



## **Digital Leadership and Quality Culture in Islamic Educational Institutions: A Multi-Level Empirical Study**

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### **Abstract**

This study investigates the role of digital leadership in strengthening quality culture across Islamic educational institutions at various levels, from early childhood to higher education. Employing a qualitative multi-site case study approach, this research collected data through interviews, observations, and document analysis to explore how technological adoption and value-based practices shape institutional effectiveness. The findings reveal that digital leadership significantly enhances decision-making, coordination, instructional innovation, and the use of data-driven tools for quality monitoring. Leaders actively utilize digital platforms to support participatory, evidence-based governance and quality monitoring. The integration of Islamic values, including trustworthiness, discipline, and ethical digital conduct, further reinforces the consistency and depth of quality culture implementation, creating a leadership model that is both technologically adaptive and morally grounded. Higher education and senior secondary institutions show the highest level of maturity in integrating digital leadership with quality culture. In contrast, early childhood and elementary levels exhibit foundational digital adoption supported by strong value formation. The study concludes that successful digital transformation in Islamic education requires visionary leaders who can integrate technological competence, continuous quality improvement, and spiritual values. Practical implications highlight the need for structured digital capacity-building, leadership training, and strategic policy support. Future research is recommended to examine broader comparative contexts and the potential scalability of the proposed model.

**Keywords:** data-driven decision making, digital leadership, educational transformation, Islamic education, quality culture

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## A. Introduction

The development of digital technology in the 21<sup>st</sup> century has brought fundamental changes in the paradigm of leadership and management of educational institutions, including Islamic educational institutions that include under the auspices of the Ministry of Religion of the Republic of Indonesia, both in basic education such as Rhaudhatul Athfal (RA) and Madrasah Ibtidaiyah (MI), secondary education, namely Madrasah Tsanawiyah (MTs), Madrasah Aliyah (MA), and Islamic religious higher education. Digital transformation does not just present new technological tools, but demands changes in mindset, leadership style, and organizational culture. In this context, digital leadership is a strategic instrument that determines the ability of Islamic educational institutions to adapt and maintain their relevance in the digital era. Islamic education leaders are now faced with the challenge of not only mastering technology but also ensuring that the digital transformation process aligns with ethical values and Islamic principles. This change requires integrating managerial skills, transformational leadership, and a quality culture that is adaptive to modern innovation and technology. Thus, digital leadership in Islamic education cannot be understood simply as a technological skill, but as a comprehensive approach that guides policy direction, organizational behavior, and strengthening quality culture at all levels of Islamic educational institutions (Muhith et al., 2023; Radjak et al., 2024; Rahmanitabar et al., 2023).

The context of Islamic educational institutions underscores the growing urgency to integrate technology into educational governance. Leaders in these institutions are expected to innovate in traditional educational practices by leveraging digital platforms to support learning and institutional management. Research shows that the millennial generation has a significant contribution to accelerating this digitalization process, because they are more adaptive to technology and can encourage communication transformation and innovation in the Islamic education system (Muhith et al., 2023). In line with that, Islamic educational institutions are encouraged to build digital systems and platforms that can strengthen the quality of educational services to remain relevant to the needs of modern society (Radjak et al., 2024; Rahmanitabar et al., 2023). Digital leadership in this context focuses not only on efficiency but also on transforming educational values and practices to align with a holistic, benefit-oriented Islamic vision. This becomes even more important when Islamic educational institutions have to compete globally, a competition that demands quality, innovation, and accountability.

In addition to the technological aspect, digital leadership in Islamic education has a very significant ethical dimension. Leaders of Islamic educational institutions have a moral responsibility to ensure that any form of technological adoption does not deviate from Islamic values. Ethical and moral values serve as a frame of reference for directing digital policies to avoid dehumanization, excessive commercialization, or unequal access among students. Astra et al. (2024) emphasize the importance of an ethical framework in digital leadership to ensure that the process of technological transformation remains within the corridor of noble spiritual and human values. Thus, digital leadership in Islamic educational institutions demands a balance between technological innovation and ethical responsibility. Leaders who adhere to Islamic ethical values can create an educational atmosphere that is not only adaptive to the changing times but also maintains the spiritual integrity of educational institutions. From this perspective, digital transformation in Islamic educational institutions is part of efforts to strengthen moral values, expand access to knowledge,

and sustainably improve the quality of the learning process and educational management.

The dimension of leadership style has also undergone a significant transformation in the digital context. Authoritarian, top-down leadership is increasingly being abandoned and replaced by a democratic, transformational leadership style that emphasizes collaboration, participation, and the empowerment of all components of educational institutions. Subaidi et al. (2024) and Syamsuddin & Maunah (2020) emphasize that Islamic education leaders who adopt a transformational leadership style can foster a participatory climate, build motivation, and strengthen the involvement of lecturers, teachers, and students in the digital transformation process. With collaborative leadership, Islamic educational institutions not only become places for the transmission of knowledge but also active learning communities that reflect social and technological changes. Digital leadership in this case facilitates the transition to an adaptive, transparent, and collective-spirited educational governance. This is in line with the spirit of Islam, which emphasizes *shura* (deliberation), *ukhuwah* (brotherhood), and *amanah* (responsibility) as fundamental values in the management of educational institutions.

However, the success of digital leadership in strengthening the quality culture does not depend solely on leadership style, but also on an education management system that can adapt to the demands of the digital era. Curriculum reform, improving human resource competencies, and implementing a digital-based management system are key factors in ensuring the transformation's effectiveness. Dacholfany et al. (2024) and Suprianto & Sari (2023) show that future-oriented curriculum reform must be accompanied by strengthening leadership capacity and quality management to ensure that Islamic educational institutions can produce academically and spiritually competent graduates. This is where the close relationship between digital leadership and quality culture takes shape: they support each other in building an innovative and sustainable education system. Digital leadership encourages efficiency and creativity in the learning and administrative processes. At the same time, a quality culture ensures that all innovations take place within a corridor of values, standards, and procedures that uphold the quality of education as a whole.

