

Strategic Alignment of Technology, Human Capital, and Value Creation: Digital Archival Transformation in Quranic Education

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Abstract:

This study aims to explore the transformation of digital archives and formulate an "Islamic Educational Digital Archive Ecosystem" (IEDAE) framework, grounded in the strengthening of information governance, technological integration, service quality enhancement, stakeholder satisfaction, and Islamic values. Employing a qualitative, multi-case study design, this research examines three Al-Qur'an educational institutions in Bekasi City: Riung Huffazh Indonesia (RHI), Qur'anic Leadership Centre (QLC), and Akademi Teras Qur'an (ATQ). Data were collected through observations, in-depth interviews, and document analysis, then analyzed using an interactive model comprising data condensation, data display, and conclusion verification. The findings indicate that implementing digital archive transformation is highly contextual, depending on human resource readiness, technological capacity, and organizational managerial dynamics. RHI employs a structured digital archive governance model; QLC adopts a transitional, combined manual-digital approach; and ATQ utilizes an adaptive hybrid approach. The IEDAE framework integrates digital archives into a systematic ecosystem that aligns technology, operational management, service excellence, and Islamic ethics. This study's managerial implications offer a strategic guide for leaders of Islamic educational institutions in planning resource allocation, mitigating resistance to digitalization, optimizing adaptive and accountable information governance, and continuously enhancing stakeholder satisfaction.

Keywords: *Digital Archives, Information Governance, IEDAE, Stakeholder Satisfaction*

Abstrak:

Penelitian ini bertujuan mengeksplorasi transformasi arsip digital serta merumuskan kerangka kerja Islamic Educational Digital Archive Ecosystem (IEDAE) berbasis penguatan tata kelola informasi, integrasi teknologi, peningkatan mutu layanan, kepuasan pemangku kepentingan, dan nilai-nilai Islam. Penelitian kualitatif berdesain studi multikasus ini meneliti tiga lembaga pendidikan Al-Qur'an di Kota Bekasi: Riung Huffazh Indonesia (RHI), Qur'anic Leadership Centre (QLC), dan Akademi Teras Qur'an (ATQ). Data dihimpun melalui observasi, wawancara mendalam, serta telaah dokumen, lalu dianalisis menggunakan model interaktif kondensasi data, penyajian data, dan verifikasi kesimpulan. Hasil penelitian menunjukkan implementasi transformasi arsip digital berlangsung kontekstual sesuai kesiapan sumber daya manusia, kapasitas teknologi, dan dinamika manajerial organisasi. RHI menerapkan tata kelola arsip digital yang terstruktur, QLC mengadopsi model transisi kombinitif manual-digital, dan ATQ menggunakan pendekatan hibrida adaptif. Kerangka IEDAE mengintegrasikan arsip digital ke dalam

ekosistem sistematis yang menyelaraskan teknologi, manajemen operasional, keunggulan layanan, serta etika Islam. Implikasi manajerial penelitian ini menyediakan panduan strategis bagi pimpinan institusi pendidikan Islam dalam merencanakan alokasi sumber daya, memitigasi resistensi digitalisasi, mengoptimalkan tata kelola informasi yang adaptif dan akuntabel, serta meningkatkan nilai kepuasan pemangku kepentingan secara berkelanjutan.

Kata Kunci: *Arsip Digital, Tata Kelola Informasi, IEDAE, Kepuasan Pemangku Kepentingan*

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INTRODUCTION

Digital transformation has become a societal priority because educational institutions are expected to provide reliable, transparent, and responsive services in increasingly data-intensive environments (Bahri & Najiburrahman, 2024; Al-Shamsi, 2024). Effective information management matters beyond administrative convenience: it supports sound decisions, protects institutional accountability, and helps learners and families access accurate educational information (Iwogbe et al., 2025; Mishra & Purohit, 2025). Research on digital transformation emphasizes aligning technology with organizational practices and institutional needs. In education, archives preserve evidence of learning, administration, and institutional decisions, making their quality consequential for service continuity and public trust (Bădescu et al., 2026; McNamara & Hasnine, 2026). Therefore, transforming archives digitally is not simply a technical upgrade; it is an important foundation for inclusive, accountable, and sustainable educational governance.

