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Artificial Intelligence Governance in Islamic Educational Institutions: Leadership, Ethics, and Decision-Making

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Abstract : *Digital transformation has encouraged Islamic educational institutions to adopt Artificial Intelligence (AI) as part of efforts to improve governance effectiveness and management quality. However, AI implementation requires not only technological readiness but also adaptive leadership and governance based on ethical principles. This study aims to explore how AI adoption is applied in Islamic educational management through the perspectives of leadership, ethical governance, and institutional transformation. The study used a qualitative approach with a multiple case study design at several Islamic educational institutions that have implemented digital technology in their management systems. Data were collected through in-depth interviews, observations, and documentation studies, then analyzed using the interactive model of Miles, Huberman, and Saldaña, which includes data condensation, data presentation, and drawing and verifying conclusions. The results of the study indicate two main findings. First, adaptive leadership is a strategic factor in driving AI adoption through developing a digital transformation vision, strengthening human resource competencies, and establishing an innovative organizational culture. Second, AI governance based on ethical principles, such as accountability, transparency, data protection, and the values of trustworthiness, justice, and welfare, is an important foundation for sustainable institutional transformation. This research proposes an Adaptive AI Governance Model for Islamic Educational Management, which integrates adaptive leadership and ethical governance as two key pillars in AI implementation in Islamic educational institutions. This model is expected to serve as a reference for developing Islamic educational management policies and practices in the era of digital transformation.*

Keywords : *Artificial Intelligence; Islamic Education Management; Adaptive Leadership.*
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INTRODUCTION

Digital transformation has become a strategic agenda in the development of education systems in various countries, including Indonesia. The development of Artificial Intelligence (AI) technology is no longer limited to the industrial and business sectors, but has penetrated the world of education as an instrument capable of improving the effectiveness of institutional governance, the quality of decision-making, and the efficiency of academic and administrative services (Abubakari et al.., 2023; Alvarez-Sández et al., 2023). In the educational context, AI is being utilized to support student data analysis, administrative automation, learning schedule preparation, academic achievement prediction, and even the personalization of educational services (Dwivedi et al., 2021; Setiawan & Kertanegara, 2023). This shift demonstrates that AI is not merely a technological innovation, but has become part of the transformation of educational management that is changing the way educational institutions plan, organize, implement, and evaluate various programs in a more adaptive and data-driven manner.

In the context of Islamic education, this transformation presents both opportunities and more complex challenges. Islamic educational institutions, such as madrasahs, integrated Islamic schools, and Islamic boarding schools, are required to integrate digital innovation without neglecting the Islamic values that underpin their institutional identity (Dwivedi et al., 2021; Thang & Tuyen, 2023). The implementation of AI in Islamic education is not only about increasing administrative efficiency but also concerns aspects of governance, leadership, transparency, accountability, and ethical considerations in decision-making (Habash, 2024). Therefore, the success of AI adoption is not solely determined by technological readiness, but also by the organization's ability to develop policies, a work culture, and leadership that support sustainable digital transformation.

Although AI offers numerous benefits, its implementation in Islamic educational institutions still faces numerous challenges (Mulla & Krishnan, 2022; Munawwaroh & Thelma, 2024). The digital competency gap among educators and staff, limited technological infrastructure, resistance to change, and the lack of institutional policies regarding AI use are factors that hinder the adoption process (Dwivedi et al., 2023; Woelert, 2023). Furthermore, various ethical issues have emerged, such as the protection of students' personal data, the transparency of algorithms, the potential for bias in AI systems, and concerns about the diminishing role of humans in decision-making (Galvin et al., 2023; Hanafi et al., 2021). These conditions demonstrate that AI implementation requires a governance approach that is not only oriented towards efficiency but also takes into account the principles of ethics, fairness, and responsibility.

On the other hand, the concept of AI Governance has evolved as an approach that emphasizes the importance of regulation, accountability, transparency, risk management, and oversight of AI use within organizations (Sari & Muslim, 2023; Qalati et al., 2022). From an Islamic educational perspective, AI governance needs to be aligned with the values of trustworthiness, justice (al-'adl), benefit (maslahah), transparency (shiddiq), and

responsibility (mas'uliyyah) so that the use of technology continues to support the holistic goals of Islamic education. Thus, AI is not positioned as a substitute for human roles, but rather as a supporting instrument that strengthens the quality of leadership and decision-making within educational institutions.