The concept of quality culture (*quality culture*) in educational institutions plays an important role in shaping the excellence and credibility of the institution. A culture of quality not only includes formal quality assurance standards but also reflects the shared values, commitment, and participation of the entire academic community towards continuous improvement. Research by Amtu et al. (2021) emphasize that leadership has a significant influence on the effectiveness of the internal quality assurance system in higher education, with a supportive organizational culture accounting for 55.1% of the system's success in implementation. In the context of Islamic educational institutions, a culture of quality must be built through the integration of professional values and spiritual values, so that quality is not only understood as an administrative achievement, but also as a manifestation of moral mandate and social responsibility. In line with that, Sohel-Uz-Zaman et al. (2020) emphasize that the shift from a traditional academic culture to a dynamic quality culture is essential for educational institutions to apply the principles of *Total Quality Management* (TQM), which emphasizes continuous improvement. This view is reinforced by Droissart and Tuytens (2024) which emphasize the importance of collaboration between lecturers and educators in building a quality culture that is responsive to society's demands and the times' development.

In addition, globally, the paradigm shift in the quality of education is influenced by international policies such as the Bologna Process, which emphasizes collaboration, transparency, and accountability in higher education (Gruzina et al., 2020). Furthermore, Gruzina et al. (2020) show that this process has shifted the mindset of educational leaders towards a more open, collaborative, quality-oriented culture. In the context of Islamic educational institutions in Indonesia, this spirit can be applied by combining the principles of modern accountability with Islamic values that are oriented towards *ihsan* (moral and professional excellence). Such a culture of quality not only enhances the competitiveness of institutions but also strengthens public trust and reputation in Islamic educational institutions. Sukardi et al. (2024) emphasize that quality culture shapes responsible and skilled individuals, while Kartini et al. (2023) show that the synergy between structural and managerial dimensions of quality culture directly contributes to student satisfaction and institutional effectiveness. Thus, strengthening the quality culture is the leading indicator of the success of digital leadership in transforming Islamic educational institutions towards sustainable standards of excellence.

However, existing studies on digital leadership in Islamic educational institutions have predominantly emphasized technological adoption or managerial efficiency, often examining leadership practices at a single institutional level (Muhith et al., 2023; Rahmanitabar et al., 2023). In contrast, studies on quality culture have generally focused on quality assurance systems and organizational commitment without explicitly linking them to leadership dynamics in the digital era (Amtu et al., 2021; Md. Sohel-Uz-Zaman et al., 2020). Consequently, empirical research that explains how digital leadership styles contribute to the formation and strengthening of quality culture across different levels of Islamic educational institutions, from early childhood education to higher education, remains limited. Given that digital transformation in Islamic education is uneven and shaped by differences in organizational structure, institutional maturity, and value orientation across levels, a contextual and multi-level analysis is required. This study addresses this gap by empirically examining how digital leadership strengthens quality culture through the integration of ethical values, collective participation, and technology-based innovation within Islamic educational institutions.

This research is highly novel and original in two main aspects. First, this study offers a conceptual integration of digital leadership and quality culture within a comprehensive empirical analysis framework across various levels of Islamic educational institutions. Second, this study emphasizes the dimensions of Islamic ethics and spirituality in the process of digital transformation. This aspect has not been examined in depth in the study of digital leadership in education. By combining ethical values, collective participation, and quality management principles, this research is expected to produce a conceptual model that illustrates the synergy between digital leadership and quality culture in strengthening institutional quality. This approach also has the potential to enrich Islamic education leadership theory with a new perspective that places digital transformation not only as a technological tool, but as a value-based leadership strategy oriented towards improving the quality and sustainability of Islamic education.

Based on the description above, this study aims to empirically analyze how digital leadership strengthens the quality culture in Islamic educational institutions at the basic, intermediate, and tertiary levels. The focus of the research is to understand leadership styles, digital management strategies, and the dynamics of

building a quality culture within institutions grounded in Islamic values. The formulation of this research problem is: How does digital leadership strengthen the culture of quality in Islamic educational institutions in the era of digital transformation? This research is expected to make a theoretical contribution to the development of Islamic education management science and provide practical implications for leaders of Islamic educational institutions in managing digital transformation ethically, effectively, and sustainably.

## **B. Method**

This study used a multi-site qualitative approach to describe and analyze digital leadership practices in strengthening quality culture in five types of Islamic educational institutions, namely Raudhatul Athfal, Madrasah Ibtidaiyah, Madrasah Tsanawiyah, Madrasah Aliyah, and Islamic Religious Colleges. The selection of research sites was carried out *purposively* in East Kalimantan Province, considering the vertical representation of Islamic education levels from primary to higher education, as well as different managerial characteristics and levels of digitalization across educational units. Each institution is selected based on a minimum B accreditation, active involvement in the digitalization of education programs, and the implementation of an ongoing internal quality assurance system. East Kalimantan was chosen because it has a complete Islamic education ecosystem, ranging from elementary institutions to universities, with a diverse level of digital adaptation and quality culture. This context allows researchers to obtain a holistic picture and conduct comparative analysis of the dynamics of digital leadership and the strengthening of quality culture across Islamic institutional contexts.

The study involved five key informants: the head of Raudhatul Athfal (RA), the head of Madrasah Ibtidaiyah (MI), the head of Madrasah Tsanawiyah (MTs), the head of Madrasah Aliyah (MA), and a dean from an Islamic Religious Higher Education institution (PTKIN). These informants were selected because they hold strategic leadership positions and are directly responsible for decision-making related to digital leadership implementation and quality culture development at their respective institutional levels. This composition enabled an in-depth, cross-level understanding of how digital leadership practices and quality culture are enacted across different stages of Islamic education. Data collection was conducted through in-depth interviews, participatory observations, and documentation of quality policies, digitization systems, and leadership practices in each institution. The researcher served as the primary instrument, supported by interview guidelines grounded in two theoretical foundations: Transformational Leadership theory (Bass & Avolio) and Total Quality Management theory (Deming). To ensure rigor, the researcher maintained reflexivity through continuous triangulation and cross-site comparison, minimizing subjective bias in data interpretation.

Data analysis was carried out using the Miles and Huberman interactive model, covering three main stages: data condensation, data presentation, and conclusion drawing and verification (Miles et al., 2020). All data were analyzed simultaneously, from collection to final verification, to identify the pattern of the relationship between digital leadership practices and the formation of a quality culture in each institution. To ensure the validity of the data, this study applied source and technique triangulation, which involves comparing results from interviews, observations, and documentation across respondents and sites to ensure consistency and credibility of the findings.

The selection of Islamic educational institutions from RA to Higher Education is based on the view that the whole is an Islamic education ecosystem that forms a continuous chain in the development of quality and spiritual values. Thus, this variation in institutional context serves as a means to test the adaptability of digital leadership across various Islamic educational organizational structures at different levels of complexity.

