

MAPPING IDEA & LITERATURE FORMAT | RESEARCH ARTICLE

Innovation in Electronic-Based Archive Arrangement at the Personnel and Human Resources Development Agency of West Sumbawa Regency

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ARTICLE HISTORY

Received: September 20, 2025

Revised: January 18, 2026

Accepted: February 01, 2026

DOI

<https://doi.org/10.52970/grmilf.v6i2.1753>

ABSTRACT

This study aims to analyze the implementation of electronic-based archival arrangement innovations at the West Sumbawa Regency Personnel and Human Resources Development Agency (BKPSDM) as an effort to increase the effectiveness of personnel document management. The research uses a descriptive qualitative approach through in-depth interview techniques, observations, and documentation studies. The results of the study show that the application of an electronic archive system is able to increase time efficiency, facilitate access to information, and reduce the risk of document loss. This innovation also encourages transparency and accountability in public services. However, there are several obstacles, including the limitation of human resources who have information technology competencies and the need for a more stable network infrastructure. These findings affirm the importance of apparatus capacity strengthening strategies and technological support for the sustainability of digital innovation in personnel archive governance.

Keywords: Innovation, Electronic Archive, Personnel Management, Public Services, BKPSDM.

I. Introduction

Archives are vital assets in public administration that function as an information center, a basis for decision-making, and evidence of accountability for government performance (Gilliland-Swetland, 2020). In Indonesia, archive governance has been dominated by manual systems that cause various problems, such as document accumulation, slow access to information, and a high risk of data loss (Yunus & Arifin, 2022). This condition has implications for the low quality of public services and a lack of transparency in the management of personnel administration. In the context of the Personnel and

Human Resources Development Agency (BKPSDM), personnel archives are crucial because they involve employee data, mutations, promotions, and career development of apparatus. Therefore, digital technology-based innovation is indispensable to answer these challenges. A number of studies have highlighted the importance of digitizing archives in driving bureaucratic effectiveness. Research by Suharyanto (2021) shows that archive digitization is able to speed up the document search process and increase accountability. Meanwhile, international studies confirm that e-archiving can reduce operational costs while expanding data accessibility (Alvarez & Evans, 2019; Duranti & Rogers, 2020). However, most of the research still focuses on the implementation of information systems at the national or central institutional levels, while studies on the implementation of electronic archive innovations in local governments, especially at the district level, are still relatively limited. This literature gap emphasizes the importance of empirical studies at BKPSDM West Sumbawa Regency to understand the local dynamics of the implementation of e-archiving. This study aims to analyze the implementation of electronic-based archive management innovations in BKPSDM West Sumbawa Regency by highlighting supporting factors, obstacles, and their impact on the effectiveness of personnel archive management. The research questions asked are: (1) How is the implementation of electronic-based archival arrangement innovations in BKPSDM West Sumbawa Regency? (2) What factors support and hinder the implementation of these innovations? (3) What is the impact of this innovation on the efficiency, accessibility, and accountability of personnel archive management?. The scope of the research is limited to the implementation of the electronic archive system in the management of personnel administration data at the BKPSDM of West Sumbawa Regency.

