

Optimizing Public Service Effectiveness through Digital-Based Archival Management at Bandung City Land Office

Poppy Citra Luthfiya¹, Muhammad Taufiq^{2*}

¹ Public Sector Business Administration Program, Politeknik STIA LAN Bandung, Indonesia

² Magister of State Administrative Development Program, Politeknik STIA LAN Jakarta, Jakarta, Indonesia

Abstract

Archival management is an important part in supporting the effectiveness of public services, especially in government agencies engaged in land administration. This study aims to analyze archival management at the Bandung City Land Office in supporting the effectiveness of public services. This study uses a qualitative descriptive method with data collection techniques through observation, archival, and literature studies. Data were obtained from archive and correspondence management activities at the Bandung City Land Office and supported by national and international references related to digital archive management. The results of the study indicate that archival management has been carried out through a systematic process of administration, recording, distribution, validation, and archiving of archival s. The implementation of digital systems such as E-Surat, E-Office, KKP, and SITATA helps improve the efficiency of land administration. Effective archival management has a positive impact on increasing the speed of service, information accuracy, administrative transparency, and public service accountability. However, obstacles still faced are the accumulation of physical archives, limited storage space, and human error in archival management. To overcome these obstacles, the Bandung City Land Office implemented the PDCA (Plan, Do, Check, Action) approach as an effort to continuously improve the quality of archive management. This study concludes that digital-based archival management can optimally improve the effectiveness of public services.

Article Info

Keywords:

Archival Management,
Digital Archives,
Public Services,
Land Administration,
Service Effectiveness.

JEL Classification:

H83, O32, Q15

Corresponding Author:

Muhammad Taufiq
(muhammad.taufiq@stialan.ac.id)

Received : 11-10-2024

Revised : 14-12-2024

Accepted : 18-12-2024

Published: 30-12-2024



1. INTRODUCTION

Public service is a fundamental function of the government aimed at fulfilling the needs and interests of the community. In its implementation, the government is mandated to provide services that are effective, efficient, transparent, and accountable, with the ultimate goal of achieving good governance. The quality of public service is significantly influenced by human resources, policy frameworks, and the organizational capacity to manage administration and information in an orderly and sustainable manner (Taufiq, 2023; Taufiq & Harijanto, 2023). Consequently, the management of records and archives becomes a crucial element in supporting the success of public services within government institutions (Danielsen, 2021; Lolytasari & Dirsanala, 2023; Mynenko & Lyulyov, 2022).

Archival management involves a series of administrative activities encompassing the receipt, recording, classification, storage, distribution, maintenance, and disposal of records in accordance with applicable regulations. Archives are essentially records of activities or events in various media forms that serve as authentic evidence and organizational memory. When archival management is performed correctly and structurally, an organization can provide information more rapidly, precisely, and accurately (Azim et al., 2018; Rasmussen, 2019). Conversely,

suboptimal archival management can lead to various issues, such as service delays, administrative errors, and difficulties in tracing data and archives. In the context of public administration, archival management plays a strategic role as records serve not only as administrative evidence but also as a primary source of information and a foundation for organizational decision-making (Taufiq & Andikaputra, 2023; Taufiq & Karunia, 2023). Well-organized archival management can enhance organizational effectiveness while supporting the creation of high-quality public services. Therefore, an effective archival management system is a vital prerequisite for every government agency in executing its duties and functions, particularly in protecting the legal rights of the community regarding land ownership.

One such institution requiring robust archival management is the Bandung City Land Office, under the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN). This office is responsible for conducting land administration, including land registration services and the management of massive volumes of land archives such as Land Books (*Buku Tanah*) and Measuring Letters (*Surat Ukur*). High-quality archival management is particularly urgent in Bandung City, as it has been noted for having a high frequency of land disputes in Indonesia, where accurate archives are the primary key to conflict resolution (Aprilia et al., 2022). The advancement of information technology in the digital era has encouraged government agencies to transform their administration and archival management. Archival digitalization is a key effort to improve the effectiveness and efficiency of public services by processing recorded data so that it can be transmitted and processed using digital computer technology (Aprilia et al., 2022). Digitalization is not merely a change in format from analog to digital but is expected to provide comprehensive benefits related to the acceleration of land services (Anindyati et al., 2020; Fitriainingsih et al., 2021). Furthermore, digital records management helps public organizations increase administrative efficiency and accelerate decision-making processes through easier information access.