Qur'anic educational institutions face particular information-management demands because they combine religious learning and memorization with academic monitoring, student administration, attendance recording, evaluation, and communication with families (Fahrudin et al., 2026; Hamdanah, 2025). These activities generate records that must remain accurate, accessible, secure, and useful over time and across academic cycles. However, institutions may rely on paper files, scattered digital documents, or informal communication channels, creating risks of duplication, delayed retrieval, inconsistent reporting, and weak continuity when personnel change (Gamit et al., 2025; Suratman & Sugiyono, 2025; Wadi et al., 2023). Limited infrastructure, uneven digital readiness, and differences in staff capability can further constrain sustained institutional improvement. Such conditions affect not only internal efficiency but also the quality of services experienced by students, parents, educators, and institutional partners.

These challenges are especially significant in non-formal Qur'anic education, where religious commitments, organizational culture, and close stakeholder relationships shape institutional practices (Arifudin et al., 2026; Saekan & Kayadibi, 2026). Records concerning memorization progress and learning evaluations require careful handling, while administrative documents and communication records need clear procedures for access, storage, and responsibility (Razzaq, 2024; Simwaka et al., 2025). When digital tools are adopted without appropriate governance, staff training, information standards, or safeguards, digitization may reproduce existing weaknesses rather than resolve

them. Prior research indicates that digital archive management can improve accessibility, accountability, and educational administration (Khairullah et al., 2025; Ngoepe et al., 2024). Nevertheless, the practical conditions and institutional consequences of archive transformation in Qur'anic educational settings remain empirically under-understood.

Research on electronic records management has examined archive systems, information governance, digital readiness, and administrative efficiency in educational organizations (Lestari & Prianthara, 2026; Saleh et al., 2025; Sudrajat et al., 2026). Studies of Islamic educational transformation have also considered how institutions adapt management practices to digital environments while retaining their values (Rizal et al., 2026; Zakiyyah et al., 2024). Related service research suggests that system quality, information accuracy, responsiveness, trust, and users' digital capability can shape satisfaction with digital services (Rustanto et al., 2026; Tedjakusuma & Kulachai, 2026). Together, these studies establish important technological, organizational, and service-related foundations. However, their insights remain dispersed across separate strands of research, limiting an integrated explanation of digital archive transformation.

A central gap is that existing studies commonly treat digital archives as technical systems or governance mechanisms, with limited attention to how technology interacts with staff capability, service change, stakeholder experience, and Islamic ethical commitments. This limitation matters because Qur'anic educational institutions cannot assess transformation solely by whether documents are stored electronically. Governance also requires *amanah* (trustworthiness), accountability, transparency, and professionalism in handling institutional information. The state of the art is an ecosystem perspective that brings these dimensions together. Its novelty lies in developing the Islamic Educational Digital Archive Ecosystem (IEDAE), a context-sensitive framework for understanding digital archives as interconnected institutional capabilities rather than isolated infrastructure.

Accordingly, this study asks how digital archive transformation unfolds across Qur'anic educational institutions with different levels of digital readiness, and what conceptual framework can explain their technological, organizational, service, stakeholder, and ethical dimensions. It examines Riung Huffazh Indonesia (RHI), Qur'anic Leadership Center (QLC), and Akademi Teras Qur'an (ATQ) in Bekasi City, Indonesia. The guiding argument is that transformation is contextual: institutions may develop structured digital systems, transitional combinations of manual and digital practices, or adaptive hybrid arrangements according to their capabilities and needs. IEDAE is proposed on the premise that sustainable transformation depends on aligning technology and information governance with human capability, service quality, stakeholder experience, and Islamic values overall.