Various previous studies have discussed the use of AI in education, including its use for personalized learning, improving learning outcomes, developing automated assessment systems, and efficiencies in educational administration. Other studies have also examined teacher readiness to adopt AI, perceptions of digital technology, and the challenges of implementing AI in educational settings (Baharun et al., 2025; Kwangmuang et al., 2021). However, most of this research focuses on pedagogical aspects and the use of AI in the learning process. Studies specifically addressing the governance of AI adoption from an Islamic education management perspective, particularly those integrating dimensions of leadership, ethics, and institutional transformation, are still relatively limited. Furthermore, research that positions AI as part of the development strategy of Islamic educational organizations is also limited.

The novelty of this study lies in the development of an Adaptive AI Governance Model for Islamic Education Management that integrates three interrelated dimensions: adaptive leadership, ethical governance, and human-centered decision-making. Existing studies on AI in education have predominantly focused on technological adoption, learning effectiveness, digital readiness, or the efficiency of AI-supported processes, while the governance of AI within the organizational and value-based context of Islamic education remains relatively underexplored. This study addresses this gap by positioning AI not merely as a technological tool, but as a strategic component of institutional governance that requires leadership capacity to manage organizational change and ethical mechanisms to ensure responsible technology use. The proposed model emphasizes that AI adoption in Islamic educational institutions must remain aligned with accountability, transparency, data protection, human oversight, *amanah*, justice, deliberation, and public benefit. This integration offers a distinctive perspective in which technological transformation, adaptive leadership, and Islamic ethical governance function as mutually reinforcing foundations for sustainable AI adoption.

Based on this novelty, this study aims to develop an Adaptive AI Governance Model for Islamic Education Management that explains how adaptive leadership and ethical governance shape the responsible adoption and institutional integration of AI within Islamic educational institutions. Through this focus, the study seeks to provide a conceptual contribution to Islamic education management while offering a practical governance framework for madrasahs, Islamic schools, and pesantren to implement AI responsibly, adaptively, and consistently with Islamic educational values.

METHOD

This research employs a qualitative approach with a multiple case study design. This approach was chosen to gain an in-depth understanding of the adoption process of Artificial Intelligence (AI) in Islamic education management, particularly regarding leadership, governance, ethics, and institutional transformation. The multiple case study design allows researchers to explore the same phenomenon across several Islamic educational institutions, thereby identifying similarities, differences, and evolving patterns of AI implementation within each institution. Through this approach, the research not only describes AI adoption practices but also builds a conceptual understanding of AI governance within the context of Islamic education management.

The research locations were purposively selected from several Islamic educational institutions, such as madrasas, integrated Islamic schools, and modern Islamic boarding schools (pesantren) that have implemented digital technology in their institutional management systems. The locations were selected based on several considerations: the institutions had implemented digital information systems in administration and academic services, had policies related to digital transformation, and demonstrated a commitment to developing technological innovation as part of organizational quality improvement. The selection of several research locations aimed to obtain a more comprehensive picture of the variations in AI implementation practices across various types of Islamic educational institutions.

Research informants were determined using purposive sampling, selecting individuals with experience, knowledge, and direct involvement in the AI implementation process in educational institutions. Key informants included madrasah or school principals, Islamic boarding school administrators, deputy heads of curriculum, heads of administration, information systems operators, teachers who utilize AI in academic and administrative activities, and information technology personnel, if available. Furthermore, if additional data was needed, the researchers used snowball sampling to obtain other informants recommended by previous participants, thus providing richer and more in-depth information.

Data collection was conducted through three techniques: in-depth interviews, observation, and documentation study. Interviews were conducted semi-structured using interview guidelines that allowed researchers to explore informants' experiences regarding the AI adoption process, leadership strategies, decision-making mechanisms, implementation challenges, and ethical considerations in technology use. Direct observations were made of institutional management activities, including the use of information systems, the implementation of AI in administration and educational services, and interactions between actors in supporting digital transformation. Meanwhile, documentation study was conducted by analyzing various documents such as the institution's strategic plan, digital transformation policies, standard operating procedures, evaluation reports, accreditation documents, and other relevant documents to strengthen the results of the interviews and observations.

