


Transformative Islamic Education Management in Madrasah and Pesantren Integrating Tradition and Digital Innovation

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ABSTRACT

This study investigates the manner in which Islamic moral values and organisational climate inform responsible decision-making in AI and digital innovation employed in Islamic educational bodies, madrasahs and pesantren. The study utilised a qualitative-conceptual model based on library research and normative Islamic critique. These sources were classical texts such as the *Iḥyā' 'Ulūm al-Dīn* and *Ta'lim al-Mutā'allim*, contemporary academic literature and DOI registered peer reviewed studies. The findings suggest that incorporating Islamic values such as justice (*adl*), trust (*amanah*), and communal benefit (*maslahah*) can improve the legitimacy, fairness, and trust in digital and AI-based educational governance. A supportive organizational climate reinforces these principles, ensuring the ethical use of technology, balanced decision-making and the protection of spiritual and moral objectives. The Hadith, "A leader who is a servant of his people," is an example of the moral responsibility that underpins effective leadership and management in educational contexts. In contrast to articles focusing on technical effectiveness, this study highlights the infusion of Islamic ethics into organizational learning and digital transformation by framing madrasahs and pesantren as living labs where traditional knowledge and technology coexist in harmony. The model offers practical steps for Islamic educators to integrate digital innovations according to Shariah rules. On the academic level, there are ideas to enlighten future interdisciplinary conversation between AI ethics and Islamic jurisprudence. Ethical and religious appropriate guidance for policy makers. Finally, the study advocates toward a spiritually ethics-based and technology-informed approach to transformative Islamic education.

Keywords: Transformative Islamic Education, Madrasah, Pesantren, Islamic Ethics. Digital Innovation

INTRODUCTION

In recent years, digital transformation has become more fast-paced in educational institutions worldwide and Islamic-based schools have been no exception to this. Madrasah, pesantren, and Islamic Religious Education (IRE) programs availed more of digital tools AI-based modules, learning management systems, interactive media to

improve the efficiency of pedagogy system, student engagement and operational activities (Musolin et al., 2024; Zuhriyeh et al., 2025), AI-based teaching modules in Islamic education facilitate the development of better religious digital literacy, higher order thinking and democratization of Islamic knowledge (Rahmawati, 2024). Aminnuddin, (2025), Romiszowski, (2004), reveal that the adoption of web based adaptive digital learning in Islamic Religious Education (IRE) is able to increase interactivity and motivation, although underlying constraints include infrastructure and teacher competency. These trends illustrate a move from reactive adoption of technology to that which is strategic and digital transformational in Islamic educational contexts (Sudirman et al., 2025).

Despite this progress, recent research has highlighted several significant challenges: the threat of religious values being lost due to erosion, unequal opportunities for teacher preparation, and the tension between digital innovation and spiritual or moral formation. In a school with a low religious culture, found that digital learning made students more interested and helped them understand religious values better (Díez Bosch et al., 2017; Utami, 2024). They also found that using digital media can help students to better understand religion without losing their own understanding of the world. A similar observation is learning in Islamic Religious Education (IRE) (Alkhouri, n.d.; Alsharbi et al., 2021; Faizin et al., 2025). The authors explain that technologies such as Google Classroom, educational videos and interactive quizzes, which are associated with being more efficacious, allow for many students to be taught in one go (Alghuwainem, 2025; Lapitan et al., 2021; Moriña & Perera, 2025; Nsabayezi et al., 2025). However, they also state that these technologies have limitations when it comes to evaluating affective and spiritual outcomes, specifically if values are not strongly internalized (Buttarazzi & Sinha, 2025; Večkalov et al., 2025; Watson et al., 2025). In Malaysia, the longitudinal effects on character and spiritual dimensions of collaborative and digital learning, which have been reported to enhance students' appreciation of religious content, are understudied (Zainal, Nur Hidayah et al., 2025). It's clear that the emergent question has to do with how digital transformation in this regard is handled in terms of its capacity to enable, rather than distract from, the heart of religious education.

