Volume 3 Number 2 (2025)
July-December 2025
Page: 379-392

E-ISSN: 2986-6502
DOI: 10.37680/ssa.v3i2.11004

Social Science Academic

# The Strategic Role of Leadership in Realizing Value-Based Digital Transformation at Islamic Boarding Schools

**Ramli**

Sekolah Tinggi Agama Islam Al Mujtama Pamekasan, Indonesia

Received: 26/09/2025 Revised: 28/11/2025 Accepted: 30/12/2025

**Abstract**

Leadership plays a pivotal role in driving institutional transformation, particularly within Islamic educational institutions navigating the complexities of globalization. This study investigates the strategic dimensions of leadership in facilitating value-based digital transformation at Pondok Pesantren Ash-Shiddiiqi, Batang Hari Regency, Jambi Province, Indonesia. Grounded in an interpretive-phenomenological paradigm and employing qualitative case study methodology, data were obtained through in-depth semi-structured interviews, participatory observation, and systematic document analysis. The findings reveal four interrelated leadership dimensions that collectively underpin a sustainable transformation process: (1) value-based leadership that anchors institutional decision-making within an Islamic ethical framework; (2) adaptive and exemplary leadership that promotes collective digital capacity-building through participatory learning; (3) human resource development and external networking through structured collaboration with alumni, governmental agencies, and relevant stakeholders; and (4) strategic communication grounded in Qur'anic communicative ethics that effectively mitigates resistance to organizational change. The study contributes a contextual theoretical model of transformational leadership applicable to Islamic educational institutions pursuing digitalization without compromising their spiritual identity. Practically, this research proposes a replicable framework integrating value-oriented leadership, participatory human resource development, phased digital transformation strategies, and Qur'anic-principled communication. The findings suggest that harmonizing technological innovation with enduring Islamic values is not only feasible but also constitutes a prerequisite for the long-term relevance and sustainability of pesantren in the digital era.

**Keywords**

Strategic leadership; Digital transformation; Islamic boarding school; Value-based leadership; Pesantren.

**Corresponding Author**
Ramli
Sekolah Tinggi Agama Islam Al Mujtama Pamekasan, Indonesia; ramlisbc@gmail.com

## 1. INTRODUCTION

The governance of educational institutions has continually evolved in response to shifting societal demands, technological advancements, and global imperatives (Basri & Arifin, 2021). Within this broader context, Islamic boarding schools—commonly referred to as pondok pesantren—occupy a

© 2025 by the authors. This is an open access publication under the terms and conditions of the Creative Commons Attribution 4.0 International License (CC BY NC) license (https://creativecommons.org/licenses/by/4.0/).

unique position in Indonesia's educational landscape as the oldest form of Islamic educational institution, yet one increasingly confronted by the pressures of the digital era (Supriani et al., 2023; Hastasari et al., 2022; Van Es, 2019). The tension between preserving traditional pedagogical and spiritual values while adapting to modern technological demands represents a fundamental institutional challenge (Zuhri & Huda, 2024).

The sustainability of pesantren hinges upon their capacity to remain relevant within a rapidly evolving socio-technological environment without sacrificing their distinctive Islamic identity (Nasir et al., 2024). Although many pesantren have undertaken incremental improvements across various institutional domains, their environments remain marked by debates and divergent perspectives on the role of modernization (Maghfuri, 2020). Despite the normative consensus that digital transformation is essential for institutional competitiveness and effectiveness (Jin et al., 2024), a substantial number of pesantren continue to rely predominantly on conventional, non-digitalized approaches (Sadali, 2020). This condition underscores the urgency of a transformation process that is neither wholesale adoption of technological modernity nor wholesale rejection, but rather a strategic, values-aligned adaptation.

