Examine the Challenges of Electronic Records Management in a Modern Office.

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ABSTRACT

This study examined the challenges of electronic records management in a modern office. Electronic records management provides security for records from unauthorized users through fire walls and passwords. In the course of this study, appropriate literature was reviewed based on published work on the challenges of electronic records management. Findings from the studies showed that proper maintenance of electronic record should be the first priority of the organization. Good storage/filling of electronic record should be safeguard by the use of back-ups and other external storage device in day to day activities of the organization. It was concluded that proper training of staff will improve the maintenance of electronic records. It was recommended among others that modern electronics records gadgets; software should be installed and managed by trained personnel in the organization.

Keywords: Examine, challenges, electronic, records, management, modern, office.

INTRODUCTION

The attainment of any organizational goals include decision making which is made easier because of the records which are kept and preserved for future reference. Improper handling of those records can cause problems for

both the organization and customer. Many management has developed new techniques to save both time and money for the organization.

Records management is vital in every organization be it a private or public sector. Every individual needs well managed records to recall the past and coordinate the present to plan ahead for the future. Before a business can achieve its aim, it must have a good system of retaining its information (records) in from of letters, statement of accounts, invoice, letter of appointment, minute of meetings and reports.

Agomuo in 2012 defined electronic records as a record created, generated, sent, communicated, received or shored by electronic means. Currently, most information's are created digitally by the use of computer or system application and store on personal computers, network drivers and Personnel Digital Assistants (PDA's) reaching terabyte.

Storage levels and beyond international standard organization (1S0.2011).It is vital that organization understand that information's and records are assets of the organization and such need to need to be managed activity and properly. Most computer software and packages are now offering increased capacity to mange electronic records, yet most organization and ministries in today's modern office have not integrate the electronic and paper works. The changes being experience in our modern office today is essentially the same as its being the time transition between the proper realistic and electronic possibilities.

Electronic records paved ways for easy accessibility and safeguarding of records electronically. The records which are electronically kept and safeguarded can easily be shared among various users without unnecessary delay in operation. The 21st Century has evolved as age of electronic office where most of what is done would be through the computer.

Alfa (2017), also said that information technology has led to development of self activity machines that work through record cycle and retained, the information without the use of paper until is needed for managerial decision making.

According to record management guide for micro soft office serve (2007), records are document or other electronic or physical entity in an organization that serves as evidence of an activity or transaction by the organization and that requires retention for some period of time.

International standard organization (1S0,15489,2011). Defines electronic records management 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 and information about business activities and transaction in the form records. The evolution of information technology is creating challenges in the management and preservation of electronic records, complex and electronic records are being created in volumes as a result, shortage media are affected by the problems of obsolescence and deterioration thereby leaving records unread due to problem of computer hardware and software application, if the problems are not address valuable information may be lost.

The International Council on Achieve (ICA) committee on electronic records defines records as "a 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 provided evidence of the activity.

National Achievers and Record Administration (NARA, 2016), define records management as the policies procedures, guidance, tools and techniques, resources, and training needed to design and maintain reliable and trustworthily records systems, electronic records, like any other record, must be maintained in a reliable and secure format for the entire retention period, electronic records are machine readable; they require hardware and software to be interpreted.

For record to be preserved over a long period of time such that it can be used at any point in time, there should be adequate facilities for a storage in order to be stable to reach the record and access it as at when due. The problem of preservation, long-term storage and access to electronic record over the time due to repaid pace of technology can make the software used to be in accessible (Geferry, 2015).

This study observed that there was a problem from the middle level of managers on the poor handling of the electronic record management system. This has impeded the effective management of electronic records in the organization. Also due to the poor handling; confidentially and security issues has been a challenge to the workers in managing electronic records, sometime the workers resort to the use of manual system for record management.

MATERIALS AND METHODS

The study aims to review comment and contribution of other author's related literature on electronic records management.

Concept of Electronic Record Management

According to Egunleti (2012) Records are all papers maps, exhibits, magnetic or paper tapes, photographic film and prints and other document produced, received, owned or used by an agency, regardless of media, physical from of characteristics.

Arias, (2012), defined records management (RM) 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 achieves and transaction in the form of records.

Electronic Record

Electronic records are information or data files that are created and shored in digitized from through the use of computers and application software. They are stored on various magnetic and optical storage devices and are products of computers software, the format of an electronic document does not change the fact that it is a record, but its electronic form depends o machines for creation and reference do change the way these records must be store and managed. Usually, the definition applies to all electronic records systems whether in microcomputers, minicomputer or mainframe computer regard less of storage media, in network or stand-alone systems including small computers, such as memory typewriters, calculators, and embedded systems. Example includes; records stored on a serve, or on magnetic media, such as tape, disk packs, compact disks or optical disks, flash drive floppy disk (Azuke, 2011).