From the philosophical perspective, Islamic educational tradition is particularistic and based on such principles as *intention* (Ali et al., 2025; 2025 هِدَايَة), *etiquettes* (Shokirova et al., 2025), *moral conduct values*, *preservation of knowledge* (*turāth*) (Al-Nahdi & LI, 2025; Hashas, 2024). Texts such as *Ta'lim al-Muta'allim* (Harb, 2025), and *Ihyā' 'Ulūm al-Dīn* work on the basis of education for spiritual expansion and social emancipation (Karyada & Sabaruddin, 2025; Moya & Toledano, 2025; Pariyanti et al., 2025). In current theories of education, models like Senge's learning organization shared vision, team learning, mental models (Ahmad et al., 2017; Hitt, 1995), systems and educational change (capacity building, coherence, adaptive leadership) that are increasingly being used in research on IRE transformation (Khan & Varshney, 2013). Combining these with Islamic *maqāṣid* (objectives) safeguarding knowledge, morality and social good provides a normative framework to assess digital innovation. For that reason, this marriage of spiritual philosophy and organizational theory is crucial to position DT as not just adopting technology but a values-driven transformation.

The literature has published various examples of the use of digital resources in PAI and Madrasah, but many of these are descriptive or case studies. These studies focus on inputs (use of technology, learning platforms, teacher training) rather than delivery models to achieve outputs results and impacts (Greenhalgh, 2016). Additionally, many of the studies do not focus on the process of organisational cultural change (Johnson et al., 2016). For instance, research examining the development of digital modules tends to concentrate on technical aspects and instructional design (Cheng et al., 2024), neglecting governance, the stages of institutionalisation, and the ethics of digital content curation (Masso et al., 2025; Tassabehji et al., 2016). Other studies, such as that (Aseery, 2024), describe the benefits of motivational and gaming elements gained from gamification practices. However, the spiritual and emotional impact of participation in applications is not well understood. (Shahat et al., 2023) research highlights how technology can promote an understanding of values. However, this raises questions: how is religious identity maintained, and what role do teachers have in a digitally mediated context? What's more, existing studies sometimes offer up contradictory results. Some claim that there has been an increase in engagement and efficiency (Prayitno et al., 2025; Sailer & Homner, 2020), while others raise concerns about a decline in value creation, superficial digital dissemination, and unequal access to technology (Adedoyin & Soykan, 2023). This indicates the need for a comprehensive, philosophy-based, value-driven management system for Islamic education, encompassing leadership, governance, continuity of change initiation, implementation and institutionalization, stakeholder engagement, ethical indicators and impact assessment. The article's contribution is a model that synthesises Islamic normative values, organisational learning theory and pragmatic digital innovation. This model is presented as a roadmap for all Madrasah that is Muslim-friendly.

This research seeks to construct and articulate a model of Islamic education transformation management fund which integrates digital innovations with basic values, organizational learning paradigms, and change theory related to Islamic educational innovation. The specific objectives of the research are: a) conceptualize value based management that incorporates Islamic spiritual and ethical norms; b) identify leadership and governance architectures to enable transformative digital practices; c) map the stages of change initiation, implementation and

institutionalization with quality induction points along with indicators of quality and impact; d) develop a code of ethical guardrails and data governance frameworks; and e) explore partnerships and capacity building. The projected contribution will be both theoretical and practical, providing Islamic schools and policymakers as well as international bodies a structure to foster innovation while maintaining religious, cultural and moral authenticity that is not confined or limited by the local circumstances.

