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Integrating Islamic Managerial Values into Digital Governance: Towards a Global Framework for Sustainable Educational Management

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This study explores the integration of Islamic managerial values into digital governance as a strategic framework for achieving sustainable educational management. Grounded in qualitative descriptive research, it investigates how principles such as amanah (trust), 'adl (justice), shura (consultation), and itqan (excellence) can be operationalized within digital management systems of Islamic educational institutions. Data were derived from document analysis and semi-structured interviews across Indonesia, Malaysia, and Saudi Arabia, supported by official reports from the Ministry of Education and Culture (2023), UNICEF Indonesia (2021), and the International Telecommunication Union (2023). The findings reveal a substantial gap between digital readiness and ethical institutionalization, as infrastructure and human-resource competencies lag behind student adaptability. The proposed global framework interlinks value codification, technological architecture, human-capital capability, and sustainability measurement to create a cohesive, value-driven governance model. Integrating ethical and technological dimensions strengthens transparency, accountability, and institutional resilience. The study concludes that embedding Islamic managerial ethics into digital governance is essential to achieving moral coherence and long-term sustainability in global Islamic education.

Keywords: Islamic managerial values, digital governance, sustainable education, ethical leadership, institutional accountability.



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INTRODUCTION

Islamic education has long served as a cornerstone for nurturing intellectual, moral, and social development within Muslim societies (Jamil, 2024; Ibrahim et al., 2024; Ismet et al., 2025), yet the unprecedented acceleration of digital transformation and globalization compels Islamic educational institutions to evolve toward transparent, accountable, and technology-driven management systems capable of sustaining relevance in a knowledge-based economy. The convergence between traditional Islamic values and contemporary managerial practices demands an integrated framework that harmonizes ethical governance with digital innovation, enabling institutions to preserve spiritual authenticity while enhancing institutional efficiency (Ahmad et al., 2023). In recent case, the management of Islamic education has expanded beyond pedagogical reform, encompassing strategic planning, financial administration, decision-making analytics, and public accountability through digital platforms (Elihami et al., 2024). The incorporation of digital governance thus emerges not as a luxury but as a structural necessity to ensure institutional sustainability and global competitiveness.

Empirical evidence from Hartati (2025) and Othman & Yaakub (2025) indicates that Islamic educational institutions, while expanding their digital footprint, continue to face considerable challenges related to digital readiness, human-resource competency, and cultural adaptation to technological innovation, underscoring the urgency of an ethical and value-based digital governance framework. A recent survey from Zahraini et al. (2025) among Indonesian Islamic schools reported that only 45 % have effectively integrated technology into their curricula, whereas infrastructure and staff competence remain the primary obstacles to full digital transformation. This gap highlights a critical imbalance between technological adoption and value integration, suggesting that digital transformation must extend beyond operational digitization to encompass moral and managerial dimensions. Institutions that neglect ethical grounding risk fostering efficiency without integrity, transparency

without accountability, and innovation without purpose (Nwaimo et al., 2023). Consequently, the present research underscores the need to conceptualize a global model that reconciles Islamic managerial ethics with digital governance principles to secure both effectiveness and moral sustainability in education.

Islamic managerial thought, historically grounded in the Qur'an and the Sunnah, offers a comprehensive ethical foundation that aligns remarkably with modern governance principles, emphasizing justice ('adl), trust (amanah), responsibility (takāful), equality (musāwah), and excellence (itqan) (Mukri & Wakhid, 2024). These values, when operationalized through policy, digital information systems, and participatory decision-making mechanisms, can foster institutions that are not only technologically advanced but also morally coherent. Previous research on Islamic education and sustainable development underscores the sector's potential contribution to the UN Sustainable Development Goals (SDGs) by aligning ethical education with global sustainability imperatives (Yasmeen et al., 2024). Most existing studies emphasize curriculum design and pedagogy rather than the institutional architecture of digital governance (Abdullah & Hassanpour, 2021).

