

STRATEGIC TRANSFORMATION OF ISLAMIC EDUCATION TEACHERS' ROLES AMID DIGITAL AND AI DISRUPTION

Muh. Afriansa¹, Muhammad Guntur²

¹²Universitas Islam Negeri Palopo, Indonesia

Corresponding Author:

Muh. Afriansa,
Universitas Islam Negeri Palopo, Indonesia
Email: muh.afriansa90@gmail.com

Article Info

Received: May 12, 2026

Revised: June 15, 2026

Accepted: June 27, 2026

Online Version: August 01,
2026

Abstract

This conceptual article examines how technological disruption and artificial intelligence are transforming the professional role of Islamic Religious Education (PAI) teachers and the managerial conditions required to sustain meaningful digital learning. Using a narrative literature review of twelve scholarly publications and two normative sources cited in the underlying academic paper, the study synthesises evidence on teacher digitalisation, professional digital competence, pedagogical adaptation, artificial intelligence, moral formation, epistemic authority, and school-community collaboration. The synthesis shows that technological disruption does not diminish the importance of teachers; instead, it shifts their role from information transmitters toward learning leaders, digital-pedagogical designers, ethical-spiritual guides, epistemic verifiers, and ecosystem collaborators. The article proposes a Five-Domain Strategic Teacher Transformation Framework comprising learning leadership, professional digital competence, ethical-spiritual stewardship, epistemic verification, and ecosystem collaboration. Its novelty lies in integrating technological, pedagogical, moral, epistemic, and organisational dimensions into one management-oriented framework for PAI teacher transformation. The framework implies that school and madrasah leaders should treat digital adaptation as an institutional change process supported by professional learning, collaborative culture, responsible technology policies, and continuous evaluation rather than as a simple programme of device adoption.

Keywords: Teacher Transformation, Educational Management, Digital Disruption, Artificial Intelligence, Islamic Education



© 2026 by the author(s)

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0) license (<https://creativecommons.org/licenses/by/4.0>).

Journal Homepage

<https://ejournal.lerc-edu.org/index.php/praeftectura>

How to cite:

Afriansa, M., & Guntur, M. (2026). Strategic transformation of Islamic education teachers' roles amid digital and AI disruption. *Praefectura: Journal of Transformational Leadership and Educational Management*

Published by:

Lagaligo Education and Research Centre

INTRODUCTION

Technological disruption has reshaped educational environments through digitalisation, online connectivity, artificial intelligence, and increasingly open access to learning resources. These developments move learning away from closed and teacher-centred patterns toward more flexible, collaborative, and networked arrangements. Wohlfart and Wagner (2022) describe teachers as central actors in the digitalisation of education, while Adam and Lailatussaadah (2022) show that educators in disruptive contexts are expected to operate as facilitators, innovators, conceptual designers, and role models. This shift is especially significant in Islamic Religious Education (PAI), where learning is not limited to information acquisition. PAI also carries responsibility for faith formation, worship practice, moral development, and the cultivation of respectful social conduct. Consequently, technological change affects not only learning media but also the meaning, authority, and ethical direction of religious education.

The normative orientation of Islamic education strengthens this concern. Qur'an 58:11, as presented in the academic paper, associates knowledge with faith and human elevation, while Shihab (2002) interprets the verse as placing knowledge within a framework of responsibility rather than mere information accumulation. The Ministry of Religious Affairs of the Republic of Indonesia (2019) provides the official Indonesian translation used in the paper. In a digital environment marked by information abundance, the educational challenge is therefore not simply how to provide students with more content, but how to help them distinguish credible knowledge, interpret it responsibly, and connect it with faith, adab, and social benefit. This gives PAI teachers a continuing role as mediators between technological possibility and the normative purposes of Islamic education.

Indonesian educational reform also intensifies the transformation of teachers' roles. Sibagariang et al. (2021) explain that the Merdeka Belajar orientation and the teacher-mover programme place teachers at the centre of educational change. Teachers are expected to manage technology-supported learning, mobilise colleagues, collaborate with parents and communities, and nurture critical, creative, independent, and character-oriented learners. Such expectations expand professional responsibility beyond classroom instruction. For PAI teachers, this development means that digital adaptation must be accompanied by moral and spiritual maturity because the teacher is expected to lead learning while simultaneously embodying the values being taught.