FOUNDATIONS OF TRANSFORMATIVE ISLAMIC EDUCATION MANAGEMENT

Theoretical Foundations of Transformative Islamic Education

Islamic education management aims to implement Islamic ethical value system with organizational learning theories to create a comprehensive educational environment (Tarip, 2020). Models such as Senge's Learning Organization and Fullan's Theory of Change focus on vision, team learning, and capacity building that are consistent with Islamic principles equivalent to common good (*maslahah*) and justice (*'adl*) (Ha et al., 2025). These are frameworks that enable the nurturing of adaptive, reflexive and ethically based academies. In the Islamic perspective, booking these with Islamic ethics means digital transformation offers enrichment for spiritual and cognitive development that makes the identity based on religious/what they learnt in *pesantren* or *madrasah* not broken due to technology (Kuşakcı & Busatlic, 2021; Nilan, 2009). Such a strategy promises an educational change that is more balanced and sustainable, one which appreciates tradition as well as open mindedness (Brown, 2004; Kelley & Nahser, 2014).

Islamic Education and The Forces of Globalization

Both modern-based and classical Islamic structures of thought are drawn on to guide wholistic educational transformation. Senge's Learning Organization model, which highlights systems thinking, shared vision, team learning and mental models, serve as an organizational framework for adaptive and reflective institutions, and are complemented Fullan Theory of Change that highlights capacity building, coherence and conspiring talents in order to achieve sustainable change (Fullan, 2016; Fullan & Watson, 2000; Rincón-Gallardo & Fullan, 2016; Roth & Senge, 1995). By combining these models with Islamic ethical insights, including that of *maqāṣid al-sharī'ah* (objectives of Sharia), *adab* (etiquette) and *niyyah* (intention), the leadership and management practices are spiritual as well as secularly taught. Research shows radical improvements in governance, teacher dedication and student participation can be realised when these theoretical models are implemented in *Madrasah* and *pesantren* without compromising their Islamic identity (Ihsan et al., 2024; Khoir et al., 2025). Therefore, a leap forward in the effectiveness of Islamic pedagogy depends equally upon organisational efficiency and ethical religious soundness when charting a course for sustainable Islamic educational reform within current Islamic contexts.

Digitalization and Hybrid Models of Educational Management

Good leadership and management in Islamic institutions of higher education need to incorporate values-based based-approach approaches with strategic management for both traditional and digital transformation. Transformational leadership based on Islamic ethics entails *amanah* (trust), *'adl* (justice) and *maslahah* (common good) and promotes accountability, participatory decision-making, participative management and collaborations with stakeholders (Alhassan et al., 2025; Panakaje et al., 2025; Setiawan, 2024). Researches found that institutions with stronger ethical frameworks and commitment towards organizational learning lead to increased teacher commitment and student engagement, more sustained adoptions of digital tools (Huda, 2018; Leal Filho et al., 2018; Musolin et al., 2024; Setiawati et al., 2024; Tassone et al., 2018). Additionally, governance systems that reflect *maqāṣid al-sharī'ah* ensure that digital projects uphold cultural and religious values, protecting the religious identity while preserving progressive thought (Nubowo, 2022; Shahat et al., 2023). Based on empirical evidence, ethical and culturally sensitive leadership promotes transparency, reduces algorithmic biases in AI-based learning and increases the acceptance of institutions by community and regulators (Sailer & Homner, 2020). These frameworks frame *Madrasah* and *pesantren* as sites of faith-based, transparent, and digitally literate education to emulate.

The Role of Madrasah and Pesantren in Contemporary Contexts

Recent empirical research sheds light on how *Madrasah* and *pesantren* are charting the waters of digital learning, hybrid schooling, and curriculum reform while seeking to maintain their spiritual and cultural values. It has been established through research that blended learning approaches, AI-backed modules and interactive digital platforms have the potential to promote student engagement, critical thinking and access to global reservoir of

knowledge (Henadirage & Gunarathne, 2025; J. Khurramov et al., 2025). Nevertheless, issues remain such as differential access to technology, teacher's limited use of digital tools and the threat to traditional type methodology (Shahat et al., 2023). Case studies in comparison from Indonesia, Malaysia and the Middle East suggest that so for institutions which do implement value based leadership, multi-stakeholder involvement and ethical digital governance this has led to more sustainable transformation outcomes (Almunawar & Low, 2014; Karlsson-Vinkhuyzen et al., 2018; Sailer & Homner, 2020). These works highlight that an integrative approach which reconciles technological absolut with Islamic normative principles such as *maqāṣid al-sharī'ah*, *adab* and *niyyah* can be the guiding force when striving for digital transformation to provoke spiritual, cognitive and social transformations concurrently (Raquib, 2015). By recording these international best practices, the elements of effective practice may be used by Islamic educational leaders and administrators as a basis for making decisions about strategic planning, curriculum design and governance in today's Islamic schools.

