International Journal of Marketing and Digital Creative, Vol. 3 No. 1 (2025) https://doi.org/10.31098/ijmadic.v3i1.2878

Research Paper

Digital Transformation in the Records Management of a Private Higher Education Institution

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Received: December 13, 2024	Revised: January 10, 2025	Accepted: March 27, 2025	Online: March 31, 2025

Abstract

Digital transformation is revolutionizing record management and igniting a bold new era of unparalleled efficiency, enhanced security, and seamless accessibility. This study assessed the implementation of digital record management across three dimensions: efficiency gains; strengthening accuracy; and best practices and identified the challenges organizations face in achieving these goals. This descriptive-quantitative study used a researcher-structured questionnaire to collect data from 56 randomly sampled employees of a private higher education institution (HEI) in the Philippines. The data were analyzed using frequency, percentage, weighted mean, and Spearman's rank correlation analysis. The report highlights best practices in digital record management and delves deeper into data accuracy and security enhancements. The findings also demonstrate that the HEI is working hard to implement best practices in digital record management, including establishing a well-defined plan for the transition from paper to digital records. Implementation obstacles such as data loss and compatibility problems are discussed, and it is revealed that there is no meaningful connection between these challenges and the implementation of digital records management. A proposed strategy roadmap is recommended by the researchers to enhance digital record management in the subject HEI. This study on digital transformation in the records management of a private HEI in the Philippines has the potential to drive significant improvements in the institution's operations, enhance its reputation and contribute to the broader goals of HEIs in the country.

Keywords: *Digital Transformation, Higher Education Institution, Problems on Digital Records Management, Records Management, Technology Acceptance Model*

INTRODUCTION

Digital transformation practices involve converting paper-based records to digital formats, enabling organizations to streamline processes, enhance data accessibility, and improve operational efficiency. Technology changes enormously from time to time, affecting widespread concern worldwide in various fields, including the management of records in organizations. Globally, recordkeeping has transformed from paper-based into digital formats, with a patchwork of achievements, failures, and difficulties (Zulkifli et al., 2023). Consequently, higher education institutions (HEIs) are undergoing significant changes due to digitalization, making digital transformation a key focus in practice and research. This transformation emphasizes the need for effective digital record management systems that enhance information organization, compliance, and operational efficiency.

In the 21st century, digital transformation is essential for HEIs to remain competitive and responsive to demands for efficiency and transparency. In the Philippines, many private HEIs face difficulties with traditional manual record management, which often leads to errors and

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compliance problems (Yin et al., 2024). Recently, many changes have been taking place in the education sector worldwide in the aftermath of the COVID-19 pandemic (United Nations, 2020). Salama and Hinton (2023) highlighted the challenges faced by higher education leaders in adopting online offerings and the factors affecting their decision-making. Kerroum et al. (2020) highlighted the ongoing debate regarding the importance of digital transformation for HEIs. The study noted that adopting new technologies rapidly altered how academics and their institutions functioned.

The HEI under study is a private university in the Philippines with approximately 7,000 students struggling with outdated manual record management, leading to inefficiencies and compliance issues. Although the HEI acknowledges the importance of digital transformation, challenges such as staff resistance and inadequate training continue to hinder progress or complicate transition processes. The critical research gaps include issues with system compatibility, frequent data loss during the transition, and the potential for inaccuracies that could impact decision-making. The unnecessary transfer of data complicates record management and increases storage costs. Furthermore, there is a need to explore integrating emerging technologies like artificial intelligence and blockchain, to enhance records management practices. These challenges underscore the need for focused research to address the barriers to successful digital transformation in HEIs.

The debate surrounding the importance of digital transformation for HEIs is ongoing. Kerroum et al. (2020) highlighted the rapid reshaping of academic operations by adopting new technologies. This transformation directly impacts record management, necessitating effective digital systems to enhance information organization, retrieval, and security, addressing issues in traditional manual processes. Digital transformation in HEIs directly influences record management by requiring effective digital systems that improve information organization, retrieval, and security. This shift enhances operational efficiency and regulatory compliance, addressing the shortcomings of traditional manual processes. Ultimately, effective digital record management is crucial for HEIs to succeed in a competitive landscape, ensuring information preservation and accessibility while meeting demands for transparency and efficiency. While the shift to digital record management supports compliance and operational efficiency, challenges like staff resistance, technical issues, and inadequate training or resources can arise. Despite obstacles, efficient digital record management is crucial for HEIs to lead in a competitive landscape, ensuring information preservation, accessibility and meeting demands for transparency and efficiency.