**Table 1. Key Aspects, Indicators, and Research Theories**

Key Aspects	Research Indicators	Supporting Theories
Digital Leadership	<ol style="list-style-type: none"> <li>1. Utilization of technology in decision-making</li> <li>2. Transformational capabilities in driving digital innovation</li> <li>3. Digital vision and strategic direction of the institution</li> </ol>	<i>Transformational Leadership Theory</i> (Bass & Avolio, 1994)
The Quality Culture of Islamic Education	<ol style="list-style-type: none"> <li>1. Commitment to continuous improvement</li> <li>2. Involvement of all institutional components in the quality cycle</li> <li>3. Integration of Islamic values in the institution's quality system</li> </ol>	<i>Total Quality Management Theory</i> (Deming, 1986)
Integration of Digital Leadership and Quality Culture	<ol style="list-style-type: none"> <li>1. Use of digital systems for quality monitoring</li> <li>2. Synergy between technological innovation and institutional spiritual values</li> <li>3. Digital data-driven participatory leadership</li> </ol>	Synthesis of Bass & Avolio and Deming in the context of Islamic education

## C. Findings

### 1. Digital Leadership in Islamic Educational Institutions

The results show that digital leadership has been implemented across all Islamic educational institutions, although the level of implementation varies between levels. Institutional leaders actively use digital technology to support decision-making processes, internal coordination, and learning innovation. The use of Google Forms, WhatsApp Groups, e-learning, and SIM was the most dominant pattern across all research sites.

**Table 2. Digital Leadership Findings Summary**

Code	Indicator	Summary of Findings (Analysis)	Data Source	Synthesis of Findings
DL1	Utilization of technology for decision-making	Digital platforms (Google Forms, SIM, WhatsApp, e-learning) are consistently used to formulate and decide on institutional policies.	Observations, Interviews, Documentation	Strong and even implementation at all levels.
DL2	Digital innovation &	Teachers are empowered through digital training, the use of learning applications,	Observations, Interviews	The most active innovation is in

	teacher/staff empowerment	and participation in ICT-based innovation activities.		MTs, MA, and PTKI.
<b>DL3</b>	Digital vision alignment	The digital vision is understood by the academic community and is contained in official documents at the MA and PTKI; RA and MI tend to convey informally.	Interviews, Documentation	The coherence of digital vision has increased at the upper-middle level.

Beyond the general consistency shown in Table 2, digital leadership practices demonstrate varying degrees of intensity across educational levels. Leadership at the RA and MI levels tends to emphasize interpersonal communication and direct supervision. At the same time, MTs, MA, and PTKIN exhibit stronger integration of digital systems for coordination, monitoring, and decision-making. This variation reflects differences in institutional complexity and leadership demands across educational stages. Among the digital leadership indicators, digital innovation (DL2) is the strongest, particularly in MTs, MA, and PTKIN. Meanwhile, the most mature institutional digital vision (DL3) is predominantly observed at the MA and PTKIN levels.

## 2. Quality Culture in Islamic Education Institutions

The culture of quality seems to run consistently through periodic evaluations, the involvement of institutional components, and the integration of Islamic values in quality management practices. Quality evaluation is carried out regularly, and follow-up accreditation or audit results are applied to most institutions, especially the MA and PTKI. The values of trust, discipline, and digital ethics are the cultural foundation of quality assurance activities.

**Table 3. A Summary of the Culture of Islamic Education**

Code	Indicator	Summary of Findings (Analysis)	Data Source	Synthesis of Findings
<b>QM1</b>	Sustainable quality improvement	Quality evaluation is carried out periodically; the follow-up of accreditation results and AMI is effective, especially in MA and PTKI.	Observation, Documentation	Consistent and systemic quality culture at the middle-upper level.
<b>QM2</b>	Involvement of the board component	Teachers and staff are actively involved in planning, implementation, monitoring, and quality evaluation; students are involved in RA and MI activities.	Interview	High participation rates across the institution.
<b>QM3</b>	Integration of Islamic values in quality	Islamic values (trust, discipline, ihsan, digital ethics) are integrated into SOPs, discipline, and digital habituation.	Documentation	Strong religious values characterize a culture of quality.

Beyond the patterns presented in Table 3, quality culture appears to develop progressively across educational levels. Early childhood and primary education institutions prioritize the internalization of values, discipline, and participatory routines as the foundation of a quality culture. In contrast, secondary schools and higher education institutions demonstrate more formalized quality assurance mechanisms, including structured evaluations, documentation systems, and performance-based monitoring. This pattern indicates that quality culture evolves from value-driven practices toward system-oriented implementation as institutional levels advance. The integration of Islamic values (QM3) emerges as a foundational element across all levels, serving as a distinctive characteristic of quality culture within Islamic educational institutions.

### 3. Integration of Digital Leadership and Quality Culture

The integration of digital leadership and quality culture is evident through the use of quality dashboards, digital evaluation forms, and school-monitoring applications. Technology is used not only for efficiency but also to strengthen Islamic values in ethical digital media management and habit formation.

**Table 4. Summary of Digital–Quality Integration Findings**

Code	Integration Indicators	Summary of Findings (Analysis)	Data Source	Synthesis of Findings
INT1	Monitoring mutu digital	Quality dashboards, digital evaluation forms, and monitoring applications (quality driver's licenses) are used for quality control at MTs, MA, and PTKI.	Documentation	Digital quality monitoring runs effectively and accurately.
INT2	Synergy of technology and Islamic values	Technology is used as a medium for building Islamic values and strengthening digital ethics; Moral messages are shared via digital platforms.	Interview	Moral-digital synergy is a peculiarity of Islamic institutions.
INT3	Digital data-driven decisions	Institutional decisions are discussed in digital data-based meetings; teachers and staff are involved in analyzing digital survey data.	Observations, Interviews	Decisions are participatory, transparent, and evidence-based.

Analysis of Table 4 indicates that the integration between digital leadership and quality culture is most evident in practices related to participatory decision-making and continuous improvement. Higher-level institutions, particularly MA and PTKIN, exhibit greater alignment between digital governance and quality management systems, whereas lower-level institutions rely more heavily on leadership presence and shared values to support quality initiatives. This finding suggests that integration mechanisms vary with institutional capacity and governance structure. Meanwhile, moral–digital synergy (INT2) emerges as a salient characteristic of integration practices within Islamic educational institutions.