In this study, the researcher acted as the primary instrument (human instrument), responsible for designing the research, collecting data, conducting analysis, and interpreting the results. To support the data collection process, the researcher utilized interview guidelines, observation guidelines, document analysis sheets, field notes, a voice recorder, and other

documentation tools. The researcher's presence in the field enabled direct interaction with informants, resulting in more in-depth data collection that aligns with the research context.

Data analysis was conducted concurrently with the data collection process using an interactive model developed by Miles et al., (2014), which includes three stages: data condensation, data display, and conclusion drawing and verification. In the data condensation stage, researchers transcribed, reduced, coded, and grouped data into key themes related to leadership, AI governance, AI ethics, institutional transformation, and supporting and inhibiting factors for implementation. Furthermore, the data was presented in narrative form, matrices, and thematic tables to facilitate the identification of relationships between categories. The final stage involved comprehensive data interpretation to identify patterns, compare findings across cases, and formulate a conceptual model for the governance of Artificial Intelligence adoption in Islamic education management.

Data validity was maintained through the application of trustworthiness criteria, including credibility, transferability, dependability, and confirmability. Data credibility was achieved through source triangulation, technical triangulation, member checking, and intensive researcher involvement throughout the research process. Transferability was maintained by presenting a detailed description of the research context, enabling readers to assess the applicability of the research results to other contexts. Dependability was achieved through an audit of the entire research process, while confirmability was maintained by documenting all empirical evidence supporting each finding so that the research results could be scientifically accounted for.

The entire research process was conducted in accordance with ethical research principles. Prior to data collection, the researcher obtained informed consent from all informants. Participants' identities were kept confidential using codes or initials, and all data collected was used solely for academic purposes. The researcher also upheld the principles of scientific honesty, objectivity, respect for participants' rights, and the norms and values prevailing in each Islamic educational institution where the research took place. Therefore, the research process is expected to yield valid and credible findings that will contribute to the development of Islamic education management studies in the era of digital transformation.

RESULT AND DISCUSSION

Results

1. Adaptive Leadership as a Driver of Artificial Intelligence Adoption in Islamic Education Management

   The research findings indicate that the successful adoption of Artificial Intelligence (AI) in Islamic education management is not solely determined by the availability of technology, but rather by adaptive leadership in managing organizational change. Based on interviews, observations, and document analysis, educational institution leaders play a key role in developing a digital transformation vision, developing a culture of innovation, enhancing the digital competence of human resources, and directing the use of AI as a supporting instrument for decision-making. Adaptive leadership encourages all members of

the institution to embrace change gradually without eliminating the Islamic educational values that characterize the organization.

This finding was reinforced by the results of an interview with the Head of Madrasah (Informant 1) who stated: *"We never consider AI to replace teachers or principals. We utilize AI to assist with administrative work, student data analysis, and report preparation, allowing leaders to have more time to focus on improving the quality of the institution. The most important thing is that all teachers are ready for change."*

This statement shows that leadership orientation is not focused solely on the use of technology, but rather on strengthening organizational capacity in facing digital transformation. A similar thing was also expressed by the Deputy Head of Curriculum (Informant 3) who explained: *"Before using various AI-based applications, we conduct regular training. Teachers aren't immediately asked to use the new technology, but are provided with guidance so they understand its benefits and don't feel overwhelmed."*

The interview data shows that enhancing digital competency is a key strategy employed by leaders to build human resource readiness. The approach emphasizes organizational learning processes rather than immediate technology implementation.

Observations further support these findings. During the research process, researchers observed that leaders actively utilize various digital platforms for coordination meetings, performance evaluations, and work program development. Academic dashboards are used to monitor student progress, while several AI-based applications are utilized to assist with report preparation, academic data analysis, and institutional administration. Nevertheless, all strategic decisions are made through deliberation between leaders, teachers, and educational staff.

Document analysis also demonstrates an institutional commitment to digital transformation. This is reflected in the Madrasah Strategic Plan for the 2025–2029 period, which includes programs to improve digital literacy, strengthen information technology infrastructure, train teachers on AI utilization, and develop a management information system to support effective educational services.

Based on this overall data, it can be interpreted that adaptive leadership is a fundamental factor in the successful adoption of AI in Islamic educational institutions. Leaders serve not only as decision-makers but also as agents of change, building a shared vision, creating a culture of innovation, facilitating the development of digital competencies, and ensuring that AI use remains under human control. Thus, AI implementation is positioned as an instrument to strengthen management effectiveness and improve institutional governance without shifting the values of leadership, collaboration, and responsibility that characterize Islamic education.

