



DIGITAL TRANSFORMATION AS A STRATEGIC INNOVATION IN ISLAMIC EDUCATION GOVERNANCE IN THE ERA OF SOCIETY 5.0

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Abstract:

This study aims to analyze the role of digital transformation as a strategic innovation in Islamic education governance in the era of Society 5.0. The research employs a library research method by reviewing books, scientific articles, and national and international journals related to digital transformation and Islamic education governance. Data were analyzed using content analysis through the stages of identification, classification, interpretation, and synthesis of relevant literature. The findings indicate that digital transformation plays a strategic role in Islamic education governance by shifting from a mere administrative support system to a key driver of governance reform that enhances effectiveness, efficiency, transparency, and accountability. It also supports data-driven decision-making, improves the quality of educational services, and expands access to educational information through integrated digital systems. Furthermore, digital transformation should be understood as a holistic process that integrates technological advancement with Islamic values and human-centered principles in line with the Society 5.0 paradigm. However, its implementation faces challenges such as limited technological infrastructure, low digital literacy, resistance to organizational change, and insufficient integration of Islamic ethical values in digital governance systems. Therefore, strengthening institutional policies, digital competencies, leadership capacity, and value-based governance frameworks is essential to ensure sustainable transformation in Islamic education. The study concludes that digital transformation is not only a technological innovation but also a paradigm shift in Islamic education governance toward a more adaptive, ethical, and human-centered system.

Keywords: *Digital Transformation, Islamic Education Governance, Educational Innovation, Society 5.0, Educational Digitalization.*

INTRODUCTION

Digital transformation has significantly reshaped educational systems worldwide, including Islamic education. It is not merely the adoption of digital tools but a comprehensive transformation involving systemic, cultural, and data-driven governance changes (UNESCO, 2023). In Islamic education, digital transformation has become a strategic necessity to improve the effectiveness, efficiency, transparency, and accountability of educational governance in response to rapid global developments.

This transformation aligns with the concept of Society 5.0, which emphasizes a human-centered society that integrates cyberspace and physical space through advanced technologies such as Artificial Intelligence, the Internet

of Things, and big data (Cabinet Office of Japan, 2021). Within this framework, Islamic educational institutions are expected to adopt digital technologies in management and decision-making processes to become more adaptive, responsive, and innovative.

Previous studies have shown that digital transformation contributes to improving educational governance through management information systems, digital services, and technology-based learning (Yulianti A. S et al., 2024). In addition, digital governance enhances transparency and accountability in Islamic educational institutions (Hilman & Samad, 2025). However, these studies tend to focus separately on technical implementation, digital learning systems, or administrative efficiency, without providing a comprehensive understanding of digital transformation as a strategic innovation in Islamic education governance.

However, most existing studies remain fragmented and lack an integrative perspective. Previous research rarely combines digital transformation, Islamic education governance, and the Society 5.0 paradigm within a unified analytical framework. Moreover, the integration of Islamic ethical values and human-centered principles into digital governance systems remains underexplored UNESCO (2023), despite its importance in ensuring that technological development aligns with Islamic educational philosophy.

Furthermore, the literature still shows limited attention to how digital transformation can function not only as a technological instrument but also as a governance innovation that redefines institutional management in Islamic education. This indicates a clear research gap in the lack of holistic and interdisciplinary studies that connect technological innovation, governance reform, and Islamic values in a unified conceptual model.

Therefore, this study offers novelty by positioning digital transformation not only as a technological instrument but also as a strategic and value-based innovation in Islamic education governance aligned with the Society 5.0 paradigm. This study aims to analyze the role of digital transformation in Islamic education governance in the Society 5.0 era, identify its opportunities and challenges, and formulate strategic directions for developing adaptive, effective, and sustainable governance systems.