As part of its digital transformation efforts, the Bandung City Land Office has implemented various electronic-based systems to support archival management and land administration services. The implementation of these systems is expected to streamline the storage, retrieval, and distribution of records, thereby enabling faster and more effective public service. However, several challenges remain, such as technical constraints in applications, the need for stable internet connectivity, and the potential for human error during the scanning and validation process (Aprilia et al., 2022). Additionally, digitizing archives acts as a preservation alternative to safeguard the historical and legal value of the documents (Husnita & Kesuma, 2020; Jaillant et al., 2022). The paradigm shift towards a digital-centric administrative environment has redefined how government institutions perceive record-keeping. In the era of big data, archive management is no longer merely about storing documents but has evolved into a pressing task of improving service capabilities through intelligent data resource management. As highlighted by Xu (2022), the accumulation of archival information in modern governance necessitates the implementation of advanced data mining models to promote efficient information sharing and resource utilization. This transformation allows institutions to move beyond manual retrieval, ensuring that vital land records are not just preserved but are actively supporting smarter, data-driven public services.

However, the transition from analog to digital formats is not without its complexities, particularly regarding the integrity of the information being migrated. Digitization is a specialized process where analog records are scanned and converted into digital forms, a method that became increasingly vital during the global pandemic to maintain service continuity when physical access was restricted. According to Rosmaniah et al., (2022), while digital services offer the advantage of reducing physical touch and breaking the barriers of time and space, they require a meticulous scanning and uploading process to ensure that textual and cartographic archives remain accurate and reliable for the users. The implementation of these digital initiatives is fundamentally tied to the broader goals of e-government, which seeks to enhance transparency and community access to information. Institutions are now encouraged to join national archival networks to ensure a seamless flow of data across various government levels. Lolytasari & Dirsanala (2023) emphasize that digitizing conventional archives is an essential prerequisite for supporting e-government policies, as it creates a track record of institutional development that is easily accessible to the

public. By migrating old media to digital portals, government agencies can fulfill their role as providers of open information while maintaining a robust digital history of their operations.

Despite the clear advantages, the journey toward a fully digital archival system faces significant "hidden" hurdles that organizational leaders must address. Issues such as technology obsolescence, data security vulnerabilities, and the need for standardized implementation guidelines often emerge as major concerns in digital preservation (Afdalia & Mustari, 2023; Danielsen, 2021; Mynenko & Lyulyov, 2022). Azim et al., (2018) point out that while digitization offers a strategic solution for space-saving and rapid access, organizations must remain vigilant about the issues of electronic record authenticity and the potential for digital fragility. Therefore, a successful archival transformation at the Bandung City Land Office requires not only sophisticated tools but also a comprehensive framework that balances technological innovation with the enduring principles of archival science.

Based on the description above, archival management is a critical aspect of supporting the effectiveness of public services at the Bandung City Land Office. Digitalization efforts must ensure that the digital results possess strong authentication and legalization to have the same legal standing as original paper documents (Anindyati et al., 2020). This study aims to analyze archival management at the Bandung City Land Office in supporting effective public services. Through this research, it is expected to determine the extent to which the implementation of archival management and digital transformation improves the quality of land administration services provided to the community.

2. METHODS

This research initiative utilized a qualitative research method with a descriptive approach (Creswell & Creswell, 2023; Sugiyono, 2019). The participative approach was selected to provide a profound understanding of the archival management processes implemented at the Bandung City Land Office. Through this descriptive framework, the team sought to systematically and factually illustrate the conditions, procedures, and various challenges encountered in archival management activities as they occurred in the field (Creswell & Creswell, 2023; Miles et al., 2014). This approach is considered highly relevant as it offers a comprehensive overview of administrative practices and archival management in supporting public services. The data sources for this activity consisted of both primary and secondary data. Primary data were obtained through direct observation of archival management activities within the correspondence and archives section during an internship at the Bandung City Land Office. Observations were conducted to gain firsthand insight into the archival lifecycle, encompassing receipt, recording, storage, and distribution within land administration activities. Furthermore, the team observed various bottlenecks emerging in the archival management process and the institutional efforts undertaken to mitigate these issues.

Meanwhile, secondary data were gathered through archival studies and literature reviews relevant to the topic. These secondary sources included activity reports, agenda logs, land archival, laws and regulations, as well as various scientific literatures such as national and international journals discussing archival management, archiving, digital transformation, and public services. The use of secondary data aimed to strengthen the analysis and provide a robust theoretical foundation for understanding the phenomena under study. The data collection techniques were executed through several stages. First, direct observation was performed to monitor the archival management workflow at the Bandung City Land Office's correspondence and archives unit. Second, archival was conducted by collecting supporting evidence, such as incoming and outgoing mail agendas, land archives, and other administrative archival s related to archival management. Third, a literature review was carried out by examining various reference sources, particularly national and international journals published between 2021 and 2026, to obtain theoretical information and relevant prior research findings.