RESEARCH METHODS

This study employed a qualitative approach using a multiple case study design to explore digital archive transformation in Qur'anic educational institutions (Firdaus & Abrian, 2025; Maharani et al., 2026). A qualitative approach

was selected because the phenomenon involves technological implementation, organizational culture, human capabilities, service processes, stakeholder experiences, and Islamic institutional values. The multiple case study design enabled an in-depth investigation of these interconnected dimensions within their natural contexts and facilitated cross-case comparisons. The research was conducted at three Qur'anic educational institutions in Bekasi City, Indonesia: Riung Huffazh Indonesia (RHI), Qur'anic Leadership Center (QLC), and Akademi Teras Qur'an (ATQ). These institutions were purposively selected because they represented different archival practices: structured digital management, transitional digital adoption, and hybrid documentation. Their variations provided opportunities to examine contextual patterns and develop the Islamic Educational Digital Archive Ecosystem (IEDAE) framework.

Data were collected through observation, semi-structured in-depth interviews, and documentation to obtain comprehensive evidence about archival practices (Putra & Adam, 2026; Saputra et al., 2026). Data collection explored what archival systems were implemented, who managed and used them, where activities occurred, when relevant changes took place, why particular approaches were adopted, and how digital archives supported educational services. Observations examined archival procedures, technological infrastructure, information accessibility, administrative activities, and stakeholder interactions. Interviews explored participants' experiences, responsibilities, perceptions, challenges, and assessments of digital archive implementation. Participants included institutional leaders, administrators, teachers (asatidz/asatidzah), administrative staff, information technology personnel, students, and parents or guardians. Documentation included institutional profiles, organizational structures, operational guidelines, student records, learning progress reports, attendance records, digital documents, communication records, and relevant social media content. These techniques enabled the comparison of reported experiences, observed practices, and documented evidence across the three institutions.

Data were analyzed using the interactive model of Miles, Huberman, and Saldaña (2020), comprising data condensation, data display, and conclusion drawing and verification (Jaenullah et al., 2022; Laia et al., 2025). Data condensation involved selecting, coding, simplifying, and categorizing information relevant to the research questions. Data display organized findings into descriptive narratives, matrices, and cross-case comparisons to identify recurring themes, differences, and relationships. Conclusion drawing and verification involved interpreting emerging patterns and examining their consistency with the collected evidence. Data trustworthiness was established through source triangulation, technique triangulation, time triangulation, and member checking. Source triangulation compared accounts from different participant groups, while technique triangulation compared interview, observation, and documentation findings. Time triangulation examined consistency across different collection periods, where applicable. Member checking involved confirming interpretations with selected participants. Discrepancies were examined critically to strengthen credibility and support the development of the IEDAE conceptual framework.

RESULTS AND DISCUSSION

Results

Digital Archive Transformation Patterns in Qur'anic Educational Institutions

Digital archive transformation refers to how Qur'anic educational institutions adopt, organize, and integrate digital technologies into archival management and educational service delivery. This study examines six dimensions: transformation patterns, digital technology, archival practices, information functions, work-process integration, and stakeholder access. A comparative analysis of Riung Huffazh Indonesia (RHI), Qur'anic Leadership Centre (QLC), and Akademi Teras Qur'an (ATQ) identifies three distinct configurations. RHI demonstrates a structured pattern characterized by digital academic information management and student progress monitoring. QLC represents a transitional pattern in which conventional documentation coexists with digital communication platforms. ATQ exhibits an adaptive hybrid pattern combining conventional records with digital documentation and communication. These differences suggest that institutional readiness, technological capacity, human resources, and organizational requirements shape digital archive transformation.

At RHI, digital archive management is examined through student information organization, Qur'anic learning progress documentation, and academic reporting. Properly managed digital records can support academic monitoring beyond electronic storage by facilitating information retrieval, reporting, and communication between educators and institutional managers. The structured pattern indicates the integration of digital documentation into routine academic activities. However, its effectiveness depends on consistent recordkeeping, accurate information, appropriate access arrangements, and data security. At QLC, conventional archival procedures coexist with emerging digital practices. This transitional arrangement suggests that digital transformation can occur incrementally without immediately replacing established practices. Nevertheless, maintaining manual and digital records simultaneously may create duplication, inconsistent updates, and fragmented information when institutional procedures are not adequately coordinated.