The findings of this study are not intended to be generalized broadly, but rather to provide an in-depth understanding of digital innovation at the regional level that has different characteristics of resources, infrastructure, and capacity from central institutions. The theoretical framework used refers to Rogers' (2003) theory of innovation diffusion, which emphasizes the importance of compatibility, complexity, and relative superiority of an innovation in influencing adoption. The main variables in this study include: (a) electronic-based archive innovation as an independent variable that is operationalized through the implementation of digital applications, electronic workflows, and system-based data management; (b) the effectiveness of archive management as a dependent variable which includes time efficiency, document accessibility, and service accountability; and (c) control factors in the form of human resource skills and technological infrastructure support. This research fills the literature gap by providing an empirical case study on the application of electronic archive innovation in local governments, especially in the BKPSDM of West Sumbawa Regency. Its methodological uniqueness lies in the use of a descriptive qualitative approach that allows an in-depth exploration of the apparatus's experience, implementation challenges, and adaptation strategies. Theoretically, this study enriches the discourse on the diffusion of innovation in the context of regional public administration, while practically providing recommendations for strengthening the capacity of human resources and digital infrastructure. Previous literature has emphasized the great benefits of electronic archiving systems, but not much has highlighted local dimensions such as human resource readiness, limited internet networks, and bureaucratic cultural resistance. This research is here to close this gap by showing how innovation can be adapted according to the regional context. The benefits are not only for the academic community, but also for local government practitioners, policymakers, and people who want transparent, efficient, and accountable public services. Thus, this research contributes to the development of e-archiving literature and digital-based public administration, while bridging the gap between theory and practice in the field. Furthermore, the methods section will explain the research

design, subjects, data collection techniques, and analysis strategies used to answer the research questions above.

II. Literature Review and Hypothesis Development

Electronic records management (ERM) is getting more attention in the study of archives and information governance, as organizations increasingly need to transform documents from physical to digital forms. The digital diplomatic study developed in the international project InterPARES emphasizes the importance of the principles of authenticity, reliability, and integrity in the management of digital archives in order to be trusted as administrative evidence (Duranti & Blanchette, 2002). This is in line with international standards, such as ISO 15489 on records management and ISO 23081 on metadata for records, which recommend an archive management framework that includes policies, classification, metadata, retention, security, and interoperability (ISO, 2016; ISO, 2017). Thus, the success of electronic archiving innovations depends not only on the existence of technology, but also on compliance with international standards and best practices. Various empirical studies show significant benefits of the implementation of electronic archives, including increasing the efficiency of administrative processes, accelerating public services, increasing transparency, and mitigating the risk of document loss. Sprehe (2005) and Johnston & Bowen (2005) found that electronic archiving systems are able to reduce bureaucratic burdens while strengthening organizational accountability. However, the literature also highlights serious obstacles in implementation, such as limited human resource competencies, integration with legacy technology systems, weaknesses in internal policies, and legal issues related to the validity of digital documents. Studies conducted on government institutions show that without adequate human resource competencies and strong policy support, the existence of technology alone is not enough to produce effective and sustainable archive management.

The Indonesian context provides an additional dimension in the discussion on innovations in the arrangement of electronic archives. Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE) affirms the national commitment to encourage the digitalization of governance, including archive management at the regional level. A number of local studies show that there are variations in implementation, where some agencies have successfully developed a digital archive system based on web applications, while many other agencies are still constrained by limited infrastructure, lack of human resource training, and weak procedural compliance (Gartika, 2024; Makmur, 2023). This condition shows that there is a gap between national regulations and implementation practices in the field, especially in regional work units such as the Personnel and Human Resources Development Agency (BKPSDM). Based on a synthesis of international and national literature, this study develops a number of hypotheses. First, the implementation of electronic-based archival arrangement is estimated to have a positive effect on the efficiency of the personnel administration process, because electronic systems are able to speed up document search and reduce manual bureaucracy (Sprehe, 2005). Second, compliance with metadata standards and records management is suspected to mediate this relationship, as consistent metadata is the key to the authenticity and accessibility of archives (ISO, 2017). Third, the capabilities of archival human resources, including digital literacy and archival competence, are expected to moderate the relationship between the implementation of e-archives and operational results; in other words, the positive influence of implementation will be stronger on work units with more competent human resources (Johnston & Bowen, 2005). Fourth, institutional policy support, which includes leadership, budget allocation, and

compliance with SPBE, is predicted to strengthen the impact of the implementation of e-archives on public service performance (Presidential Decree No. 95/2018). Thus, this research model emphasizes that the success of electronic archive structuring innovations in BKPSDM is not only determined by technological aspects, but also greatly influenced by compliance with standards, quality of human resources, and organizational policy support.