The data analysis technique followed the qualitative data analysis stages, which include data reduction, data display, and conclusion drawing. Data reduction was performed by selecting, focusing, and concentrating on information relevant to the objectives of the activity. The reduced data were then presented in a descriptive format to facilitate better understanding and analysis.

The final stage involved drawing conclusions, which is the process of interpreting the data to gain a general overview of how archival management at the Bandung City Land Office supports the delivery of effective public services.

3. RESULTS AND DISCUSSION

3.1. Archival Management at the Bandung City Land Office

Archival management at the Bandung City Land Office is a fundamental component in supporting the continuity of land administration operations and public services. This management is executed through a series of structured administrative stages, including mail receipt, archival recording, distribution, duplication, data validation, and archiving. Each stage is conducted in accordance with established administrative procedures to ensure orderliness, security, and the accuracy of land archival s. During the mail receipt stage, incoming archival s are thoroughly examined for administrative completeness before further processing. This inspection ensures that archival s meet specified requirements, thereby reducing the risk of administrative errors. Once verified, archival s are recorded in the correspondence agenda for administrative control and data archival ation. Recording is performed using Microsoft Excel and internal electronic systems specific to the Bandung City Land Office. The utilization of these systems aims to simplify archival tracking, accelerate data retrieval, and enhance employee efficiency in managing administrative correspondence. Beyond correspondence, archiving represents a critical part of land administration, particularly for land certificates and deed certificates, which are the primary archival s in land services. These archival s hold high administrative and legal value as they contain information regarding land rights status, legal data, and physical data. Consequently, they are managed systematically through a classification process based on region, type of rights, and the year of issuance. This classification system aims to streamline storage and retrieval when needed for public services and land data verification. In line with advancements in information technology, the Bandung City Land Office has implemented various digital systems to support archival management and land administration. This electronic transition is part of a digital transformation effort to enhance the effectiveness and efficiency of public services. The systems in use include E-Surat, E-Office, the Land Activity Computerization System (KKP), and SITATA.

Archival management at the Bandung City Land Office serves as a fundamental pillar in sustaining land administration operations and public services. This management is executed through a structured lifecycle, including mail receipt, recording, distribution, validation, and systematic archiving. Each stage adheres to strict administrative procedures to ensure the security and accuracy of land records. During the receipt stage, documents undergo rigorous examination for completeness, a process that significantly reduces the risk of administrative errors. Once verified, records are documented using Microsoft Excel and internal electronic systems. This approach aligns with the findings of Mynenko & Lyulyov (2022), who emphasize that digitalization in public authorities opens new opportunities to improve transparency and ensure that administrative actions remain open and accountable to the public.

Beyond simple correspondence, the archiving of land certificates and deeds represents the core of land services, holding immense legal and administrative value. These records are managed through a classification system based on region and rights type to streamline storage and retrieval. As the landscape of archives shifts from physical to digital, organizations face what Jaillant et al. (2022) describe as enormous challenges in capturing, preserving, and contextualizing digitized records. To address these complexities, the Bandung City Land Office has implemented systems such as E-Surat, E-Office, the Land Activity Computerization System (KKP), and SITATA. These tools demonstrate a transition toward "intelligent" archive management, which Xu (2022) identifies as a pressing task in the era of big data to improve service capabilities and promote efficient resource utilization.

The implementation of electronic signatures via E-Office and data verification through KKP reflects a modernization of land administration that enhances organizational effectiveness. Research by Danielsen (2021) suggests that while digital transformation in public organizations offers significant benefits such as cost reduction and improved handling of turbulent

environments, it must be balanced against the challenges of laws and regulations. Furthermore, the shift toward a digital repository allows for better data mining and sharing. This is consistent with the perspective of Liao et al., (2020), who state that digital transformation demands higher-level socio-technical transitions that go beyond mere digitization, ultimately widening the reach and performance of the organization. Despite the integration of sophisticated digital tools, archival management at the Bandung City Land Office continues to face persistent bottlenecks, most notably the prevalence of human error within the administrative workflow. While digitalization is designed to streamline processes, human factors often remain a vulnerable point due to the "hybrid" nature of the current transition. Staff are frequently burdened by dual-processing tasks, where they must manage traditional physical records alongside new digital inputs. This high cognitive workload, compounded by varying levels of digital literacy, creates a gap where clerical slips, such as misclassification or data entry inconsistencies, become almost inevitable. As Das et al., (2018) observe, archival methods are a critical yet often neglected component in organizational studies; in this context, the failure to fully standardize human-digital interaction prevents the organization from capturing the full benefits of its technological investments.