Observations across the three institutions focused on digital technology use, record organization, administrative routines, and stakeholder access to institutional information. At RHI, relevant indicators included student records, Qur'anic learning progress documentation, and academic report preparation. At QLC, the analysis considered the coexistence of manual documentation and digital communication platforms, particularly information recording, updating, and retrieval. At ATQ, the focus was on digital documentation of institutional activities, online communication, and administrative support alongside conventional records. These dimensions provide a basis for comparing institutional accounts with documented practices. The analysis emphasizes whether digital tools are embedded in routine recordkeeping rather than used exclusively for communication or public documentation. Claims concerning retrieval efficiency, record security, and administrative improvement require direct support from field notes and empirical evidence.

The cross-case analysis identifies three configurations: structured integration, transitional coexistence, and adaptive hybridity. These configurations represent different relationships between digital technologies and established archival practices, rather than necessarily successive stages of development. RHI integrates digital records into academic information management, whereas QLC adopts digital practices alongside conventional procedures. ATQ selectively combines digital tools and conventional records according to institutional functions. Across the cases, transformation reflects interactions among organizational readiness, staff capabilities, leadership priorities, technological resources, and stakeholder information needs. These findings suggest that digital archive transformation depends on aligning technological resources with administrative and educational requirements. This interpretation provides an empirical basis for the Islamic Educational Digital Archive Ecosystem (IEDAE), which conceptualizes digital archives as an interconnected ecosystem encompassing technology, information governance, human capability, service transformation, stakeholder experience, and Islamic governance values.

Table 1. Cross-case comparison of digital archive transformation patterns

Dimension	RHI	QLC	ATQ
Transformation pattern	Structured	Transitional	Adaptive hybrid
Digital technology	Digital academic information systems	Digital communication and information platforms	Digital documentation and communication tools
Archival practices	Organized digital academic records	Coexisting manual and digital records	Combined conventional and digital documentation
Main information function	Student records and learning progress	Information dissemination and institutional communication	Activity documentation and administrative support
Integration with work processes	Digital records support academic monitoring	Digital tools supplement conventional procedures	Digital tools support selected institutional activities
Stakeholder access	Access to organized academic information	Gradually expanding digital information access	Flexible access through digital communication
Main analytical issue	Consistency, security, and integration of records	Coordination and consistency across formats	Integration and continuity between digital and conventional records

Table 1 shows that digital archive transformation varies across institutions in technology implementation, record organization, and integration with institutional activities. RHI shows a structured pattern, with digital academic information systems supporting student records and learning progress. QLC reflects a transitional pattern in which manual and digital records coexist, potentially creating fragmented information when management procedures are inconsistent. Meanwhile, ATQ represents an adaptive hybrid pattern that combines digital documentation and communication tools with conventional archival practices. Across the three cases, digital archives contribute to institutional activities when technological resources, human capabilities, recordkeeping procedures, and stakeholder needs align appropriately. These findings support the Islamic Educational Digital Archive Ecosystem (IEDAE) perspective, which conceptualizes digital archive transformation as a socio-technical process rather than merely a technological intervention. However, the comparison identifies contextual differences among the institutions without establishing causal effects on stakeholder satisfaction or a universal sequence of digital maturity.

Stakeholder Experience in Digital Archive Implementation

Stakeholder experience in digital archive implementation refers to how institutional stakeholders perceive, access, understand, and utilize digitally managed educational information in their interactions with Qur'anic educational institutions. Operationally, this subtheme encompasses four indicators: information accessibility, information quality, communication effectiveness, and institutional responsiveness, supported by digital literacy, user adaptation, and institutional assistance. Stakeholders include institutional leaders, administrators, teachers (asatidz/asatidzah), students, and parents or guardians. The findings indicate that digital archives can improve stakeholder experiences when educational information is organized, accessible, understandable, and regularly updated. Access to student learning progress and institutional activity records may facilitate communication and strengthen perceptions of transparency and accountability. However, these benefits are not experienced uniformly because stakeholders differ in their technological capabilities and familiarity with digital platforms. Consequently, stakeholder experience reflects the interaction between information system characteristics, institutional service practices, and users' ability to engage with digital information.

