sustainable quality enhancement.

Previous studies have examined various aspects of educational management and digital transformation in Islamic education. Domínguez et al. (2024) and Subandi et al. (2021) emphasised the role of transformational leadership in improving institutional performance, while Karaduman (2024) and Ma (2024) demonstrated that digital technology positively influences learning effectiveness and organisational efficiency. Similarly, Zakaria et al. (2025) and Idris et al. (2024) highlighted the integration of Islamic values within modern management practices, and Faroh et al. (2025) and Budiharso et al. (2023) reaffirmed that Islamic education aims to cultivate ethically grounded and intellectually competent individuals. However, much of the existing literature treats digitalisation as a supporting tool rather than a central managerial paradigm. Moreover, prior

research often addresses management, technology, and Islamic values separately, resulting in a fragmented understanding. This reveals a significant research gap: the lack of a holistic, integrative framework that reconceptualises Islamic education management by systematically combining digital innovation, quality management, and Islamic educational philosophy.

The novelty of this study lies in its effort to reconceptualise Islamic education management through an integrative digital perspective grounded in Islamic values. Unlike previous studies that focus on partial or technical aspects of digitalisation, this research positions digital transformation as a strategic and systemic component of educational management (Khin, 2022; Melnychenko et al., 2021). The proposed approach emphasises not only efficiency and effectiveness but also ethical governance, spiritual development, and the enhancement of human quality. This state-of-the-art perspective responds to the growing demand for Islamic educational institutions to produce graduates who are digitally competent, morally grounded, and socially responsible. The significance of this research is underscored by the accelerating pace of technological change, which requires educational institutions to adapt quickly without compromising their foundational values (Dewi et al., 2021; Elkordy, 2021). Without a renewed management paradigm, Islamic education risks marginalisation in the global knowledge economy.

Based on the identified issues, the central research question of this study is: how can Islamic education management be reconceptualised to enhance educational quality in the digital era? This study argues that quality improvement cannot be achieved solely through technological adoption but requires a management paradigm shift that integrates digital innovation with Islamic ethical and educational principles. The originality of this research lies in its conceptual argument that Islamic education management must be adaptive, value-driven, and strategically aligned with digital transformation. By synthesising management theory, digital leadership concepts, and Islamic educational philosophy, this study offers an original framework that contributes to both theoretical development and practical application. This contribution is expected to guide policymakers, institutional leaders, and educators in designing management strategies that foster holistic quality improvement.

This study aims to develop a conceptual model of Islamic education management that is responsive to the challenges and opportunities of the digital era. Specifically, it seeks to identify key managerial principles and strategies that support quality enhancement through ethical and sustainable use of digital technology. The expected contribution of this research is twofold. Theoretically, it enriches the discourse on Islamic education management by introducing an integrative and contemporary perspective. In practice, it provides a strategic framework for Islamic educational institutions to improve governance, learning quality, and institutional performance. Ultimately, this study aspires to serve as a scholarly foundation for future research and policy development, supporting the advancement of Islamic education that is both technologically adaptive and firmly rooted in Islamic values.

RESEARCH METHODS

This study employed a qualitative research design, using a case study approach, to explore in depth the reconceptualisation of Islamic education management for quality enhancement in the digital era. A qualitative case study was selected because it allows for a comprehensive, contextual understanding of complex social and organisational phenomena in their real-life settings (Cole, 2024; Kekeya, 2023). Islamic education management in pesantren-based institutions involves intertwined dimensions of leadership, religious values, institutional culture, and digital adaptation processes that cannot be adequately captured through quantitative methods alone. By adopting a case study design, this research examined managerial practices, decision-making processes, and stakeholder interactions holistically, yielding rich, contextually grounded insights relevant to both theoretical development and practical improvement.

The research was conducted at PPMA (Pondok Pesantren Madrasah Aliyah) Budi Guna, located at Jln. Raya Tajur Leuwibilik RT.04/01, Desa Tajur, Citeureup, Kabupaten Bogor, West Java, Indonesia. This site was purposively selected based on three primary considerations. First, PPMA Budi Guna represents a formal Islamic educational institution that integrates pesantren traditions with secondary-level formal education. Second, the institution has initiated digital practices in academic administration, learning activities, and institutional management while maintaining a strong Islamic boarding school culture. Third, the accessibility of institutional leaders, educators, and administrative personnel allowed for in-depth exploration of management practices and digital transformation processes. These characteristics made PPMA Budi Guna a relevant and information-rich case for examining Islamic education management in the digital era.