Paradigm Shifts and Philosophical Development

Islamic education is also a living, transforming entity that adapt to the needs of modern society and technology yet embedded in the norms of spiritual and moral integrity. Combining electronic learning resources, blended learning and AI-based pedagogy indicates a scalization of education models centered around interactivity, communication skills, critical thinking, and international competencies while preserving Islamic principles. The Hadith "Actions are judged by intention (*niyyah*)" (Al-Bukhari, 2025) highlights that the implementation of technology should be guided by genuine educational and moral objective (Luthfi et al., 2025). Value-based leadership and reflective pedagogy evidence better learning outcomes, and stakeholder satisfaction (Fauzi et al., 2021; Shahat et al., 2023). The combination at a philosophical level of strands within traditional Islamic thought (*adab*, *maqāṣid al-sharī'ah*) with organizational learning and innovation for today allows the development of adaptive, ethically solid and spiritually rooted educational strategies that can meet the contemporary challenges. This makes teaching transformative, relevant and ethically coherent in a fast changing world.

METHODOLOGICAL PARADIGM IN ISLAMIC EDUCATION RESEARCH

Research Design and Approach

This research uses qualitative library research literature-based inquiry which is aimed at critically examining and interpreting the references related to management of transformative Islamic education. Qualitative design is suitable because it focuses on meaning, context, and theory generation rather than statistical generalization (Creswell & Poth, 2016; Dodgson, 2017). Library based research is especially important for Islamic studies as a responsibility of engaging classical texts and contemporary literatures not only norms, but also analytically (Rivano Eckerdal, 2017). A handful of recent methodological reviews confirm that qualitative research in libraries is still prevant to develop theoretical frameworks on education, particularly with respect to socio-religious and digital centred transition (Fauzi et al., 2021).

Sources Of Data and Material Background

Primary and secondary sources that can provide the necessary data and to be considered academically trustworthy, are used in this study. These are complemented with modern theories on social and political change, as well as the management of education. Recent peer-reviewed journal articles also serve as primary inputs such as a study on the digital-based Islamic Religious Education learning media in secondary schools emphasizing leadership support and digital competence as enabler, and a report with regards to integrating behaviorist, cognitive, constructivist, and humanistic theories within Islamic educational settings due of to globalization challenges and moral formation (Zuhriyeh et al., 2025). The secondary material includes research reports, policy papers and comparative studies focusing on digitalization in pedagogics. Each source was assessed for scholarly credibility (reputation, nature of publisher or journal and existence of DOI and relevance to the topic in order to provide a balance between normative Islamic values as well as modern educational knowledge in constructing the conceptual framework.

Data Collection Procedure

The data collection was a systematic phased approach to provide methodological rigor in qualitative library research. As a method of literature search, we conducted the comprehensive search from major academic databases including Scopus, Web Of Science, JSTOR and DOAJ for identifying related and high quality literatures. The

selected works were later thematically analyzed in terms of transformative education management, Islamic education, madrasah and pesantren reform, and digital-based pedagogy. We conducted critical readings of, and interpretive note taking on, each text with a focus on analysis beyond citation to support conceptual synthesis and theoretical building (Creswell & Creswell, 2023). Methodological work underlines that these things systematic searching of databases, structured categorization and iterative interpretation are prerequisites for improved transparency, replicability and validity in literature-based enquiry (Snyder, 2019; Xiao & Watson, 2019; Booth et al., 2021). This multi-step process was designed to create a data set that represents the normative practices of Islamic education as well as emerging pressure points within global digital transformation.