Electronic Records Management

Electronic records management involving special considerations required; planning, budgeting, organizing, directing, training and controlling activities associated with managing the record in its entirety (Bennett, 2010).

Electronic Records Keeping

Electronic records keeping are use for records management principles for records maintained electronically. This term is sometime confused with "Electronic records keeping system".

Electronic Records Keeping System (ERS)

An electronic record keeping system is primarily software – based methodology used by an organization to manage all its records, regardless of format, over the entire records lifecycles. Primary records keeping functions must including categorizing, locating, identifying and enrolling record disposition requirements, including management of the storage, retrieval and disposition of the records regardless of the repository. This type of software includes the capabilities of both integrated document management system (IDMS) and Records information management (RIM) software.

Record Management Database

The records management analyst and records manager, the information or systems technology manager, have specific and important roles and responsible dealing with data bases management. The records management

analyst or records manager is concerned with the creation, management and disposition of records generated by database while the systems technology manager is involved with its creation, design and management.

Methods Used to Arrange Records Within a Database:

Databases are free-structured, that is, their logic goes from the broader meaning to a narrower meaning through one or several steps each step branches out into smaller units and with each step branches out into smaller units, and with each step, other options are eliminated. It is a process of "narrowing the field" to the desired item. Although this structure simplifies searching, it is not particularly well suited for extensive lists of information(Bracken, 2014).

Rational Database

Allow data to be accessed based on relationships among several database files. This means that within a predetermined set of data fields and their relationships, you can retrieve specific information through one command.

Network Database

Permit data to be arranged into grouping that can be connected through the use of pointers. These pointers give users a great deal of flexibility and speed in searching for data, although the pointer structure is relatively complex to establish.

Disposal of Records

Disposal of records does not always mean destruction; it can also include transfer to a historical archive, museum, or private individual. Destruction of records ought to be authorized by law, statute; regulation or operating procedure and the records should be disposed of with care to avoid inadvertent disclosure of information. The process needs to be well–documented, starting with a records retentions schedule and policies and procedures that have been approved at the highest level.An inventory of the record disposed of should be maintained, including certification that they have been destroyed. Records should never simply be discarded as refuse.

Recovery of Records

Contingency plans must be board enough in scope to cope successfully with the immediate emergency, provide interim service, and bring the electronic records. Keeping and information processing function back to normal; because an organization must respond quickly to a disaster, recovery producers must be spelled out clearly

According to (Blissmer, 2013), the individual most likely to execute an emergency plan if they are the ones who developed it. Developers must consider the possibility that assigned office workers may be incapacitated and unable to function following a disaster. Therefore, the plan should be written so that others less familiar with the office will have information they need to continue operations.

Disaster resulting in service damage to an office and its equipment may be required to assume operations at an alternate location until repairs are completed and service are restored.

Information on other records management application and their appropriate use. Sokolosky (2011), automated records keeping systems have been developed which use database specialized records management function. These include, but they are not limited to:

- Electronic Document Imaging (EDI)
- Enterprise – Report Management (ERM)
- Computer – Assisted Retrieval (CAR)
- Scan on Demand Document Conversation System
- Records Center Management System.

Electronic Document Imaging (EDI)

Electronic Document Imaging (EDI) is a technology designed to provide for the storage and retrieval of all bitmapped document, regardless of format, though most often a group four (Compression) tiff (tagged information file format). Tiff files have become a standard primarily, due to their loss-less attributes. That is the bitmap is an accurate map of the pixels, etc storage and retrieval approaches have often included various aspects of hierarchical storage management (HSM) and database strategies for sale able (expandable from a few users to the entire organization) document imaging solutions. Image backups are made on various media, CD ROMs and other optical media are currently favoured for their stability. Estimates of their storage reliability range from fifteen to one hundred years, though thirty to fifty years is considered by most to be reliable.

Computer – Assisted Retrieval (CAR)

Broadly defined, the phase computer assisted retrieval (CAR) denotes an automated document storage and retrieval technology that uses computer hardware and software to index and locate document or document images recorded on any media .CAR systems use database management, software to create, maintain, retrieval and manipulated machine-readable records that contain index information accompanied by pointers to document location information needs.