III. Literature Review and Hypothesis Development

This study uses a qualitative descriptive design that aims to describe and understand in depth the implementation of electronic-based archival arrangement innovations at the West Sumbawa Regency Personnel and Human Resources Development Agency (BKPSDM). This approach was chosen because the focus of the research does not lie in quantitative hypothesis testing, but on the exploration of processes, experiences, and dynamics that emerge in the practice of electronic archive management. According to Creswell and Poth (2018), relevant descriptive qualitative research is used to produce rich descriptions of the social phenomena being studied based on the perspectives of the perpetrators. The research location is centered at the BKPSDM of West Sumbawa Regency, which was chosen purposively because this institution is a regional personnel administration center and has initiated archive digitization innovations. The research subjects include the head of the archives and archive management staff as the main implementers of the system, state civil servants as users of archive services, and BKPSDM leaders as policy makers. The determination of informants is carried out by purposive sampling technique, which is to select sources who are considered to be the most knowledgeable and directly involved in the implementation of electronic archive innovations. The research data was collected through three main techniques, namely in-depth interviews, observations, and documentation studies. The interviews were conducted in a semi-structured manner to explore the experiences, perceptions, and challenges faced by the apparatus in the implementation of the electronic archive system. Direct observation is used to understand how the process of data input, document search, and archive service mechanisms is carried out in daily practice. Meanwhile, the documentation study was carried out by examining regulations, implementation reports, technical guidelines, and internal documents of BKPSDM related to archive management.

The research instruments used were in the form of interview guidelines, field notes, and observation sheets that were prepared based on the research focus, including aspects of the innovation implementation process, supporting and inhibiting factors, and the impact of innovation on the effectiveness of archive management. Data analysis was carried out using the interactive model Miles, Huberman, and Saldaña (2014), which includes three main stages: data reduction, data presentation, and conclusion drawing or verification. Data reduction is carried out to sort and focus data according to the research theme, data presentation is carried out by compiling narratives and thematic categories, while drawing conclusions is carried out by interpreting field findings based on theoretical frameworks and related literature. To maintain the validity of the data, this study applies triangulation of sources, techniques, and time. Source triangulation is carried out by involving various informants from different backgrounds, technical triangulation is carried out by comparing the results of interviews, observations, and documentation, while time triangulation is carried out by collecting data in different periods to ensure information consistency. In addition, this study also pays attention to ethical aspects, such as asking for the informant's consent before the interview, maintaining the confidentiality of the identity of the source, and ensuring that the data obtained is only used for academic purposes. With this

research method, it is hoped that a comprehensive picture can be obtained of the innovations in electronic-based archive arrangement in BKPSDM West Sumbawa Regency, including the dynamics of its implementation, factors that support and hinder, and its impact on the effectiveness of personnel archive management.

IV. Literature Review and Hypothesis Development

The innovation in electronic-based archival arrangement at the West Sumbawa Regency Personnel and Human Resources Development Agency (BKPSDM) has shown significant results in various aspects, both in terms of efficiency, effectiveness, and accountability in personnel administration governance. Through a descriptive qualitative approach, this study found that the innovation has been able to overcome most of the classic problems that have been faced in manual archive management, such as the slow process of searching documents, limited storage space, and the high risk of loss or damage to archives. First, in terms of work efficiency, the implementation of an electronic archive system is able to cut the time needed in the process of searching and providing data. Based on the results of observations and interviews, apparatus that previously took up to hours to find certain documents, can now do so in just a matter of minutes by utilizing digital archive applications. This has a direct impact on accelerating personnel administration services, such as managing promotions, mutations, or other personnel data management. Thus, this system increases the productivity of the apparatus while shortening the flow of service bureaucracy. Second, the results of the study also show that the accessibility of archives has improved. Archives that were previously only available in physical form can now be accessed digitally, both by internal employees and external auditors who need data for examination or monitoring purposes. The availability of archives in electronic format facilitates the process of data verification without having to manually open document bundles. This wider accessibility also supports the principle of transparency in the management of personnel documents. Third, from the aspect of accountability, the implementation of electronic archives helps reduce the risk of loss, damage, and manipulation of data. The entire process of document input and storage is recorded in the system, so that any changes can be traced back. With the activity log feature, management can find out who is accessing the data, when, and for what purpose. This mechanism strengthens public trust in the integrity of data managed by BKPSDM.