Digital transformation, understood not merely as the adoption of new technologies but as a systemic reconfiguration of institutional processes and working cultures through advanced technological empowerment (Rahmawati et al., 2023), represents a critical factor in the advancement of educational institutions (Jin et al., 2024). The proliferation of digital technologies—including the internet, mobile devices, and cloud-based applications—has fundamentally altered the modalities of teaching, learning, and organizational management (Muzakky et al., 2023). For pesantren, this transformation encompasses not only the administrative and pedagogical dimensions but also the enhancement of their da'wah (Islamic outreach) capacity in the digital space.

Central to this transformation is the role of leadership. Within the pesantren institutional context, the Kyai—the principal religious scholar and institutional leader—serves as the primary decision-making authority and custodian of the institution's values and norms (Rofiq & Sutopo, 2022). The Kyai is responsible for formulating educational policy, establishing normative frameworks, designing evaluative mechanisms, and supervising the transmission of religious knowledge (Falakhina & Hernawati, 2025). Consequently, the Kyai's strategic orientation constitutes the decisive factor in determining the trajectory and character of digital transformation within any given pesantren. A Kyai who effectively exercises transformational, adaptive, and value-based leadership is capable of cultivating a digital culture that reinforces rather than supplants the pesantren's spiritual foundations (Haris, 2023; Saputra & Sirozi, 2025).

The digital transformation initiative at Pondok Pesantren Ash-Shiddiiqi began in 2018, marking a deliberate institutional transition from manual, paper-based administrative systems to technology-

mediated management. Prior to this shift, core institutional functions—including student enrollment, data management, and financial administration—were conducted through traditional methods, rendering them both inefficient and susceptible to error. By the time of this study, the pesantren had implemented online registration systems, digital data repositories, and social media-based information dissemination platforms. Furthermore, during the COVID-19 pandemic, pedagogical activities were transitioned to synchronous e-learning platforms, including Zoom and Google Meet. This trajectory of transformation has been enabled by visionary and adaptive leadership that conceptualizes digitalization not merely as a technical upgrade, but as a strategic institutional investment.

Prior scholarship has addressed aspects of this phenomenon, though with notable limitations. Taufikin et al. (2017) examined the integration of digital content in pesantren settings, yet their analysis was confined to the technical dimensions of digital learning without interrogating the leadership strategies underlying comprehensive digital vision-formulation. Khoir and Hidayat (2025) explored the intersection of leadership and digitalization, but their analysis was circumscribed by an internal institutional focus, neglecting the long-term strategic and global dimensions of transformation. Wahidmurni et al. (2024) examined teacher resistance to curriculum change as part of broader educational transformation, without specifically addressing leadership's role in the digitalization of pesantren.

This study addresses these lacunae by conducting an in-depth investigation into the strategic leadership practices that have enabled value-based digital transformation at Pondok Pesantren Ash-Shiddiiqi. Specifically, it examines how leadership integrates technology adoption, human resource capacity development, external institutional collaboration, exemplary conduct, and Islamic communicative ethics in advancing digital transformation. The overarching research objective is to elucidate the strategic role of leadership in the implementation of value-based digital transformation within the pesantren context.

## 2. METHOD

This research adopts an interpretive paradigm grounded in a phenomenological approach, oriented toward understanding the lived experiences and subjective meanings constructed by individuals within the institutional context of Pondok Pesantren Ash-Shiddiiqi during its digital transformation process. This epistemological orientation is predicated on the assumption that social reality is not objectively given but is constituted through the dynamic interplay of interactions, experiences, and interpretive frameworks through which institutional actors make sense of organizational change.

The research site was selected purposively on the basis of the pesantren's documented engagement with digital transformation since 2018, encompassing the implementation of web-based administrative systems, e-learning platforms, and digitalized data management protocols. The institutional context is particularly significant given the pesantren's explicit commitment to balancing technological modernization with the preservation of its religious and pedagogical values. Research participants comprised the pesantren's principal leader (Kyai), deputy leader, teachers, and administrative personnel—stakeholders whose perspectives collectively provide a comprehensive account of institutional leadership practices.