#### 4. Comparison of Levels of Educational Institutions

Comparative analysis shows gradual progress: PTKI has the most mature implementation, followed by MA and MTs. RA and MI are at the basic stage but show strength in integrating Islamic values and participatory culture.

**Table 5. Comparison of Digital Leadership Implementation and Quality Culture**

Ladder	Digital Leadership	Quality Culture	Digital Integration–Quality	Umum Synthesis
<b>RA</b>	Basic technology used (WA, Google Forms)	Regular evaluation; dominant Islamic values	Monitoring digital minimal	Strong value foundation; Early digitization
<b>MI</b>	Digital platforms are used steadily	Involvement of high teachers and staff	Strong integration of Islamic values	Ready for medium digitalization
<b>Mts</b>	SIM & digital coordination active	SOP evaluation effectively and run	Dashboard goes live	Digital & quality begins to be structured
<b>MA</b>	High digitalization; Clear vision	Systemic evaluation	Digital integration–strong quality	Lembaga digital matang
<b>PTKI</b>	Digital strategy is very mature	AMI & mutu systemic	Digital integration–full quality	The highest level at all levels

Table 5 confirms the gradation of digital implementation and quality. PTKI and MA are at the highest level, while RA and MI are at the stage of strengthening the fundamental values and utilizing simple technology.

#### 5. Integrative Model of Digital Leadership and Quality Culture

The results of the study consistently show a mutually reinforcing relationship between digital leadership and quality culture. Technology helps improve quality and effectiveness, while a culture of quality strengthens the consistency of digitalization. Both form a digital leadership ecosystem with a religious character.

**Table 6. Synthesis of Integrative Models of Digital Leadership and Quality Culture**

Component	Core Findings	Proof of Data	Sintesis
<b>Digital Leadership - Mutu</b>	The use of technology in decision-making improves policy accuracy	Observations, Interviews	Quality improves through data-driven decisions.
<b>Quality - Digital</b>	Routine evaluation encourages the use of digital applications for documentation and monitoring.	Documentation	Quality culture strengthens the sustainability of digitalization.

<b>Digital + Mutu</b>	Digital quality monitoring goes hand in hand with Islamic values, creating ethical and adaptive governance.	Observation, Documentation	A religious and responsive digital leadership ecosystem is formed.
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Table 6 emphasizes that digital leadership and quality culture reinforce each other, creating a digital leadership model characterized by technology-adaptive Islamic values.

## D. Discussion

### 1. Digital Leadership in Islamic Educational Institutions

This study demonstrates that digital leadership strengthens a culture of quality through data-driven decision-making, participatory governance, and the internalization of Islamic values across educational levels. In addition, the empowerment of teachers and staff through digital innovation emerged as a significant result of digital leadership in these institutions, which is consistent with previous studies highlighting the role of ICT in strengthening instructional practices and educational supervision in Islamic educational settings (Kartika et al., 2023; Posangi et al., 2025; Sugiyantoro & Apriliantoni, 2025). Research shows that educators not only utilize digital tools but also undergo comprehensive ICT-related training, enhancing their innovative capacity (Lee et al., 2022; Yarun et al., 2023). This trend is observed mainly in MTs and MAs, where teachers are actively involved in ICT-based projects and encouraged to participate in ongoing professional development. (Kharismatunisa, 2023; Prasetyo et al., 2025). The empowerment aligns the digital vision in the academic community, ensuring that stakeholders understand and support the strategic integration of technology in education (Hamdan et al., 2024). These findings reflect the trajectory of improving digital literacy and competence among educators, maintaining an environment conducive to learning progress.

These findings should be interpreted within the specific context of Islamic educational institutions in East Kalimantan, Indonesia, where variations in infrastructure availability, institutional autonomy, and access to digital resources influence how digital leadership is enacted. While institutions at the MTs, MA, and PTKIN levels generally benefit from more structured organizational systems and greater access to digital infrastructure, early childhood and primary education institutions tend to rely more heavily on value-driven leadership and informal coordination mechanisms. This contextual variation shapes the implementation of digital leadership and quality culture across educational levels. A limitation of this study lies in its regional focus and the limited number of key informants, which may affect the generalizability of the findings to other regions with different institutional and socio-cultural conditions.

The alignment of digital visions in Islamic educational institutions is essential for the success of ICT integration. The coherence of this vision varies, with top-level institutions often demonstrating a more structured approach through formal documentation, whereas smaller institutions may communicate it informally (Abubakari et al., 2023; Aprillia & Iryanti, 2024). As leaders navigate infrastructure

challenges and varying levels of technology adoption, building a unified digital vision becomes essential. This coherence fosters an inclusive institutional culture and encourages collaboration among educators to make effective use of ICT (Sarwoedi et al., 2025; Sugiyantoro & Apriliantoni, 2025). By prioritizing digital leadership, Islamic educational institutions can improve operational efficiency and educational outcomes, positioning themselves competitively in the modern educational landscape.

## **2. Quality Culture in Islamic Education Institutions**

The culture of quality in Islamic educational institutions is characterized by systematic evaluation, community involvement, and the integration of Islamic core values in quality management practices. Regular quality evaluation is essential for this culture, and evidence of its implementation can be seen in the accreditation process and audit results at various Islamic Religious Universities (PTKI) (Mirsal et al., 2025). Commitment to continuous improvement is evident through periodic assessments and subsequent actions based on accreditation feedback, which improve institutional performance and promote transparency and accountability in the educational environment (Sofa et al., 2025). In addition, the values of trust, discipline, and ethical considerations have become an integral part of quality assurance activities, reinforcing the institution's commitment to excellence (Alpha, 2025).

These practices among Islamic educational institutions reinforce the idea that they foster a comprehensive culture of quality through collaborative participation and systematic implementation. The involvement of faculty and staff in all phases of quality management, from planning to monitoring, creates an environment of shared responsibility that is critical to maintaining quality (Sofa et al., 2025). In addition, student involvement in various institutional activities emphasizes the importance of feedback from diverse stakeholders within the educational framework (Mirsal et al., 2025). Such participatory practices foster a sense of collective ownership over quality improvement while aligning educational goals with broader institutional goals.