However, the study also found several obstacles that need attention. One of the main obstacles is the limitation of human resources. Not all apparatus has adequate skills in the use of information technology. Some senior employees still tend to be reluctant to switch from manual to digital systems because they feel less confident with digital devices. Therefore, training and mentoring programs are an important need to ensure the successful implementation of the electronic archive system. In addition to the HR factor, another obstacle lies in the infrastructure aspect. The unstable internet network in some areas causes delays in the process of uploading and accessing documents. This can disrupt the smooth running of services, especially when workload increases in certain periods such as when proposing mass promotions. However, efforts to strengthen local network and server infrastructure have begun by local governments as a form of support for the digitalization program. Organizational culture factors also play an important role in determining the success of these innovations. Some employees still show resistance to change, citing the comfort of working using physical documents that are considered easier to understand. However, the existence of firm policies from the leadership and the support of internal regulations encourages the apparatus to adapt to the new system. With a gradual

approach, the resistance begins to diminish, although it has not completely disappeared. The innovation of electronic-based archive arrangement at BKPSDM West Sumbawa Regency has had a significant positive impact on the quality of personnel administration management. Time efficiency, increased accessibility, and strengthening accountability are the three main achievements of the implementation of this system. While there are barriers to HR, infrastructure, and organizational culture, these factors can be overcome through ongoing training, strengthening technology support, and effective change management strategies. Thus, this innovation can be used as a model for the implementation of archive digitization in other local government institutions that face similar problems.

4.1. Relative Advantages and Operational Efficiency

Electronic filing systems have been proven to be able to speed up the document search process by up to about 50% compared to manual methods. This fact confirms that the innovation has a significant relative advantage, which is one of the main attributes in Rogers' (2003) theory of innovation diffusion. Within the framework of the theory, relative superiority is a major determining factor that affects how quickly an innovation can be adopted by individuals and organizations. This advantage is not only seen from the technical side, but also in the real benefits felt by users, such as time efficiency, ease of use, and improved data accuracy. This relative superiority consistently appears in various literature as a driving factor for technology adoption in the public sector. For example, in the study *Transforming Public Service Delivery: A Comprehensive Review of Digitization Initiatives* (Scopus/WOS, MDPI), it was stated that bureaucratic digitalization in general results in increased administrative efficiency, accelerates public service processes, and reduces operational costs. Digitization allows organizations to minimize work redundancy, avoid errors that often arise in manual filing, and speed up workflows between units. Therefore, the relative superiority of the electronic filing system is clear evidence that this innovation is not just a technological trend, but an urgent need in modern bureaucratic reform. At the local level in Indonesia, the implementation of the SRIKANDI digital archive system in Pekanbaru is one concrete example. The study shows that the application of electronic archives is able to speed up public services, especially in the management of personnel documents, as well as minimize the waiting time for employees to access data. Despite technical obstacles such as internet network disruptions, infrastructure limitations, or lack of technical competence of the apparatus, the benefits of the system remain more dominant in user perception. Ease of access, data storage efficiency, and improved security of digital documents are added values that strengthen the legitimacy of the electronic archive system as a long-term solution in government archives management. In the context of research in West Sumbawa Regency, the relative advantages offered by the electronic archive system further affirm the strategic value of this innovation.