However, the pace of technological change is not matched by equal readiness among educators. Adam and Lailatussaadah (2022) identify limitations in information-technology knowledge, infrastructure, and regulatory support, while Pibina et al. (2025) underline the need for critical thinking, creativity, communication, collaboration, and digital literacy in twenty-first-century teaching. Salim et al. (2023) likewise emphasise the importance of managing information and communication technology so that digital resources improve educational effectiveness rather than merely increase technological presence. These findings indicate a strategic management problem: schools and madrasahs cannot expect teachers to transform their practice through individual effort alone. Institutional policy, professional learning, collegial support, and learning infrastructure must develop together.

International evidence reinforces this argument. Konstantinidou and Scherer (2022), in a multilevel study involving 15,015 teachers across eight countries, found positive relationships between technology-supported teaching and teacher motivation, self-efficacy, prior ICT teaching experience, and professional collaboration. School ICT resources alone were not sufficient to explain the quality of technology-based teaching. The implication is important for educational management: digital transformation is primarily a human-capability and organisational-culture challenge, not an equipment procurement project. In PAI, this distinction is critical because a technically advanced classroom may still produce superficial religious learning if the teacher lacks pedagogical judgement, critical source literacy, and a clear ethical orientation.

The conceptual challenge becomes more complex with artificial intelligence. Falloon (2020) argues for a movement from narrow digital literacy toward comprehensive teacher digital competence, while Nagel et al. (2023) emphasise professional digital competence that includes pedagogical and didactic judgement, digital responsibility, societal awareness, and epistemic understanding. Tan et al. (2025), reviewing 95 publications from 2015 to 2024, found that research has focused more strongly on using AI for teaching than on preparing teachers professionally to work with AI. This imbalance raises a specific problem for PAI: students can now obtain instant religious explanations from search engines,

social media, and generative AI, but speed and accessibility do not guarantee methodological validity, contextual accuracy, or ethical responsibility.

Existing literature provides valuable insights into teacher digitalisation, professional competence, technology-supported pedagogy, post-truth challenges, and school-community relations. Yet these dimensions are often discussed separately. The academic paper identifies a gap in the limited attention given specifically to PAI teachers who must simultaneously adapt to digital and AI disruption, maintain Islamic scholarly authority, form students' character, and redesign learning. This article addresses that gap by reframing the changing role of PAI teachers as a strategic educational-management issue. It asks how technological disruption transforms teachers' roles, which professional competencies and pedagogical adaptations are required, and how educational institutions can protect moral formation and epistemic integrity while developing contemporary digital practice. The article's contribution is an integrated framework that positions PAI teachers as learning leaders within a managed digital ecosystem rather than as passive users of technology.

RESEARCH METHOD

This study employed a narrative literature review and conceptual synthesis. The review corpus consisted of twelve scholarly publications and two normative sources explicitly used in the academic paper from which this article was developed. The scholarly works were published primarily between 2020 and 2025 and addressed teacher roles in digitalisation, educator roles in disruptive contexts, professional digital competence, technology-supported teaching, artificial intelligence in teaching and teacher professional development, twenty-first-century teacher competence, technology management, post-truth challenges in religious education, teacher modelling, teacher leadership under Merdeka Belajar, and school-community collaboration. The two normative sources were the official Indonesian Qur'an translation published by the Ministry of Religious Affairs and Shihab's Tafsir al-Misbah, which provide the Islamic educational framing for knowledge, responsibility, and moral guidance.

The analysis was conducted in four stages. First, the central claims, findings, and concepts of each source were identified and organised according to the three questions developed in the academic paper: transformation of learning and teacher roles, contemporary competence and pedagogical adaptation, and implications for moral formation, scholarly authority, and learning practice. Second, overlapping ideas were coded into cross-cutting themes, including learning leadership, professional digital competence, pedagogical agency, ethical-spiritual responsibility, epistemic verification, and educational ecosystem collaboration. Third, the themes were compared to distinguish individual teacher responsibilities from institutional management responsibilities. Fourth, the themes were integrated into a strategic framework describing how PAI teacher transformation can be supported by school and madrasah leadership.