Studies on digital transformation and record management in HEIs have highlighted various international findings. Chukwunweike and Aro (2024) identified alternative approaches to improving performance and achieving best practices in the United States. In China, Xia and Johar (2024) examined the evolution of digital innovation and its impact on organizational growth. Their results revealed that both information and innovation infrastructures have a positive and direct effect on organizational digital innovation, as well as an indirect effect through data flows. Converged infrastructure has only an indirect impact on organizational digital innovation through data flow. However, Audu et al. (2024) focused on enhancing operational efficiency through digital tools in Nigeria. They examined the role of digital tools in enhancing environmental monitoring and business efficiency, focusing on how businesses leverage technologies such as artificial intelligence, the Internet of Things, blockchain, and machine learning to meet sustainability goals and optimize operations. This study identified cybersecurity risks as a critical concern, particularly as businesses become increasingly reliant on digital infrastructure. Regulatory hurdles and financial costs associated with implementing cutting-edge technologies also pose significant barriers. Nonetheless, this study provides recommendations for businesses to address these challenges, including investing in robust cybersecurity frameworks. According to Arman and Lamiyar (2023), it is also important that the potential ethical and societal implications of these technologies be

properly assessed to ensure that they are used responsibly and beneficially.

Local studies (Briones et al., 2023; Roque & Ulanday-Lozano, 2024; Simon & Anutariya, 2023) highlighted the challenges faced by Philippine HEIs in transitioning from traditional to digital systems. These studies provide valuable insights into the broader challenges of digital transformation, particularly in terms of adopting new technologies within existing infrastructures. However, they primarily focused on the general challenges of digital transformation without addressing the specific issues related to integrating new digital systems with current record management practices. While these studies have shed light on the broader challenges of digital transformation in Philippine HEIs, there remains a need to fully address the difficulties of integrating new digital systems with existing record management approaches. This gap becomes particularly evident in HEIs, where integrating digital systems into established record management processes poses unique challenges. This study aims to fill this gap by focusing on integration and data management aspects and by offering practical solutions to overcome the difficulties encountered. This study seeks to help institutions streamline their digital transformation by addressing these challenges and improving operational efficiency and decision-making.

The main research aims of this study are to examine the impact of digital transformation on record management in HEIs and to identify the challenges they face during the process. The primary objective of this study is to investigate how digital transformation influences record management, focusing on efficiency gains, accuracy improvements, and identifying best practices. Additionally, this study assesses the problems encountered during the digital transformation process and explore the relationship between the benefits of digital record management and the challenges faced by HEIs. Finally, this study seeks to develop an action plan to further enhance digital records management practices in the HEI. This strategy provides valuable insights into the effects of digital transformation and offers practical steps for improving the efficiency and effectiveness of records management in the HEI.

LITERATURE REVIEW

In accordance with the study's aims, the researchers conducted a thorough evaluation of related literature acquired from various sources to provide a clear understanding of the topic at hand. This section presents the underpinning theory of this study and the regulatory issues surrounding the digital transformation of record management in private HEIs.

Technology Acceptance Model (TAM) Theory

Digital transformation in record management combines various interdisciplinary frameworks to explain how organizations have shifted from traditional paper-based systems to digital technologies. In the context of the present study, the assessment of employees on the implementation of digital records management of the subject HEI is grounded on the TAM theory. TAM, introduced by Davis (1986), is a core framework that suggests that digital systems' perceived ease of use and usefulness are key factors driving the technology adoption (Aboalsamh et al., 2023; Schorr, 2023). TAM emphasizes that when employees find new technologies accessible and beneficial to their tasks, they are more likely to embrace them. This theory is central to understanding how an organization's transition to digital records management because it highlights the importance of user perceptions in facilitating successful technology adoption (Armouti et al., 2023).

Implementation of Digital Records Management

Digital transformation in record management significantly boosts organizational efficiency by streamlining record retrieval, reducing physical storage needs, and enabling quicker decision-

making. Digital systems allow for rapid access to records, reducing the time spent manually searching physical files and eliminating the delays inherent in traditional methods (Agu et al., 2022; Valeriano, 2024). Automating tasks such as document approval, classification, and retention further enhances workflow efficiency, while shared access to digital records supports better collaboration across teams (Tsabedze, 2020). By consolidating vast amounts of data into secure, space-efficient digital formats, organizations can reduce physical storage costs and enhance overall productivity and agility (Velkoska, 2024). Efendi et al. (2023) noted that digital transformation through the use of various platforms enhances the growth of an organization. Cababao, Jr. (2024) also noted that automation tools significantly enhanced the efficacy of key work processes in terms of speed, accuracy, and collaboration.

In addition to efficiency gains, digital record management also improves data accuracy and integrity, and secure digital storage protects records from physical damage, theft, or natural disasters, ensuring critical information remains accessible (Velkoska, 2024). Digital systems offer audit trails to track record ownership and access history, fostering accountability and maintaining data integrity, according to Armouti et al. (2023). Data entry and validation automation also reduces human error, ensuring that records are accurate and consistent (Tsabedze, 2020). For successful implementation, organizations must establish a clear transition strategy, invest in training, and foster a culture of continuous improvement to adapt to evolving technologies and maintain long-term system effectiveness (Faiq & Ali, 2024).

It was pointed out by Alvarenga et al. (2020) that the digital transformation process has a relevant effect on the knowledge management practices of an organization. Thus, knowledge management can be considered a critical factor in digital transformation success. In the context of HEI operations, the implementation of digital record management is becoming increasingly relevant. Mukred et al. (2022) revealed that digital record management plays a substantial and vital role in educational organizations' competency.

Problems Encountered in Digital Records Management

One of the key challenges in digital record management is the issue of compatibility when integrating new systems with legacy records management frameworks. Older technologies often need to seamlessly interface with modern platforms as organizations transition to digital systems, leading to data consistency and operational inefficiencies (Elugbaju et al., 2024). This lack of integration can cause significant disruptions in data flow, making it difficult for organizations to effectively manage records across multiple systems. Additionally, the migration process from physical or legacy systems to digital formats often results in data loss, creating gaps in critical records, and affecting organizational operations (Velkoska, 2024). These gaps can undermine the integrity of records management systems and hinder compliance with legal or regulatory requirements.

Furthermore, downtime and business disruptions are expected during digital transformation because system outages or transitions may temporarily impede access to essential information (Athreya et al., 2024). These disruptions can lower productivity and delay decision-making. Additionally, when transferring records, organizations may inadvertently move unnecessary or redundant data into digital systems, increasing storage costs and complicating the management of digital archives (Akbar et al., 2018). This excessive data accumulation can make it more difficult to maintain an organized, efficient digital system, further intensifying the challenges of digital record management. Finally, in addition to the high cost of technology for efficient digital record management, Tsvuura and Ngulube (2021) noted that the cost of manpower training and continuous education should be considered by the HEI. As emphasized by Chaputula (2022), training of personnel for digital records management is critical as it empowers them with the

necessary knowledge and skills to properly discharge their duties.

In a study conducted by Damanik et al. (2024), they stressed the importance of a collaborative, multidisciplinary approach involving archivists, technologists, and policymakers in fostering innovation and addressing challenges in digital records management.

Relationships between Implementation and the Problems Encountered in Digital Records Management

The implementation of digital records management systems is often accompanied by various challenges driven by the complex interplay of technological, organizational, and operational factors. One major issue organizations face is compatibility problems when integrating new digital systems with legacy frameworks. According to Elugbaju et al. (2024), this can result in data silos and inconsistent information across platforms, thereby impeding smooth workflow and decision-making. Additionally, during the migration from paper-based or outdated digital records to new systems, there is an increased risk of data loss, leading to gaps in crucial historical data that can undermine organizational operations and compliance with regulatory requirements (Velkoska, 2024). These issues are compounded by the operational disruptions caused by system transitions, which often result in downtime and slow productivity as employees adapt to new workflows and technologies, as cited by Athreya et al. (2024).

Furthermore, adopting digital systems often results in the accumulation of inaccurate or incomplete data, which significantly impacts organizational decision-making (Malik, 2024). The increased volume of digital data, combined with poor planning or inadequate data governance, can result in unnecessary data transfer into digital systems. This inflates storage costs and complicates the maintenance of an organized and efficient records management system (Fernández-Iglesias et al., 2024). These challenges underscore the need for meticulous planning, effective system integration, and robust data governance practices to successfully implement digital record management systems while minimizing disruptions and ensuring data accuracy and accessibility. Ghadge (2024) repeated how meticulous planning ensures organizations' better management of digital transformation, ultimately improving operational efficiency and minimizing risks associated with data inaccuracies and accessibility issues. This comprehensive approach supports the long-term success of digital record management systems, enabling organizations to fully realize the benefits of digitalization.

Thus, this study explores whether these factors or dimensions of digital record management are affected by implementation and the problems encountered. The formulated null hypothesis of the researchers assumes that any observed differences are only due to random chance and provides a benchmark for testing whether digital record management has a meaningful impact on these challenges. Thus, the null hypothesis is as follows:

Ho: There is no significant relationship between digital record management and the problems encountered in the three dimensions (efficiency gains, accuracy, and best practices).

RESEARCH METHOD

The researchers employed a descriptive-quantitative research method to summarize and present the collected data, making it easier for readers to understand the information. This method is particularly relevant to the present study because it allows for a clear and systematic analysis of the specific variables related to digital transformation in records management within a particular HEI. Using this approach, the study can collect relevant data from a defined population (De Pilli et al., 2024) in this case, the employees of the subject HEIs. Likewise, it can assess critical factors, such as efficiency gains, accuracy improvements, and challenges encountered during the digital

transformation process. The descriptive-quantitative method provides a structured way to examine and interpret data, which aligns with the study's goal of identifying practical insights and solutions to enhance digital records management practices. The study considered a target sample size of 56 employees from the overall population of teaching and non-teaching employees of 295 employees of the subject HEI in the Philippines. The sample size was determined using the Raosoft sample size calculator, with a 90% confidence level and a 10% acceptable margin of error. A simple random sampling technique was employed to target regular employees of the subject HEI who were involved in record management and who performed various duties and responsibilities.

The researchers' structured questionnaire was designed to be simple, avoiding complex questions to ensure an easy response. For content validity, the questionnaire was reviewed by two experts in record management from an academic setting. Feedback was incorporated into the final version of the instrument. The questionnaire consisted of 20 items, which were organized into two main sections. The first section covered three dimensions of digital record management: efficiency gains, accuracy improvements, and best practices, with five items dedicated to each dimension. The second section addresses the problems encountered during digital transformation, consisting of a one-dimensional representation of five items. Data gathering was done through the questionnaire using a 4-point Likert Scale: 1.00 – 1.74 Strongly Disagree; 1.75 – 2.49 Disagree; 2.50 – 3.24 Agree; 3.25 – 4.00 Strongly Agree. Confidentiality was strictly maintained throughout the research process. A pilot test was conducted with 10 employees who were not part of the study sample, resulting in a Cronbach's Alpha of 0.873, indicating good reliability. The researchers collected data personally using the questionnaires distributed to the respondents.

To protect the respondents' privacy and guarantee that the data collected would only be used for the study, a confidentiality form was included in the questionnaire during the survey. Frequency, percentage, weighted mean, and Spearman's rank correlation analysis were used to tabulate and evaluate the data that were deemed sufficient for the study.

FINDINGS AND DISCUSSION

This section focuses on the analysis of survey data collected from sampled HEI employees at the HEIs, providing a detailed interpretation of their responses to the study objectives.

Respondents' Profile

The 56 participants in this study generously contributed their personal and professional information for this study, providing insights and details related to their work in the subject-HEI. Table 1 presents the demographic profile of these respondents, outlining their age, length of service, employee classification, department affiliation, and involvement in digitization.

Table 1. Respondents' Profile

Profile	Details	Frequency (n = 56)	Percentage
Age	20 – 30 years old	36	64
	31 – 40 years old	17	30
	41 – 50 years old	3	6
Length of Service	Less than a year	8	16
	1 – 3 years	17	30
	4 – 6 years	19	34
	7 – 10 years	3	5
	Over 10 years	8	14
Employee Classification	Non-Teaching Staff	13	23
	Teaching Staff	43	77

Profile	Details	Frequency (n = 56)	Percentage
Department	Registrar	12	21
	Student Alumni Services	4	7
	Basic Educ. School	24	43
	Tertiary School	16	29
Involved in Digitization	Yes	42	75
	No	2	4
	Unsure	7	12
	In Progress	5	9

According to the data, the majority of respondents are young professionals with not more than six years of employment tenure and are with digital experience. The data suggest that the participants are more likely to be more adaptable to new records management technologies, which may make the adoption process easier. This finding is aligned with the study of Zamrudi et al. (2024) stating that the institution's focus is on young professionals with strong digital literacy to meet the demand of knowledge workers.

Implementation of Digital Records Management

According to the data, most respondents are young professionals with not more than six years of employment tenure and digital experience. The data suggest that the participants are more likely to be adaptable to new record management technologies, which may ease the adoption process. This finding is aligned with Zamrudi et al. (2024) study, which stated that the institution's focus is on young professionals with strong digital literacy to meet knowledge workers' demand.

Efficiency Gains

Digital record management can significantly improve information retrieval efficiency, enabling users to quickly locate and access the information they need, regardless of location or time. Table 2 presents a detailed analysis of the efficiency gains observed in record management within the HEI.

As can be gleaned from the table, the composite mean posted the verbal interpretation "Strongly Agree" indicating that all statements related to digital transformation in records management are consistently implemented in the HEI. Digital systems improve decision-making by providing quicker access to records and enhancing the speed and efficiency of decision-making processes. The results demonstrate that these systems significantly reduce record retrieval times, further accelerating decision-making. In addition, the data indicate a reduction in manual errors, which results in more reliable and efficient operations. These findings suggest that digital systems can enhance efficiency and decision-making, although the extent of the gains may vary based on the implementation scale and technology. This study aligns with Al-Saudi and Flayyih (2024) findings that digital systems can streamline record retrieval, improving efficiency and decision-making.

Table 2. Efficiency Gains

Statement	Mean	Standard Deviation	Descriptive Interpretation
1. Digital transformation leads to increased efficiency and productivity of employees through streamlined record retrieval processes.	3.3760	0.94508	Strongly Agree

Statement	Mean	Standard Deviation	Descriptive Interpretation
2. Digitizing records reduces physical storage requirements.	3.6607	0.66815	Strongly Agree
3. Digital systems facilitate quicker access to records, enhancing decision-making speed.	3.7143	0.65267	Strongly Agree
4. Automation of workflows results in fewer delays and interruptions in records management.	3.4107	0.7078	Strongly Agree
5. Shared access to digital records improves collaboration among team members.	3.3740	0.86471	Strongly Agree
Average Weighted Mean	**3.5071**		**Strongly Agree**

Strengthening Accuracy

Digital records management systems can foster a culture of data accuracy by providing clear guidelines for data entry, standardized formats for record-keeping, and automated mechanisms for error detection and correction. Table 3 presents a detailed analysis of the improvements in accuracy observed in record management within the HEI.

Table 3. Strengthening Accuracy

Statement	Mean	Standard Deviation	Descriptive Interpretation
1. The use of secure digital storage solutions minimizes the risk of data loss.	3.2500	0.66742	Strongly Agree
2. Real-time updates provided by digital systems reduce discrepancies in records.	3.4643	0.78542	Strongly Agree
3. Digital transformation facilitates easy tracking of record ownership and access history.	3.5000	0.80904	Strongly Agree
4. Automated data entry and validation processes enhance data accuracy.	3.4643	0.78542	Strongly Agree
5. Implementing data validation checks supports error reduction in records management.	3.5893	0.68162	Strongly Agree
Average Weighted Mean	3.4535		Strongly Agree

As can be gleaned from the table, the composite mean posted "Strongly Agree" indicating that all statements related to strengthening the accuracy dimension were consistently agreed upon by the participants in the institution. This implies that organizations can improve data management by focusing on security, accuracy, and accountability. While this approach is effective, there is still room for improvement, especially in terms of addressing emerging challenges and optimizing system efficiency. This study aligns with the findings of Eswararaj (2023), who highlighted how

validation checks ensure data accuracy, consistency, and completeness, leading to reduced error rates and improved data quality.

Best Practices

Adopting best practices in digital record management, including regular data backups and disaster recovery plans, is crucial for ensuring the continuity of operations and the preservation of valuable records. Table 4 presents a detailed analysis of the improvements in best practices observed in record management within the HEI.

Table 4. Best Practices

Statement	Mean	Standard Deviation	Descriptive Interpretation
1. A clear strategy is established for transitioning from paper to digital records.	3.3571	0.74903	Strongly Agree
2. Comprehensive training programs are provided to ensure staff competency with digital tools.	3.3036	0.71146	Strongly Agree
3. There is encouragement for ongoing evaluation and adjustment of digital records management practices.	3.3929	0.80178	Strongly Agree
4. A culture of continuous improvement in digital records management processes is promoted.	3.5179	0.76256	Strongly Agree
5. A contingency plan for data recovery is developed in case of system failures.	3.1607	0.84803	Agree
Average Weighted Mean	3.3464		Strongly Agree

As can be gleaned from the table, the composite mean is equated to an interpretation of "Strongly Agree" indicating that the subject HEI is making significant efforts to implement best practices in digital records management, including having a clear plan for transitioning from paper to digital records, providing thorough training to staff on using digital tools, and encouraging continuous review and improvement of digital management processes. It is also important to note that the result reveals that the HEI fosters a culture of continuous improvement where employees seek ways to enhance how they manage digital records. This implies that HEIs consistently and effectively implementing a culture of continuous improvement. This finding aligns with the recommendations of several researchers (Chukwunweike & Aro, 2024; Rivera et al., 2023) who highlighted the importance of fostering this culture, emphasizing the need for data-driven decision-making, employee engagement, and willingness to embrace change and learn from failures. The results further support this argument by highlighting the importance of data-driven decision-making and employee engagement. As emphasized by De Ramos and Briones (2024) an academic institution capable of improving its decision-making system would be able to easily adapt to a competitive educational landscape.

On the other hand, respondents perceived that having a contingency plan for data recovery in case of system failures is only frequently observed in records management, as this indicator obtained an “Agree” rating. According to Mirza (2024), disaster recovery planning plays a vital role

in ensuring data availability and continuity in the event of failures and unexpected events. It is then suggested that cloud storage of data can be practiced by the HEI for secure data storage without any high-cost hardware investment. As emphasized by Hasan et al. (2023), cloud storage aids in the security of data backup, which allows access to files and documents even if the hardware is lost or damaged.

Problems Encountered in the Implementation of Digital Records Management

The analysis of the problems encountered by employees in digital record management highlights the challenges in organizing, structuring, and accessing data for efficient decision-making. As shown in Table 5, issues such as slow record retrieval and data inaccuracies suggest that, while the digital system is in place, it may not be fully optimized. Addressing these problems is essential for improving efficiency and supporting better decision-making within the institution. This finding aligns with the study of Efendi et al. (2024), who found that using digital records management in education provides great opportunities to improve better educational decision-making.

Table 5. Problems Encountered in the Implementation of Digital Records Management

Statement	Mean	Descriptive
1. Efficiency Gains Related Problems	2.9286	Agree
2. Strengthening Accuracy Related Problems	3.1071	Agree
3. Best Practices Related Problems	2.6964	Agree
Average Weighted Mean	2.0892	Agree

Relationship Between Implementation and Problems Encountered in Digital Records Management

The relationship of digital record management implementation in its three dimensions (efficiency gains, strengthening accuracy, and best practices) and the problems encountered were analyzed by Spearman's rank correlation analysis. In reference to the null hypothesis formulated by the researchers that there is no significant relationship between the implementation of digital record management and the problems encountered, Table 6 presents the results of the statistical analysis.

All variable pairings yielded non-significant results because the computed p-values of these variables were all greater than the 0.05 level of significance. Thus, the null hypothesis is accepted. The non-significant results (p-values greater than 0.05) indicate that there is not enough statistical evidence to reject the null hypothesis, suggesting that any observed relationships between the variables may be due to chance. This outcome can be justified by considering that other factors, such as staff training and infrastructure, may influence the success of digital transformation in record management. Literature supports this, as studies like those by Ekhsan et al. (2023) and Yang et al. (2024) highlighted that factor beyond digital systems themselves, such as system integration and employee engagement, play a significant role in achieving successful outcomes.

Table 6. Relationship Between Implementation and Problems Encountered in Digital Records Management

Variables	p-value	Conclusion

		Coefficient of Correlation		
Efficiency Gain	Problems Encountered	-0.077	0.571	Not Significant
Strengthening Accuracy		0.031	0.819	Not Significant
Best Practices		-0.183	0.177	Not Significant

Proposed Strategy Roadmap to Enhance Digital Records Management

The researchers proposed strategies to provide a comprehensive framework for enhancing digital records management at the HEI, focusing on addressing the identified challenges and maximizing the benefits of digital transformation. According to Sutirman et al. (2018), these strategies align with the core principles of effective records management—ensuring data is organized, protected, accessible, and compliant—while also fostering a culture of continuous improvement. By implementing these strategies, organizations can optimize their records management practices, mitigate risks, reduce costs, and enhance their decision-making capabilities, ultimately leading to better business outcomes.

Table 7. Proposed Strategies

Dimension of Digital Records Management	Areas that Need Improvements	Proposed Strategies
Efficiency Gains	Security Risks	Implementing strong security measures. This includes employing strong encryption protocols for data.
	Cost of Implementation	Exploring open-source solutions or cloud-based services to reduce upfront costs.
	Technical Expertise	Conducting adequate training for staff to ensure successful implementation.
	Data Integrity	Maintaining the use of version control, regular backups, and data validation procedures.
	Accessibility and Equity	Designing a system with scalability in mind to accommodate future growth and changes in data volume.
Strengthening Accuracy	Redundancy	Implementing Redundant Backup Systems. Using a combination of on-site and off-site backups to ensure data redundancy.
	Authentication	Adopting Multi-Factor Authentication (MFA) for Access Control. Require multi-factor authentication (MFA) for users accessing secure digital storage solutions.
	Regularly Update	Conducting Regular Security Audits and Risk Assessments. Performing regular security audits and risk

Dimension of Digital Records Management	Areas that Need Improvements	Proposed Strategies
		assessments on digital storage solutions to identify potential weaknesses.
Best Practices	Data Organization and Classification	Implementing a standardized taxonomy and metadata tagging system for digital records.
	Document Retention and Disposal	Automating retention and disposal schedules using records management software to enforce policies and reduce human error.
	Data Security and Compliance	Conducting regular security audits and vulnerability assessments to identify potential gaps in data protection protocols.
	Search and Retrieval Efficiency	Implementing an advanced search engine with AI-powered capabilities such as natural language processing and optical character recognition.
Problems Encountered	User Adoption and Engagement	Creating a user-friendly onboarding and training program with ongoing support to drive adoption and ensure long-term engagement.
	Data Security and Compliance Checks	Implementing Data Access Controls and Automated Compliance Auditing Tools
	User Training and Awareness	Developing a Continuous Training and Certification Program for Data Management

CONCLUSION

This study assessed digital record management in terms of efficiency gains, strengthening accuracy, and best practices at a private HEI in the Philippines. The findings indicate that HEIs have a relevant and effective digital record management system that contributes to the achievement of common goals and enhanced employee engagement. However, no statistically significant relationships were found between the implementation of digital record management and the problems encountered across the three dimensions. This suggests that the HEI has already implemented strong practices to mitigate the impact of these challenges. Nonetheless, the absence of statistical significance does not imply that the problems are insignificant or should be ignored.

Based on these findings, the researchers recommend a strategic roadmap to further optimize the HEI's digital records management system. This roadmap addresses existing challenges, build on current strengths, and enhance system efficiency. The implications of the study suggest that while the HEI has made progress, targeted improvements are still needed to ensure a more robust and effective digital record management system. By following the roadmap's proposed strategies, the HEI can improve its decision-making, resource management, and operational efficiency, ultimately strengthening its overall digital transformation efforts.

LIMITATION AND FURTHER RESEARCH

The researchers suggest that future studies should expand their scope to include a wider

variety of HEIs in the Philippines, thereby broadening the coverage of the research. Further research could also delve into additional aspects of digital record management beyond those examined in this study. Likewise, assessment of technology utilization, knowledge management practices, and manpower competencies for effective and efficient digital transformation are excellent topics for future research. To mitigate potential self-report bias, researchers could employ alternative data collection methods, such as interviews, focus group discussions, and observations. Incorporating qualitative data would offer valuable insights into employees' perceptions, experiences and challenges related to digital records management, providing a more nuanced understanding of the impact of digital transformation on HEIs and identifying areas for improvement. By exploring a wider range of HEIs, incorporating diverse research methods and integrating qualitative data, future studies can contribute to a more comprehensive and insightful understanding of the complexities of digital records management within the Philippine HE landscape.

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