Data were generated through three complementary methodological instruments. First, in-depth semi-structured interviews were conducted with key informants, utilizing open-ended interview protocols designed to elicit contextual and reflexive accounts of leadership practices and digitalization experiences (Creswell, 2015). Second, participant observation was employed to enable direct and sustained engagement with the digitalization processes occurring within the institution, including observations of administrative digital workflows, online platform utilization, and technology-mediated communication patterns. Third, document analysis was conducted encompassing archival records, institutional policy documents, activity reports, and the pesantren's digital communications across social media channels and its official website.

Data analysis was conducted through thematic analysis, proceeding through three iterative stages: data reduction, data display, and conclusion drawing and verification (Cohen et al., 2017). To safeguard the trustworthiness and credibility of the findings, the research employed multiple triangulation strategies, including source triangulation and method triangulation. Member checking was conducted with primary informants to verify the accuracy of interpretations, and peer debriefing was undertaken with research colleagues to enhance analytical rigor and mitigate potential researcher bias. Collectively, these procedures were designed to ensure that the interpretations generated authentically reflect the empirical realities encountered in the field.

## 3. FINDINGS AND DISCUSSION

The findings of this investigation are organized around the key dimensions of strategic leadership practice that have enabled digital transformation at Pondok Pesantren Ash-Shiddiiqi. Table 1 presents a structured overview of the transformation process, followed by a detailed analytical discussion of the four interrelated leadership dimensions identified through the data.

**Table 1. Digital Transformation Process at Pondok Pesantren Ash-Shiddiiqi**

| No. | Research Dimension | Key Findings |
|---|---|---|
| 1 | **Primary Vision** | Adaptive to contemporary developments; supports da'wah, learning, and institutional management; majority of programs operationalized. |
| 2 | **Initiation and Stages** | Commenced 2018–2019: administrative digitalization → e-learning (iPad integration, 2022) → digital communication and social media → systemic integration. |
| 3 | **Priority Domains** | Administration (data and financial management), learning (e-learning platforms), da'wah (social media and YouTube outreach). |
| 4 | **Policy Framework** | Digital governance team oversees device utilization, data security protocols, and digital ethics; policies ratified under the Kyai's authority. |
| 5 | **Budgeting and Resources** | Incremental allocation from internal institutional funds, philanthropic donors, and alumni networks; emphasis on devices, internet infrastructure, and HR capacity development. |
| 6 | **Platform Selection** | Evaluated on functional necessity, operational simplicity, and security standards; piloted prior to full implementation. |
| 7 | **Managerial Challenges** | Mindset transformation among HR constituents; limited internet infrastructure; addressed through sustained mentoring and institutional socialization. |
| 8 | **Success Indicators** | Enhanced administrative efficiency, improved learning quality, active technology adoption, accelerated data processing, expanded outreach capacity. |
| 9 | **Development Trajectory** | Integrated Pesantren Information System; expanded internet coverage; senior students appointed as digital ambassadors. |

The data presented in Table 1 illustrate that digital transformation at Pondok Pesantren Ash-Shiddiiqi has been pursued through a deliberate, phased, and institutionally contextualized process. Crucially, this transformation has unfolded not as a technologically deterministic rupture but as a leadership-mediated process of adaptive institutional evolution. The following subsections analyze the four principal leadership dimensions emerging from the data.

### A. Value-Based Leadership and the Preservation of Institutional Identity

A foundational finding of this study is that the Kyai's leadership is constitutively value-based—that is, institutional decision-making, including decisions pertaining to digital transformation, is anchored within an explicitly Islamic ethical and normative framework. In articulating the pesantren's digital vision, the Kyai stated: "Digitalization is not meant to change the soul of the pesantren, but to strengthen da'wah and work efficiency." This statement captures the fundamental orientation of leadership at Ash-Shiddiiqi: technology is positioned as an instrumental resource in service of the institution's spiritual and educational mission, rather than as an end in itself.