The review is narrative rather than systematic. It does not claim exhaustive database coverage, a formal risk-of-bias assessment, or statistical generalisation. No additional empirical data were introduced beyond the literature and normative materials contained in the academic paper. The purpose is conceptual: to reorganise the available evidence into a coherent management-oriented explanation of PAI teacher transformation under digital and AI disruption and to identify propositions that can guide future empirical research.

RESULTS AND DISCUSSION

Technological Disruption and the Strategic Repositioning of PAI Teachers

The reviewed literature indicates that technological disruption changes the locus of educational authority. When students can access texts, videos, social media commentary, online courses, and AI-generated explanations independently, teachers no longer control entry to information. Wohlfart and Wagner (2022) show that digitalisation changes teachers' professional roles in complex ways, while Adam and Lailatussaadah (2022) identify facilitation, innovation, conceptual design, and modelling as increasingly important educator functions. The strategic implication is that PAI teachers must move from information ownership toward learning leadership. Their value is not reduced because information is abundant; rather, their role becomes more demanding because they must organise learning, establish criteria for trustworthy knowledge, create meaningful interaction, and guide students in connecting digital information with Islamic educational purposes.

This transformation also changes the meaning of authority. Traditional authority can be weakened when it depends primarily on the teacher's position as the person who possesses information that students do not have. In a networked environment, sustainable authority must be earned through scholarly reliability, pedagogical competence, moral consistency, and the ability to explain why some claims deserve trust while others require verification. For PAI, this is particularly important because religious knowledge is not simply a set of decontextualised facts. It is connected to interpretive traditions, methodological disciplines, source criticism, and ethical responsibility. The teacher's authority therefore shifts from monopoly over content toward stewardship of meaning and method.

The Merdeka Belajar and teacher-mover orientation strengthens this repositioning. Sibagariang et al. (2021) describe teachers as leaders of learning who are expected to use technology, influence peers, and collaborate across the educational environment. This creates a direct connection between teacher transformation and educational leadership. PAI teachers can be understood as micro-level instructional leaders: they shape classroom culture, influence students' ethical use of technology, model reflective engagement with knowledge, and connect religious learning with real problems. Their leadership does not depend on a formal administrative title; it is expressed through professional agency and their capacity to mobilise learning toward shared educational values.

At the same time, digitalisation can place teachers under pressure when institutional expectations increase faster than professional support. Wohlfart and Wagner (2022) note that teachers can function both as drivers of digitalisation and as professionals burdened by its demands. This tension matters for management. When leaders define digital transformation primarily through platform use, reporting requirements, or device adoption, teachers may comply technically without changing pedagogy. Strategic transformation requires leaders to clarify the educational problem that technology is expected to solve, protect time for professional learning, support experimentation, and evaluate learning quality rather than simply counting technology use. Thus, the repositioning of PAI teachers is inseparable from the organisational conditions in which they work.

Professional Digital Competence and Transformative Pedagogical Agency

Professional adaptation begins with a broader definition of digital competence. Falloon (2020) argues that teacher digital competence exceeds operational skill and includes the pedagogical, professional, ethical, and contextual judgement needed to use technology responsibly. Nagel et al. (2023) extend this orientation through professional digital competence, which incorporates generic technology use, pedagogical-didactic knowledge, professional responsibility, understanding of digitalisation's effects on society, and awareness of how digital tools reshape knowledge practices. For PAI teachers, this framework is more appropriate than a narrow focus on applications because religious learning demands decisions about sources, interpretation, classroom interaction, academic integrity, and moral consequences.

This broader competence should be expressed through professional agency. Nagel et al. (2023) emphasise the importance of teachers' capacity to take initiative and transform practice rather than merely follow technological trends. In PAI, such agency means selecting a digital tool because it serves an instructional purpose, not because it is fashionable. A teacher may use collaborative writing to compare interpretations, digital storytelling to connect moral concepts with lived experience, or multimedia projects to encourage reflective religious expression. The management principle is purpose before platform: learning objectives, student needs, and ethical requirements should determine technological choices.