The interview findings suggest that information accessibility and quality are important considerations in stakeholders' experiences of digital archive implementation. A parent or guardian might explain: "When information about learning activities and student progress is documented clearly, it becomes easier for us to understand our children's development and communicate with the institution." This statement highlights the importance of accessible, comprehensible educational information for families. From the researcher's perspective, accessible digital records may reduce uncertainty and help parents participate more meaningfully in monitoring students' learning development. Nevertheless, accessibility alone does not guarantee a positive experience; the information must also be accurate, relevant, up to date, and presented in a format users can understand. The analytical significance of this finding lies in the relationship between information quality and stakeholders' ability to interpret educational developments, rather than in the mere availability of digital documentation.

Communication effectiveness and institutional responsiveness constitute another dimension of stakeholder experience. An institutional administrator or teacher might state: "Digital platforms help us share educational information more conveniently, but some users still need assistance to understand the information and use the available facilities." This illustrative quotation shows how digital communication can facilitate information exchange while also creating demands for user support. The researcher interprets this potential pattern as evidence that digital transformation involves both technological adoption and the development of institutional service capabilities. When institutions provide clear information, respond to questions, and support users with different levels of digital literacy, digital archives may enable more inclusive communication. Conversely, limited assistance or difficulties interpreting digital information may restrict stakeholder participation. Therefore, institutional responsiveness should be understood as an

organizational capability that mediates the relationship between digital information availability and stakeholders' actual experiences.

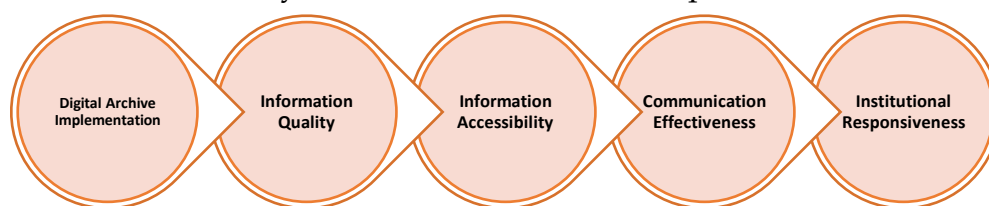


Figure 1. Stakeholder Experience Framework

Figure 1 illustrates the proposed analytical relationship between digital archives implementation and stakeholder experiences. Digital archives provide the information infrastructure, while information quality, accessibility, communication effectiveness, and institutional responsiveness represent service-related dimensions through which stakeholders interact with that infrastructure. These dimensions can contribute to perceptions of usefulness, transparency, trust, and satisfaction, although these outcomes should not be interpreted as automatic consequences of digitization. Digital literacy, user adaptability, and institutional support operate as cross-cutting conditions that can facilitate or constrain these relationships. For example, accurate information may remain difficult to use when stakeholders lack the skills to access it, while easily accessible platforms may not generate trust when the information is outdated. Thus, the proposed pathway represents an interpretive framework for understanding the findings, not a statistically validated causal model.

Stakeholder experience in digital archive implementation depends on the interaction between information accessibility, information quality, communication effectiveness, institutional responsiveness, and user capabilities. Observations of institutional practices can help examine whether educational information is retrievable, records are understandable, learning updates are communicated effectively, and assistance is provided when users encounter difficulties. Digital archives may facilitate access to educational information, support student progress monitoring, and strengthen perceptions of transparency and accountability. However, these benefits depend on stakeholders' ability to access, understand, and use the information provided. Differences in digital literacy and user adaptation may produce varied experiences, making institutional support essential. Within the Islamic Educational Digital Archive Ecosystem (IEDAE), stakeholder experience is an outcome dimension that connects technology, information governance, human capability, and service transformation. Nevertheless, interpretations concerning these relationships must be grounded in documented field observations and empirical evidence rather than assumed improvements or unverified causal claims.