Digital governance in educational management encompasses integrated information systems, automated administrative processes, data analytics for evidence-based decision-making, and virtual stakeholder engagement designed to promote efficiency, accountability, and transparency (Magakwe, 2025). Within Islamic educational institutions, digital transformation has been observed to yield mixed outcomes: while some have adopted online learning and e-management successfully, many still struggle with inadequate infrastructure, limited digital literacy among administrators, and resistance to technological change. The issue is not merely technical but profoundly ethical how can digital systems be designed to embody Islamic principles of justice, trustworthiness, and collective consultation? Without ethical integration, technology risks reducing management to mechanical efficiency, devoid of moral direction and social accountability. This research therefore positions digital governance as both a technological and ethical project that requires the fusion of moral wisdom with systemic innovation.

Sustainability in education transcends environmental considerations and refers instead to the institutional capacity to adapt, remain relevant, and contribute meaningfully to society without eroding moral identity or institutional integrity. Within Islamic education, sustainability implies embedding *maslahah* (public benefit) and social justice within managerial processes while ensuring resilience against technological disruption and economic volatility. Studies indicate that institutions integrating sustainability principles with technological advancement enjoy greater long-term competitiveness, operational efficiency, and stakeholder trust. Yet, many Islamic institutions exhibit a significant policy-practice gap: digital policies are either undocumented or inconsistently applied, and data-driven decision-making remains underutilized. This situation reinforces the necessity for a comprehensive framework that unifies ethical governance, digital capability, and sustainable management into a coherent global model:

Table 1. Indicators of digital readiness and infrastructure in Islamic educational institutions

Indicator	Percentage	
Institutions integrating		
technology effectively into	45 %	
curricula		
Students in Islamic boarding		
schools assessed as "highly	84 %	
digitally ready"		
Institutions reporting		
inadequate digital	72 %	
infrastructure		

Sources: Government of Indonesia (Ministry of Education & Culture/Ministry of Religious Affairs); UNICEF Indonesia (2021); International Telecommunication Union (2023).

The data presented in Table 1 demonstrate that while student readiness for digital learning is remarkably high, institutional infrastructure and managerial frameworks remain inadequate. This

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disparity indicates that digital transformation in Islamic education cannot rely solely on technological adoption but must be reinforced by governance grounded in ethical and strategic principles. Embedding Islamic managerial values ensures that transformation processes prioritize accountability and social equity. In this sense, moral and managerial integration is not ancillary but essential to the success of digital governance. The empirical evidence thus substantiates the urgency for an integrated ethical-technological model proposed in this study.

The framework proposed herein seeks to serve as a cross-cultural model adaptable to diverse educational environments in Muslim-majority and minority contexts. It interlinks governance, digital infrastructure, human resources, and sustainability metrics underpinned by Islamic ethical norms. The model allows for contextual variation while maintaining universality through shared values of justice, consultation, and trustworthiness. Comparative insights from Indonesia, Malaysia, Saudi Arabia, and the United Kingdom are anticipated to reveal globally applicable best practices. The study thereby contributes to the construction of a cohesive paradigm positioning Islamic education as an ethical leader in the digital age.

This research employs a mixed-methods approach combining quantitative assessment of digital readiness indicators with qualitative inquiry into ethical integration within educational management. Surveys and policy document analyses will quantify performance gaps, while interviews with institutional leaders will elucidate perceptions of value-driven digital transformation. Such triangulation ensures both depth and validity. The design also reflects sensitivity to sociocultural variation, thereby strengthening external validity across geographic and institutional contexts. The study produces a rigorous, empirically grounded foundation for the global framework.

Expected contributions include a validated model of Islamic ethical digital governance, measurable indicators of managerial sustainability, and actionable recommendations for educational policymakers and practitioners. Embedding ethical values into digital management enhances transparency, operational efficiency, and trust while safeguarding cultural and spiritual integrity. The research further enriches scholarly discourse on the interplay between faith, technology, and global sustainability. By demonstrating how value integration elevates governance quality, this study extends theoretical and practical boundaries in both Islamic management and educational technology. The framework's adaptability also supports comparative application to other faith-based institutions worldwide.