RESEARCH METHODS

This study employed a qualitative approach using a library research method. Library research is conducted by analyzing relevant literature sources without involving direct field data collection (Creswell & Creswell, 2014). This approach is used to examine the concept of digital transformation as an innovation in Islamic education governance within the Society 5.0 era (UNESCO, 2023). The object of this study is the concept of digital transformation and Islamic education governance in the context of Society 5.0. The focus is directed toward conceptual analysis of digitalization in Islamic education management systems, particularly in terms of effectiveness, efficiency, transparency, and institutional accountability. This study does not involve population and sample because it is a library-based research (Mestika Zed, 2014). The main data sources include academic books, national and international journals, scientific articles, and official documents related to digital transformation, Islamic education, and Society 5.0 (Cabinet Office of Japan, 2021).

Data collection techniques were conducted through documentation by searching, reading, recording, and classifying relevant literature (Yusuf, 2016). The collected data were then analyzed using content analysis techniques, involving theme identification, classification of information, and systematic interpretation of literature sources (Hilman & Samad, 2025). Data validity was

ensured through source triangulation by comparing various previous studies to obtain more valid and comprehensive conclusions. This study aims to produce a conceptual synthesis regarding the role of digital transformation in Islamic education governance within the Society 5.0 era.

RESULTS AND DISCUSSION

The findings of this study are derived from a comprehensive literature analysis concerning digital transformation, Islamic education governance, and the Society 5.0 paradigm. The analysis draws upon scholarly articles, books, international reports, and previous studies relevant to the research topic. Through a library research approach, this study explores the concepts, roles, challenges, and implications of digital transformation within Islamic education governance in the context of Society 5.0.

Digital Transformation in Islamic Education Governance

Digital transformation in Islamic education governance has evolved from simple administrative digitization to a systemic change involving data-driven decision-making, service transparency, and the integration of technology in institutional management. According to Vial (2019), digital transformation refers to an organizational transformation process driven by digital technologies that affects structures, strategies, and operational processes. Similarly, Westerman et al. (2014) argue that digital transformation is not merely the adoption of technology but also the development of digital capabilities that enhance organizational performance and innovation. UNESCO (2023) emphasizes that digital transformation in education involves comprehensive changes in systems, processes, and organizational culture.

In Islamic education institutions, digital transformation is implemented through management information systems, digital academic administration, and online learning platforms. This indicates that Islamic educational institutions are gradually adapting to digital demands, although the level of implementation varies across institutions. Yuliati et al. (2024) found that educational digitalization improves efficiency and accessibility of educational services. However, its implementation is still predominantly focused on technical aspects rather than strategic governance transformation.

Digital transformation is also closely related to administrative governance reform in educational institutions. It has shifted traditional bureaucratic systems toward more efficient, transparent, and technology-based management systems. From the perspective of Governance Theory, Rhodes (2007) explains that governance involves coordination among multiple actors through networks rather than hierarchical control. Osborne (2010), through the concept of New Public Governance, further emphasizes collaboration, participation, and network-based management as key characteristics of modern governance systems. Mustoip et al. (2022) reveal that many Islamic educational institutions in Indonesia are still in a transitional phase, where digitalization is limited to basic administrative functions and has not yet fully evolved into an integrated governance system. This indicates that digital transformation has not been fully adopted as a core managerial strategy in Islamic education governance.

Furthermore, digital transformation has significant potential to enhance data-driven decision-making, strengthen institutional accountability, and improve the effectiveness of educational services. However, its implementation faces challenges such as low digital literacy, limited technological infrastructure, and organizational resistance to change (Fritiar, 2025). These findings indicate that the success of digital transformation depends not only on technology, but

also on institutional readiness and human resource capacity in adapting to governance paradigm shifts.

Islamic Education Governance in the Society 5.0 Era

The Society 5.0 era emphasizes the integration of advanced digital technologies with human-centered values in governance systems. According to the Cabinet Office of Japan (2021), Society 5.0 promotes the use of Artificial Intelligence, Internet of Things, and big data to create a human-centered society that is capable of solving social challenges while maintaining human dignity and ethical values. Similarly, Fukumiya (2018) argues that Society 5.0 seeks to balance technological advancement with social welfare, ensuring that digital innovation remains oriented toward human well-being rather than technological efficiency alone.