This leadership orientation aligns with the theoretical framework of values-based leadership as elaborated in the context of faith-based organizations by Foppen and van Saane (2024), who emphasize that the effectiveness of religious institutional leadership is measured by the degree of alignment between managerial conduct and the organization's spiritual or missional objectives. Within this framework, the Kyai functions not merely as an administrative decision-maker but as a moral custodian who actively mediates the relationship between technological change and institutional integrity. This mediating function is empirically evidenced in the pesantren's approach to administrative digitalization, in which online registration systems, digital financial management tools, and social media-based da'wah platforms have been implemented while preserving the relational and spiritual fabric of the institution.

Nurkhin et al. (2024) argue that pesantren must achieve a dynamic balance between technical innovation and the preservation of the religious and cultural values constitutive of their identity. Pennell (2023) further contends that transformational efforts attain greater sustainability when organizational leaders embed institutional values and culture within the transformation process, thereby ensuring that change reinforces rather than erodes institutional identity. The findings at Ash-Shiddiiqi substantiate these theoretical claims: by consistently framing digital transformation as a value-affirming rather than value-displacing process, the Kyai has cultivated institutional legitimacy for technological change among teachers, staff, and students. This approach resonates with the broader transformational leadership literature, which identifies culture-building—encompassing a culture of innovation, trust cultivation, and future orientation—as central to navigating structural and technological transitions (Toprak et al., 2023; Faisal et al., 2022).

**B. Adaptive and Exemplary Leadership: Fostering Collective Capacity**

The second critical dimension of leadership identified in this study is the combination of adaptive and exemplary leadership practices. The concept of adaptive leadership emphasizes leaders' capacity to respond dynamically to environmental challenges, facilitate organizational learning, and mobilize collective problem-solving capacities (Safitri et al., 2025). At Ash-Shiddiiqi, the Kyai's adaptive leadership is manifested in his direct and active participation in digital training activities alongside teachers and staff. As one teacher reported: "He (the Kyai) always leads by example. When there is training on using digital platforms, he learns together with us." This co-participatory model of leadership effectively dissolves the hierarchical distance often associated with top-down digital mandates and generates authentic buy-in through shared learning experiences.

This finding corroborates the argument advanced by Khozaini and Mundiri (2024) that educational institutions—and pesantren in particular—require adaptive awareness and rapid response capacities to

support digitalization among all levels of staff and administration. Ibadullaeva (2025) further argues that enhancing digital literacy within educational settings necessitates leaders capable of facilitating genuine collective learning rather than imposing prescriptive, hierarchically directed training regimes. The distinction is significant: rather than positioning digital competence as an externally imposed requirement, adaptive leadership at Ash-Shiddiiqi constitutes it as a shared institutional endeavor in which the leader's visible engagement confers both moral authority and practical motivation.

The exemplary dimension of this leadership style carries particular significance within the pesantren cultural context, where the Kyai's personal conduct is conventionally accorded profound normative weight. When the Kyai personally engages with digital systems, participates in technology training, and demonstrates a willingness to learn from younger and more digitally proficient colleagues, he generates what the transformational leadership literature terms "idealized influence" or "modeling the way"—the behavioral embodiment of values that establishes the leader as a credible and trustworthy agent of change (Heenan et al., 2023). This conduct simultaneously reduces resistance to digitalization by demonstrating that technological adoption is compatible with the spiritual and cultural commitments central to pesantren identity. Chughtai et al. (2023) provide additional theoretical grounding, demonstrating that adaptive leadership functions as a moderating variable in the relationship between learning organization structures, self-change efficacy, and institutional innovation—suggesting that the Kyai's adaptive engagement not only builds individual digital competence but also enhances the institution's overall innovative capacity.