In addition, the integration of Islamic values such as trust, discipline, and correctness in quality management practices distinguishes Islamic educational institutions from public institutions (Alifana, 2025). This practice reflects a holistic view of the qualities that religious principles inform in operational processes, thereby strengthening the ethical dimension of education. By embedding these values into standard operating procedures (SOPs) and behavioral expectations, these institutions improve the quality of their education while upholding religious principles (Hambon, 2025). Thus, a culture of quality in Islamic educational institutions can be understood as an interdependent framework that combines rigorous academic standards with the maintenance of ethical and moral values, ultimately contributing to the long-term sustainability of the educational model.

## **3. Integration of Digital Leadership and Quality Culture**

The integration of digital leadership and quality culture is increasingly becoming a hallmark of educational institutions. This integration manifests through the deployment of various digital tools such as quality dashboards, digital evaluation forms, and school monitoring applications. This technology not only streamlines the administrative process but also strengthens Islamic values aligned with ethical digital

media management and habit formation (Maryani et al., 2023; Nurdiani et al., 2025). Digital innovation capabilities effectively support quality monitoring processes in schools that leverage them to improve quality control measures, thereby promoting an environment of continuous improvement (Kurniawan et al., 2025; Ropik & Nugraha, 2025). Additionally, comprehensive data documentation and real-time feedback facilitate participatory management strategies, ensuring that education leaders maintain transparency and accountability in their practices (Javier & Baylon, 2025; Solahudin et al., 2025).

In addition, the synergy between technology and Islamic values stands out as a unique characteristic within Islamic educational institutions. Digital platforms are leveraged to disseminate moral messages that resonate with the core tenets of Islam, thus expanding the mandate of education beyond academic excellence to include character development (Louka, 2025; Samahati et al., 2025). This moral-digital synergy exemplifies how technology can function as more than just an operational tool; it becomes a conduit for embedding ethical considerations into everyday educational practices. Qualitative data collected from the interviews reinforces this notion, illustrating that educators are actively engaging with technological tools to foster an ethical understanding of digital interactions among students (Kurniawan et al., 2025; Nurdiani et al., 2025).

Further, the emphasis on data-driven decision-making represents the pinnacle of this digital quality integration. Leveraging digital data allows educators and administrators to make informed decisions, where active participation is encouraged from both teachers and staff in the analysis of digital survey results (Abdurrahman, 2025; Munandar, 2025). This form of collective decision-making fosters an evidence-based, participatory culture that not only strengthens governance within these institutions but also significantly improves the quality of educational outcomes. The way forward requires addressing existing challenges, such as inadequate IT infrastructure and resistance to digital integration, through targeted training and a cultural shift towards embracing technology in educational settings (Brazauskienė, 2025; Rohbiyatun et al., 2025).

#### **4. Comparison of Levels of Educational Institutions**

In the comparative analysis of educational institutions in Indonesia, significant developments were seen at various levels of Islamic education, especially among PTKI (Islamic Religious College), MA (Madrasah Aliyah), MTs (Madrasah Tsanawiyah), MI (Madrasah Ibtidaiyah), and RA (Raudhatul Atfal). PTKI demonstrates the implementation of a digital strategy and advanced quality of education, characterized by sophisticated digital integration and systemic evaluation methods, thereby serving as a benchmark of educational excellence within the framework of the Ministry of Religion in Indonesia (Bashori, 2022). In contrast, institutions at the RA and MI levels are in a digital adoption stage, leveraging basic technologies such as WhatsApp and Google Forms while maintaining a strong commitment to inculcating Islamic values among their students. These foundational stages underscore the strong potential for growth of digital education practices as RA and MI aim to improve their technology readiness and quality assurance approach (Siskandar, 2020).

The integration of digital leadership into the educational framework varies significantly across levels. MA and PTKI institutions demonstrate strong digital integration, leverage advanced digital platforms for educational delivery, and engage in comprehensive quality culture initiatives through established Standard Operating Procedures (SOPs) and evaluative metrics (Fadhilah et al., 2022; Haddade et al., 2024). In contrast, lower-level institutions, such as RA and MI, while important in fostering early education rooted in Islamic values, face challenges in adopting a systematic digital transformation. This gap demonstrates the urgent need for strategic interventions aimed at improving the digital literacy and technological infrastructure of these foundational institutions, enabling them to participate more fully in the broader advancement of education across Indonesia (Tamami, 2021).

These findings show an interesting framework in which enhanced digital capabilities correspond to improved educational quality. Sustainable quality management practices and adaptability to technological changes are essential for maintaining a holistic educational environment at all levels. A positive correlation between the quality of education and digital readiness, as shown by the successful experiences of PTKI and MA institutions, should be a model for lower-level educational institutions, which can leverage Islamic values and participatory culture as a strong foundation for future progress in digital education (Azizah et al., 2024; Fauzi, 2021). This multifaceted approach is essential to ensure that all institutions keep pace with technological advances while contributing to the continuous improvement of educational standards across Indonesia.

## **5. Integrative Model of Digital Leadership and Quality Culture**

Integrative models of digital leadership and quality culture describe synergistic relationships that enhance technology adoption and quality assurance in educational institutions, especially in Islamic contexts. Digital leadership is characterized by the strategic use of technology to improve decision-making, leading to more effective policy implementation. Studies show that incorporating technology into leadership practices not only streamlines administrative processes but also strengthens the overall culture of quality in the organization (Alifana, 2025; Ismail et al., 2024; Sartika, 2025). In addition, the emerging approach of digital leadership enables education leaders to foster an environment conducive to quality improvement, strategically aligned with Islamic principles for maintaining ethical governance (Hasan et al., 2025; Siskandar, 2020).

This relationship is further enhanced by a performance framework that integrates routine evaluations and digital applications to improve documentation and monitoring. Research shows that when a culture of quality is actively assessed and promoted, it encourages the expansion of digital tools organizationally, thus maintaining the continuity of quality initiatives amid rapid technological change (Sofa et al., 2025; Suryana, 2021). Building this culture not only fosters efficiency in resource management but also fosters an adaptive learning environment that values growth while upholding Islamic values and ethical standards (Sarnoto & Wahyuningsih, 2022; Sukaisih et al., 2022). Such a culture is essential to countering resistance to digitalization, fostering an ecosystem in which educational practices can evolve in harmony with technological advancements.