3.2. Effectiveness of Public Services

The implementation of proper and structured archival management serves as a fundamental pillar in enhancing the effectiveness of public services at the Bandung City Land Office. Systematic organization of records does not merely function as a storage solution but acts as a catalyst for seamless administrative workflows, ensuring that information provision is both accelerated and reliable. In the high-stakes domain of land administration, where legal certainty is paramount, service effectiveness is a multi-dimensional construct directly linked to data precision, operational velocity, and ultimate public satisfaction (Hidayat-ur-Rehman et al., 2023; Pratama et al., 2023). By transitioning from fragmented manual processes to an orderly archival regime, the institution can ensure that every administrative step—from initial land registration to the final issuance of certificates—is supported by a robust and accessible information backbone.

The effectiveness of these services can be empirically evaluated through several key performance indicators that demonstrate the transformative impact of modern archiving. Primarily, Service Speed is significantly improved as systematic management allows staff to navigate vast databases with precision, thereby reducing the time required to complete complex land transactions. This is closely followed by the Accuracy of Land Information, where rigorous archival standards ensure that all physical and legal data remain verifiable, a critical factor for maintaining the legal integrity of land ownership. Furthermore, Service Transparency and Administrative Accountability are bolstered through digital tracking mechanisms that make every administrative action traceable and open to audit, whilst also avoiding organizational risk (Taufiq & Pradesa, 2023). Finally, the Ease of Retrieval facilitated by structured indexing eliminates the inefficiencies of traditional manual searches, allowing employees to focus on high-value service delivery rather than clerical data recovery.

The strategic integration of digital systems has been the primary driver behind these improvements in service effectiveness. Electronic platforms enable employees to access, verify, and synchronize land data in real-time, drastically reducing the bureaucratic friction typically associated with land governance. This modernization effort aligns with previous authors which posits that electronic archiving systems are essential for overcoming administrative barriers and accelerating the pace of government information management. Moreover, as highlighted by Afdalia & Mustari (2023) and Darmansah et al. (2024), digital-based archival management does not only improve the technical quality of services but also plays a sociopolitical role in strengthening public trust by fostering transparency and accountability within government administration. These advancements ensure that the Bandung City Land Office remains resilient and responsive to the increasing demands of a digital society.

3.3. Constraints in Archival Management

Despite the implementation of structured management protocols and digital support, the Bandung City Land Office still faces several critical constraints that potentially undermine

administrative effectiveness. A primary and persistent challenge is the massive accumulation of physical archives. The high volume of land-related documents—such as land certificates, deeds, and various legal dossiers—results in a significant annual increase in physical records. This continuous growth poses high risks of document deterioration, potential loss, and extreme difficulties in retrieval. This situation is further exacerbated by limited storage capacity, which hinders optimal archival organization. When storage space reaches its maximum threshold, the ability of staff to categorize and access data efficiently is compromised, often leading to a cluttered environment that slows down the entire public service workflow.

Furthermore, human error remains a significant obstacle within the administrative lifecycle. These errors, which typically manifest as inaccuracies in data entry, incorrect document classification, or inconsistencies in labeling, are often the byproduct of high administrative workloads and the incomplete standardization of archival procedures. Even with the presence of digital tools, the manual input phase remains a vulnerable point where mistakes can occur. High-pressure environments often lead to a decrease in precision, which, in the context of land administration, can have serious legal implications. Without a fully standardized and automated validation mechanism, these human-induced errors can result in data discrepancies that require extensive time and resources to rectify, thereby diminishing the overall quality of service provided to the community.

Furthermore, the persistence of administrative errors can be traced back to the lack of a comprehensive automated validation system that can "catch" human oversights in real-time. When the digital transition is treated merely as a change in tools rather than a fundamental shift in organizational culture, the underlying manual habits often persist. The accumulation of physical documents and limited storage space further exacerbate this issue, as the physical clutter often translates into mental fatigue for the personnel responsible for data integrity. Without a robust framework to ensure digital authenticity and long-term preservation, these human-induced errors pose a risk to the legal certainty of land administration. Consequently, addressing these hurdles requires more than just an increase in digital technology; it necessitates a holistic strengthening of the archival management system through a "human-centered" technological approach. Strengthening this system involves not only upgrading software but also implementing rigorous standardization and continuous capacity building for staff to mitigate the risks of human factor inconsistencies. By bridging the gap between human execution and digital precision, the Bandung City Land Office can ensure that its land administration processes run optimally, ultimately supporting sustainable and high-quality improvements in public service.

Additionally, the absence of a fully integrated digital tracking system for document loans presents a major hurdle in maintaining archival security and accountability. Currently, the loan-tracking process still relies on partially manual or fragmented methods, leading to difficulties in monitoring the real-time movement of vital land records. This lack of integration results in less-than-optimal control over which documents are being borrowed, by whom, and when they are due for return, creating a risk of administrative "blind spots." According to previous scholars (Edwards, 2022; Husnita & Kesuma, 2020; Rosmaniah et al., 2022), digital archives must be supported by integrated and unified storage systems to ensure maximum data security, accuracy, and sustainability. Therefore, bridging the gap between physical archives and a seamless digital monitoring system is essential to mitigate these logistical challenges and safeguard the integrity of land administration data.