2. Ethical Governance of Artificial Intelligence as a Foundation for the Transformation of Islamic Educational Institutions

The findings reveal that the implementation of Artificial Intelligence (AI) in Islamic education management is developing within an ethically governed framework. AI is utilized to improve administrative efficiency, data processing, information management, and managerial decision-making; however, its implementation remains subject to institutional policies and human oversight. The data indicate four interconnected practices underlying ethical AI governance: human-centered decision-making, data protection, verification of AI-generated information, and the integration of Islamic institutional values. These practices demonstrate that digital transformation is not interpreted as replacing the authority of principals, teachers, or administrative staff, but as strengthening their capacity to manage information and make more informed decisions. The following interview data illustrate how these principles are implemented in institutional

Table 1. Interview Evidence on Ethical Governance in AI Implementation

Informant	Interview
Head of Madrasah	"We set clear boundaries for the use of AI. Teachers may use AI to assist with administrative tasks or data analysis, but decisions regarding student assessment, school policies, and character development remain the responsibility of educators and leaders. AI only helps provide information, not drive decisions."
Head of Administration	"We're also starting to pay attention to data security. Not all student data can be input into AI-based applications. There are internal rules regarding who can access the data and how it's used to ensure confidentiality."
Teacher/Educational Staff	"The information generated by AI is checked first before we use it in reports or other administrative decisions. We cannot simply assume that everything produced by AI is correct."
Madrasah Leadership Team	"Important decisions are still discussed together. AI can help us collect or process information, but the final decision is made through discussion between the principal, teachers, and staff."

The data demonstrate that AI implementation is characterized by clear boundaries between technological assistance and human authority. AI is primarily used to facilitate administrative work, process information, and provide analytical support, while important institutional decisions remain under human control. This arrangement ensures that technological outputs do not automatically become the basis for decisions, particularly in areas involving student assessment, institutional policies, and character development. At the same time, the selective use of student data and restrictions on access indicate that AI adoption is accompanied by attention to confidentiality and information security. The verification of AI-generated information further demonstrates that technological outputs

are treated as supporting information that requires human validation before being used in institutional processes. Decision-making also continues to emphasize deliberation and collective responsibility, allowing technological efficiency to operate alongside established organizational practices. These patterns show that AI is being integrated into the existing governance structure rather than replacing it.

Overall, the findings establish that ethical governance functions as the principal foundation of AI implementation in Islamic education management. The use of AI is directed toward improving efficiency and information quality while maintaining human judgment, accountability, data protection, and collective decision-making. The integration of these mechanisms with Islamic values such as *amanah*, responsibility, justice, transparency, and the common good demonstrates that digital transformation is being aligned with the normative identity of Islamic education. Therefore, sustainable AI adoption depends not only on technological readiness but also on the institution's capacity to establish governance that balances innovation, human accountability, information security, and Islamic ethical values.

Discussion

This study reveals that the successful adoption of Artificial Intelligence (AI) in Islamic education management is built through two main dimensions: adaptive leadership that drives digital transformation and AI governance based on ethical principles (Gianni et al., 2022; Munawwaroh et. al., 2025). These two dimensions demonstrate that AI implementation in Islamic educational institutions is not merely understood as a process of technology adoption, but as an organizational change involving leadership, institutional culture, governance, and Islamic values (Mäntymäki et al., 2022; Mökander & Floridi, 2023). These findings indicate that digital transformation will only be sustainable if technology is integrated with organizational capacity and governance mechanisms that maintain a balance between innovation and moral responsibility.

The first finding indicates that adaptive leadership is a key factor determining the success of AI implementation in Islamic education management. The role of leaders extends beyond providing digital infrastructure and encompasses developing a transformation vision, developing human resources' digital competencies, fostering an innovative organizational culture, and creating a collaborative climate for change (Ibrahim et al., 2023; Nurhakim, 2020). This demonstrates that digital transformation is a social process that relies on leaders' ability to manage organizational change rather than simply adopting new technologies.