**C. Human Resource Development, External Networking, and Institutional Innovation**

The third leadership dimension concerns the Kyai's strategic investment in human resource development and the deliberate cultivation of external institutional networks. The data reveal that Pondok Pesantren Ash-Shiddiiqi has pursued a systematic program of digital competence development among its staff, facilitated through structured collaboration with the Department of Communication and Information Technology (Dinas Kominfo) and alumni professionals specializing in information technology. As one administrative staff member recounted: "The Kyai asked us to attend digital training sessions conducted by IT alumni. Now we can manage databases and finances more efficiently." This testimony illustrates how externally sourced expertise has been channeled into meaningful improvements in internal institutional capacity.

This finding is theoretically consonant with Al-Husseini et al.'s (2021) analysis of transformational leadership in higher education, which identifies knowledge-sharing networks as a critical mechanism through which transformational leaders facilitate organizational innovation and institutional commitment. Yuwanda et al. (2023) similarly argue that digital transformation in pesantren is

contingent upon the learning dispositions and collaborative capacities of teachers and staff, as well as on leaders who are capable of constructing and leveraging external relationships to access necessary resources.

Within the broader context of Islamic educational institutions, external collaboration serves functions that transcend mere resource acquisition. As Happyana et al. (2025) observe, successful transformation management in pesantren is characterized by the strategic deployment of collaborative relationships with external parties. Given the well-documented resource constraints that frequently challenge pesantren—encompassing financial, human, and infrastructural dimensions—external networks with alumni, government agencies, and peer institutions constitute an indispensable mechanism for sustaining and scaling digital transformation initiatives. Rhendica (2024) further emphasizes that adaptive leadership and inter-institutional collaboration are inseparable prerequisites for Islamic educational institutions aspiring to remain competitive and relevant in an era of accelerating technological and global change.

**D. Strategic Communication and Harmonization of Values with Technology**

The fourth and final leadership dimension identified in this study pertains to the Kyai's deployment of strategic communication as an instrument of institutional alignment and change management. The data demonstrate that the Kyai systematically integrates messages about digital transformation into multiple institutional communication forums, including weekly meetings and regular teachers' religious study (pengajian) sessions. In these contexts, the Kyai articulates a consistent message: "We must not reject progress, but progress must always remain within the framework of Islamic values." This communicative practice performs a dual function—it normalizes digital transformation as a legitimate institutional priority while simultaneously reassuring institutional members that transformation will not compromise their spiritual commitments.

Rahman (2023) argues that leadership communication in the digital era must be capable of effectively bridging value-laden religious messages with contemporary technological realities, enabling these messages to reach broader communities in meaningful and impactful ways. In this context, the Kyai functions as an institutional broker between religious vision and digital realities, employing Qur'anic principles of communication—qaulan sadidan (veracious speech), qaulan ma'rufan (honorable speech), and qaulan layyinan (gentle speech)—as the normative foundation of his communicative practice. These principles collectively orient institutional communication toward transparency, respect, and constructive engagement.

The effectiveness of transparent, persuasive, and educative communication in mitigating resistance to institutional change is well-established in the organizational change literature. Heenan et al. (2023)

document that open and participatory communication by transformational leaders exerts a significant positive effect on change acceptance and the reinforcement of organizational culture in educational settings. Conceptually, the integration of value-based communication, moral exemplarity, and technological adaptation at Ash-Shiddiiqi constitutes what may be characterized as a pattern of "values-technology harmonization"—a process through which the pesantren not only accommodates digitalization but actively imbues it with spiritual meaning. This orientation aligns with Muchlis et al.'s (2025) argument that digital communication within the Islamic tradition must remain grounded in Qur'anic ethics, ensuring that technology serves as a medium for da'wah and learning rather than functioning as an end in itself.

Taken collectively, the four leadership dimensions analyzed above—value-based leadership, adaptive and exemplary leadership, human resource development and external networking, and strategic communication—constitute an integrated model of transformational leadership uniquely suited to the institutional specificities of pesantren. These dimensions are not discrete or sequential but are mutually reinforcing, operating in concert to produce a sustainable trajectory of digital transformation that preserves and deepens the institution's Islamic identity while enhancing its operational effectiveness and outreach capacity. The findings extend the existing literature on transformational leadership in Islamic educational contexts (Kareem et al., 2023) by demonstrating the contextual adaptations and value-based orientations that render this leadership model effective in the pesantren setting.