The selection of informants used purposive sampling to ensure participants had direct experience and in-depth knowledge of institutional management and digital practices (Cole, 2024). Informants were chosen based on their roles within the pesantren-madrasah system, educational background, and involvement in policy formulation and implementation. The total number of informants and their profiles are presented in Table 1.

Table 1. Research Participants at PPMA Budi Guna

Participant Category	Educational Background	Rationale for Selection	Total
Institutional leaders (Head of Pesantren / Madrasah Principal)	Master's-Doctoral degrees in Education or Islamic Education Management	Strategic decision-makers responsible for institutional governance and digital policy	2
Academic managers (Vice principals/heads of programs)	Master's degrees in Educational Management or Islamic Studies	Direct involvement in curriculum development, quality assurance, and academic coordination	3
Teachers	Bachelor's-Master's degrees in Islamic Education or related fields	Frontline implementers of digital learning and educational quality practices	6
Administrative and student affairs staff	Bachelor's-Master's degrees in Management or Information Systems	Operational management and digital administration of academic services	4
IT coordinators /	Bachelor's degrees in	Responsible for digital	2

digital managers	system	Information Technology or Computer Science	infrastructure, maintenance, and integration	system technology
Total Participants				17

Data collection employed multiple qualitative techniques to ensure depth, richness, and triangulation (Fadli, 2021). In-depth semi-structured interviews were conducted with institutional leaders, academic managers, teachers, administrative staff, and IT coordinators to explore their experiences and perspectives on Islamic education management and digital transformation within the pesantren context. Non-participant observations were carried out to examine daily managerial practices, the use of digital systems, and interactions among stakeholders in both academic and boarding school environments. Document analysis complemented these techniques by examining institutional policies, standard operating procedures, strategic plans, quality assurance reports, curriculum documents, and digital platform records. The integration of these data sources strengthened the credibility and completeness of the findings.

Data analysis followed an interactive model comprising data condensation, data display, and conclusion drawing and verification (Soesana et al., 2023). Data condensation involved selecting, coding, and reducing raw data to focus on themes related to integrative digital leadership, value-based management, and holistic governance. Data were then organised and displayed through thematic matrices and narrative descriptions to facilitate interpretation. Conclusions were drawn through iterative comparisons across data sources and continuously verified to ensure consistency and analytical rigour.

RESULTS AND DISCUSSION

Results

This section presents the study's key findings on the reconceptualization of Islamic education management in the digital era. The results highlight how leadership, managerial practices, and governance structures interact to enhance educational quality and institutional sustainability. The findings are organized into thematic sub-findings that reflect empirical evidence from interviews, observations, and documentation.

Integrative Digital Leadership Strengthens Islamic Education

Integrative digital leadership, as identified in this study, refers to a leadership practice in Islamic educational institutions that strategically combines digital innovation with Islamic values to strengthen academic quality. In the field, this form of leadership is not merely defined by technological proficiency but by the ability of leaders to embed digital transformation within a value-driven vision, ethical decision-making, and long-term institutional goals. Operationally, integrative digital leadership was manifested through leaders' commitment to aligning digital policies with Islamic principles, fostering collaborative decision-making, and prioritising both academic excellence and spiritual development. Leaders demonstrated an awareness that digitalisation is a means rather than an end, serving broader educational and moral objectives. This sub-finding highlights

leadership as a central driver that connects technology, management, and Islamic educational philosophy into a coherent system that supports sustainable quality enhancement.

Interviews with institutional leaders revealed a strong emphasis on vision-driven digital transformation. One principal stated, "Digital transformation in our institution is not only about adopting technology, but about ensuring that every digital policy reflects Islamic values and supports students' character development." Another academic manager explained, "We always consider whether a digital decision strengthens learning quality and aligns with our spiritual mission before implementation." These statements indicate that a balance between innovation and values guided leadership decisions. The researcher interprets these findings as evidence that digital leadership in Islamic education is conceptualised as an ethical and strategic responsibility rather than a technical task. Leaders positioned themselves as moral agents who shape institutional culture, ensuring that digital initiatives contribute to holistic educational goals rather than merely operational efficiency.