These findings align with previous studies that suggest that the success of digital transformation is strongly influenced by the quality of leadership in building a shared vision, managing change, and enhancing organizational readiness. Previous research also suggests that leaders act as change agents, capable of reducing resistance to technology through

communication, training, and empowering human resources (Arta et al., 2023; Wardah & Syarifuddin, 2022). However, this study expands on previous studies by demonstrating that, in the context of Islamic education, adaptive leadership is not solely oriented toward organizational efficiency but also considers the values of trust, deliberation, responsibility, and service as part of the digital transformation process (Dwivedi et al., 2021; Xue & Pang, 2022). Thus, digital leadership in Islamic educational institutions has more holistic characteristics than in educational organizations in general.

This phenomenon occurs because the adoption of AI brings changes to work patterns, coordination mechanisms, and decision-making processes, requiring adjustments to organizational culture. When leaders are able to build trust, provide mentoring, and improve the digital competency of educators and staff, the level of acceptance of AI increases(Ayanwale et al., 2024; Sauri et al., 2022). Conversely, if technology implementation focuses solely on technical aspects without building organizational readiness, resistance to change tends to increase. Therefore, the success of AI implementation is more influenced by organizational readiness than the sophistication of the technology used.

The second finding indicates that ethical governance is a crucial foundation for AI implementation in Islamic educational institutions. This study found that educational institutions do not grant AI full authority in decision-making processes, but rather position it as a decision support system that assists in providing information and data analysis. Furthermore, institutions have begun to establish data protection mechanisms, restrict access to information, implement transparency in technology use, and develop internal policies to ensure that AI utilization remains consistent with institutional values.

These findings support previous research explaining that the implementation of AI in organizations requires an AI governance framework that emphasizes transparency, accountability, fairness, and data protection. However, this study provides a new perspective by integrating AI governance principles with Islamic educational values. The values of trustworthiness, justice (al-'adl), benefit (maslahah), deliberation (shura), and responsibility serve as the normative foundations for regulating the relationship between humans and technology. This integration demonstrates that AI is not only assessed based on its technological capabilities, but also on the extent to which its use supports the goals of Islamic education in developing knowledgeable, moral, and responsible individuals.

The implementation of ethical governance arises because Islamic educational institutions have responsibilities that are not only administrative, but also moral and spiritual. Unlike productivity-oriented business organizations, Islamic educational institutions must ensure that every innovation supports the development of student character and maintains public trust. Therefore, the use of AI is controlled through human verification mechanisms, institutional oversight, and internal policies that govern the responsible use of technology. This

approach reflects the fact that digital innovation and Islamic values are not contradictory concepts but can reinforce each other when managed through good governance.

Theoretically, this study expands the study of Islamic educational management by positioning AI as part of organizational governance transformation, not merely as a learning technology (He et al., 2023; Xia, 2021). This study offers the perspective that the success of AI adoption is influenced by the interaction between adaptive leadership and ethical governance, so that digital transformation cannot be understood solely through a technological approach (Owoseni, 2023; Ridwan et al., 2021). Based on these findings, this study proposes a conceptual framework of the Adaptive AI Governance Model for Islamic Educational Management, which positions adaptive leadership as a driver of organizational change and ethical governance as a controlling mechanism for AI implementation. These two components together form an institutional transformation that is effective, accountable, and aligned with the values of Islamic education.

From a practical perspective, the research findings imply that leaders of Islamic educational institutions need to develop digital transformation strategies that focus not only on technology investment but also on strengthening human resource capacity, developing AI policies, improving digital literacy, data protection, and establishing an adaptive organizational culture. Thus, AI implementation can be instrumental in improving governance quality, educational service effectiveness, and institutional quality without neglecting ethical principles and the characteristics of Islamic education.

CONCLUSION

This study concludes that the successful adoption of Artificial Intelligence (AI) in Islamic education management depends not merely on technological readiness, but on the capacity of institutions to integrate adaptive leadership and ethical governance into the digital transformation process. Adaptive leadership enables institutions to respond to technological change through a clear digital vision, capacity building, and an organizational culture that supports innovation, while ethical governance ensures that AI implementation remains accountable, transparent, secure, and consistent with Islamic values such as *amanah*, justice, deliberation, and public benefit. Accordingly, AI is positioned as a strategic decision-support instrument that strengthens managerial effectiveness and information quality while preserving human authority and professional judgment in institutional decision-making. The findings therefore demonstrate that sustainable digital transformation requires a balance between technological innovation, adaptive leadership, and value-based governance.