## 4. CONCLUSION

This study has demonstrated that effective digital transformation in Islamic boarding schools is fundamentally a leadership phenomenon, shaped by the strategic vision, adaptive conduct, communicative practices, and relational networks of the institutional leader. At Pondok Pesantren Ash-Shiddiiqi, the Kyai's value-based leadership has served as the primary enabling condition for a sustainable and identity-preserving digital transformation process. By anchoring all technological decisions within an explicitly Islamic normative framework, actively participating in capacity-building initiatives alongside staff, constructing strategic external partnerships, and deploying Qur'anic communicative ethics in all institutional communications, the Kyai has created an institutional environment in which digital innovation and spiritual continuity are mutually reinforcing rather than contradictory imperatives.

Theoretically, this study contributes a contextually grounded model of transformational leadership for Islamic educational institutions, enriching the existing literature by foregrounding the indispensable role of value-based, adaptive, and exemplary leadership in navigating digital transformation.

Practically, the findings offer a replicable framework for other pesantren and Islamic educational institutions seeking to manage digitalization in a manner consistent with their institutional missions and Islamic values. The proposed framework integrates value-oriented leadership, participatory human resource development, phased and resource-sensitive digital implementation strategies, and ethically grounded institutional communication.

Future research should extend this inquiry in several directions. Longitudinal studies tracking the sustained impact of value-based digital leadership on learning outcomes, teacher professional development, and institutional innovation would substantially enrich understanding of the long-term dynamics of this transformation model. Comparative studies across multiple pesantren with varying resource endowments, geographic contexts, and leadership profiles would further illuminate the conditions under which this model is generalizable and the adaptations it may require. Additionally, investigation of the perspectives of students (santri) as the primary beneficiaries of these transformations would provide an important dimension currently underrepresented in the extant literature.

**3REFERENCES**

Al-Husseini, S., Beltagi, I. El, & Moizer, J. (2021). Transformational leadership and innovation: The mediating role of knowledge sharing amongst higher education faculty. International Journal of Leadership in Education, 24(5), 670–693. https://doi.org/10.1080/13603124.2019.1588381

Basri, H., & Arifin, Z. (2021). Islamic education autonomy: Challenges and expectations. Potensia: Jurnal Kependidikan Islam, 7(2), 136–153.

Chughtai, M. S., Syed, F., Naseer, S., & Chinchilla, N. (2023). Role of adaptive leadership in learning organizations to boost organizational innovations with change self-efficacy. Current Psychology, 1–20. https://doi.org/10.1007/s12144-023-04669-z

Cohen, L., Manion, L., & Marrison, K. (2017). Research methods in education. Routledge.

Creswell, J. (2015). Penelitian kualitatif & desain riset (1st ed.). Pustaka Pelajar.

Darmawan, & Nurdin, M. Z. (2025). Sistem pendidikan pesantren di era 4.0. HOLD: Jurnal Studi Islam, 2(1), 12–26.

Faisal, A., Pabbajah, M., Abdullah, I., Muhammad, N. E., & Rusli, M. (2022). Strengthening religious moderatism through the traditional authority of Kiai in Indonesia. Cogent Social Sciences, 8(1). https://doi.org/10.1080/23311886.2022.2150450

Falakhina, A. N., & Hernawati, S. (2025). Peran Kiai dalam kepemimpinan pesantren. Risalah: Jurnal Pendidikan dan Studi Islam, 11(1), 13–23. https://doi.org/10.31943/jurnal_risalah.v11i1.1621

Foppen, A., & van Saane, J. W. (2024). Assessing religious leadership: A scoping review of leadership effectiveness criteria and current trends in the academic literature. Pastoral Psychology, 73(1), 1–21. https://doi.org/10.1007/s11089-023-01113-8