Further interviews highlighted how integrative digital leadership influenced decision-making processes. One informant noted, "Every major digital initiative is discussed collectively, and we assess its impact on teaching quality, staff readiness, and Islamic ethics." Another leader remarked, "We avoid rushing into technology trends; instead, we choose systems that support long-term quality and spiritual values." These narratives suggest that leadership practices emphasised deliberation, inclusivity, and alignment with values. The researcher interprets this as a leadership pattern that resists purely market-driven or trend-based digital adoption. Instead, leaders exercised reflective judgment, ensuring that technological choices strengthened institutional coherence and educational integrity. This approach positioned leadership as a mediating force that integrates digital progress with Islamic educational commitments.

Observational data supported the interview findings by revealing consistent leadership practices in daily institutional activities. Leaders were observed actively participating in digital planning meetings, monitoring digital learning platforms, and engaging in discussions on quality assurance and ethical governance. Digital initiatives were consistently framed within institutional missions, emphasising Islamic values and student development. Restating the findings, integrative digital leadership in this context functioned as a unifying mechanism that aligned technology use with educational quality and spirituality. The data indicate that leadership effectiveness was rooted in coherence among vision, decision-making, and practice. Leaders who integrated digital strategies with Islamic values created a stable and purpose-driven management environment. This pattern demonstrates that integrative digital leadership plays a crucial role in strengthening Islamic education by ensuring that digital transformation supports both institutional performance and moral objectives.

Value-based Management Aligns Technology with Spirituality

Value-based management in this study is operationally defined as managerial practices in Islamic educational institutions that consciously integrate

digital technology with Islamic spiritual and ethical values in daily operations. In the field, this concept was observed through how technology was introduced, utilised, and governed within educational and administrative activities. Rather than functioning as a neutral or purely technical tool, digital technology was positioned as an instrument that supports moral conduct, spiritual awareness, and educational purpose. This alignment was reflected in institutional routines, learning environments, and managerial interactions, where digital platforms were used to reinforce Islamic norms such as adab, discipline, responsibility, and sincerity. Operationally, value-based management was evident when technological practices consistently reflected spiritual intentions, ethical considerations, and educational meaning, indicating that technology use was embedded within a broader moral and institutional framework.

Table 2. Observation Results and Indicators Table

Observational Evidence	Indicator
Digital learning platforms initiated with Islamic greetings and ethical reminders	Integration of adab Islami in digital environments
Online learning content includes Qur'anic verses and Islamic moral messages.	Integration of spiritual content into digital instruction
Managers supervise digital activities while emphasizing discipline and responsibility.	Ethical oversight in digital management
Use of technology is scheduled around prayer times and religious activities.	Alignment of digital practices with spiritual routines
Digital communication is conducted respectfully and formally	Application of Islamic ethics in digital interaction

The observational data presented in the table indicate that digital technology within the institution was systematically managed through a value-based lens. The presence of Islamic greetings, ethical reminders, and spiritual content within digital platforms demonstrates that technology was not treated as value-neutral. Instead, it functioned as a medium for reinforcing Islamic norms and spiritual awareness. Restating these findings, the institution consistently embedded religious values into digital practices, ensuring that technological use supported both learning objectives and moral development. Observations of managerial supervision further indicate that leaders actively monitored digital activities to maintain ethical conduct and discipline. Aligning digital schedules with religious routines reinforces the view that spirituality shaped operational decisions. Overall, these findings suggest that value-based management effectively transformed technology into a tool that strengthens spiritual identity rather than diminishing it.