3.4. Improvement Efforts through the PDCA Approach

The first stage of this continuous improvement cycle, the Plan phase, involves the meticulous development of standardized procedures and protocols tailored specifically to the unique administrative needs of land management. At the Bandung City Land Office, this phase is characterized by a strategic focus on integrating digital technology into the existing archival framework. Administrators and project leaders collaborate to design a roadmap that defines how land documents should be classified, how digital migration should occur, and what security measures are necessary to protect sensitive data. By establishing clear guidelines and performance benchmarks before implementation, the office ensures that the transition toward

modernization is organized, purposeful, and aligned with the overarching goal of improving public service quality.

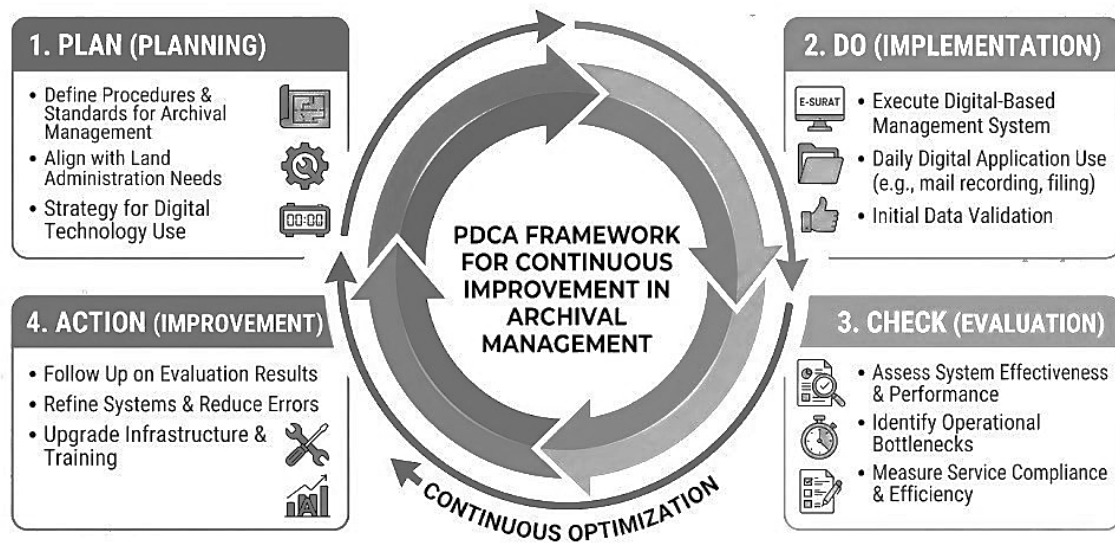


Figure 1. Continuous Improvement for Enhancing Archival Quality for Public Service Effectiveness

In the Do phase, the planned strategies are translated into tangible actions through the day-to-day implementation of digital-based archival management. This stage sees the active use of electronic applications to streamline the recording of incoming and outgoing mail, the systematic digital filing of land deeds, and the rigorous validation of spatial data. Employees transition from traditional, labor-intensive methods to a more agile digital workflow, where software tools like E-Surat and SITATA become central to their routine. This practical application is vital, as it allows the organization to test the viability of their digital infrastructure in a real-world setting, turning theoretical plans into functional administrative assets that facilitate faster information processing.

The Check phase follows, serving as a critical evaluative period where the office assesses the actual effectiveness of the newly implemented systems. During this stage, management conducts thorough reviews to identify any remaining bottlenecks, such as server latency, data entry inconsistencies, or areas where staff may still struggle with the technology. This phase is not merely about finding faults; it is a systematic measurement of service compliance and operational efficiency. By comparing current performance against the initial benchmarks established in the planning phase, the Land Office can gain an objective understanding of how much the digital transformation has actually contributed to the speed and transparency of land administration services. Finally, the Action phase focuses on long-term sustainability and refinement based on the insights gained during the evaluation. In this concluding stage of the cycle, the Bandung City Land Office takes corrective measures to resolve identified issues, such as upgrading hardware, refining software interfaces, or providing additional technical training for employees. Improvements are treated as a continuous evolution rather than a one-time task, ensuring that administrative errors are minimized and the service system becomes increasingly efficient over time. As previous scholars noted (Husaini & Prasetyo, 2021; Zhao & Jiang, 2020), the PDCA method is exceptionally effective in controlling administrative quality because it fosters an environment of constant growth and precision. Consequently, the adoption of this approach is highly relevant for creating a systematic and integrated archival management system that remains resilient and responsive to the needs of the public.