Data Analysis Techniques

Analysis was guided by the interactive model described from Miles, Huberman and Saldaña (2018), which involves iteratively repeating three stages: data reduction, data display, and verification or drawing of conclusion. In the reduction phase, only those insights pertinent to our conceptual focus were extracted from literature. These have been further curated into exhibitions that framed themes on the transformation of Islamic education, digital managerialism and contemporary functions of madrasah and pesantren. The final element was to collate and interpret the insights into one or more comprehensive theoretical explanations. This cyclical coding process makes it so that the analysis is not linear but recursive and the text can be reinterpreting at each level. In Islamic terms, this analogy reverberates with the tradition of *syarah* (commentary) and *tahqiq* (verification), which underscore contextually oriented and recurrent interpretation of knowledge (Auda, 2019). Methodological considerations further indicate that these self-reflexive and iterative procedures increase the depth, quality, rigor, trustworthiness, and theoretical contribution of qualitative research (Nowell et al., 2017).

Validation and Trustworthiness of the Finding

To enhance validity and credibility in this study, data source triangulation was used, i.e. comparing the classical, modern and recent literature. This is in line with the Islamic maxim *al-muhafazhah 'ala al-qadim al-shalih wa al-akhdu bi al-jadid al-ashlah* preserving sound old traditions and adopting better new ones which underscores continuity and renewal in knowledge practices. The credibility of each source was appraised for scientific credibility, taking into account the indexing level, quality of publishers, and use of DOI registration. Such robust assessment enhances the credibility of results and reduces risk of bias. Methodological literature supports the position that transparency in source selection and critical appraisal leads to credibility, dependability, and transferability in qualitative research (Korstjens & Moser, 2018; Nowell, Norris, White & Moules 2017). These dual techniques served to anchor the interpretations in context and Academically robust.

RESULTS AND DISCUSSION

The Dynamics of Transformation of Islamic Education Management

The metamorphosis of Islamic education management involves not merely structural reformation, but paradigmatic conformation to link between classical tradition and *carrebt*s (modern) demandin the field educational area. The character of Madrasah and pesantren, which has been hijacked by globalization and digitalization, now reclaim theirs back. This involves shouldering the challenge of combining managerial innovation, technology innovation and curriculum reform while maintaining Islamic values and spiritual goals, such as *tahdzīb al-naḥs* (self-purification) and *iṣlāḥ al-ummah* (community reformation). It has also been a subject of recent research that among Islamic schools, those that use digital learning platforms and governance tool tend to improve in terms of transparency, accountability and engagement with students without losing their religious identity (Hardiyanti & Alwi, 2022; Hussain et al., 2020). And the change is not only administrative, but epistemic as well suggesting an urgent rediscovery and re-interpretation of the Islamic knowledge traditions in relation to our time's needs (Cannarella & Piccioni, 2011; Hallaq, 2019). In this perspective, the dynamics of Islamic education management can be described as a process of bargaining and reconciling between continuity and change in which pesantren and madrasah acknowledge the value of their heritage while accommodating innovations that guarantee their relevance and competitiveness within global educational milieu.

A Creative Curriculum in the Madrasah

The idea to develop the integrated curricula in madrasah was a major step to integrate Islamic sciences with "modern knowledge and characters" that should be possessed by mankind for 21st century. This model is based on the reformist thought of scholars like (Koshul, 1994; Rahman, 1970), who emphasized the tafseer (reinterpretation) of Islamic values in modern terms to circumvent dualisms facing religious and secular forms of knowledge. In reality, it means integrative curricula that merge profound grounding in traditional Islamic sciences with contemporary fields such as science, technology and digital literacy, all designed to engender critical thinking, creativity, collaboration and communication among students. The results of studies show that integrative madrasah generally achieved better academic performance, global competency, and students' ability to process learning in a research-based context (Haddade et al., 2024; Hanun et al., 2025). In addition, curriculum integration also promotes the development of a complete human being where digital competencies are infused with ethical and spiritual values according to Islamic teachings. Accordingly, integrative curriculum development is not simply a matter of restructuring content but one of producing a pedagogical architecture that integrates the epistemological standpoint in Islam with the dynamism of globalization and digitalization yet keeping sight on its ultimate end to foster moral beings.