The main contribution of this study is the Adaptive AI Governance Model for Islamic Educational Management, which integrates adaptive leadership and ethical governance as complementary pillars for sustainable AI adoption. This model extends the discourse on Islamic educational management by positioning AI not simply as a technological or instructional tool, but as a strategic instrument for strengthening institutional governance. Practically, the

findings suggest that madrasahs, Islamic schools, and pesantren should complement digital infrastructure investment with AI-use policies, data protection mechanisms, digital competency development, and governance procedures grounded in Islamic educational values. However, because this study was conducted within a limited number of Islamic educational institutions, its findings cannot be generalized to all institutional contexts. Future research should therefore examine the model across more diverse settings and employ mixed-method or quantitative approaches to further validate its applicability and examine its relationship with leadership effectiveness, governance quality, and educational outcomes.

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BIBLIOGRAPHY

Abubakari, A. R., Inusah, M., & Abdulai, A. A. (2023). The effects of information communication technology on administrative efficiency of Tamale Technical University. *American Journal of Industrial and Business Management*, *13*(5), 394-417.

Alvarez-Sández, D., Velázquez-Victorica, K., Mungaray-Moctezuma, A., & López-Guerrero, A. (2023). Administrative processes efficiency measurement in higher education institutions: a scoping review. *Education Sciences*, *13*(9), 855.

Arta, D. N. C., Makduani, R., Rozi, F., Taufik, M., & Nusa, Y. (2023). Peran Career Adaptability Terhadap Emotional Intelligence Dan Work Values: Literature Review. *Journal of Economic, Bussines and Accounting (COSTING)*, *6*(2), 1270–1279. https://doi.org/10.31539/costing.v6i2.5206

Baharun, H., Kamal, M. N. I., & Munawwaroh, I. (2025). Microsoft Teams-Based Interactive Learning Management Training To Improve Teacher Competence At Mts Nurus Syam, Bondowoso District. *GEMEINSCHAFT: Journal of Social and Community Engagement*, *3*(1), 37-55. https://doi.org/10.71392/gjsce.v3i1.145

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, *59*(May 2020), 102168. https://doi.org/10.1016/j.ijinfomgt.2020.102168

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., … Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*,

71(March). https://doi.org/10.1016/j.ijinfomgt.2023.102642

Galvin, L., Verissimo, C. K., Ambikapathi, R., Gunaratna, N. S., Rudnicka, P., Sunseri, A., Jeong, J., Froese, S., Malley, O., Yousafzai, A. K., Mwanyika, M., Mosha, D., Kumalija, E., Connolly, H., Praygod, G., Endyke-doran, C., & Pat, M. (2023). Social Science & Medicine Effects of engaging fathers and bundling nutrition and parenting interventions on household gender equality and women ' s empowerment in rural Tanzania : Results from EFFECTS , a five-arm cluster-randomized controlled trial. *Social Science & Medicine*, *324*(March), 115869. https://doi.org/10.1016/j.socscimed.2023.115869

Gianni, R., Lehtinen, S., & Nieminen, M. (2022). Governance of responsible AI: From ethical guidelines to cooperative policies. *Frontiers in Computer Science*, *4*, 873437.

Hanafi, Y., Taufiq, A., Saefi, M., Ikhsan, M. A., Diyana, T. N., Thoriquttyas, T., & Anam, F. K. (2021). The new identity of Indonesian Islamic boarding schools in the "new normal": the education leadership response to COVID-19. *Heliyon*, *7*(3). https://doi.org/10.1016/j.heliyon.2021.e06549

He, Z., Huang, H., Choi, H., & Bilgihan, A. (2023). Building organizational resilience with digital transformation. *Journal of service management*, *34*(1), 147-171.

Ibrahim, M. A., Abdullah, A., Ismail, I. A., & Asimiran, S. (2023). Islamic economics and finance instructional leadership and curriculum practices: a case study of selected public universities in Saudi Arabia. *International Journal of Islamic and Middle Eastern Finance and Management*, *16*(6), 1201–1218. https://doi.org/10.1108/IMEFM-10-2022-0393

Kwangmuang, P., Jarutkamolpong, S., Sangboonraung, W., & Daungtod, S. (2021). The development of learning innovation to enhance higher order thinking skills for students in Thailand junior high schools. *Heliyon*, *7*(6), e07309. https://doi.org/10.1016/j.heliyon.2021.e07309

Mäntymäki, M., Minkkinen, M., Birkstedt, T., & Viljanen, M. (2022). Defining organizational AI governance. *AI and Ethics*, *2*(4), 603-609.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook. 3rd*. Thousand Oaks, CA: Sage.