Happyana, L., Istiqomah, F. Z., Khasanah, M., & Hussin, M. (2025). Integration of tradition and technology: Digitalization strategies in Islamic education at pesantren in Banyuwangi, Indonesia. Journal of Islamic Education Research, 6(1), 1–18. https://doi.org/10.35719/jier.v6i1.446

Haris, M. A. (2023). Urgensi digitalisasi pendidikan pesantren di era society 5.0: Peluang dan tantangannya di Pondok Pesantren Al-Amin Indramayu. Islamic Management: Jurnal Manajemen Pendidikan Islam, 6(01), 49–64.

Hastasari, C., Setiawan, B., & Aw, S. (2022). Students' communication patterns of Islamic boarding schools: The case of students in Muallimin Muhammadiyah Yogyakarta. Heliyon, 8(1), e08824. https://doi.org/10.1016/j.heliyon.2022.e08824

Heenan, I. W., Paor, D. De, & Lafferty, N. (2023). Staff and school culture in primary schools: A systematic review. Societies, 13(133), 1–27.

Ibadullaeva, S. (2025). Beyond screens: An adaptive leadership approach to addressing digital distortions and student well-being. Journal of Cases in Educational Leadership, 28(2), 119–134. https://doi.org/10.1177/15554589251320850

Jannah, Y. (2021). Potret pendidikan entrepreneur di pesantren. Potensia: Jurnal Kependidikan Islam, 7(1), 86–110.

Jin, Y., Zhu, X., Zhang, X., Wang, H., & Liu, X. (2024). Business model innovation of 3D-printing garment enterprises in digital transformation. European Journal of Innovation Management, 28(6), 2251–2284. https://doi.org/10.1108/EJIM-03-2023-0223

Kareem, J., Patrick, H. A., Prabakaran, N., B., V., Tantia, V., M. P. M., P. K., & Mukherjee, U. (2023). Transformational educational leaders inspire school educators' commitment. Frontiers in Education, 8. https://doi.org/10.3389/feduc.2023.1171513

Khoir, N., & Hidayat, S. (2025). Development of an e-book on madrasah principal leadership based on pesantren culture to train students' digital literacy. At-Ta'dib, 20(1), 84–91.

Khozaini, F. Al, & Mundiri, A. (2024). Mewujudkan transformasi digital berbasis kearifan lokal: Strategi cerdas menuju sistem tata kelola unggul. JIIP - Jurnal Ilmiah Ilmu Pendidikan, 7(1), 383–392. https://doi.org/10.54371/jiip.v7i1.3636

Maghfuri, A. (2020). Synergic management of pesantren-madrasa in the modern era as an alternative of Indonesian Islamic education. Potensia: Jurnal Kependidikan Islam, 6(1), 51–71.

Muchlis, Rusli, K. M. C., & Islamdini, R. M. (2025). Konsep etika komunikasi dalam Al-Qur'an dan relevansinya terhadap praktik komunikasi digital abad ke-21: Studi tafsir tematik. Journal of Multidisciplinary Islamic Studies, 2(1), 110–129.

Muzakky, R. M. R., Mahmuudy, R., & Faristiana, A. R. (2023). Transformasi pesantren menghadapi era revolusi digital 4.0. Aladalah: Jurnal Politik, Sosial, Hukum dan Humaniora, 1(3), 241–255.