Integrating Islamic managerial ethics into digital governance represents an imperative for ensuring that the digitalization of education aligns with moral responsibility and long-term institutional resilience. The framework developed in this study bridges ethical theory with digital innovation, allowing Islamic education to evolve without compromising authenticity or equity. Through the synthesis of management science, ICT systems, and Islamic ethics, the research contributes a transformative perspective to the global pursuit of sustainable education. The findings are expected to inform both policy and practice, encouraging inclusive, value-oriented technological transformation. Islamic education, when guided by such integration, may serve as a global exemplar of how moral conviction and technological progress can coexist to advance collective human flourishing.

RESEARCH METHODS

This study employs a qualitative descriptive design aimed at exploring how Islamic managerial values can be integrated into digital governance systems to enhance sustainable management within Islamic educational institutions. The qualitative approach was chosen because it allows for an in-depth understanding of complex social and managerial phenomena that cannot be adequately captured through numerical data. Research settings include several Islamic universities and schools in Indonesia, Malaysia, and Saudi Arabia, selected through purposive sampling based on their implementation of digital management systems and public availability of governance documents. Data were gathered primarily through document analysis and semi-structured interviews. The document analysis involved reviewing institutional strategic plans, annual reports, digital governance policies, and e-management platforms to identify evidence of ethical and technological integration. Semi-structured interviews were conducted with educational leaders, administrative officers, and digital management coordinators to gain deeper insight into how values such as *amanah* (trust), *shura* (consultation), and *itqan* (professional excellence) are operationalized within digital decision-making and institutional governance processes.

Data analysis followed the Miles and Huberman interactive model (2002), consisting of three iterative stages: data reduction, data display, and conclusion drawing or verification. In the reduction stage, all collected information from documents and interviews was transcribed, coded, and categorized according to thematic patterns representing the intersection of Islamic managerial values and digital governance practices. Data display was conducted through matrix organization and narrative synthesis to visualize relationships among emerging categories such as ethical leadership, transparency mechanisms, and technology-enabled accountability. The verification stage involved constant comparison between cases to ensure analytical consistency and theoretical saturation. To enhance trustworthiness, the research applied methodological triangulation comparing data from documents, interviews, and institutional websites along with member checking to validate interpretations with key participants. Ethical procedures were maintained throughout the study by obtaining informed consent, protecting confidentiality, and ensuring accuracy in representation. This qualitative framework provides a rigorous and credible foundation for developing a globally adaptable model of Islamic value-based digital governance in education.

RESULT AND DISCUSSION

Integrating Islamic Managerial Values into Digital Governance of Educational Institutions

Integrating Islamic managerial values into institutional digital governance necessitates translating abstract ethical precepts such as *amanah* (trust), 'adl (justice), shura (consultation), and itqan (excellence) into actionable managerial processes. Many Islamic institutions have transitioned to online administrative systems, yet a disconnection often persists between technological efficiency and moral accountability. Ethical governance requires that digital decision-support tools embody justice in algorithmic fairness, transparency in record-keeping, and consultation in participatory feedback mechanisms. The moral dimension ensures that the digital ecosystem serves institutional integrity rather than mere automation. Achieving this synthesis requires leadership commitment, policy coherence, and clear ethical indicators embedded in every governance process.

Government data highlight that Islamic educational institutions are unevenly distributed in their adoption of digital governance structures, reflecting disparities in infrastructure and leadership capacity. The Ministry of Education and Culture (2023) reported that approximately 45 percent of registered Islamic schools had implemented digital administrative systems, but fewer than one-third maintained publicly accessible transparency portals. This pattern underscores that digital transformation remains concentrated in urban regions with stronger funding and ICT literacy, while rural and pesantren-based institutions lag behind. Embedding Islamic managerial ethics into governance offers a pathway to balance such inequalities through principled decision-making. Leadership grounded in *amanah* and 'adl can prioritise equitable allocation of resources and consistent monitoring across diverse institutional profiles.

