University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Fall 1-4-2020

Improving Records Management And Security For Successful Business Performance: The Role Of New Media

Olufemi K. ARAMIDE PhD The Polytechnic Ibadan, Nigeria, femaramid@yahoo.com

Rita E. Ajibola The Polytechnic Ibadan, Nigeria, ritajib@yahoo.com

Olusoji S. Olatunji The Polytechnic Ibadan, Nigeria, sojioustimilehin@gmail.com

Peter Oduroye Caleb University, Imota Lagos, poduroye@yahoo.co.uk

Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac

Part of the Library and Information Science Commons

ARAMIDE, Olufemi K. PhD; Ajibola, Rita E.; Olatunji, Olusoji S.; and Oduroye, Peter, "Improving Records Management And Security For Successful Business Performance: The Role Of New Media" (2020). *Library Philosophy and Practice (e-journal)*. 3734.

https://digitalcommons.unl.edu/libphilprac/3734

IMPROVING RECORDS MANAGEMENT AND SECURITY FOR SUCCESSFUL BUSINESS PERFORMANCE: THE ROLE OF NEW MEDIA

ABSTRACT

The paper identifies how New Media has become one important phenomenon in shaping records management and security of information for successful business performance. With the advent of new media, paper documents could be read and converted automatically into electronic files thereby saving man hour of expensive data entry labour. The paper examines how records stored on electronic media can be readily accessed, and the importance of document security through proper document management. The paper findings reveals that records management plays a vital role in running a successful business and that businesses maintain sensitive information daily, as a result security measures are a critical issue. It is recommended that Electronic records should be reliably and securely maintained in their electronic form because preserving the context and structure of records and facilitating access to them is best accomplished in the electronic environment.

KEYWORDS: New Media, Records Management, Security

INTRODUCTION

Records management is the supervision and administration of digital or paper records, regardless of format. Records management activities include the creation, receipt, maintenance, use and disposal of records. In this context, a record is content that documents a business transaction. Documentation may exist in contracts, memos, paper files, electronic files, reports, emails, videos, instant message logs or database records. Paper records may be stored in physical boxes on-premises or at a storage facility. Digital records may be stored on storage media in-house or in the cloud. (Association of Information and image management 2018). Records management is an established theory and methodology for ensuring the systematic management of all records and the information they contain throughout their lifecycle. According to International Standard ISO 15489: 2001, records management is defined as the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records. Oyedokun (2012) opined that records management is a systematic control of an organization's records throughout their life cycle, in order to meet operational business needs, statutory and fiscal requirements and community expectations. Oxford Learners Dictionary, defined records management as the activities designed to control the life cycle of a record from its creation to its ultimate disposition.

Traditionally records were held on paper, microfilm or microfiche, but are now predominantly created and held in electronic format or within electronic systems. The core concept underpinning records management theory is that of the lifecycle, which sees records having a series of phases from creation to final disposition ultimately resulting either in their controlled destruction or being retained on a permanent basis as an archival record. The process of changing records, the media on which records are stored and the ways records are used have changed greatly since the 1980s. Changes in technology facilitate changes in business methods. Additionally, technology has helped create a global market place, making it easier for people around the world to exchange goods and services. Organisations and their information systems face security threats from a wide range of sources, including computer-assisted fraud, sabotage, vandalism, theft, fire or flood. Damage caused by breaches such as computer viruses and computer hacking is becoming increasingly common and sophisticated. Dependence on information systems and services means that organisations are increasingly exposed and vulnerable to security threats; security issues were not always the primary consideration in system design. The paper will look at the various contributions of new media in records management and security.

THEORETICAL FRAMEWORK:

According to Read and Ginn (2007), most of the business records before 1600 were based upon simple trade transactions that provided evidence of money received and spent, lists of articles bought and sold, and simple contracts. These records and

any copies were created by hand until the printing press and later the typewriter were invented. Until the 1950's when computers were first used in business, records were almost entirely paper documents. The most important emphasis during this stage in history was getting the records properly placed in the files. Emphases on retrieval surfaced later. Little importance or status was granted to records and to records management functions at this time. Read and Ginn (2007) went further to say that starting in the early 1970's, manufacturing proportion of the U.S. Gross Domestic Product (GDP) started to fall. Since that time, more of the GDP is produced by information services. This is a significant change from the 1950s industrial based economy. The majority of business records are no longer just records of accounting transaction. Correspondence and information about customers are prevalent because these records are an important resource about the customer who buys the products or services a company sells. Records are stored on magnetic media, microforms, and optical media as well as in paper form. Fast accurate retrieval helps a business meet customer needs. The ISO defines records as information created, received, and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business. Whilst useful in stressing the essential evidential quality of a record and of highlighting the vital role played by the record as the output of a transaction, it could be said that this definition of a record fails to adequately describe the properties which define a record. The International Council on Archives (ICA) Committee on Electronic Records

definition of a **record** as, recorded information produced or received in the initiation, conduct or completion of an institutional or individual activity and that comprises content, context and structure sufficient to provide evidence of the activity. Organisations and their staff are under pressure to do more for less. Creating accurate, reliable records; providing controlled, ready access to them and only retaining those worthy of preservation are all part of the essential infra-structure necessary to meet these challenges. This is especially true as it becomes less and less possible to rely on the knowledge and experience of individual members of staff. Increased staff turnover and regular organizational restructuring mean that the records an organization creates now represent its 'collective memory' to a far larger degree than ever before.

Organisations are also becoming increasingly aware of the potential value contained within the internal records they hold. This could be the lessons they contain from past experiences, allowing organizations to learn both from their successes and their failures. Alternatively as knowledge-rich, research-driven organizations it could be the competitive advantage or even commercial gain that can be acquired through the effective exploitation of their information assets.

As the evidence left behind from the activities organizations undertake, records are also an organization's best ally in terms of protecting its rights and interests. Effectiverecords management ensures that the organization can call upon a body of reliable evidence if required to justify its actions, or defend its position. This may prove a critical strength as we move into an increasingly litigious society. Organisations are

also under ever-mounting pressure to proactively demonstrate their accountability and good standards of corporate governance. This may take the form of internal audit, submissions to funding bodies or public scrutiny through legislation such as the Freedom of Information Act, Environmental Information Regulations and Data Protection Act. Compliance with all of these is only possible if the appropriate body of records exists to prove what actions were taken, why they were taken and on whose authority, and what their outcomes were. This is only possible with effective records/information management. Oyedokun (2012)

Records Management:

Read and Ginn (2007) defined management as the process of using an organization's resources to achieve specific goals through the functions of planning, organizing, leading and controlling. Information is an important and valuable business resource. To survive, businesses and organizations must have up to date information in the right form, at the right time, and in the right place to make-management decisions. Records management is the systematic control of all records from their creation or receipt, through their processing, distribution, organization, storage, and retrieval to their ultimate disposition. Because information is such an important resource to organizations, the records management function also includes information management. Traditional records management is being transformed because of changes in technology. Large and complex organisation, with hundreds or even thousands of staff, undertaking varied range of functions and having complex administrative

structures straddling multiple geographical locations, striving to operate as modern, agile, efficient organizations and be able to sustain growth and manage change, it is essential that they have effective control over the records they create and use. Historically the way in which internal records have been managed has developed in a piecemeal, organic fashion - often in response to local departmental requirements. It is now increasingly recognised that a more proactive, consistent and comprehensive approach is required for the organisation to be able to cope with current and future demands.

Classification of Records:

Common records such as correspondence (letters and memos), reports forms, and books, can appear on paper, on optical or digital storage media or on an organizations intranet pages. An Organization may receive these records through regular mail, electronic mail. Facsimile machines (fax), special couriers, or by accessing computer networks including the internet and computer intranets. Other types of records are oral records that capture the human voice and are stored on cassettes and other magnetic media. Records are also stored on film, CDs, DVDs, videotapes, photographs, and microfilm. Read and Ginn (2007), opined that Records are classified in three basic ways:

Classification by use: This includes transaction documents and reference documents. A transaction document is record used in an organization's day to day operations, examples are invoices, requisitions, purchase and sales orders, bank cheques etc.

Reference documents on the other hand contains information needed to carry on the operations of a firm over long periods, for example business letters, reports, and interoffice e-mail.

Classification by Place of Use: This refers to external and internal records. An external record is created for use outside an organization. Examples of such records are letters, faxex, or e-mail sent to a customer, client, supplier or various branches of government. Internal records are a larger group of records classified by their place of use. An internal record contains information needed to operate an organization. Such records may be created inside or outside the organization. Example are the communication of a firm and its employees (payroll records, bulletins, newsletters, and government regulations).

Classification by Value of the Record to the Firm: A manager determines the value of records to the Firm. Some records are so valuable to a firm that they require special measures of protection.

NEW MEDIA AND RECORDS MANAGEMENT:

As a consequence of the current information explosion, more businesses are investing in new technologies as they deal with increasing numbers of records (Read and Ginn 2007). The following are examples of new media in records and information management.

Electronic Records: An electronic record is a record stored on electronic media that can be readily accessed or changed. An electronic record is any information that is

recorded in machine readable form. Electronic records include numeric, graphic, audio, video and textual information which is recorded or transmitted in analog or digital form such as electronic spreadsheet, word processing files, databases, electronic mail, instant messages, scanned images, digital photographs and multimedia files. (Oyedokun, 2012).

As technology has advanced, true electronic records are in use today and the contents of these records are accessible by machine. The challenge for the records manager is to ensure that all records are what they appear to be. Increases in fraud and theft of electronic records have left records and information managers desperate to ensure that safety and security of the organization's valuable resources.

Electronic Mail: Electron mail (e-mail) is a system that enables users to compose, transmit, receive and manage electronic documents and images across networks. A variety of electronic mail systems allow users to write and send messages via computers and software. E-mail is now the primary mode of communication between employees in corporations and most governmental agencies. The many advantages of using e-mail include its ease of use and short delivery time. Unfortunately, e-mail has a potential for abuse and disaster. Records and information manager have developed policies related to electronic records for their organizations. Employees must follow the policies developed for effective and efficient management of electronic records.

Document Imaging: Document imaging is an automated system for scanning, stroring,

retrieving, and managing images of paper records in an electronic format. A paper document is scanned into a computer file, thus creating an electronic image of document. Scanned document is usually large, consequently, optical disk storage is recommended.

Internet and Electronic Commerce: The internet is a worldwide network of computers that allows public access to send, store and receive electronic information over public networks. The multimedia centre of the internet, the world wide web is a worldwide hypermedia system that allows browsing in many databases. Companies, organizations and individuals create locations, called websites that can be accessed by anyone who has an internet connection. Companies use these sites to share information about themselves and their products. They also conduct business using these sites. A broad definition of e-commerce is an electronic method to communicate and transact business over networks through computers. E-commerce is the buying and selling of goods and services using the internet and other digital communications such as electronic funds transfer, smart cards, and digital cash.

Electronic File Transfer and Data Interchange: The business processes of electronic file transfer and data interchange are another way that organizations use digital communications. Electronic fund transfer (EFT)provides for electronic payments and collections. It is safe, secure, efficient, and less expensive than paper cheque payments and collections. Electronic data interchange(EDI) is a communication

procedure between two companies that allows the exchange of standardized documents through computers. Records and information managers should ensure that records transmitted in this business process are authentic, correct and usable.

Enterprise Content Management: Enterprise Content Management (ECM) is a term used to describe the technologies, tools and methods used to capture, manage, store, preserve and deliver content or information across an enterprise or organization (EMC Roadmap 2005). The broader term of ECM is an attempt to deal with the complex world of information technology where one technology can become outdated and be replaced with several new ones.

RECORDS STORAGE

Storage is a process of keeping records/information in a particular place until when they are needed. A school may keep records on a variety of media: paper, magnetic media such as computer disks or tape, and micrographics (documents reduced and placed on film). A good records management system includes a program for analyzing the needs of the organization to determine which storage medium or combination of media is best. Each medium has particular advantages and disadvantages.

Storage equipment such as filing cabinets, should be chosen with specific storage media in mind. For example, if your records are on paper, you might use a filing cabinet. This cabinet would not be appropriate for filing micrographic records. You may

need file folders to hold paper records, but you would not use them for storing computer tapes.(Oliverio, Pasewark& White, 2015)

Storage Media For Records:

Oliverio et al (2005) opined that a record may be stored using a variety of media as follows:

- Paper: Each time you print a copy of a letter, record an address on an index card, complete a telephone message form, or print a statistical report or complicated graph from the computer, you are recording information on paper. These paper records are referred to as hard copy. The advantage of keeping paper records is that you can immediately read the information recorded. With magnetic media, on the other hand, you need a display screen or printer to access the information. Two disadvantages of storing records on paper are that such records take up agreat deal of space and can be easily misfiled.
- Magnetic Media: Magnetic media are reusable and contain information that isstored electronically. The most frequently used forms of magnetic media are hardcomputer disks (hard drives), flexible (floppy) disks, flash drives and tapes. Harddisks are metal disks that are specially magnetized to hold the information putonto them and are usually internal to a computer. These disks vary in size andmay hold up to nine gigabytes (9,000,000,000 bytes) of information.
- **Floppy Disks:** Floppy disks are bendable disks placed inside a hard casing

to protect them. They work in the same way as hard disks but hold less information and are less durable. Their main use is portability. Information can be placed on a floppy disk in one computer and transported by that disk to be read or used in another computer. These disks hold up to 1.44 megabytes (1,400,000 bytes) of information.

- Tapes: Tape is used primarily for backing up (making a copy of the files on) hard drives and for holding large amounts of information that is not used on a regular basis. Because tape may be of great length, it has a large storage capacity. However, with the invention of the compact laser disc, tape may become a thing of the past. Compact discs are far more portable than tape and hold equally large quantities of information.
- Flash Drives: A USB flash drive consists of flash memory data storage device integrated with a USB (Universal Serial Bus). USB flash drives are typically removable and rewritable, much smaller than a floppy disk, and most weigh less than 30 g.
- Compact Discs (CDs): The CD or compact discs, is another storage form. Information is put on the disc by laser and read by a CD drive in the computer. These discs are in many ways better than most magnetic media, such as floppies, because they can hold more information than any but a hard disk.
- Micrographics: Micro imaging system also called micrographics, photographically reduce documents to a fraction of their original size to fit onfilm

or microfiche.

Computer Output Microfilm (COM): is the process of transferring computer files directly to microfilm or fiche. The computer reads information recorded on magnetic media and outputs it as microimages on film rather than as paper printouts.

Computer Input Microfilm (CIM): is the process of converting data to electrical impulses stored on magnetic media and using the data as input to the computer to create files. Micro image takes less space to store than paper and will not, if properly stored, deteriorate after long periods of time.

Imaging Systems: Imaging is a relatively new process of handling information and the media on which it is kept. An imaging system converts all types of documents to digitized electronic data that can be stored on CD-ROM or rewritable CDs and retrieved immediately.

RECORD SECURITY

Security is the degree of protection against danger, loss, and criminals. It goes without saying that records should be protected both from damage and unauthorized access. The method of security depends entirely on the storage method that had been adopted. Where computers are used, confidentiality can be maintained by giving password to a document or file which makes it difficult for another user who does not know the password to gain access to the file. Most organizations now store their

information in the computer thereby creating more space in the office.

MEASURES USED TO PROTECT RECORDS:

Access to Records: The level of security required for a record will vary, depending on the content of the record. Some records may have a very low level of sensitivity, requiring very little or no security. Others will have a high level of sensitivity, needing high security.

The accessibility of a record should depend on its level of sensitivity. When you have decided how sensitive a record is, you will need to think about who needs to have, and who should have, access to that record.

Transferring Records: If data / information needs to be sent to a third party or other location, either within or outside the organization, then all necessary security precautions should be taken to protect it in transit. This will include sending in the most appropriate format, or packaging appropriately, and addressing correctly.

Authenticity of Records: This will apply to both hard copy and electronic records. There are some specific difficulties with maintaining the integrity of electronic records, for instance records kept on email, or data contained in a database, both of which can be changed easily. Measures to be taken should include: Controlling access to the record or data, Knowing who has responsibility for and access to the record or data, preventing accidental or malicious change as far as possible, Checking the accuracy of the information or data recorded, at regular intervals. **Preservation of Records:** Organizations should consider which format or medium to keep records in, and choose that which is most likely to be the most secure. And in order to guard against loss they may need to back up their documents, particularly if they are vital or business critical in some way.

Location of Records: Records should be stored safely and securely, both electronically and physically. Sensitive documents should not be left on the desk or computer screen when unattended. Organizations should consider the best method of disposal of the records, at the end of their lifetime.

Preventing Fraud and theft: Two records management techniques - certified shredding and off-site storage- are aimed at keeping your sensitive information secure. In many cases, the perpetrator is simply in need of extra cash when he happens upon some financial documents lying about the office; these documents contain information such as credit cards numbers, tax ids, bank account information and more. Whether carelessly strewn about, or stored neatly in paper boxes, leaving such documents in plain sight is poor records management practice. To remedy the situation, consider storing your financial and other sensitive documents in a safe, secure, off-site records storage facility. (www.corporateservices.com)

CONCLUSION:

The main aim of keeping records is to help in decision making. This will be possible when records can be found when needed. There is a rapidly increasing volume of

information which exists in digital form as a result of new media. Records management is the practice of maintaining the records of an organization from the time they are created up to their eventual disposal. A record can either be a tangible object or digital information. Records management is primarily concerned with the evidence of anorganization's activities and is usually applied according to value of the records rather than their physical format. Records should be safeguarded from unauthorized users. New Media in Records management allows electronic management and control of records from receipt or creation through processing, storage and retrieval, to disposal. The advantage of such a system is that it allows all of the records management tasks to be performed with limited personnel. (Olivero, Pasewark, White, 2015)

RECOMMENDATIONS:

- Organizations must invest in risk assessment policy development, training, management strategies and other activities as well as technology;
- Electronic records should be reliably and securely maintained in their electronic form because preserving the context and structure of records and facilitating access to them are best accomplished in the electronic environment.
- Records keeping systems should meet legal and administrative requirements, national and international standards and best practices for recordkeeping in anelectronic environment.

- 4. Electronic record keeping systems should include adequate- system controls, such as audit trails, routine testing of system hardware and software and procedures for measuring the accuracy of data input and output.
- 5. To ensure that active digital records are readable for future use, a proactive maintenance plan should be implemented, when operating system or softwareapplications are changed or upgraded.
- 6. Electronic records should be protected from accidental or intentional alteration and from deletion while record still has value.
- Only authorized personnel should be permitted to create, capture or purge electronic records.
- 8. Loss of data can occur when system fails. For this reason, Organizations should ensure that backup copies are retained and stored in another location.
- 9. Where computers are used, confidentiality can be maintained by giving password to a document or file which makes it difficult for another user who does not know the password to gain access to the file.

REFERENCES

Association of Information and Image Management, What is information management. (2017) Available at: <u>www.aiim.org/what</u> (Accessed on 22nd March, 2019).

Brown University, Guideline for Managing All Electronic Records. Available at http://www.brown.edu/cis/policy/eedispose.php (Accessed 30ⁿ July 2016)

Corporate Storage Services, The importance of document security and records management. Available at <u>www.corporatestorage.com.</u> (Accessed on 10 April, 2017)

Emc Roadmap. Available at http://www. aiim.org.uk/publications/ecmroadmap/2005. (Accessed May 6, 2015)

Hornby A S, Oxford Learners Dictionary, (Oxford University Press; New York), (2000).

International Standard ISO 15489: 2001, Information and Documentation-Records Management, Part 1: General (Geneva, Switzerland: ISO, 2001).

Oliverio M E, Pasewark W R and White B R, The Office, Procedures and Technology, (South-Western Educational Publishing; New York), 2015, p. 545-547.

Oyedokun A O, Records and Information Management Awareness Foundation, RIMA Foundation (2012), Available at president@rimaw.org

Read J and Ginn M L, Records Management, (Thomson South Western Publishers; Ohio, USA), 2007, p. 4-11.