In the context of Islamic education governance, this concept requires a management system that is not only technologically efficient but also grounded in Islamic values such as justice (*'adl*), trustworthiness (*amanah*), and transparency (*shafafiyyah*). This perspective is consistent with Al-Attas (1979), who emphasizes that the primary objective of Islamic education is *ta'dib*, namely the cultivation of ethical, moral, and civilized individuals. Likewise, Rahman (1982) highlights that Islamic education should integrate intellectual development with moral and spiritual values to achieve balanced human development. Digital transformation in this context is not merely a technical process, but also a moral and institutional reform that aligns technological advancement with Islamic educational principles.

Hilman & Samad (2025) state that digital governance significantly improves accountability and transparency in Islamic educational institutions by enabling more structured, data-driven, and traceable administrative systems. In addition, Aryani et al. (2023) emphasize that the integration of digital systems in educational management strengthens institutional performance by improving decision-making efficiency and reducing bureaucratic complexity.

However, despite these potential benefits, the implementation of Society 5.0-based governance in Islamic education institutions still faces several structural and cultural challenges. These include digital inequality among institutions, limited technological infrastructure, and low levels of digital literacy among educators and administrators. Furthermore, Asmendri et al. (2024) highlight that resistance to change and lack of digital leadership remain significant barriers in the transformation of Islamic education governance systems.

These findings indicate that the success of Islamic education governance in the Society 5.0 era does not depend solely on technological readiness, but also on human resource capacity, leadership quality, and institutional commitment to integrating Islamic values with digital innovation.

The Role of Digital Transformation as an Innovation

Digital transformation serves not only as an administrative tool but also as a strategic innovation in Islamic education governance. The analysis indicates that digitalization accelerates decision-making processes, improves service efficiency, strengthens institutional coordination, and expands access to educational information. In this sense, digital transformation reshapes governance structures from conventional bureaucratic models into more adaptive, data-driven, and transparent systems. According to Vial (2019), digital transformation represents a fundamental organizational change driven by digital technologies that reshape business processes, organizational structures, and

strategic objectives. Similarly, Westerman et al. (2014) argue that digital transformation is not merely the adoption of technology but the development of digital capabilities that enable organizations to innovate and improve overall performance.

This finding aligns with UNESCO (2023), which highlights that digital transformation enhances governance quality through data-driven decision-making and integrated information systems. Similarly, Hilman & Samad (2025) emphasize that information technology-based governance strengthens transparency, accountability, and institutional performance in Islamic education management. From a governance perspective, Osborne (2010) explains that governance innovation emerges through collaboration, institutional adaptability, and network-based management systems. Likewise, Rhodes (1997) argues that contemporary governance requires flexible coordination mechanisms that enable organizations to respond effectively to complex and dynamic environments.

In addition, Aryani et al. (2023) found that the implementation of digital management systems in educational institutions significantly improves administrative efficiency and accelerates academic service delivery. Furthermore, Asmendri et al. (2024) explain that digital leadership plays a crucial role in ensuring the successful transformation of Islamic education governance, particularly in aligning technological adoption with institutional vision and human resource readiness.

However, despite these advancements, there remains a gap in integrating digital technology with Islamic values within governance systems. Most existing studies primarily focus on technical efficiency and operational effectiveness, while the integration of ethical, spiritual, and value-based dimensions in digital governance is still underexplored. This indicates that digital transformation in Islamic education governance is still in the stage of functional optimization rather than holistic transformation.

Therefore, the success of digital transformation should not only be measured by technological adoption but also by its ability to harmonize efficiency with Islamic ethical principles, thereby creating a balanced, human-centered governance system aligned with the values of Society 5.0.

These findings indicate that digital transformation functions as a strategic governance innovation that enhances institutional effectiveness, transparency, and adaptability while requiring stronger integration with Islamic values and human-centered governance principles.

Implications of Digital Transformation

The findings of this study indicate that digital transformation in Islamic education governance has several important implications. First, it contributes significantly to improving the effectiveness of Islamic education management by streamlining administrative processes and enhancing coordination within educational institutions. Second, it strengthens institutional transparency and accountability through the use of integrated digital systems that enable more open and traceable management practices. This is consistent with Vial (2019), who argues that digital transformation fundamentally reshapes organizational structures, processes, and governance mechanisms, enabling institutions to operate more efficiently and strategically in a digital environment.