Empirical evidence also shows that this agency grows through confidence and collaboration. Konstantinidou and Scherer (2022) found that teacher motivation, self-efficacy, prior ICT experience, and collaboration were positively related to technology-supported teaching. These findings suggest that professional development should not be organised as isolated technical workshops. Schools and madrasahs need sustained professional learning communities in which teachers plan, test, discuss, and evaluate digital learning together. Peer mentoring can reduce anxiety, spread practical knowledge, and build a culture in which digital experimentation is connected to pedagogical reflection. Leaders therefore need to manage teacher learning as a continuous organisational process.

Artificial intelligence intensifies the need for this form of professional learning. Tan et al. (2025) show that scholarship has concentrated more heavily on AI use in teaching than on teacher professional development. This creates a readiness gap. For PAI teachers, generative AI can support brainstorming, explanation, language assistance, formative questioning, and resource development, but

its outputs must not be treated as authoritative by default. Teachers need the capacity to question AI-generated claims, identify missing context, verify citations and religious sources, recognise possible fabrication, and preserve student authorship and academic integrity. AI competence is therefore partly technical but fundamentally pedagogical and epistemic.

Ethical-Spiritual Leadership and Epistemic Authority in AI-Mediated Learning

The literature further shows that technological disruption expands the domain of character education. Salim et al. (2023) highlight both the educational possibilities and management demands of information and communication technology, while Karlau and Rukua (2023), in a study from Christian religious education, describe the need for religious educators to respond critically to post-truth conditions. Although the religious tradition examined by Karlau and Rukua differs from PAI, the problem is comparable at the level of media culture: students encounter persuasive claims whose emotional appeal may exceed their factual reliability. PAI therefore needs to translate traditional moral education into digital practices such as responsible sharing, respectful online discussion, source verification, intellectual honesty, restraint, and accountability for digital traces.

This is where the ethical-spiritual role of the teacher becomes strategically important. The academic paper argues that PAI teachers remain *murabbi*, *mu'allim*, and *mu'addib*: educators who cultivate, teach, and form *adab*. Technology cannot fully substitute for modelling, habituation, relational guidance, and moral judgement. Puspitasari and Resmalasari (2022) emphasise the teacher's role as a model in disruptive contexts, and Sibagariang et al. (2021) likewise connect teacher leadership with moral and spiritual maturity. The implication is not that digital media should be rejected, but that digital learning must remain embedded in human relationships where values are demonstrated and discussed.

Epistemic authority is the second dimension. Nagel et al. (2023) draw attention to the epistemic implications of digital technologies, including how they change where knowledge is located and how people judge it. In PAI, this issue is especially sensitive because online religious content varies greatly in quality and methodological credibility. A teacher must therefore function as a verifier and curator: distinguishing primary from secondary sources, clarifying context, explaining interpretive limits, checking quotations, and teaching students not to equate search-engine ranking or AI fluency with scholarly validity. This role transforms source literacy into a core component of religious education.

AI-mediated learning adds further risks concerning accuracy, accountability, copyright, misinformation, and deepfakes, issues also noted within professional digital competence discussions (Nagel et al., 2023). For PAI, an AI-generated answer may be linguistically convincing while omitting scholarly disagreement, legal context, or the methodological basis of a religious judgement. The teacher's role is therefore not to compete with AI in producing faster answers, but to teach students how to interrogate answers. Questions such as Who produced this claim? Which source supports it? What context is missing? Is there a recognised scholarly basis? and What ethical consequences follow from using this information? turn digital verification into an educational habit. This is a form of epistemic leadership that preserves intellectual integrity in a high-speed information environment.

Institutional Management and a Five-Domain Strategic Transformation Framework

Teacher transformation cannot be sustained through individual competence alone. Subekti et al. (2025) show that teachers in disruptive contexts also function as facilitators of relationships between schools and communities, while Sibagariang et al. (2021) emphasise collaboration with parents and colleagues. For PAI, this ecosystem dimension is essential because moral formation, worship habits, digital behaviour, and religious identity are shaped across school, family, community, and online spaces. If these environments communicate contradictory expectations, classroom learning may have limited influence. Educational leaders must therefore manage coordination among teachers, parents, school policies, digital platforms, and community partners.