The current landscape of digital governance readiness among Islamic education providers is illustrated by consolidated data from official reports, as shown below.

Table 2. Indicators of digital readiness in Islamic educational institutions

Indicator	Percentage	
Institutions integrating technology effectively into curricula	45 %	
Students assessed as highly digitally ready	84 %	
Institutions reporting inadequate digital infrastructure	72 %	

Sources: Ministry of Education and Culture (2023); UNICEF Indonesia (2021); International Telecommunication Union (2023).

The data demonstrate that while learners display high digital readiness, institutions themselves remain technologically constrained, revealing a misalignment between user capability and infrastructural provision. The lack of sufficient connectivity and digital management policy inhibits the institutionalisation of Islamic managerial values within governance systems. Educational institutions

operating under such asymmetry risk perpetuating inequities that contradict the Islamic principle of justice. Ethical digital governance, guided by *amanah* and 'adl, must therefore address infrastructural distribution and capacity building as integral moral imperatives. Sustainable management emerges only when technology, ethics, and accessibility function in concert.

Institutional interviews revealed that the translation of Islamic values into digital governance often encounters cultural and procedural barriers (Makki & Alqahtani, 2022). Administrators noted uncertainty in operationalising *shura* through online platforms or incorporating *itqan* into performance dashboards. These difficulties reflect a broader knowledge gap in integrating normative frameworks into technological ecosystems. System designers typically prioritise functionality and compliance over moral alignment, resulting in efficient but ethically neutral systems. To remedy this, institutional training must extend beyond technical capacity to include the articulation of Islamic managerial ethics as performance criteria in digital governance design.

Value-based digital governance strengthens institutional legitimacy by ensuring transparency, inclusivity, and fairness across managerial processes (Makasi et al., 2021). When stakeholders can trace decisions, verify data accuracy, and participate through digital consultation channels, trust and accountability expand organically. Studies from UNICEF's (2021) report on digital learning confirm that inclusive governance models yield stronger engagement and improved educational outcomes. Embedding Islamic ethics into such systems ensures that technological progress aligns with spiritual accountability. In this sense, digital governance becomes a manifestation of moral stewardship rather than a mechanical administrative framework.

A strategic framework for integrating values into digital governance involves four interdependent dimensions: value codification, technological architecture, human-capital capability, and sustainability measurement (Skandalis, 2025). Value codification formalises *amanah* and 'adl in policy documents and performance indicators; technological architecture translates them into dashboards and data workflows; capability development equips staff to maintain ethical coherence; and sustainability measurement monitors long-term alignment between value and performance. Each dimension directly responds to deficiencies highlighted in national and international reports. Applying these pillars ensures that digitalisation contributes to holistic institutional growth rather than fragmented innovation.

Practical implementation begins with an institutional audit comparing existing governance structures with Islamic ethical principles, followed by policy realignment and the creation of measurable indicators (Ahmed, 2025). The Ministry's (2023) audit guidelines on digital transformation provide a procedural basis for such assessments. Institutions may employ value dashboards displaying trust indices, consultation frequency, and fairness ratios in resource allocation. These metrics transform moral commitments into observable governance outcomes. Such operationalisation ensures that ethical discourse translates into actionable institutional practice supported by credible data.

The integration of ethical and technological governance also carries pedagogical implications (Li & Zhang, 2025). Students observing ethically coherent digital systems internalise transparency and responsibility as civic virtues. When institutions demonstrate fair decision-making and participatory processes online, they model the prophetic ideals of consultation and justice within contemporary technological modalities (Pulanram, 2025). This alignment of moral education and governance practice reinforces the institutional identity of Islamic education as both technologically advanced and ethically anchored. It situates digital governance within a broader framework of human development consistent with Islamic epistemology.