Furthermore, digital transformation accelerates data-driven decision-making processes, allowing educational leaders to make more accurate and timely policy decisions based on real-time information. It also expands access to educational services by facilitating digital-based learning platforms and improving the reach of educational resources to broader stakeholders.

However, the successful implementation of digital transformation is

highly dependent on several enabling factors, including adequate technological infrastructure, improved digital literacy among educators and administrators, and the development of adaptive institutional policies. Without these supporting elements, the potential benefits of digital transformation cannot be fully realized.

From the perspective of Islamic education, technological advancement should not be separated from moral and ethical considerations. Al-Attas (1979) emphasizes that the ultimate goal of Islamic education is the development of civilized and ethical human beings through the concept of ta'dib. Similarly, Rahman (1982) argues that educational reform must integrate intellectual progress with moral and spiritual development. Therefore, the implementation of digital transformation should support not only institutional effectiveness but also the cultivation of Islamic values within educational governance.

Therefore, digital transformation should be understood not only as a technological shift, but also as a fundamental paradigm shift in Islamic education governance. It represents a movement toward a more modern, adaptive, transparent, and sustainable governance system that aligns with the demands of the Society 5.0 era while maintaining its commitment to Islamic ethical principles.

These findings indicate that the implications of digital transformation extend beyond technological efficiency, encompassing organizational reform, human resource development, and the strengthening of value-based governance in Islamic education institutions.

Research Gap dan Novelty

Despite these important findings, the analysis reveals a clear research gap in the limited number of integrative studies that simultaneously examine digital transformation, Islamic education governance, and the Society 5.0 paradigm within a unified conceptual framework. Existing studies generally treat these themes separately, particularly in the areas of digital learning systems, education management information systems, and the development of digital competencies among educators.

However, there is still a lack of studies that position digital transformation not merely as a technical instrument, but as a strategic innovation in Islamic education governance aligned with the human-centered values of Society 5.0. Most previous research emphasizes operational efficiency and technological implementation, while the integration of ethical, cultural, and Islamic value dimensions within digital governance remains insufficiently explored.

Based on this gap, therefore the novelty of this study lies in its conceptual synthesis that integrates digital transformation, Islamic education governance, and the Society 5.0 framework into a holistic analytical model. This study positions digital transformation as a value-based innovation that enhances not only administrative efficiency but also strengthens human-centered governance within Islamic education.

CONCLUSION

Based on the literature review, it can be concluded that digital transformation plays a strategic role as an innovation in Islamic education governance in the era of Society 5.0. The findings demonstrate that digital transformation has shifted from being merely an administrative support mechanism to becoming a key driver of governance reform, contributing to greater effectiveness, efficiency, transparency, and accountability in Islamic educational institutions. Furthermore, digital transformation supports data-driven decision-making, improves the quality of educational services, and

expands access to educational information through integrated digital systems.

The study also reveals that the implementation of digital transformation in Islamic education governance should not be viewed solely as a technological process, but as a holistic transformation that integrates technological advancement with Islamic values and human-centered principles. This perspective is consistent with the Society 5.0 paradigm, which emphasizes the balanced integration of digital innovation and human well-being.

Despite its potential benefits, several challenges remain, including limited technological infrastructure, inadequate digital literacy among educators and administrators, resistance to organizational change, and the insufficient integration of Islamic ethical values within digital governance systems. Therefore, strengthening institutional policies, enhancing digital competencies, promoting digital leadership, and developing value-based governance frameworks are essential to ensure the sustainability of digital transformation in Islamic education.

The novelty of this study lies in its conceptual integration of digital transformation, Islamic education governance, and the Society 5.0 framework into a holistic analytical perspective. Future research is recommended to conduct empirical investigations in various Islamic educational institutions and to explore practical governance models supported by emerging technologies such as Artificial Intelligence, Big Data, and Learning Analytics within the context of Islamic education.

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