A clear pattern emerged from the observational data, showing consistent alignment between technological practices and Islamic spiritual values across institutional activities. Technology use followed a structured moral framework rather than an efficiency-driven model alone. Digital environments reflected continuity between physical and virtual spaces, both of which were governed by similar ethical standards. Another recurring pattern was intentionality, in which digital tools were deliberately designed and regulated to support spiritual routines and moral behaviour. This pattern indicates that value-based management

functioned as a guiding principle that shaped how technology was adopted, implemented, and sustained. Rather than creating tension between modernity and spirituality, the observed practices demonstrate a harmonious relationship in which technology reinforced religious identity and educational purpose. This pattern confirms that value-based management is crucial for aligning digital transformation with the spiritual foundations of Islamic education.

Holistic Governance Enhances Sustainable Institutional Performance

Holistic governance in this study is operationally defined as an integrated institutional management system that aligns Islamic value-based policies, digital governance mechanisms, quality assurance processes, and continuous evaluation to sustain institutional performance. In the context of PPMA Budi Guna, holistic governance was empirically manifested through formal accreditation processes conducted by the National Accreditation Board for Early Childhood Education, Primary Education, and Non-Formal Education (BAN-PDM). The accreditation visit served as a comprehensive governance audit, assessing leadership, management systems, digital administration, learning quality, and institutional sustainability. Operationally, holistic governance was reflected in the institution's ability to present coherent documentation, demonstrate standardised digital procedures, and provide evidence of continuous quality improvement within a unified governance framework.



Figure 1. Visitation of Budi Guna Islamic Senior High School Accreditation by the BAN-PDM Assessor Team

Observation of the accreditation visitation process in Figure 1 revealed that institutional governance at PPMA Budi Guna operated in a structured and integrated manner. During the visit, institutional leaders systematically presented governance documents, digital systems, and quality assurance evidence in alignment with national accreditation standards. The presence of digital records, organised administrative workflows, and coordinated responses from multiple stakeholders indicated that governance practices were institutionalised rather than incidental. The researcher interprets the accreditation visit as empirical confirmation that institutional performance was sustained through holistic governance, where leadership, digital management, and quality control functioned as interconnected components. The successful orchestration of accreditation activities reflects governance maturity and organisational readiness

to sustain quality in the digital era.

Restating the findings, holistic governance at PPMA Budi Guna was concretely demonstrated through the accreditation visitation process conducted by BAN-PDM. Institutional performance sustainability was evidenced by coherent documentation, standardised digital procedures, and systematic quality evaluation, as presented during the visit. Digital governance was embedded within institutional policies and operational practices, enabling the institution to meet external quality standards. The accreditation process thus served as both an evaluative and a confirmatory mechanism, demonstrating that sustainable performance emerged from integrated governance rather than isolated managerial actions.

A dominant pattern across the documentation and accreditation visuals was governance integration, in which leadership decisions, digital systems, administrative procedures, and quality assurance operated as a unified structure. Another recurring pattern was sustainability orientation, reflected in the institution's preparedness for external evaluation and its reliance on documented, repeatable processes rather than temporary compliance. The accreditation visit demonstrated the continuity of governance and accountability over time, reinforcing institutional commitment to long-term quality enhancement. These patterns indicate that holistic governance supports sustainable institutional performance by ensuring coherence, transparency, and adaptability within Islamic education management in the digital era.

Discussion

The findings of this study reinforce and extend existing literature on Islamic education management by demonstrating that digital transformation is most effective when driven by integrative leadership grounded in religious values. Previous studies on digital leadership in education often emphasise technological competence, innovation capacity, and responsiveness to change as key leadership attributes (Bali, 2024; Mahsusi et al., 2024). However, the present findings show a nuanced distinction: in Islamic educational institutions, effective digital leadership is not value-neutral but deeply ethical and spiritual. Unlike leadership models that prioritise efficiency or competitiveness, integrative digital leadership at PPMA Budi Guna aligns digital policies with Islamic principles, character education, and long-term moral objectives. This confirms scholarly arguments that leadership in faith-based institutions must balance modernisation with identity preservation, while also highlighting a contextual difference: digital leadership here functions as moral stewardship rather than merely strategic management.