3.5. Theoretical and Practical Implications

From a theoretical perspective, this study reinforces the application of the Technology Acceptance Model (TAM) and the DeLone & McLean Information Systems Success Model within

the public sector (Irmawan & Muslim, 2023; Rehouma & Hofmann, 2018; Wirtz et al., 2017), specifically in land administration. The findings validate that system quality and information quality are pivotal drivers of user satisfaction and organizational effectiveness in government agencies. By integrating digital systems like SIKASEP or E-Office, the conceptual link between digital transformation and bureaucratic transparency is strengthened. This research provides empirical evidence that modernizing archival management is not merely a technical upgrade but a fundamental shift in administrative paradigms that supports the pillars of Good Governance. Furthermore, the integration of the PDCA (Plan, Do, Check, Action) cycle into archival management theory offers a robust framework for sustainable administrative improvement. Theoretically, this suggests that qualitative improvements in public service are achieved through iterative processes rather than static implementations. The study enriches the literature on e-government by demonstrating how systematic archival lifecycles—from receipt to digital archiving—act as the backbone of institutional accountability. It underscores that the synergy between human resource competence and advanced infrastructure is essential for the successful transition from manual to digital-based public administration.

Practically, the results of this initiative provide a strategic roadmap for the Bandung City Land Office to optimize its land administration services. The implementation of integrated electronic systems, such as E-Surat and SITATA, proves that digitalizing archival workflows significantly reduces administrative bottlenecks and accelerates service delivery to the community. For practitioners, this highlights the necessity of shifting away from paper-based dependencies to mitigate risks associated with physical archive accumulation and storage limitations. The study suggests that a well-indexed digital repository is a mandatory asset for ensuring data accuracy and legal certainty in land transactions. A critical practical intervention identified is the development of a fully integrated digital loan-tracking system. Beyond operational efficiency, this specific intervention serves as a vital safeguard against the legal risks associated with land disputes—a concern highlighted in the introduction of this study. By providing a transparent, real-time digital audit trail of document movements, the office can significantly reduce the risk of "missing" or misplaced physical dossiers, which are often the root cause of overlapping claims and administrative lawsuits. When every access request, loan, and return of a land certificate or deed is digitally logged and timestamped, the integrity of the evidence chain is preserved. This level of traceability ensures that the Land Office can provide definitive proof of a document's history and status during legal proceedings, thereby minimizing the institutional vulnerability to fraud or data manipulation. Consequently, prioritizing this digital tracking mechanism, alongside continuous digital literacy training for staff, creates a more resilient administrative framework. By adopting the PDCA approach as a standard operating procedure, the Land Office can establish a culture of continuous evaluation, ensuring that systemic glitches are addressed before they escalate into legal liabilities. This proactive management style will ultimately foster greater public trust (Agustina et al., 2023; Mugiarto et al., 2023; Taufiq, 2023) and ensure that the digital transformation in land services remains sustainable, legally secure, and responsive to the evolving needs of the citizens.

4. CONCLUSION

The implementation of archival management at the Bandung City Land Office has been carried out systematically through structured administrative stages, including receipt, recording, distribution, and digital archiving. The integration of electronic systems like E-Office, KKP, and SITATA has significantly enhanced the effectiveness of public services by fostering a more transparent, efficient, and accountable administrative environment. While the transition to a digital-based ecosystem has successfully streamlined data verification and accelerated service speed, the persistent challenges of physical archive accumulation and human error indicate that the digital transformation process is still an ongoing journey that requires further refinement and infrastructure strengthening. In conclusion, the adoption of the PDCA (Plan, Do, Check, Action) framework serves as a vital mechanism for ensuring continuous improvement in land administration. By consistently evaluating system performance and implementing corrective actions, the Bandung City Land Office can overcome existing logistical hurdles and optimize its

technological investments. This initiative confirms that effective archival management, supported by robust digital integration and competent human resources, is the primary key to delivering high-quality public services in the land sector. Moving forward, a complete synchronization of digital systems and a total shift towards paperless archiving are recommended to achieve a fully modern and sustainable e-government model.

Despite the significant strides made in modernizing land administration, several inherent limitations remain that warrant further investigation. The current system still grapples with the logistical burden of managing legacy physical archives alongside new digital repositories, which can create a fragmented information landscape. Issues concerning technology obsolescence and the long-term integrity of electronic records remain critical concerns that this study could not fully address. Furthermore, while digital systems have improved internal workflows, the human element of adapting to these complex platforms presents a persistent risk of administrative error during the transition phase. Consequently, future research should explore the implementation of advanced data mining and artificial intelligence models to further automate data verification, shifting from mere digitization to truly intelligent archive management. Longitudinal studies are also recommended to evaluate the impact of a total paperless transition on the legal standing of land records and to identify more robust frameworks for digital preservation in high-stakes public sectors. Finally, further exploration into the socio-technical challenges faced by employees during digital adoption would provide valuable insights into creating a more resilient and user-friendly administrative ecosystem.