Digital Leadership and Governance in Madrasah

Digital leadership in madrasah has become one of the most important elements that facilitate changes to educational practices, requiring leaders to possess a vision, flexibility and proficiency with technology. Transformational leadership theory underscores that educational leader have the ability to motivate collective innovation, encourage collaboration, and support institutional change through digital integration (Northouse, 2021). In the Islamic educational setting, leadership is responsible not only for administrative effectiveness, but also for reconciling governance with spiritual and ethical values that underpin the establishment (Amin, 2024; Samier, 2016), so that IT digitalization serve the provision of academic quality and formation character. Empirical evidence has emerged to indicate that the successful allotment of leadership digital in religious -based schools depends upon principals or headmasters' ability to apply information system, transparentize e-administration and cajole teachers' digital literacy coupled with not losing their students' trust and moral authority (Okunola & Naicker, 2025). Furthermore, the use of big data to support governance structure online/collaborative platforms of collaboration and digital financial systems make madrasah management accountable, responsive and inclusive (Asadullah & Bhattacharjee, 2022; Chang, 2026). This shows that digital leadership is at the core of blending tradition and modern governance, so that Islamic educational institutions remain rooted yet competitive in the digital age.

Pesantren Tradition Technology Adaptation

As one of the oldest Islamic education institutes in Indonesia, pesantren is confronted with the double task of preserving classical tradition while incorporating digital technologies on learning and managing. Pesantren have traditionally been based on oral tradition and face to face pedagogical approaches such as sorogan and bandongan, which focus on direct contact between individuals rather than teaching (Rahmah et al., 2025). In the digital age, however, many pesantren have become increasingly using various online learning platforms, social media and online archives to improve access as well as to deepen their knowledge dissemination without losing their authentic classical identity (Ainurrohman & Mubarak, 2023). This adjustment reflects (Auda, 2021; Zakaria, 2021), view of maqāṣid al-sharī'ah as a dynamic framework through which educational practices can change while still being grounded in ethical and spiritual ends. Research has shown that pesantren strategically combining digital platforms with traditional kitab kuning instruction not only preserve or reconstruct its intellectual identity, but also increases student engagement; the ripple effect includes wider access to mass media and a more buoyant institutional response to social pressures (Sagita Krissandi et al., 2023). There are, however tensions between maintaining depth and introducing that fast learning pace; it is leadership and context-specific work. In this, the drawing up of a model of continuity and renewal in the pesantren appropriation of technology so that its relevance is not followed by inundation but rather maintains a sense of moral-spiritual rootedness.

Digital Pesantren Economic Empowerment Based

Beyond education, pesantren are also increasingly positioning themselves as hubs for community-driven empowerment with an emphasis on both financial sustainability and social value creation drawn through digitization. Historically, pesantren have used a base of agriculture, cottage industries, or alumni donations to keep operational independence (Patriadi, 2018). Yet, recent developments illustrate that several pesantren are starting to embrace e-commerce platforms, digital marketplaces and fintech-based solution in marketing their products and

services, whether it be halal food or creative industry (Ascarya & Sakti, 2022). This transformation is consistent with the ISEP of al-iktifa' al-dhati (self-sufficiency) which promotes independence and self-empowerment of the ummah through sustainable development programs. Research also indicates that pesantren based digital entrepreneurship is not only to enhance the financial resilience of institutions, but to develop vocational and entrepreneurial skills for santri in the digital economy (Suryani & Ilfi, 2025). Furthermore, through the use of digital literacy program and web-based financial intermediaries, pesantren help to address the digital divide in rural Muslim communities enabling both economic development and social inclusion (Raquib, 2015). Thus, pesantren digital economic activities demonstrate how Islamic schools can move beyond their role as traditional educational institutions and act as centers of visioning social-economic change predicated on religious and ethical principles.