The study's findings on value-based management further align with and expand on existing discussions of spirituality in organisational management. Prior literature frequently argues that technology risks eroding the spiritual and ethical dimensions of education due to its instrumental, efficiency-driven nature (Assa'idi, 2021; Shofwani et al., 2025). In contrast, the empirical evidence from this study demonstrates that technology can be consciously governed to reinforce spiritual identity. Observations revealed that digital platforms embedded Islamic greetings, moral reminders, and Qur'anic content, indicating a deliberate moral framing of technology use. This finding supports value-based management

theories that view organisational values as active regulators of practice rather than symbolic statements (Fahyuni et al., 2020; Izzah et al., 2024). The difference lies in the operationalisation: while many studies remain conceptual, this research provides concrete behavioural and managerial indicators showing how spirituality can be embedded in everyday digital routines.

In relation to governance, the findings corroborate the institutional management literature, which emphasises integrated governance systems as a foundation for sustainable performance. Accreditation processes have often been discussed as external accountability mechanisms; however, this study demonstrates that accreditation can also serve as internal validation of holistic governance (Fawaid et al., 2025; Putri, 2023; Zamroni et al., 2025). The BAN-PDM visitation at PPMA Budi Guna illustrated how leadership, digital administration, quality assurance, and documentation operated as an interconnected system. This finding aligns with governance theories that stress coherence and continuity, while extending them into the Islamic education context by showing that governance integration includes not only managerial efficiency but also alignment with religious values and educational missions (Hindaryatiningsih et al., 2025; Yusuf et al., 2024). The study thus challenges fragmented governance approaches that treat digitalisation, quality assurance, and values as separate domains.

From a theoretical perspective, this study contributes to reconceptualising Islamic education management in the digital era by proposing a triadic relationship among integrative digital leadership, value-based management, and holistic governance. Rather than viewing these elements independently, the findings suggest that they function synergistically to enhance educational quality and institutional sustainability. This integrated perspective adds depth to existing theories of educational leadership and management by situating digital transformation within a moral and governance framework specific to Islamic institutions. The study also advances theory by demonstrating that sustainability in educational performance emerges from alignment across leadership vision, managerial practices, and governance structures, rather than from technological adoption alone.

Practically, the findings offer important implications for policymakers, school leaders, and Islamic educational institutions facing digital-era challenges. Leaders are encouraged to approach digital transformation as a value-driven process that strengthens, rather than compromises, Islamic educational identity. Managers can use the observed value-based practices as models for embedding ethics and spirituality into digital environments. At the institutional level, holistic governance, evidenced by structured documentation, digital SOPs, and continuous evaluation, can serve as a roadmap for achieving sustainable quality improvement. Collectively, these implications suggest that Islamic education institutions can successfully navigate digital transformation when leadership, management, and governance are intentionally integrated to support both academic excellence and spiritual development.

CONCLUSION

This study reveals that the key lesson is that improving the quality of Islamic education in the digital era requires a fundamental reconceptualisation of

educational management rather than mere technological adoption. The most critical finding demonstrates that academic quality is strengthened when digital transformation is guided by integrative digital leadership, value-based management, and holistic governance. Digital leadership serves as a moral and strategic driver, aligning technology with Islamic values and long-term educational goals. Value-based management ensures that technology reinforces spirituality, ethics, and character development instead of undermining them. Holistic governance, as evidenced through structured accreditation processes and integrated documentation, sustains institutional performance through coherence and accountability. The strength of this study lies in its contribution to Islamic education management scholarship by offering an integrative framework that connects leadership, management, governance, and digital transformation within an Islamic value system. This framework enriches theoretical discourse by positioning digitalisation as an ethical and systemic managerial paradigm rather than a technical instrument.

Despite its contributions, this study has several limitations that open avenues for future research. First, the research was conducted as a single qualitative case study at PPMA Budi Guna, limiting the generalizability of the findings across diverse Islamic educational contexts. Second, the study focused primarily on managerial and governance perspectives, while students' learning outcomes and perceptions of digital practices were not explored in depth. Third, rapid technological changes may alter digital management practices over time, requiring continuous reassessment. Future research is therefore recommended to employ comparative or multi-site studies across different types of Islamic educational institutions to validate and extend the proposed framework. Quantitative or mixed-method approaches could also be used to measure the impact of integrative digital leadership and value-based management on learning outcomes. Longitudinal studies are further recommended to examine how sustainable quality enhancement evolves as Islamic education systems undergo digital transformation.

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