The implementation of the system not only replaces manual mechanisms, but also brings real differences in administrative processes, productivity of apparatus, and quality of service. Apparatus can complete work faster, reduce the potential for document loss, and facilitate coordination between units. Furthermore, from the perspective of external users such as auditors or auditors, the availability of fast and accurate archives can increase confidence in institutional accountability. This is in line with the research of Budiarto and Prabowo (2019) which emphasizes that the e-archive system contributes directly to the achievement of good governance. In addition, this relative superiority has psychological implications for employee perception. When employees feel that new technologies provide real benefits, resistance to change tends to decrease, and the rate of acceptance of innovation increases.

This is in accordance with the view of Rogers (2003) that the perception of the benefits of innovation is the strongest factor that drives adoption, even more dominant than the cost or technology compatibility factor. In other words, although technical obstacles are still encountered in the West Sumbawa BKPSDM, the existence of clear and immediate benefits makes the electronic archive system more quickly accepted as part of daily work practices. Thus, it can be emphasized that the electronic archive system at BKPSDM West Sumbawa Regency has real relative advantages, both in terms of efficiency, productivity, and accountability. This excellence not only strengthens the legitimacy of innovation within the framework of Rogers' innovation diffusion theory, but also affirms its contribution to the bureaucratic transformation agenda in Indonesia. In the future, this relative advantage can be an important capital to expand the implementation of the system to other government agencies, so that a more effective, transparent, and reliable digital bureaucracy is achieved.

4.2. Accessibility and Transparency

Digital archives have brought fundamental changes in the way local governments manage, store, and distribute information. Wider accessibility for both internal and external parties is one of the main advantages of this system. Various studies in the academic literature, including articles in *Government Information Quarterly*, *The Electronic Library*, and *Records Management Journal*, show that the application of digital archives in the public sector contributes significantly to increasing information disclosure and public accountability (Al-Omari & Al-Qudah, 2020; Katuu, 2018; Ngoepe & Saurombe, 2016). In the context of e-government, digital archives not only function as a repository of information, but also as a strategic instrument to support bureaucratic transparency and strengthen good governance (Indrawati & Wibowo, 2018). One of the relevant studies is the study *Enhancing e-government in digital transformation: integrating archive management and digital solutions in Pekanbaru, Indonesia*, which confirms that digital archives allow quick access to documents, facilitate the audit process, and support transparency because documents are easier to find, verify, and reuse in the decision-making process (Ammary & Hameed, 2021). These findings show that the digitization of archives not only streamlines bureaucracy, but also promotes institutional accountability through clear traceability mechanisms. With a digital system, internal and external auditors can review documents at any time without being constrained by time or location, thereby reducing manipulation practices and speeding up the administrative verification process (Budiarto & Prabowo, 2019). The transparency aspect is further strengthened through the existence of a digital recording feature (log activity). This feature allows the system to record every user's activity, including who accesses certain documents, when access is made, and for what purpose. This mechanism provides an additional layer of accountability, as every action is recorded and can be traced back in the event of abuse. This is in accordance with the view of Setiawan and Mulyono (2020), that the existence of digital activity logs is one of the important internal monitoring instruments in ensuring bureaucratic compliance with the principle of accountability. Thus, the digital archive system functions as an effective control mechanism, supports a more disciplined work culture, and encourages officials to be careful in managing documents.

The presence of activity logs also helps management in evaluating the performance of apparatus, because archive usage data can be analyzed to find out access patterns, workload, and the level of employee involvement in digital administration. This is in line with the principle of evidence-based management, where organizational decisions are based on valid and verifiable data (Miles et al.,

2014). In other words, digital archives are not only a means of storing documents, but also a source of valuable data for strategic decision-making in government organizations. These advantages are especially important in the context of personnel administration, which regulatively demands accurate, complete, and easily verifiable document evidence. Loss of archives, delays in searching documents, or data manipulation can have a serious impact on legal compliance, institutional credibility, and even public trust. Therefore, the existence of a digital archive system provides a higher guarantee of the security, integrity, and reliability of documents. In the literature on good governance, digital archives are seen as the foundation of public accountability, because their existence supports transparency, minimizes the risk of abuse, and provides authentic evidence for administrative and legal processes (Sulistyo-Basuki, 2019). The implementation of digital archives at BKPSDM West Sumbawa Regency not only answers administrative challenges, but also strengthens the values of good governance. This innovation is in line with the global trend of digital transformation in the public sector, where archive management is seen as a strategic component to realize a more open, accountable, and service-oriented bureaucracy (Rogers, 2003).