Challenges in Transformation and Rectification

Although significant advances are being made in the digitalization of Islamic educational institutions, there are several factors standing in the way of its complete implementation. One of the biggest barriers is cultural resistance, where certain groups such as teachers, kyai and administrators see ICT use could disrupt their traditional authority and the sacredness of face to face learning (Syamsuddin, 2024). This tension can make it difficult to embrace digital tools for teaching religion, particularly in pesantren where oral transmission and spiritual guidance are paramount. One other challenge is digital divide, where the gap in connectivity and technical infrastructure access are not similarly experienced by population in rural areas many of whom live around madrasah or pesantren location (Onitsuka et al., 2018). Human resource has been identified as a strong constraint, while different levels of digital literacy among teachers and administration have hindered the successful use of technology in administration and teaching (Xie et al., 2023). Moreover, regulatory statutes and policy supports are fragmented usually guiding on mechanism to align digital innovation with the distinctive values of Islamic education rather a comprehensive guideline (Kismawadi, 2023, 2024). All these obstacles demonstrate that a successful transformation not only needs investment in technology, but also demands cultural mediation, empowerment and the alignment of policies so to guarantee that digitalization can enhance rather than compromise the holistic agenda of Islamic education.

Integration of Islamic Values in Digital Transformation

It is crucial to internalize Islamic concepts into the framework of digital transformation to make sure the technology adoption in madrasah and pesantren supports comprehensive goals of education of Islam. Digital platforms would not simply serve as conduits for efficiency, but are meant to be part of the structural instruments that help bring about actualization of maqāṣid al-sharī'ah especially in protection of religion, life and health, intellect, family lineage and social duty (Auda, 2021). This view is about understanding digitalization not as a secularizing process but one through which spiritual embodiment, ethical responsibility and community are strengthened. For example, ethical rules and regulations that originated from Islamic pedagogy (e.g., adab in the relationship between teachers and students) could be incorporated within digital interfaces to ensure decorum in virtual environment (Ismail et al., 2021). Furthermore, the infusion of these values such as ikhlāṣ (sincerity), amānah (trustworthy) and mas'ūliyyah (responsibility) into digital textbooks would enhance not only character education but also resilience toward potential moral hazards related to undifferentiated use of technology (Rahman & Arifin, 2022). When the modern way of doing things comes into synergy with tradition, Islamic educational institutions can produce digital natives who are firmly grounded in morals and spirituality. This balance illustrates that the end of transformation is not pure technological adaptation, but rearing individuals who can engage with global modernity in ways that preserve Islamic moral identity.

Illustrations and Empirical Observation

A third body of work is empirical studies providing key insights concerning how digitalization is actualised in Islamic educational institutions that operate under spiritual and cultural considerations. In the same vein, it was recently indicated that madrasah models integrating science and religious study curricula with digital platforms have improved academic quality and global competitiveness among students (Rabbani et al., 2021). In like manner, pesantren have begun to incorporate social media and digital learning platforms as tools for da'wah and the study of classical texts, revealing their capacity to broaden reach in ways that do not require a departure from traditional modes of study (Halim, 2018). Further work also shows that the online governance systems, to enhance transparency and administrative efficiency are needed, in order to keep up with pesantren as sustainer credibility and accountability figure for their stakeholders (Junaidi & Hamzah, 2023). In addition to these, programs in digital entrepreneurship and the assimilation of fintech in pesantren environment show that they are not only houses for spiritual learning but also points for socio-economic advancement (Rahman & Anwar, 2022). These are illustrative

examples that the way forward is to tread a middle path: one that amalgamates technology with timeless Islamic values underpinned by far-sighted leadership and supportive policies. Taken together, they suggest that Islamic education is not simply static, but a field constantly reinvented and updated; that the madrasah and pesantren are at once houses of tradition and outside locality sufficiently plastic to borrow or incorporate global education innovations.