The empirical synthesis of policy data, infrastructural assessment, and institutional narratives confirms that embedding Islamic managerial values into digital governance is essential for sustainable educational management. The challenges lie not in technology per se but in harmonising ethical intent with administrative execution. The official data substantiate the urgency of structured frameworks to reduce disparity and elevate accountability.

Optimising Digital Governance for Sustainable Islamic Educational Management

Optimising digital governance for sustainable management entails transforming technology from an operational instrument into a strategic and ethical infrastructure (Das, 2024). Islamic education faces the dual imperative of global competitiveness and spiritual integrity; sustainability requires satisfying both. Digital platforms can strengthen transparency, participation, and efficiency, but their sustainability depends on equitable access and moral accountability. Global reports from the ITU (2023)

indicate that sustainable connectivity initiatives succeed only when they incorporate community-level participation and ethical oversight. Islamic institutions thus stand to benefit from aligning digital governance structures with ethical stewardship principles that ensure inclusiveness and resilience.

Official monitoring data reveal disparities in digital connectivity across Indonesian educational sectors, highlighting structural challenges to sustainable digital governance:

Table 2. Connectivity and digital access gaps in educational institutions (Indonesia)

Metric	Percentage / Value
Schools with reliable broadband connection	62 %
Rural schools with stable internet access	38 %
Institutions integrating online administrative reporting	46 %

Sources: International Telecommunication Union (2023); Ministry of Education and Culture (2023)

These statistics show that while more than half of educational institutions enjoy broadband connectivity, rural institutions remain significantly underserved, compromising the sustainability of digital governance. For Islamic schools often located in rural regions, limited infrastructure constrains equitable implementation of ethical management systems. Sustainability grounded in 'adl requires rectifying such disparities through strategic investment and partnership, echoing ITU's (2023) recommendations on universal service funding. Bridging infrastructure divides is therefore both a technological and a moral responsibility. Achieving universal digital access becomes a prerequisite for practising justice and trust within Islamic educational management.

Sustainable digital governance is also contingent upon human-capital readiness (He & Chen, 2024). The UNICEF (2021) report emphasises that only about half of teachers in Islamic education systems feel adequately trained to integrate digital tools into pedagogy or administration. Capacity deficits weaken both system efficacy and ethical accountability, as uninformed staff cannot guarantee transparency or equitable participation (Azeem et al., 2023). Addressing these gaps requires structured professional development linking digital competence with moral responsibility. Ethical literacy must accompany technical training to ensure that data handling, decision-making, and reporting adhere to principles of *amanah* and *itqan*. Building such human infrastructure transforms technology from a mere instrument into a living expression of institutional ethics.

Optimised governance also relies on policy integration across ministries, agencies, and educational levels. The Ministry of Education and Culture (2023) introduced the *Digital School Roadmap*, calling for unified standards in governance reporting and accountability. Islamic institutions can adapt this framework by incorporating ethical benchmarks such as justice in budget allocation or transparency in stakeholder engagement. This alignment allows Islamic educational networks to contribute to national digitalisation goals while preserving moral autonomy. The synergy between policy uniformity and ethical diversity fosters sustainable governance that is nationally coherent and spiritually grounded.

Sustainability requires that digital systems embed cyclical evaluation, allowing institutions to assess progress and recalibrate strategy. Dashboards integrating key indicators access equity, consultation frequency, and ethical compliance support evidence-based decision-making. UNICEF's (2021) situational analysis recommends continuous monitoring of digital inclusion as a determinant of long-term system resilience. Islamic educational governance can adopt similar loops, using dashboards not only to track efficiency but also to verify justice, transparency, and stakeholder trust. Such iterative governance transforms sustainability from a static target into a dynamic process of moral and managerial learning.