REFERENCES

- Afdalia, N., & Mustari, U. A. (2023). Pelestarian Arsip di Era Teknologi Digital. *Amarthapura: Historical Studies Journal*, 2(2), 63–73. <https://doi.org/10.30872/amt.v2i2.1553>
- Agustina, I., Sulistyan, R. B., & Pramuditha, R. (2023). Telaah Kritis Tentang Konsep Kepercayaan Masyarakat: Peran Serta Tehnologi, Informasi dan Komunikasi. *Konferensi Nasional Ilmu Administrasi* Vol 7 No 1, 182–187. <http://knia.stialanbandung.ac.id/index.php/knia/article/viewFile/969/349>
- Anindyati, F. D., Farid, A. H., & Andari, D. W. T. (2020). Urgensi Autentikasi dan Legalisasi Arsip Pertanahan Hasil Digitalisasi. *Jurnal Tunas Agraria*, 3(3), 40–59. <https://doi.org/10.31292/jta.v3i3.121>
- Aprilia, V., Rifai, Y. A., & Rahmi, Y. A. (2022). Pengelolaan arsip digital pada badan pertanahan nasional kota bandung. *JIA: Jurnal Ilmiah Administrasi*, 10(2), 81–87. <https://doi.org/10.55678/jia.v10i2.709>
- Azim, N. A. M., Yatin, S. F. M., Jensonray, R. C. A., & Mansor, S. A. (2018). Digitization of Records and Archives : Issues and Concerns. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 170–178. <https://doi.org/10.6007/IJARBS/v8-i9/4582>
- Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (Sixth)*. Sage Publications.
- Danielsen, F. (2021). Benefits and Challenges of Digitalization : An Expert Study on Norwegian Public Organizations. *Dg.o '21: Proceedings of the 22nd Annual International Conference on Digital Government Research*, 317–326. <https://doi.org/10.1145/3463677.3463703>
- Darmansah, T., Nur, A. M., Suryadi, H. S., & Nurarfiansyah, L. T. (2024). Tantangan Dan Solusi Dalam Pengelolaan Arsip Di Era Digital. *Jurnal Ekonomi Dan Bisnis Digital*, 02(01), 16–20.
- Das, R., Jain, K. K., & Mishra, S. K. (2018). Archival Research: A Neglected Method in Organization Studies. *Benchmarking: An International Journal*, 25(1), 138–155. <https://doi.org/10.1108/BIJ-08-2016-0123>
- Edwards, E. L. (2022). Digitizing the Archive: Historicizing Latinx Issues in Northwest Ohio. *The International Journal of Information, Diversity, & Inclusion*, 6(4), 1–31. <https://doi.org/10.33137/ijidi.v6i4.38589>
- Fitrianingsih, F., Riyadi, R., & Suharno, S. (2021). Evaluasi Digitalisasi Arsip Pertanahan dan Peta Bidang Tanah Terintegrasi Menuju Pelayanan Online (Studi di Kantor Pertanahan Kabupaten Karanganyar). *Jurnal Tunas Agraria*, 4(1), 54–81. <https://doi.org/10.31292/jta.v4i1.135>