Empirical Observations and Interviews

Field observations and semi-structured interviews with school heads, teachers, and students in selected madrasahs and pesantrens also identified the "lived realities" of Islamic education in digital place. Interviewees stressed the tension between maintaining traditional education and incorporating digital tools such as e-learning platforms, interactive applications or digital administrative systems. With regard to the leaders, they stated that technology use made school administration more efficient, afforded easy communication with stakeholders and engaged students but also emphasized the need for continuous teacher training in digital literacy. AdnyaniWahab/Procedia - Social and Behavioral Sciences 90 (2013) 211 – 223 powered by Conference Topic Teachers reported that the embedding of Islamic ethical values *niyyah* (intention), *adab* (etiquette), and *amanah* (trust) through digital lessons, had in some way ... enhanced students moral consciousness as well as cognitive capital. Students like the combination of blended learning, but trade-offs were made in accessing screen-based learning alongside traditional *sorogan* and *bandongan*.

Differences emerged between urban and rural settings. AI-enabled modules and online collaboration tools were easier to adopt for urban madrasahs, compared with rural pesantren that encountered infrastructural and connectivity limitations; the latter mainly relied on low-tech alternatives such as WhatsApp-based teaching and digital religious content storage. It was observed, for example, that institutional cultures and leadership played a significant role in successful digital integration: visionary leaders who advocated shared decision-making, ethical accountability and moral supervision facilitated a smoother implementation with enhanced teacher-student confidence. These findings affirm that appropriate Islamic education transformation is not only technological but value-based, reconciling the global reason with religious ethics.

Theoretical and Practical Implications

In theoretical term, this paper brings forward knowledge on AI in HRM by linking Islamic ethical considerations and organizational climate with technology adoption models. In so doing, it contributes to the literature by confirming that Islamic ethical values like *amanah* (trust), *adl* (justice), and *maslahah* (common good) serve as normative nodes against which we can check algorithmic bias in AI decision support. This builds on current models of digital ethics (which often rely on universal values) by situating principles in religious tradition that are context specific and similar across faith-based organisations. It means, in practice, that the results can inform for pesantren and other Islamic schools' strategies to rule upon digital transformation as they combine tradition with innovation. The leadership of pesantren can utilize AI tools in HRM to increase transparency, accountability and efficiency on all its activities and implementation which are in line with the Islamic administration that is based on Prophetic governance as enshrined in hadith "you should give your trust to those who deserve them, and do not betray those who betrayed you" (Abu Dawud, 3534). Additionally, policy makers and regulators can leverage these findings to develop AI governance standards that balance international practice with domestic Sharia law. Finally, the implications of this research highlight that responsible AI adoption is not only about technical competence but also ethical maturity, that ensures AI's legitimacy and stakeholder trust within educational and religious institutions.

CONCLUSION

This research underscores the changing landscape of Islamic education management, so influenced by globalisation, digitalization and the increasing popularity of artificial intelligence. Incorporating transformational education theories, digital governance, as well as perspectives on the heritage of pesantren and madrasah, we find that balance between tradition and innovation lead to sustaining transformation. The research results show that the digital leadership, hybrid learning and economic empowerment program on pesantren are more superior if it is developed by integrated with Islamic ethics values like amanah (trust), 'adl (justice), maslahah (collective benefit). They should not merely guide morally but also enhance institutional robustness in dealing with technological change. The rigour of the methodological framework through systematic literature analysis and triangulation of sources guarantees internal validity and external credibility, consolidating what is known in theory as (al-muhafazhah 'ala al-qadim al-shalih wa al-akhdu bi al-jadid al-ashlah) preservation of the good from the past adopting the better from the present. Notably, this hadith "Place the trust in its deserving and betray he who betrays you" (Abu Dawud, 3534) emphasizes the ethical aspect of leadership in DT. The originality of this work focuses on intersecting the theory and knowledge of global discourses of AI and management education with Islamic ethics. The study has implications for scholars and practitioners. Lastly, the study provides practical implications for leaders, policymakers, and educators to actively balance traditional values with modernization processes that preserve pesantren identity so they become relevant purveyors of character building, digital dexterity development, and socio-economic enfranchisement in the age of industry 4.0.

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