The integration of digital leadership and a culture of quality in educational settings is essential to fostering a resilient and adaptive educational framework. Study emphasizes the importance of leadership that aligns local religious values with modern digital practices to ensure the sustainability of educational outcomes (Hasan et al., 2025; Herman et al., 2022). By facilitating professional development and fostering innovation, leaders within this framework can effectively navigate the challenges posed by the changing educational landscape (Ikhwan et al., 2025; Suryana, 2021). The establishment of a values-driven leadership model, firmly embedded in the ethos of Islamic education, will serve as a beacon for other institutions navigating similar transformations, ensuring that quality and integrity remain at the forefront of educational efforts in the digital age (Herman et al., 2022; Sartika, 2025).

## E. Conclusion

This study demonstrates that digital leadership plays a critical role in strengthening quality culture in Islamic educational institutions by leveraging digital technology for decision-making, coordination, learning innovation, and data-based quality monitoring, and is reinforced by Islamic values such as trust, discipline, and digital ethics. The synergy between digital leadership and quality culture forms a participatory, adaptive, and continuous improvement-oriented governance model, with the highest level of maturity observed in Madrasah Aliyah (MA) and Islamic Religious Higher Education institutions (PTKIN). These findings indicate that effective digital transformation in Islamic education requires visionary leadership capable of integrating technological competence, quality management, and spiritual values simultaneously. From a theoretical perspective, this study contributes to Islamic educational leadership literature by proposing a multi-level, value-based digital leadership model that positions digital leadership not merely as a technological or managerial function, but as an ethical and governance-oriented mechanism that shapes quality culture across different educational levels. Practically, the findings suggest the need for coherent institutional policies on digital capacity building, infrastructure development, and continuous professional development for educators and leaders. At the same time, future research is encouraged to examine the applicability of the proposed model in broader contexts and comparative international settings.

## References

- Abdurrahman, A. (2025). Data-Based Education Service Quality Improvement Management in the Digital Era. *Qalamuna Jurnal Pendidikan Sosial Dan Agama*, 17(1), 207–218. <https://doi.org/10.37680/qalamuna.v17i1.6863>
- Abubakari, M. S., Zakaria, G. A. N., Priyanto, P., & Triantini, D. T. (2023). Analysing Technology Acceptance for Digital Learning in Islamic Education: The Role of Religious Perspective on ICT. *Journal of Computing Research and Innovation*, 8(1), 1–16. <https://doi.org/10.24191/jcrinn.v8i1.344>
- Alifana, F. T. (2025). Implementing ISO-Based Educational Reform: ISO 21001:2018 Effectiveness in Enhancing State Islamic University Services. *Al-Tanzim Jurnal Manajemen Pendidikan Islam*, 9(3), 723–735. <https://doi.org/10.33650/al->

tanzim.v9i3.11286

- Amtu, O., Souisa, S. L., Joseph, L. S., & Lumamuly, P. C. (2021). Contribution of Leadership, Organizational Commitment, and Organizational Culture to Improve the Quality of Higher Education. *International Journal of Innovation*. <https://doi.org/10.5585/iji.v9i1.18582>
- Aprillia, M. P., & Iryanti, S. S. (2024). Revitalisasi Pendidikan Islam Di Era Digital: Membangun Keseimbangan Antara Tradisi Dan Inovasi. *Al-Muaddib Jurnal Kajian Ilmu Kependidikan*, 6(1), 25–39. <https://doi.org/10.46773/muaddib.v6i1.1111>
- Azizah, M., Solikhin, S., & Lailiyah, N. (2024). Implementasi Sistem Informasi Manajemen Dalam Mendukung Pelayanan Administrasi. *Ngaos*, 2(2), 80–94. <https://doi.org/10.59373/ngaos.v2i2.46>
- Bashori, B. (2022). A Reputation Analysis and State Higher Education Institution Performance in West Sumatra, Indonesia. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 6(2), 133–142. <https://doi.org/10.47766/idarah.v6i2.103>
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage Publications, Inc.
- Bayu Astra, N. P., Hendrawati, T., & Andriyana, D. (2024). Leadership in Islamic Education: Integrating Ethical Values in the Digital Age. *Ijsh*. <https://doi.org/10.59613/ecwa6z62>
- Brazauskienė, E. (2025). Educational Decision-Making in Digital Education: A Conceptual Review of Data-Driven, Data-Based, and Data-Informed Approaches. *RPD*, 4(1), 63–72. <https://doi.org/10.61071/rpd.2562>
- Dacholfany, M. I., Ikhwan, A., Budiman, A., & Hutabarat, Z. S. (2024). Model of Educational Leadership Management in Boarding Schools. *Al-Hayat Journal of Islamic Education*. <https://doi.org/10.35723/ajie.v8i1.339>
- Deming, W. E. (1986). *Out of The Crisis*. MIT Press.
- Droissart, J., & Tuytens, M. (2024). The Integration of Lecturer Collaboration Within Higher Education Institutions' Quality Culture Framework. *Quality Assurance in Education*. <https://doi.org/10.1108/qae-09-2023-0157>
- Fadhilah, M. N., Djakfar, M., Mubaraq, Z., & Guterres, J. X. (2022). Collaboration of Teachers and Parents in the Formation of Students' Virtuous Morality. *Mudarrisa Jurnal Kajian Pendidikan Islam*, 14(1), 66–85. <https://doi.org/10.18326/mdr.v14i1.66-85>
- Fauzi, I. (2021). Analysis of Ptkin Opportunities: Quality Measurement Through the Malcolm Baldrige Criteria for Using the World Class University. *Al-Tanzim Jurnal Manajemen Pendidikan Islam*, 5(1), 1–13. <https://doi.org/10.33650/al-tanzim.v5i1.1367>
- Gruzina, Y., Фирсова, И. Б., & Shtanova, K. (2020). *The Role of the Bologna Process in Changing the Quality Culture and Mindsets of HIE Leaders*. <https://doi.org/10.2991/assehr.k.200526.029>
- Haddade, H., Nur, A., Achruh, A., & Rasyid, M. N. A. (2024). Madrasah management strategies through Madrasah Reform program: an evidence from Indonesia. *International Journal of Educational Management*, 38(5 PG-1289–1304), 1289–1304. <https://doi.org/10.1108/IJEM-05-2023-0236>