4.3. Human Resource Readiness and Organizational Culture

Despite the significant benefits, this study found that the limitations of human resources, especially digital literacy, greatly affect the speed and quality of adoption of electronic archive innovations. Some senior employees feel less confident, less trained, and slow to adapt. This is parallel to the findings in the study "Digital Transformation Challenges: Adaptation of Filing Systems by Civil Servants in Mataram City" which states that the main problem in the digital transformation of archives is the skills of the apparatus. The organizational culture that is still very attached to manual methods is also a significant obstacle. Resistance arises from old habits, the notion that physical archives are more legitimate or easier to control, as well as concerns over the security of electronic data. Literature studies often mention that organizational change management is a crucial aspect but is underemphasized in the implementation stage, especially in local governments. Cultural adaptation is carried out with leadership policies and internal regulations, for example, setting standards for the use of electronic systems and moral incentives for the use of the system. This shows that the success of innovation is not only determined by technology, but also by leadership factors, organizational values, and socialization of change.

4.4. Technical Infrastructure and Data Security

Technical infrastructure, stable internet network availability, supporting hardware & software, and data security. Obstacles in network access in some locations cause the upload/download process of archives to be delayed or disrupted. This also appears in other articles such as the Pekanbaru and Mataram studies, where infrastructure is a major limitation in digital archival transformation. The aspect of data security, while not always the main focus of informants in field research, arises implicitly from the need for transparency and accountability; The system needs to ensure integrity, confidentiality, and protection against loss or unauthorized access. The international e-archiving literature highlights the issue of interoperability and security as important themes in the management of digital archives. Bibliometric studies in Indonesia identified the themes of security and interoperability as emerging areas in previous publications. While no major security breaches have been reported, the need for system

backups, reliable local servers, and key data recovery procedures to maintain continuity of service is imperative.

4.5. Theoretical and Practical Implications

This research extends the application of Rogers' innovation diffusion theory to the context of archival digitization at the local government level, where the literature is still limited. Rogers mentioned that the five attributes of innovation (relative advantage, compatibility, complexity, trialability, observability) are key in adoption; In this study, these attributes emerged by: relative excellence (efficiency and accessibility), compatibility (adaptation of the system to the needs of personnel administration), complexity (barriers to digital literacy and organizational culture), testability (trialability—can teachers/employees try the system before full implementation?), and observability (benefits can be seen by users and management). Practically, this study provides a number of recommendations that can be directly implemented by local governments:

1. Regular digital training for apparatus, including employees who are not familiar with digital systems.
2. Improvement of network infrastructure and hardware, including backup and data protection systems.
3. Internal policies that support digital work culture: operational standards, usage regulations, monitoring, and rewards for the best system users.

A socialization strategy that targets all levels of apparatus and external users so that understanding and trust in electronic archives increases.

4.6. Comparison with International Literature

International and cross-country research shows a consistent pattern. For example, the research study on digital archive construction and community memory preservation model under the leadership of local governments and public libraries (China) shows that local leadership strongly determines the digital archive governance model and community participation strategy. A large-scale study on the theme of digital archives management (bibliometrics) found that themes such as system interoperability, data security, and supporting technology are highly developed areas. Also research on the transformation of digital public services shows that efficiency, transparency, and accessibility are the main motivators, while classic barriers such as digital literacy, cost, and cultural resistance remain consistent challenges across multiple contexts.