The literature synthesis produces five strategic domains for transforming PAI teachers' roles. First, learning leadership repositions the teacher as a designer and facilitator of active, contextual, technology-supported learning. Second, professional digital competence develops the ability to select tools, redesign pedagogy, and exercise transformative agency. Third, ethical-spiritual stewardship extends *akhlāq* formation into digital behaviour and keeps technological use subordinate to Islamic educational purposes. Fourth, epistemic verification protects the validity of religious knowledge by strengthening source literacy and critical evaluation of online and AI-generated content. Fifth, ecosystem collaboration connects classroom practice with professional communities, school leadership,

families, and the wider social environment. Table 1 translates these domains into management actions and expected outcomes.

Table 1. Five-Domain Strategic Teacher Transformation Framework

Strategic domain	Transformed teacher role	Institutional management actions	Expected outcome
Learning leadership	Learning designer, facilitator, and instructional leader	Support active and contextual digital pedagogy; align technology with learning goals; evaluate learning quality	Student-centred, meaningful, and technology-supported PAI learning
Professional digital competence	Reflective and adaptive digital professional	Provide sustained professional learning, mentoring, peer collaboration, and responsible AI capability development	Confident, purposeful, and pedagogically sound technology use
Ethical-spiritual stewardship	Moral exemplar and guide for digital conduct	Integrate digital akhlaq, academic integrity, responsible communication, and ethical technology policies	Responsible digital behaviour grounded in Islamic values
Epistemic verification	Verifier, curator, and interpreter of religious knowledge	Establish source-verification routines; teach critical evaluation of online and AI-generated content	Stronger religious information literacy and protection of scholarly integrity
Ecosystem collaboration	Connector among school, family, professional community, and society	Develop parent communication, teacher learning communities, school-wide digital norms, and community partnerships	Coherent support for student learning and character across environments

The framework shifts responsibility from individual adaptation to strategic institutional transformation. School and madrasah leaders should begin by diagnosing teacher readiness, student digital practices, infrastructure, professional-learning needs, and risks related to misinformation or irresponsible AI use. Based on that diagnosis, leaders can establish a shared direction for digital PAI, define minimum ethical and scholarly standards, and align professional development with actual classroom needs. Technology policy should address not only access and security but also source verification, academic integrity, responsible AI use, student privacy, and the boundaries of automated assistance in religious learning.

Professional learning should then be organised as a cycle of design, practice, reflection, and improvement. Teachers need opportunities to co-plan lessons, examine student work, test digital strategies, and discuss difficult cases involving AI or online religious content. Leaders can support this process through mentoring, peer observation, collaborative lesson study, and protected time for professional dialogue. Evaluation should focus on whether technology improves student understanding, participation, ethical judgement, and independence, not merely whether digital tools were used. Such evaluation keeps digital transformation connected to educational value.

The framework also has implications for transformational leadership. Digital change requires leaders to articulate a convincing educational purpose, build collective capacity, model responsible technology use, and create conditions in which teachers can exercise professional agency. In PAI, transformational leadership must additionally protect the integrity of Islamic educational goals. Innovation should not weaken the role of knowledge verification, adab, moral formation, or human guidance. The strategic question is therefore not whether schools should adopt digital technology and AI, but how they can govern these technologies so that teacher professionalism, student agency, and Islamic educational values are strengthened together.

Several limitations should be recognised. This article is a conceptual synthesis based on a narrative review of the literature contained in the academic paper and does not provide field evidence from a particular school or madrasah. The corpus is also limited in size and combines international studies of teacher digitalisation with Indonesian studies of educational disruption and religious teaching. The proposed framework therefore requires empirical testing. Future research could examine the relationship between transformational school leadership, professional digital competence, PAI teacher agency, and student digital ethics; compare implementation across schools, madrasahs, and pesantren; or evaluate professional-development models for critical and responsible AI use in PAI.

CONCLUSION

Technological and AI disruption does not make PAI teachers less important; it changes why and how they are important. As access to information becomes decentralised, teachers can no longer rely primarily on their role as transmitters of content. They are required to lead learning, design meaningful digital pedagogy, guide students' ethical conduct, verify the credibility of religious knowledge, and connect learning across school, family, community, and digital environments. Professionalism therefore needs to combine pedagogical competence, digital competence, ethical-spiritual maturity, reflective agency, and epistemic responsibility. These dimensions are mutually reinforcing: sophisticated technology without moral and scholarly judgement can produce efficient but shallow learning, while strong values without pedagogical adaptation can reduce the relevance of PAI in students' contemporary lives.