Development of Islamic Educational Digital Archive Ecosystem (IEDAE)

The Islamic Educational Digital Archive Ecosystem (IEDAE) is operationally defined as an interconnected institutional arrangement through which Qur'anic educational institutions integrate digital technology, archive management, information quality, human capability, service transformation,

stakeholder experience, and Islamic governance values. In the three cases, this ecosystem is reflected in how institutions use digital platforms, organize educational records, facilitate information access, develop staff capabilities, and improve administrative services. The framework also incorporates amanah (trustworthiness), accountability, transparency, and professionalism as normative principles guiding the management and use of educational information. Thus, IEDAE is understood not simply as a digital storage system but as a socio-technical, value-oriented ecosystem shaped by the interaction among institutional practices, technological resources, human participation, and Islamic educational principles.

An interview with an institutional administrator should establish how digital technology and archive management operate in daily institutional practice. For example, a verified interview excerpt might explain how student records, learning progress, and administrative documents are organized, updated, and retrieved through digital or hybrid systems. This evidence can be interpreted to show that the technological dimension of IEDAE becomes meaningful when supported by systematic recordkeeping procedures. Digital platforms alone do not constitute an integrated archive ecosystem; their institutional value depends on how records are maintained, how information quality is ensured, and how staff incorporate digital practices into routine activities. Insert an authentic quotation from an administrator at RHI, QLC, or ATQ here, accompanied by the participant code and relevant institutional context.

A second interview should explore how institutional personnel or other stakeholders understand the relationship between digital archive practices, service quality, and Islamic governance values. Relevant evidence may concern access to educational information, responsiveness to information requests, responsibility for maintaining records, or transparency in institutional communication. Such evidence can help explain whether digital archive practices are perceived as supporting more accountable and accessible educational services. From an interpretive perspective, amanah, accountability, transparency, and professionalism provide normative guidance for managing information responsibly, while human capability and institutional support influence how these principles are enacted in practice. Insert a verified quotation from a second informant here, ensuring that the interpretation reflects the actual statement rather than an assumed experience.

Observational evidence should demonstrate how the proposed ecosystem is reflected in actual institutional routines. Relevant observations may include the organization of electronic and physical records, the use of digital platforms to communicate educational information, staff practices for retrieving and updating documents, and procedures for responding to information requests. Comparisons across RHI, QLC, and ATQ can reveal differences in the degree of digital integration, the coexistence of manual and digital procedures, and the consistency of recordkeeping practices. Interpret these observations alongside interview and documentary evidence to determine whether the identified dimensions are visible in institutional practice. Only activities directly documented in field notes should be reported as observed findings.

Taken together, the findings conceptualize IEDAE as an institutional ecosystem in which digital technology, archive management, information quality, human capability, service transformation, and stakeholder experience are interconnected and guided by Islamic governance values. Technology enables digital documentation and information exchange, while systematic management and capable personnel support the reliability and appropriate use of educational records. These practices can contribute to more accessible and responsive services, although their practical contribution depends on institutional arrangements and user needs. Islamic governance values provide the ethical foundation for ensuring that digital transformation remains consistent with the responsibilities and educational mission of Qur'anic institutions.

Discussion

The findings indicate that digital archive transformation in Qur'anic educational institutions is a context-dependent organizational process, not merely a technological intervention. Differences among RHI, QLC, and ATQ demonstrate how institutional readiness, technological resources, human capabilities, and organizational characteristics shape transformation pathways. This finding aligns with Rizal et al. (2026) who emphasize organizational capacity and institutional practices in educational digital transformation, and Martínez-Peláez et al. (2023), who highlight alignment between technological capabilities and organizational adaptation. However, this study extends these perspectives by examining digital transformation within Qur'anic educational institutions, where institutional characteristics and Islamic governance principles shape archive management practices (Hamdanah, 2025; Mahmudi & Aimah, 2026).