The social dimension of sustainability in Islamic education manifests when digital governance strengthens community participation. ITU (2023) initiatives show that community-driven connectivity models yield higher retention and accountability outcomes. In Islamic contexts, this principle resonates with *shura*, ensuring that stakeholders participate in decision-making through online forums or digital councils. When communities observe their input shaping institutional priorities, trust deepens and

legitimacy expands. This participatory governance model unites technical systems with social ethics, forming a cornerstone for sustainable educational management.

Financial sustainability also depends on transparent and accountable governance supported by digital systems (Efunniyi et al., 2024). Online financial dashboards that disclose budget allocations and audit outcomes enhance credibility among donors and stakeholders. Islamic educational institutions managing *zakat*, *wakaf*, and tuition funds must embody transparency as a reflection of *amanah*. Digital audit trails and blockchain-based record systems offer opportunities for trust enhancement and fraud prevention. Aligning fiscal transparency with moral values reinforces both governance integrity and stakeholder confidence, aligning institutional practice with the prophetic ethos of honesty and responsibility.

Environmental sustainability, though rarely discussed in educational governance, intersects with digital transformation through energy consumption, electronic waste, and procurement ethics (Apata, 2024, April). Implementing green ICT policies such as energy-efficient servers and responsible recycling translates *itqan* into ecological stewardship. ITU's (2023) global policy brief urges educational institutions to integrate sustainability metrics into their digital transformation strategies. Islamic schools can adopt this recommendation within an ethical framework that interprets environmental responsibility as part of spiritual accountability. By extending moral concern to ecological dimensions, digital governance gains a holistic ethical character.

The synthesis of technological, ethical, and sustainability dimensions forms a multidimensional model of governance suitable for Islamic education in the digital age. Official reports from UNICEF, ITU, and the Ministry of Education confirm both progress and persistent disparities, guiding the development of adaptive, ethically rooted governance frameworks. Institutions implementing the proposed integration demonstrate enhanced transparency, social legitimacy, and resilience. Sustainable Islamic educational management, grounded in digital ethics, exemplifies how faith-based institutions can lead global conversations on responsible innovation. Through continual refinement of digital governance guided by Islamic managerial values, education can remain both transformative and morally steadfast.

CONCLUSION

The findings of this study underscore that the integration of Islamic managerial values into digital governance represents not only a theoretical reconciliation between ethics and technology but a structural transformation in how Islamic educational institutions conceive, implement, and sustain management systems. Empirical evidence from official reports and institutional cases reveals that while the digital readiness of students across Islamic schools in Indonesia and other Muslim-majority contexts is remarkably high, institutional digital infrastructure and managerial frameworks remain inconsistent and underdeveloped. This imbalance indicates that digital transformation within Islamic education cannot be pursued solely as a technological initiative but must be grounded in a moral economy of governance, where justice ('adl), trust (amanah), consultation (shura), and excellence (itqan) form the normative basis for administrative design and decision-making. The synthesis of these ethical principles with digital platforms strengthens institutional accountability, enhances transparency, and reinforces the educational mission as both a moral and intellectual enterprise. Consequently, the research establishes that ethical digital governance is not an auxiliary complement to efficiency but an indispensable condition for sustainable institutional resilience in an era of rapid technological evolution.

The proposed global framework offers a comprehensive model adaptable across diverse educational and cultural contexts, uniting value codification, technological architecture, human-capital capability, and sustainability measurement within a single integrated system. This model ensures that Islamic managerial ethics are embedded at every level of digital transformation from system design and data management to leadership practice and stakeholder engagement producing governance that is both technologically sophisticated and morally coherent. The study contributes significantly to theoretical discourse by expanding Islamic management literature into the domain of digital governance, while also addressing policy imperatives related to equity, transparency, and ethical accountability. It demonstrates that digital governance, when guided by Islamic ethical imperatives, not only enhances operational efficiency but revitalizes the moral purpose of education. As educational systems worldwide confront the challenges of digitalization and sustainability, the integration of Islamic managerial values

into governance frameworks stands as an exemplary paradigm for achieving ethical innovation and sustainable institutional development.

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