- Hidayat-ur-Rehman, I., Ali, J. A., Rosak-Szyrocka, J., Alam, M. N., & Pilař, L. (2023). The role of awareness in appraising the success of E-government systems. *Cogent Business and Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2186739>
- Husaini, H., & Prasetyo, M. A. M. (2021). Efektivitas Pengelolaan Mutu Dosen Perguruan Tinggi Agama Islam Negeri. *Improvement: Jurnal Ilmiah Untuk Peningkatan Mutu Manajemen Pendidikan*, 8(1), 29–39. <https://doi.org/10.21009/improvement.v8i1.19308>
- Husnita, T. J., & Kesuma, M. el-K. (2020). Pengelolaan Arsip Sebagai Sumber Informasi Bagi Suatu Organisasi Melalui Arsip Manual dan Arsip Digital. *El Pustaka: Jurnal Ilmu Perpustakaan Dan Informasi Islam*, 01(02), 27–41.
- Irmawan, I., & Muslim, M. A. (2023). Literature review of information system success models in e-government evaluation. *International Journal of Politics and Sociology Research*, 11(1), 84–93.
- Jaillant, L., Aske, K., Goudarouli, E., & Kitcher, N. (2022). Introduction: challenges and prospects of born-digital and digitized archives in the digital humanities. *Archival Science*, 22(3), 285–291. <https://doi.org/10.1007/s10502-022-09396-1>
- Liao, H., Zhao, M., & Sun, S. (2020). A Literature Review of Museum and Heritage on Digitization , Digitalization , and Digital Transformation. *Advances in Social Science, Education and Humanities Research, Volume 435*, 435(6th International Conference on Humanities and Social Science Research (ICHSSR 2020)), 473–476.
- Lolytasari, L., & Dirsanala, A. (2023). Digitalisasi Arsip Dalam Mendukung Pelaksanaan E-Government. *Shaut Al-Maktabah : Jurnal Perpustakaan, Arsip Dan Dokumentasi*, 15(1), 18–30. <https://doi.org/10.37108/shaut.v15i1.963>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE.
- Mugiarto, M., Agustina, I., & Suryaman, W. (2023). Adopsi Teknologi Aplikasi Aset Dan Kompetensi Pegawai Dalam Peningkatan Kinerja Pegawai Pengelolaan Barang Milik Negara Di Sopd Kota Cimahi. *Management Studies and Entrepreneurship Journal (MSEJ)*, 4(5), 4823–4835.
- Mynenko, S., & Lyulyov, O. (2022). The Impact of Digitalization on the Transparency of Public Authorities. *Business Ethics and Leadership*, 6(2), 103–115. [https://doi.org/10.21272/bel.6\(2\).103-115.2022](https://doi.org/10.21272/bel.6(2).103-115.2022)
- Pratama, R. A., Prasetyo, W. B., & Ramli, A. H. (2023). E-Service Quality, E-Trust, E-Satisfaction And E-Loyalty In Online Shopping. *Jurnal Ilmiah Manajemen Kesatuan*, 11(3), 1377–1388. <https://doi.org/10.37641/jimkes.v11i3.2313>
- Rasmussen, C. H. (2019). Is digitalization the only driver of convergence ? Theorizing relations between libraries , archives , and museums. *Journal of Documentation*, 75(6), 1258–1273. <https://doi.org/10.1108/JD-02-2019-0025>
- Rehouma, M. Ben, & Hofmann, S. (2018). Government employees' adoption of information technology - A literature review. *ACM International Conference Proceeding Series*. <https://doi.org/10.1145/3209281.3209311>
- Rosmaniah, S. M., Santoso, B., & Muhidin, S. A. (2022). Digitalisasi Arsip Statis pada Masa Pandemi Covid-19 Di Perguruan Tinggi. *Jurnal Pendidikan Manajemen Perkantoran*, 7(2), 214–224. <https://doi.org/10.17509/jpm.v7i2>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Taufiq, M. (2023). Kualitas Layanan dan Kepercayaan Publik Dalam Ekosistem E-Government. *Konferensi Nasional Ilmu Administrasi 7.0*, 488–494.
- Taufiq, M., & Andikaputra, F. A. T. (2023). Implementation of The Professional School Principal Selection Information System at The Bandung City Educational Office. *TGO Journal of Community Development*, 1(2), 116–123. <https://doi.org/10.56070/jcd.v1i2.367>
- Taufiq, M., & Harijanto, D. (2023). The Catalyst of Change : Analyzing the Impact of Public Service Motivation on Proactive Work Behavior. *Innovation Business Management and Accounting Journal*, 2(4), 275–283. <https://doi.org/10.56070/ibmaj.v2i4.366>
- Taufiq, M., & Karunia, R. L. (2023). Strengthening Tax Compliance : Enhancing E-Invoice Effectiveness in Public Sector Environmental Services. *TGO Journal of Community Development*, 1(2), 109–115. <https://doi.org/10.56070/jcd.v1i2.368>
- Taufiq, M., & Pradesa, H. A. (2023). Tinjauan Kritis Atas Implementasi Manajemen Risiko Pada

- Organisasi Publik. *Relasi: Jurnal Ekonomi*, 19(2), 411–428. <https://doi.org/10.31967/relasi.v19i2.1944>
- Wirtz, B. W., Mory, L., Piehler, R., & Daiser, P. (2017). E-government: a citizen relationship marketing analysis (IRPN-D-16-00005). *International Review on Public and Nonprofit Marketing*, 14(2), 149–178. <https://doi.org/10.1007/s12208-016-0164-9>
- Xu, D. (2022). An Analysis of Archive Digitization in the Context of Big Data. *Mobile Information Systems And*, 2022(1517824), 1–8. <https://doi.org/10.1155/2022/1517824>
- Zhao, W., & Jiang, Z. (2020). Research on occupational health and safety of medical staff based on iso 45001. *American Journal of Biochemistry and Biotechnology*, 16(3), 288–298. <https://doi.org/10.3844/ajbbbsp.2020.288.298>