- Hambon, S. F. (2025). The Implementation of ISO 9001:2015 Quality Management Systems on the Delivery of Public Services, City Government of Baguio. *International Journal for Multidisciplinary Research*, 7(4). <https://doi.org/10.36948/ijfmr.2025.v07i04.50465>
- Hamdan, Rusdiana, Tarwilah, T., Suraijiah, Rusdiah, & Ramli, M. (2024). Industrial Era Islamic Education Revolution 4.0: Strategy for Optimizing ICT Integration in Curriculum Education Study Programs. *Jurnal Iqra*, 9(2). <https://doi.org/10.25217/ji.v9i2.4525>
- Hasan, S., Ruswan, & Rahmi, A. (2025). Kepemimpinan Sekolah Berbasis Nilai Dan Sistem: Strategi Mengelola Perubahan Organisasi. *Jurmie*, 2(5), 219–229. <https://doi.org/10.71282/jurmie.v2i5.292>
- Herman, H., Juliana, R., Hasan, K., Kasman, A., & Agustina, M. (2022). The Building a Religious Work Culture in Improving Employee Performance Quality. *Jurnal Iqra*, 7(2), 133–141. <https://doi.org/10.25217/ji.v7i2.2158>
- Ikhwan, A., Zukhrufin, F. K., & Triyuliasari, A. (2025). Integrated Islamic School Marketing Management in Indonesia: Competitive or Business Oriented? *Munaddhomah Jurnal Manajemen Pendidikan Islam*, 6(2), 174–191. <https://doi.org/10.31538/munaddhomah.v6i2.1759>
- Ismail, I., Mustopa, M., Ilyas, I., Imran, I., & Muhsinin, U. (2024). The Role of Technology in Improving the Quality of Islamic Religious Education in Schools and Madrasas in the Digital Era. *Join*, 2(1), 62–72. <https://doi.org/10.59613/mey5jm55>
- Javier, R. A. V, & Baylon, J. (2025). The Impact of Educational Management Practices on the Data Driven Decision Making Among School Administrators in Florida, USA Towards Sustainable Framework. *Pemj*, 45(3), 384–400. <https://doi.org/10.70838/pemj.450305>
- Kartika, I., Saepudin, S., Budiantoro, A., & Sukarna, S. (2023). Inovasi Pembelajaran Pendidikan Agama Islam Berbasis ICT Di Era Industri 4.0. *Eduinovasi Journal of Basic Educational Studies*, 3(2), 571–586. <https://doi.org/10.47467/edui.v3i2.4594>
- Kartini, K., Samdin, S., Ramli, R., Sinarwati, S., & Zaludin, Z. (2023). The Effect of Quality Culture on Service Quality; Infrastructure Quality as a Mediation Variable. *International Journal of Applied Economics Finance and Accounting*. <https://doi.org/10.33094/ijaefa.v17i2.1121>
- Kharismatunisa, I. (2023). Innovation and Creativity of Islamic Religious Education Teachers in Utilizing Digital-Based Learning Media. *Scaffolding Jurnal Pendidikan Islam Dan Multikulturalisme*, 5(3), 519–538. <https://doi.org/10.37680/scaffolding.v5i3.3700>
- Kurniawan, H., An-Nada, S. N., Siregar, R. K., & Lubis, N. A. (2025). Inovasi Sistem Informasi Manajemen Sebagai Pendukung Pengambilan Keputusan Di Lingkungan Pendidikan. *Jumbidter*, 2(3), 1–10. <https://doi.org/10.61132/jumbidter.v2i3.545>
- Lee, B., Song, H. D., & Kim, Y. (2022). The Effects of Teachers' Digital Literacy and Transformational Leadership of School Principals on Teachers' Innovative Teaching Behavior With ICT Mediated by Teacher Engagement. *Korean Journal of Teacher Education*, 38(6), 265–291. <https://doi.org/10.14333/kjte.2022.38.6.13>



- Louka, K. (2025). Information Management in Schools in the Digital Age. *Ejiss*, 1(3), 13–20. [https://doi.org/10.59324/ejiss.2025.1\(3\).02](https://doi.org/10.59324/ejiss.2025.1(3).02)
- Maryani, L., Nur, J., Utami, S., Nurnaifah, I. I., & Farida, F. (2023). Strengthening School Management With Digital Education Technology to Improve the Quality of Educational Output. *Indonesian Journal of Educational Research and Review*, 6(2), 446–465. <https://doi.org/10.23887/ijerr.v6i2.66039>
- Md. Sohel-Uz-Zaman, A. S., Kabir, A. I., & Osman, A. (2020). TQM in Higher Education: A Search for New Insight. *Destech Transactions on Social Science Education and Human Science*. <https://doi.org/10.12783/dtssehs/ssme2019/34805>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2020). *Qualitative Data Analysis* (4 ed.). SAGE Publications.
- Mirsal, I., AS, A., Sartina, K., Irwansuri, Z., Rusdi, M., Noviyani, R., & Akbar, M. A. (2025). Evaluasi Kinerja Lembaga Akreditasi Dayah Di Aceh: Studi Terhadap Efektivitas Dan Dampaknya. *Itqan Jurnal Ilmu-Ilmu Kependidikan*, 16(1), 50–64. <https://doi.org/10.47766/itqan.v16i1.6076>
- Muhith, A., Dwiyono, Y., Munawati, S., Mustofa, A., & Haryanto, S. (2023). Challenges of Islamic Boarding School Organizational Culture in the Millennial Generation and the Digital Era 4.0. *Nazhruna Jurnal Pendidikan Islam*. <https://doi.org/10.31538/nzh.v6i3.4231>
- Munandar, D. R. (2025). Integration of Technology and Governance in Indonesian Schools: Toward a Smart School Ecosystem. *Al-Ishlah Jurnal Pendidikan*, 17(2), 2147–2158. <https://doi.org/10.35445/alishlah.v17i2.7529>
- Nurdiani, S., Fajrina, R. M., Darmansyah, D., Suryanti, S., & Ramadani, H. Z. (2025). Membangun Jiwa Kepemimpinan Di Era Digital: Kegiatan Sosialisasi Di MAS Kepala Hilalang. *Mestaka Jurnal Pengabdian Kepada Masyarakat*, 4(3), 315–319. <https://doi.org/10.58184/mestaka.v4i3.700>
- Posangi, S. S., Lundeto, A., Labaso, S., Anwar, H., & Damopolii, M. (2025). Enhancing Islamic Education Quality Through Educational Supervision and ICT. *Jurnal Ilmiah Peuradeun*, 13(2), 1209–1234. <https://doi.org/10.26811/peuradeun.v13i2.1955>
- Prasetyo, A. R., Kadiyono, A. L., Sulastiana, M., & Abidin, Z. (2025). Enhancing Innovative Behavior of Indonesian Secondary School Teachers Through Happiness at Work: An Implementation of ICT-Based Training. *Human Behavior and Emerging Technologies*, 2025(1). <https://doi.org/10.1155/hbe2/6602366>
- Radjak, D. S., Jusuf, S., & Bongkan, A. D. (2024). The Urgency of Digitizing Learning for Madrasah Aliyah Islamic Boarding School Students in the Era of Society 5.0. *The Journal of Learning and Technology*. <https://doi.org/10.33830/jlt.v3i1.7896>
- Rahmanitabar, Z., Khorshidi, A., Araghieh, A., Barzegar, N., & Faghiharam, B. (2023). Designing a Digital Leadership Model for Managers in Educational Organizations (Case Study: Islamic Azad University, Tehran Province). *Ijimob*. <https://doi.org/10.61838/kman.ijimob.3.4.1>
- Rohbiyatun, H., Widayati, W., & Haryati, T. (2025). Strategies for Educational Quality Management in the Digital Transformation Era: A Case Study of SMP PGRI 1 Semarang. *Jurnal Pendidikan Ips*, 15(2), 608–618. <https://doi.org/10.37630/jpi.v15i2.3019>