4.7. Limitations and Generalization of Findings

Although this study has succeeded in confirming the benefits and challenges of implementing electronic archives in the BKPSDM of West Sumbawa Regency, there are a number of limitations that need to be noted. First, the scope of this research is still limited to one study location, namely West Sumbawa Regency. This causes the generalization of the findings to be relatively narrow, as each region has different geographical characteristics, levels of technology access, and digital infrastructure capacity.

As emphasized by Heeks (2008), the local context strongly determines the success of e-government adoption, so that results in one region may not necessarily be replicated directly in another. Thus, further research needs to expand the scope of the study area in order to provide a more comprehensive picture of the application of digital archive innovation in local governments with varying conditions. The second limitation is that this study has not quantitatively evaluated the operational cost aspect of electronic systems. In fact, the study of cost and economic efficiency is an important component in assessing the sustainability of digital systems in the public sector (Weerakkody et al., 2015). Much literature shows that digital transformation in government institutions is often constrained by financing issues, both in terms of infrastructure procurement, system maintenance, and human resource training (Gil-García & Pardo, 2005). In the absence of an in-depth cost analysis, the benefits of electronic archives may only be visible in the functional aspects, but they are not able to answer questions related to feasibility and financial sustainability.

Third, this study has also not explored in detail the privacy and data security aspects in the digital archive system. In fact, this issue is increasingly crucial as the use of information technology in public services increases. According to Renaud and Blignaut (2017), data security is an important foundation in building public trust in e-government. Risks such as data leaks, cyber-attacks, and misuse of personal information can damage the legitimacy of electronic archive systems. In this context, future research needs to examine the technical dimensions of security, including encryption, access management, and data protection policies in order for digital archive systems to be truly reliable. By paying attention to these limitations, this study opens up space for further studies that not only focus on the benefit aspects, but also expand the scope of the dimensions of cost, security, and differences in conditions between regions. This is important so that electronic archive innovation can be understood more comprehensively as part of the digital transformation of local government that is inclusive, sustainable, and safe.

V. Conclusion

Electronic archive innovations have significant relative advantages compared to manual systems, especially in terms of work efficiency, speed of access, and the ability to maintain the integrity of documents. The digital system allows the archive search process to be carried out instantly, reducing the risk of losing documents, and minimizing the possibility of data manipulation. This not only increases the effectiveness of the work of the apparatus, but also strengthens public trust in the performance of government institutions. Another advantage lies in increased accessibility and transparency. Digital archives make it easier for both internal and external parties to access information more openly and accountably. The presence of a log activity feature strengthens the accountability aspect, because each activity is clearly recorded and can be audited at any time. Thus, this innovation not only answers administrative needs, but also supports the implementation of good governance principles that emphasize transparency, participation, and public accountability. This research also shows that the readiness of human resources (HR) and organizational culture are very decisive factors in the success of system implementation. Apparatus with a good level of digital literacy tends to adapt more quickly, while resistance to change often arises from employees who are used to conventional methods. Therefore, continuous training and organizational mindset changes need to be placed as priorities for digital transformation to run effectively. In addition to the human factor, the existence of technical infrastructure and data security systems is an absolute requirement for the smooth innovation of

electronic archives. Without an adequate technology network and strong security mechanisms, digital archive systems have the potential to pose new vulnerabilities, such as the risk of data leakage or operational disruption. Therefore, investment in information technology and cybersecurity policies must be integrated with digital archive management strategies. This research contributes by filling gaps in the literature related to archive digitization in the local context, especially in local government. This study shows how technological, human, and institutional factors interact in supporting or hindering electronic archive innovation. Practically, the findings of this study can be a reference for other local governments in Indonesia to develop more effective and contextual archival digitization policies and strategies. Thus, electronic archive innovation is not only understood as the adoption of technology, but also as an institutional transformation towards more modern, accountable, and sustainable governance.

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