Mökander, J., & Floridi, L. (2023). Operationalising AI governance through ethics-based auditing: an industry case study. *AI and Ethics*, *3*(2), 451-468.

Mulla, Z. R., & Krishnan, V. R. (2022). Impact of employment on newcomer's values: Role of supervisor's transformational leadership. *IIMB Management Review*, *34*(3), 228–241. https://doi.org/10.1016/j.iimb.2022.09.001

Munawwaroh, I., Hasanah, R., & Hina, S. (2025). Digital Game-Based Learning and the Rise of Edutainment in Virtual Classrooms. *JETech: Journal of Education and Technology*, *1*(2), 87-96. https://doi.org/10.65678/jetech.v1i2.171

Munawwaroh, I., & Thelma, C. C. (2024). Balancing Innovation and Ethics: The Controversy of Artificial Intelligence in Higher Education Policy Management. *EDUCARE: Jurnal Ilmu Pendidikan*, *3*(1), 23-36. https://doi.org/10.71392/ejip.v3i1.34

Nurhakim, H. Q. (2020). Manajemen Pembiayaan Pendidikan Di Sekolah. *Jurnal Sains Dan Seni ITS*, *6*(1), 51–66.

Owoseni, A. (2023). What is digital transformation? Investigating the metaphorical meaning of digital transformation and why it matters. *Digital Transformation and Society*, *2*(1), 78-96.

Qalati, S. A., Zafar, Z., Fan, M., Sánchez Limón, M. L., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational

citizenship behavior: A mediated model. *Heliyon*, *8*(11). https://doi.org/10.1016/j.heliyon.2022.e11374

Ridwan, Y. H., Zuhdi, M., Kosim, K., & Sahidu, H. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Model Problem Based Learning Untuk Meningkatkan Kemampuan Berpikir Kreatif Fisika Peserta Didik. *ORBITA: Jurnal Kajian, Inovasi Dan Aplikasi Pendidikan Fisika*, *7*(1), 103. https://doi.org/10.31764/orbita.v7i1.3832

Sari, R., & Muslim, M. (2023). Accountability and transparency in public sector accounting: A systematic review. *Amkop Management Accounting Review (AMAR)*, *3*(2), 90-106.

Sauri, S., Gunara, S., & Cipta, F. (2022). Establishing the identity of insan kamil generation through music learning activities in pesantren. *Heliyon*, *8*(7), e09958. https://doi.org/10.1016/j.heliyon.2022.e09958

Setiawan, H., & Kertanegara, A. M. Z. R. (2023). Perancangan Infrastruktur Kunci Publik Dengan Implementasi Pembangunan Sistem Ujian Daring Berbasis Web. *Computer Based Information System Journal*, *11*(1), 1–11. https://doi.org/10.33884/cbis.v11i1.6504

Thang, P. D., & Tuyen, T. Q. (2023). Efficient administrative management strategy for activities in international higher education institutions: Lessons for Vietnam. *International research journal of management, IT and social sciences*, *10*(3), 221-232.

Wardah, W., & Syarifuddin, S. (2022). Sikap Mahasiswa Terhadap Keaktifan Berorganisasi dalam Career Adaptability. *Jurnal Basicedu*, *6*(2), 1738–1747. https://doi.org/10.31004/basicedu.v6i2.2277

Woelert, P. (2023). Administrative burden in higher education institutions: A conceptualisation and a research agenda. *Journal of Higher Education Policy and Management*, *45*(4), 409-422.

Xia, P. (2021). Design of Personalized Intelligent Learning Assistant System Under Artificial Intelligence Background. In *Advances in Intelligent Systems and Computing* (Vol. 1282, pp. 194–200). https://doi.org/10.1007/978-3-030-62743-0_27

Xue, L., & Pang, Z. (2022). Ethical governance of artificial intelligence: An integrated analytical framework. *Journal of Digital Economy*, *1*(1), 44-52.