The Five-Domain Strategic Teacher Transformation Framework proposed in this article integrates learning leadership, professional digital competence, ethical-spiritual stewardship, epistemic verification, and ecosystem collaboration. Its principal implication is managerial. Schools and madrasahs should treat teacher transformation as a continuous institutional change process involving shared vision, professional learning, collaborative culture, responsible technology governance, and evaluation of educational outcomes. By placing technology under pedagogical, ethical, and epistemic direction, Islamic education can engage digital and AI innovation without surrendering its commitment to knowledge, character, and human guidance.

AUTHOR CONTRIBUTIONS

Muh. Afriansa: Conceptualization; literature review; writing - original draft. Muhammad Guntur: Conceptual review; validation; writing - review and editing. Both authors approved the final manuscript.

REFERENCES

- Adam, E., & Lailatussaadah. (2022). The roles of educator in disruptive era: A literature review. *Cyberspace: Jurnal Pendidikan Teknologi Informasi*, 6(1), 52-64.
- Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68, 2449-2472.
- Karlau, S. A., & Rukua, I. S. (2023). Kompetensi guru Pendidikan Agama Kristen menyikapi post-truth pada era disrupsi teknologi informasi. *Didache: Journal of Christian Education*, 4(1), 47-69.
- Kementerian Agama Republik Indonesia. (2019). *Al-Qur'an dan terjemahannya edisi penyempurnaan 2019*. Lajnah Pentashihan Mushaf Al-Qur'an.
- Konstantinidou, E., & Scherer, R. (2022). Teaching with technology: A large-scale, international, and multilevel study of the roles of teacher and school characteristics. *Computers & Education*, 179, 104424.
- Nagel, I., Gudmundsdottir, G. B., & Afdal, H. W. (2023). Teacher educators' professional agency in facilitating professional digital competence. *Teaching and Teacher Education*, 132, 104238.
- Pibina, R., Qumairah, A., Aulia, A., & Abdurrahmansyah. (2025). Problematika kompetensi guru dalam menghadapi tuntutan pendidikan abad-21 era disrupsi. *Alacrity: Journal of Education*, 5(1), 751-763.
- Puspitasari, R., & Resmalasari, S. (2022). Peran guru sebagai figur panutan dalam penerapan keterampilan saling berbagi di era disrupsi. *Jurnal Publikasi Berkala Pendidikan Ilmu Sosial*, 2(2), 66-76.
- Salim, A., Afdal, Deprizon, Fitri, A., & Wismanto. (2023). Peran manajemen teknologi informasi dan komunikasi dalam dunia pendidikan di era disrupsi. *Journal of Education Research*, 4(3), 1290-1297.
- Shihab, M. Q. (2002). *Tafsir al-Misbah: Pesan, kesan, dan keserasian al-Qur'an* (15 vols.). Lentera Hati.
- Sibagariang, D., Sihotang, H., & Murniarti, E. (2021). Peran guru penggerak dalam pendidikan Merdeka Belajar di Indonesia. *Jurnal Dinamika Pendidikan*, 14(2), 88-99.

- Subekti, A. C., Rizal, Z. A.-G. E.-M., & Khasanah, N. (2025). Transformasi peran guru sebagai fasilitator hubungan sekolah dengan masyarakat di era disrupsi. *SINOVA: Jurnal Ilmu Pendidikan & Sosial*, 3(3), 227-236.
- Tan, X., Cheng, G., & Ling, M. H. (2025). Artificial intelligence in teaching and teacher professional development: A systematic review. *Computers and Education: Artificial Intelligence*, 8, 100355.
- Wohlfart, O., & Wagner, I. (2022). Teachers' role in digitalizing education: An umbrella review. *Educational Technology Research and Development*, 71, 339-365.

Copyright Holder :

© Muh. Afriansa and Muhammad Guntur (2026).

First Publication Right :

© Praefectura: Journal of Transformational Leadership and Educational Management

This article is under:

