

Approaches and challenges on Best Practices in Archive and Record Management in Electronic Age

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ABSTRACT: The records of an organization include the specifics of every transaction and official activity, whether it was generated, carried out, or received. It is equally crucial for small and big enterprises to have proper documentation, as it is in every other industry such as business, education, health, and medical. Modern technology has made it easy to maintain track of documents throughout time by providing a plethora of digital storage alternatives. But a good record management system is required to get them back fast and easily. Effective record keeping is a boon to risk management, compliance, and administration. Record management is broken down into its component parts and its foundation in this article. What software is available, how to save and retrieve prior papers, and how to manage records electronically are all described in the article. Historians and other records keepers in the current day need to have full control over and immediate access to all digital documents. In order to keep any business running smoothly, electronic media have become an integral part of record management and information preservation systems.

KEYWORDS: Digital record, record management, record managers, electronic record, electronic record management, preservation.

I. INTRODUCTION

People have been trying to find methods to preserve knowledge and history for future generations in different forms since prehistoric times. From clay tablets and papyrus rolls to illuminated manuscripts and printed texts, the method of knowledge preservation has evolved to its present form, i.e., digital format. New possibilities for the secure storage and retrieval of data have emerged as a result of technological advancements and globalization. There is no longer any need to store print files for documents thanks to the digital revolution, and record keeping has become accessible in this electronic era. This has tremendously changed record management. Data archiving and record management is a complex and difficult undertaking for any corporation. The administrative activities of the company take data preservation, information security, and record management very seriously. Digital versions of previously printed records are created. With the advent of digital technology, the notion of e-record management has arisen to facilitate the quick access and safe storage of ever-increasing amounts of digital information. ERMS were initiated in the nineties. There is a lack of effective or systematic technique for electronic document keeping, and further information is required (Zach & Peri 2010). An electronic information environment's integrity, metadata, knowledge management, risk management, and preservation of knowledge were all greatly aided by early archive community research. (Whitland and Gilliland, 2000). According to a subsequent study, information professionals require understanding of information ecosystems, digital documentary forms, archival and document management functions, as well as interpersonal, communication, and management abilities in order to effectively work with digital records and other digital materials (Pearce-Moses & Davis, 2008). In 2008, the "Document management applications" (ISO/TC171/SC2) international standardization group created a set of guidelines for integrating an ERM system. Automation of records management processes and procedures is known as electronic record management. A company's records are created, captured, stored, preserved, and disposed of in a systematic manner via record management. All records may be stored securely and retrieved when necessary with its help. A major challenge in an electronic setting is keeping track of the loss of data and documents. In 2012, Mullauzi et al. Administrators can tackle record management difficulties with the right infrastructure, the right laws, the right framework, the right budget, the right amount of influence from technology, and the right expert personnel. This is according to Asogwa (2012).

II. ASSESSMENT OF EXISTING LITERATURE

"Adam" from 2007. This book explains why record managers need to stop using paper records and start using an EDRMS in order to comply with new laws and the Freedom of Information Act (FOIA), and it gives them the right direction and guidelines for doing so. The success of the implementation is related to the rise in efficiency and productivity. Although there have been efforts to improve MER, the findings shown by Ambira& et al. (2019) indicate that present methods for MER need improvement to ensure they adequately serve e-government. With more and more ministries adopting e-government services, the government's management of electronic records (MER) must be well-positioned to support the rapid expansion of e-government in Kenya. This article delves into the reasons and solutions for e-records management in Africa. Asogwa (2012) found that the most pressing issues in this field are technical and operational in nature. Infrastructure, laws, regulatory frameworks, sufficient funding, and technical specialist personnel are all necessary for record retention. Rocco, (2014). This paper lays out the challenges of preserving born-digital artifacts in a conventional institutional context and offers solutions to those challenges. This study fills a gap in the literature by discussing problems associated with born-digital institutional archiving, a topic that really belongs in popular culture. In his 2018 paper, Hamer examined the archival duties connected with digital record management, as well as more general issues with government transparency, individual privacy, big data, and massive record keeping. The challenges of record management were discussed by Manjama (2007) for archivists and records administrators. The research shows that high-tech records will most likely become useless unless new approaches are taken with great caution. Because of this, it is more difficult to determine who did what. In order to effectively handle digital records and new technologies, record managers need to have certain abilities, which Mulauzi (2012) explores. In order to effectively manage the many types of organizational documents, the research recommends that records managers in Zambia use modern records management practices. An essay detailing the current state of EDRMS implementation in Zimbabwe and Namibia was written by Nengomasha and Chikomba (2018). It details the two nations' EDRMS adoption processes and the elements that made or broke their implementation. Özdemirci and Bayram (2009) conducted research on the principles of national records management and provided guidance on how to develop a plan to facilitate the public sector's integrated state restructuring. Modern internet-based services may perform all of the main functions of archival institutions, according to Szekely's (2017) examination of information operators in the various archival history paradigms.

III. RESEARCH NECESSITY

Society has benefited from the digital revolution. It impacts the quantity of data produced every minute and all disciplines, including health, education, economics, and business. It is now a difficult task for these companies to manage and retrieve this data. Records are an integral part of every organization. Organizational efficiency is enhanced by records that are well-maintained. Beginning with the creation of the record and continuing through its entire life cycle till preservation, the archival process is intricately linked with the area of record management. Electronic record keeping is crucial in today's ever-evolving regulatory landscape. Records Management and archival storage are so required by law. Having a good grasp of the record management system is essential for automating record management, which is crucial for appropriate record handling.

Our objectives are:

Find out the methodical procedure for handling electronic records. In order to find out what electronic record management technologies are needed. 3. Find out what the record manager's duties are for electronic records.

IV. CHALLENGES OF E-RECORD MANAGEMENT

The challenge of managing records electronically is crucial. Document retention, maintenance, and retrieval presents challenges for businesses and record keepers. The research shows that record managers have challenges include dealing with an overabundance of data, maintaining data correctness and conformity with the principles, locating records in various places, having a poor recovery method, and not having a retention plan. Data gathering, data storage, and data security are the three main categories of record management difficulties.

Capturing Data

Managing records has never been more difficult than it is now due to the exponential growth of data and the sheer volume of information available online. Accurate data collection is crucial in this era of constant information overload. A middle ground between digital and more conventional record storage and retrieval methods is required.

Information Archive

The main purpose of record management is data storage, which involves conserving space while appropriately keeping digital information. All businesses struggle with the delicate balancing act of data storage, privacy, security, and retrieval.

Upholding conformity with rules and regulations.

It is the responsibility of record keepers to be familiar with the policies and procedures put in place by their respective organizations to guarantee the confidentiality, integrity, and availability of customer information. Maintaining data and information in accordance with corporate regulations is an important but tedious and laborious responsibility of record managers. The primary objective of record management is to ensure continued compliance. If a record manager wants to be effective, they need to keep up with industry trends.

In charge of digital assets spread out across several sites

Managing records necessitates storing and processing digital assets across several locations. Maintaining data security while yet allowing authorized users access is a difficult balancing act for record managers.

Monitoring the creation of documents

There are a lot of documents kept by the company, some of which have been made by outside parties and others by internal employees. In order to locate the correct information, classification is necessary for identifying these documents. Categorization is just as important as storing and protecting data in a record management system. It allows for the proper data to be retrieved via categorization. Record keeping also faces the difficulty of settling on an appropriate method of categorization.

A lack of structure

Numerous difficulties arise in record keeping as a result of technological advancements and digitization. Finding the right records and keeping them organized are two sides of the same coin. Consequently, it is essential that the record manager think about how to properly gather the data.

Insufficient education

Proper record keeping necessitates trained staff members familiar with the many uses of information and communication technologies. As the field of record management evolves and more information becomes available, it is imperative that all organizations provide training for record managers. Training programs face a formidable task in meeting the need for a new generation of records managers and information specialists.

Inadequate data retrieval

To obtain reliable data, record management requires a plan that is both well-defined and documented. The difficulties record managers have as a result of inefficient record retrieval methods make it simpler to retrieve accurate information.

A Timetable for the Retention of Records

It may be difficult for record managers to determine how long a document should be kept or how much data should be deleted, but a record retention policy can assist with both of these issues.

Adopting certain best practices for record management may help any firm address these issues. Rapid assembly and retrieval of the enormous e-records generated by the technology is essential. For documents to remain secure throughout storage, a decision on the document format must be made. Planning for record management began with creating records; this involves deciding where to keep them, how to store them, for how long to preserve them, and how to delete them. In order to keep track of documents, every company has its own policy.

Guidelines for Efficient Record Keeping

The electronic records should be managed according to these guidelines.

To maintain inventory and labeling records.

An accurate and current inventory of all documents, whether they are kept in physical files, on microfilm reels, or in boxes, is essential for innovative record management. This is a representation of the many storage facilities, their amounts, locations, and organizational types. Keeping tabs on inventory is much easier.

Scheduling for Retention

A record's retention schedule details all of the papers that must be kept for a certain amount of time. The document details the required retention period, the date of destruction, and the method of data deletion. Records and record managers are able to maintain their flexibility with the use of retention schedules.

Save and Transform Records.

A filing and storage plan should be established by record management. As part of this plan, make sure everything is properly filed, archived, accessible, and quick to retrieve. This approach ought to conclude the sufficiency of storage.

Programs for vital records:

It is the responsibility of record management to preserve critical documents that must be accessible in the event of an emergency.

Preparedness for Disasters and Their Recovery

An authorized disaster prevention and recovery plan policy is necessary for record management in order to recover records in the case of an emergency and to protect and limit record loss in the event of a catastrophe.

Final decision.

Disposal is the last step in record management. When dealing with electronic records, it's easy to both delete and recover them. With the help of disposal, the record manager may "lighten the load" and keep track of the crucial data. Everyone agrees that electronic document management is crucial. Electronic records management systems provide a prescribed method for handling electronic records. When it comes to electronic document management, there are a few tools that might assist the company figure out what features the system needs.

V. A FEW EXAMPLES OF FREE AND OPEN-SOURCE RECORD-KEEPING PROGRAMS ARE COVERED HERE

Ezeefile

To better manage documents and store massive volumes of data, businesses may use EzeeFile, an enterprise document management solution. It generates a sizable digital archive of the document. You may access Ezeefile on-premises, in the cloud, or via the mobile app. Integration with email providers and additional search possibilities are available. An critical document may be protected from unauthorized access with this customisable feature.

LogicalDOC

Operating in the cloud, LogicalDOC is a platform for managing documents. The organization's document management system will be managed by this. It will include Lucene indexing, an automated import method, and a workflow for activities. This strategy makes use of Java technology, which provides a vital resource for managing documents and data. It can store documents of any size and is easy to use.

Vault of Eisen

Any industry may benefit from Eisen Vault, a cloud-based management solution. You may modify documents online and save them digitally. In addition to being compatible with Google Docs, it offers indexing and search features. This system is compatible with all web browsers and can be accessed by users of iOS and Android without the need to install any software.

Ms. DMACQ

With its unified suite of document management features, this file management software is useful for individuals, groups, and companies alike. Modules for managing contacts and sophisticated PDF management using machine learning are available. It includes a metadata framework, indexing capabilities, and document control versions. It has a data warehouse for large amounts of information and an analytics engine.

Laser fiche

All of the papers are kept in one place in our electronic repository. All of your important files, folders, and documents may be neatly organized with this software's help. It offers a space for storing, retrieving, and sharing information. Everything digital is neatly filed away in this digital filing cabinet.

Manuel OpenDoc

The open-source document management software that is hosted in the cloud is compatible with a variety of OSes. With its web-based interface, it offers all document services, aids in indexing, and more. OpenDocument has features including automatic installation, scheduled updates, and process alerts.

Django is the web framework that Mayan EDMS is built on. All necessary papers and documents may be quickly accessed from this electronic repository, which also preserves correct data. It works with all file types, formats, and management groups, and it has API documentation. The dashboard is also quite efficient.

El Dorado EDMS

Django is the web framework that this program is built on. All necessary papers and documents may be quickly accessed from this electronic repository, which also preserves correct data. It works with all file types, formats, and management groups, and it has API documentation. The dashboard is also quite efficient.

Nexo

The public domain license grants unrestricted use of this open-source document management system. It includes OSes and a platform for storing and managing critical reports. In addition to a natural workflow and storyboard creator, it contains comprehensive information. Licensing services are provided upon request. The ability to work in tandem with other productivity suites, such as Google Docs and Office 365, is the software's crowning achievement.

The strigue

Depending on the needs of the user, Sentrifugo may be adjusted as an open-source management system. It allows access to all files and stores them in one place. Setting up and being available is beneficial for both the person and the organization.

Public Knowledge

Built on the Java platform, this document management system is free and easy to use. In addition to safely managing or storing digital documents, it provides an intuitive user interface. It offers enhanced preview, metadata, and automated cataloging features.

The responsible party for managing electronic records is the record manager.

Compliance with legislative obligations surrounding the generation and preservation of documents, as well as the maintenance of accurate records of operational and strategic operations, are the responsibilities of the record manager. Document production, storage, and categorization for future reference are all functions of a record manager. Electronic record keeping is related to knowledge management and electronic information management. The record manager is responsible for keeping track of all electronic records and figuring out which system is best for design and development. A record manager's duties include creating a retention and disposal plan, as well as a system for reviewing and documenting documents. The role of a record manager is to establish policies and procedures for the management of records and to ensure compliance with all relevant laws and regulations. Decisions pertaining to the General Data Protection Regulation (GDPR), the Freedom of Information and Data Protection Acts, and other local, state, or federal rules are common topics for their legal and regulatory counsel. Memory and history preservation, resource management, staff training and supervision, and overall oversight are all responsibilities of record managers.

VI. CONCLUSION

All actions taken to oversee electronic records are collectively known as electronic record management. To keep track of massive volumes of data in the digital realm, electronic record management is crucial. An enterprise risk management (ERM) strategy is necessary for determining the report life cycle of a company. This strategy aids in the development of policies pertaining to the collection, storage, preservation, retention, and disposal of data. Adopting best practices that aid in the systematic management of electronic records is necessary to tackle the problems of managing electronic records. Businesses need e-record management software in order to implement a systematic approach to managing electronic records. Efficiently selecting this software according to the needs of their business is essential for record managers.

REFERENCES

1. Adam, A. (2007). Implementing electronic document and record management systems. Auerbach Publications.
2. Akporhonor, Blessings A. (2020). Innovative Tools for Records Management in Electronic Era, Library Philosophy & Practice (e-Journal)
3. Asogwa, B. E. (2012). The challenge of managing electronic records in developing countries: Implications for records managers in sub-Saharan Africa. *Records Management Journal*.
4. Bayram, Ö. Özdemirci, F., & Güvercin, T. (2013). Developing electronic records management software applications and managing institutional differences: a comparative study. *Procedia-Social and Behavioral Sciences*, 73, 526-533.
5. Ermis, L., Dillingham, J., & Edwards, M. C. E-Record Books for Supervised Agricultural Experience Programs: An Information Management Tool for the 21 st Century.
6. Kalusopa, T., & Ngulube, P. (2012). Developing an e-records readiness framework for labour organizations in Botswana. *Information Development*, 28(3), 199-215.
7. Mnjama, N., & Wamukoya, J. (2007). E-government and records management: an assessment tool for e-records readiness in government. *The Electronic Library*.
8. Moersch, C. M. (2013). Improving achievement with digital age best practices. Corwin Press
9. Moloi, J., & Mutula, S. (2007). E-records management in an e-government setting in Botswana. *Information Development*, 23(4), 290-306.
10. Mukred, M., Yusof, Z.M., Noor, N.A.B.M., Kayode, B.K., Al-Duais, R. (2020). The Role of Cloud Electronic Records Management System (ERMS) Technology in the Competency of Educational Institutions
11. Pappel, I., Butt, S., Pappel, I., & Draheim, D. (2021). On the specific role of electronic document and record management systems in enterprise integration. In *Proceedings of fifth international congress on information and communication technology* (pp. 37-51). Springer, Singapore.
12. Saeed, F., Mohammed, F., Gazem, N. (eds) *Emerging Trends in Intelligent Computing and Informatics. IRICT 2019. Advances in Intelligent Systems and Computing*, vol 1073. Springer, Cham. https://doi.org/10.1007/978-3-030-33582-3_88
13. Wamukoya, J., & Mutula, S. M. (2005). Capacity-building requirements for e-records management: The case in East and Southern Africa. *Records Management Journal*.
14. Wamukoya, J., & Mutula, S. M. (2005). E-records management and governance in East and Southern Africa. *Malaysian Journal of Library & Information Science*, 10(2), 67-83.
15. Weise, C. (2009). Best practices for electronic records management. *Infonomics*, 23(2), 48- 50.
16. Joydeep Das, Supriya Bajaj. (2022). Top 14 Free and Open-Source Document Management System. <https://www.softwaresuggest.com/blog/free-open-source-document-managementsystem/>
17. Martin Garland. (2019). What Is Electronic Records Management? <https://blog.netwrix.com/2019/10/10/electronic-records-management-101/>
18. Pacific Records. (2022). Records Management Best Practices, by Pacific Records.pdf. <https://pacific-records.com/5-records-management-best-practices>