Nasir, M., Rizal, S., Basri, & Pabbajah, M. (2024). Revolutionizing Teungku Dayah learning model: Exploring the transformative impact of technological advancements on Islamic education in Aceh. Cogent Education, 11(1). https://doi.org/10.1080/2331186X.2024.2335720

Nurkhin, A., Rohman, A., & Prabowo, T. J. W. (2024). Accountability of pondok pesantren: A systematic literature review. Cogent Business and Management, 11(1). https://doi.org/10.1080/23311975.2024.2332503

Pennell, L. (2023). Transformational leadership in education: A comprehensive approach to educational success. https://doi.org/10.13140/RG.2.2.28815.56489

Rahman, R. (2023). Konsep komunikasi kepemimpinan era digital. Jurnal Ilmiah Al-Muttaqin, 9(1), 1–9. https://doi.org/10.37567/al-muttaqin.v9i1.1927

Rahmawati, D., Thaha, A. R., & Priyanto, A. (2023). Financial literacy, digital transformation adoption, and their significance to the MSMEs performance in Bandung City. Jurnal Manajemen Bisnis dan Kewirausahaan, 7(1), 213–223. https://doi.org/10.24912/jmbk.v7i1.20702

Rhendica, K. (2024). Transformasi manajemen pendidikan Islam. An Najah: Jurnal Pengembangan dan Sosiologi Keagamaan, 03(02), 46.

Rofiq, A., & Sutopo, S. (2022). Konseling Kiai terhadap manajemen pesantren. CONSEILS: Jurnal Bimbingan dan Konseling Islam, 2(1), 14–39. https://doi.org/10.55352/bki.v2i1.566

Sadali. (2020). Eksistensi pesantren sebagai lembaga pendidikan Islam. Atta'dib: Jurnal Pendidikan Agama Islam, 1(2), 53–70.

Safitri, I., Wahyuni, A., Permatasari, I., Mualimin, S., & Suzara, D. (2025). Model kepemimpinan adaptif di era digital: Tinjauan sistematis terhadap strategi kepala sekolah dalam menghadapi perubahan. Journal of Innovation in Teaching and Instructional Media, 6, 215–238. https://doi.org/10.52690/jitim.v6i1.1146

Saleh, M. N. I. (2025). Perceptions of pesantren leaders towards Islamic moderation approaches in combating radicalism and terrorism. Cogent Arts and Humanities, 12(1). https://doi.org/10.1080/23311983.2025.2474826

Saputra, D. E., & Sirozi, M. (2025). Strategi penguatan daya saing pesantren di era digital. Pendas: Jurnal Ilmiah Pendidikan Dasar, 10(1), 85–99.

Supriani, Y., Basri, H., & Suhartini, A. (2023). Leadership role in the formation of students' morals. Munaddhomah, 4(3), 528–538. https://doi.org/10.31538/munaddhomah.v4i3.296

Taufikin, Nurhayati, S., Falah, A., Sholihuddin, M., & Basori, H. (2017). Integrating creative digital content in pesantren: Improving santri's digital literacy and Islamic learning. Edukasia Islamika, 10(1), 35–54. https://doi.org/10.28918/jei.v10i1.10326

Toprak, M., Karakus, M., & Chen, J. (2023). Transformational school leadership: A systematic review of research in a centralized education system. Journal of Educational Administration, 61. https://doi.org/10.1108/JEA-10-2022-0185

Van Es, M. A. (2019). Muslim women as 'ambassadors' of Islam: Breaking stereotypes in everyday life. Identities, 26(4), 375–392. https://doi.org/10.1080/1070289X.2017.1346985

Wahidmurni, W., Susilawati, S., & Abidin, A. A. (2024). Resistance to curriculum changes among teachers of madrasah ibtidaiyah in Indonesia. Nidhomul Haq: Jurnal Manajemen Pendidikan Islam, 9(1), 16–27. https://doi.org/10.31538/ndh.v9i1.4300

Yuwanda, T., Fadhlan, A., & Bundo, M. (2023). Digitalization of pesantren: A perspective from human capital. Dayah: Journal of Islamic Education, 6(1), 29. https://doi.org/10.22373/jie.v6i1.15973

Zuhri, H. H., & Huda, M. (2024). Enhancing educational ecosystems: Implementing Peter Senge's learning organization model in Islamic boarding schools. Munaddhomah, 5(2), 222–234. https://doi.org/10.31538/munaddhomah.v5i2.1030