Previous studies have primarily examined digital transformation through technological adoption, information governance, and administrative accountability. (Sarifudin & Damanik, 2024; Shenkoya, 2023). The present findings extend this literature by demonstrating that digital archives connect recordkeeping practices with educational service delivery and stakeholder interaction. RHI illustrates structured integration, QLC demonstrates transitional coexistence, and ATQ represents adaptive hybridity. These differences indicate that institutions do not necessarily follow a uniform transformation pathway. Theoretically, this study contributes a contextual understanding of digital archive transformation as a socio-technical process shaped by institutional conditions rather than technology adoption alone.

The findings also highlight information accessibility, information quality, communication effectiveness, and institutional responsiveness as important dimensions of digital archive implementation. These results align with Abubakar et al. (2026), who link user satisfaction to system quality, information usefulness, and digital readiness, and Husin et al. (2025), who emphasize the influence of service quality on satisfaction. Nevertheless, this study adds an Islamic educational perspective by highlighting trust, accountability, and ethical information management. Stakeholder experience depends not only on technological functionality but also on users' digital capabilities, staff competence, information reliability, and institutional support (Islamiyah, 2025; Widad & Suliyanto, 2025). Practically, institutions should strengthen staff training, establish

consistent recordkeeping procedures, and maintain accessible, responsive communication channels.

Building on the cross-case findings, the Islamic Educational Digital Archive Ecosystem (IEDAE) is proposed as a contextual framework integrating digital technology, archive management, information quality, human capability, service transformation, stakeholder experience, and Islamic governance values (Haddade et al., 2024; Janah et al., 2026). Unlike technology-centered perspectives, IEDAE positions amanah, accountability, transparency, and professionalism as normative principles guiding the ecosystem's interconnected dimensions (Iskandar & Sabri, 2025; Rizal et al., 2026). Its theoretical contribution lies in integrating socio-technical transformation with Islamic governance within a framework for Qur'anic educational institutions. Practically, IEDAE provides institutional leaders with an analytical basis for evaluating digital archive development beyond infrastructure adoption, including record organization, information reliability, staff capability, service responsiveness, stakeholder needs, and ethical responsibilities.

However, the findings are based on three institutional cases and should not be generalized automatically to all Islamic educational settings. IEDAE should therefore be understood as a contextually grounded conceptual framework rather than a universally validated model. Its application can help institutions identify differences in digital archive practices and develop improvement strategies suited to their organizational circumstances. Future research could examine additional Islamic educational institutions and use longitudinal or mixed-methods designs to investigate the framework's applicability across contexts. Such studies could refine IEDAE's dimensions and assess how institutional readiness, governance practices, and human capabilities relate to digital archive implementation and stakeholder experience over time.

CONCLUSION

This study demonstrates that digital archive transformation in Qur'anic educational institutions is a context-dependent process shaped by institutional readiness, human capabilities, organizational practices, and stakeholder needs. The comparison of RHI, QLC, and ATQ reveals structured, transitional, and adaptive hybrid approaches, highlighting that effective transformation requires alignment between technology, institutional capacity, and educational service objectives. The study's principal scholarly contribution is the Islamic Educational Digital Archive Ecosystem (IEDAE), a contextual framework integrating technology, archive management, information quality, human capability, service transformation, stakeholder experience, and Islamic governance values. This framework advances digital transformation literature by conceptualizing archives as socio-technical ecosystems grounded in amanah, accountability, transparency, and professionalism. Practically, IEDAE can guide institutional leaders in assessing digital readiness, strengthening staff competencies, improving information accessibility, and developing accountable digital services. However, the study's three-case design in Bekasi City limits contextual transferability and does not statistically validate relationships among framework components. Future research should examine diverse Islamic educational institutions and employ mixed-method or quantitative approaches to assess IEDAE's applicability and

empirically investigate relationships among archive quality, stakeholder experience, and institutional sustainability.

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