- Ropik, I., & Nugraha, M. S. (2025). Penerapan Sistem Informasi Manajemen Sekolah Untuk Meningkatkan Kualitas Layanan Pendidikan Di MTs Daarul Muttaqin Cimahi Cimahi. *Alacrity Journal of Education*, 170–175. <https://doi.org/10.52121/alacrity.v5i1.545>
- Samahati, S. S., Sumual, T. E. M., & Usuh, E. J. (2025). The Management of the School Principal at the Early Childhood Education Institution of TK GMIM Pniel Bahu, Manado City. *International Journal of Science and Environment (Ijse)*, 5(3), 163–171. <https://doi.org/10.51601/ijse.v5i3.126>
- Sarnoto, A. Z., & Wahyuningsih, R. (2022). Implementasi Total Quality Management (Tqm) Di Institut Ptiq Jakarta. *Madani Institutte | Jurnal Politik Hukum Ekonomi Pendidikan Sosial Dan Budaya*, 11(1), 15–25. <https://doi.org/10.53976/jmi.v11i1.269>
- Sartika, D. (2025). Transformational Leadership as a Catalyst for Professional Work Culture in Islamic Boarding Schools. *Indonesian Journal of Education and Social Studies*, 4(1), 100–113. <https://doi.org/10.33650/ijess.v4i1.3311>
- Sarwoedi, S., Syamsir, S., Fakhruddin, F., Asha, L., & Warlizasusi, J. (2025). Weaving a New Paradigm: Transforming Islamic Education Under the Aegis of the Independent Curriculum. *Jurnal Manajemen Pendidikan Islam Darussalam*, 7(2), 261–274. <https://doi.org/10.30739/jmpid.v7i2.3861>
- Siskandar, S. (2020). The Role of Religious Education and Utilization Digital Technology for Improving the Quality in Sustainability Madrasa. *Jurnal Tarbiyah*, 27(1). <https://doi.org/10.30829/tar.v27i1.675>
- Sofa, A., Us, K. A., & Fridiyanto, F. (2025). Strategies for Improving Education Quality Management Towards World-Class Education. *Soc. Econ. Hum. Aspects Town. Ind.*, 3(3), 557–565. <https://doi.org/10.59535/sehati.v3i3.530>
- Solahudin, M., Jayadi, J., & Irfan, J. A. (2025). Implementation of Digital-Based School Management Systems to Improve Administrative Efficiency in Junior High Schools in East Kalimantan Province. *Jiip - Jurnal Ilmiah Ilmu Pendidikan*, 8(9), 10960–10967. <https://doi.org/10.54371/jiip.v8i9.9369>
- Subaidi, S., Arsyad, J., & Kisworo, A. Y. (2024). Empowering Islamic Values: The Role of Madrasah Head Leadership in Extracurricular Enrichment. *Al-Tanzim Jurnal Manajemen Pendidikan Islam*. <https://doi.org/10.33650/al-tanzim.v8i2.8268>
- Sugiyantoro, S., & Apriliantoni, A. (2025). Teknologi Informasi Dan Komunikasi Dalam Manajemen Pendidikan: Peluang Dan Tantangan Di Era Digital. *Nusra Jurnal Penelitian Dan Ilmu Pendidikan*, 6(3), 500–513. <https://doi.org/10.55681/nusra.v6i3.3803>
- Sukaisih, T., Widayatsih, T., & Fitriani, Y. (2022). The Role of Education Quality Management in Improving Qur'any Literacy Culture. *Journal of Social Work and Science Education*, 2(3), 227–238. <https://doi.org/10.52690/jswse.v2i3.253>
- Sukardi, S., Djumarno, Herminingsih, A., & Kasmir. (2024). Improving Higher Education Competitiveness Through a Culture of Academic Quality Mediated by Knowledge Management in Jakarta. *Journal of Law and Sustainable Development*. <https://doi.org/10.55908/sdgs.v12i2.3157>
- Suprianto, B., & Sari, C. M. (2023). New Islamic School Civilization in Education Curriculum in Digital Era. *At-Turats*. <https://doi.org/10.24260/at-turats.v17i2.2793>
- Suryana, A. T. (2021). Post-Covid Digital Transformation in Islamic Boarding Schools:

- Rethinking Quality Management for Resilient Islamic Education. *Akselerasi Jurnal Ilmiah Nasional*, 3(3), 103–113. <https://doi.org/10.54783/jin.v3i3.1304>
- Syamsuddin, S., & Maunah, B. (2020). Parsing the Significance of the Transformational Leadership Implementation to Islamic Educational Institutions. *Managere Indonesian Journal of Educational Management*. <https://doi.org/10.52627/ijeam.v2i3.56>
- Tamami, B. (2021). Implementasi Manajemen Mutu Dalam Meningkatkan Sarana Dan Prasarana Sekolah. *jDU*, 12(2), 48–60. <https://doi.org/10.62815/darululum.v12i2.70>
- Yarun, A., Bakar, M. Y. A., & Kholis, N. (2023). Assessing the Preparedness of Islamic Religious Education Teachers in Indonesia for Technology-Based Learning Innovations. *Ta Dibuna Jurnal Pendidikan Agama Islam*, 6(2), 91. <https://doi.org/10.30659/jpai.6.2.91-105>