While computer-assisted retrieval concepts can be applied to paper documents and to document image recorded on magnetic or optical media, the most common use of CAR in organization is with systems that utilize micro form for document storage. This use of computer – assisted retrieval combines the spaces serving other advantages of micro form storage with the ability of computers to rapidly manipulate index information. From the computer stand point the CAR approach simplifies data entry and on–line storage by limited those activates to index data rather than entire documents.

A micro form –based computer assisted retrieval system includes computer and micrographic subsystems. A CAR system's computer components support the entry, maintenance, and processing of index records that are linked to document images stored by the micrographic subsystem. The computer system includes a central processor, a display unit with keyboard, and sufficient magnetic disk capacity for on-line storage of data base records, supporting files, and CAR software. Optional hardware component includes a printer and telecommunication links to other computer systems. Computer configurations will vary with application characteristics (Stoyanova, 2012).

Scan on Demand Document Conversion System

According to Isiefs, (2015), electronic records keeping systems managed all types of document that constitute specific records. This may include paper or micro film lift in their original form; depending upon organizations business requirements, it may not be necessary to have all documents available to the system in electronic format. Time or other constraints may prohibit the immediate conversion to electronic format. Scan on demand allows conversion at or near the time the system becomes operational when the need for an electronic copy arises, electronic records keeping system can incorporate a "scan on demand" methodology that can provide a document upon request. This can be initiated by a simple e-mail message or be part of a more complex rule based electronic workflow. The key to utilizing this approach is a thorough understanding of the underlying business need, which can result in a dramatic cost reduction associated with document conversion.

Enterprise Report Management (ERM)

According to levy, (2011); stated that enterprise report management (ERM), Previously known as computer output to laser disk of COLD, is an integrated software and hardware solution that computers, stores and indexes formatted computer output (pages) on optical disk, magnetic disk or magnetic tape as an alternative to paper printouts or computer output- to micro film (Com).

Files on any ERM report can be used to create indexes for quick retrieval, print output files stored in their native "raw" format – not converted into a raster file and compressed to reduce storage space requirement. The data focuses on a particular time period and the output has a specific, known structure and format. The ERM process

mainly involves two procedures: recording (indexing and storing the data) and retrieving (making the data available to users).

However, there are complex tasks that need to be addressed; data must be downloaded or transferred to the ERM server before it can be processed; and the method of transfer from the mainframe/host system to the ERM subsystem depends on the communications capability in place. The ERM system has the capability to deliver productivity service benefits with a minimum level of disruption to existing operations. New reports can be created from existing (Standard) legacy reports without programming.

Records Center Management Systems

According to Nwachukwu, (2015); in a computer –based records center management system, the computer is used to manage data concerning existing records location and retention; without altering the format or storage of the records. Records center management system queries of records. However, this type of software has not been designed to be a fully functional electronic records keeping system as define by the DGS "specification for electronic Records Management software. An efficient records center management system should be able to accurately describe the status of records in the record center in terms of their location and characteristic. The system also contains an action prompt that tells when to purge, transfer, and alter the status of records. To fulfill these requirements, the system should be capable of producing the following repute system such as;

- Records by retention status
- Records by type (Vital, achieve, inactive and archival)
- Records by confidentiality designation
- Records to be moved
- Records update
- Equipment location

The computerized master index for records bring together information on each file as well as on files in every location provides faster retrieval time, facilities accurate maintenance of statistics on activity rates and enable better records management planning.

Authenticity and Management of Electronic Records

Osuala, (2014)stated that electronic records management procedures become, in this internet era, one of the most important organizational policies for both the private and the public sector. Many are the issue involved; privacy, security, authenticity, preservation, transfers, accountability, functionally, accessibility etc. Among these issues, authenticity may way be the slightest regulated topic. This United State the European union countries, and may other countries have already enacted sophisticated legislation addressing privacy and security of electronic records; yet authenticity of electronic records has not been an explicit and legally developed theme in common law system like the United States. A noticeable reason may be the precise federal Rules of evidence that specifically deal with the authenticity of admissible court evidence.

In a country with civil law systems, authenticity is matter of civil procedure and may vary depending on the country. ICA committee on electronic records prepared a report on the authenticity of electronic records for the UNESCO in 2012.The report defined an authentic record "as" one that can be proven to be what it purports to be, to have been created or sent by person purported to have created or seat it, and to have created or sent at the time purports. "This definition is taken from the international organization for standardization (1S0), clause 7.2.2.It is worth to note that the ISO clause, besides creating international Uniformity; is closely similar to the United State definition of "Authentic" evidence.

Records managers need to beware of the potential for legal challenge when documents are presented in evidence to a court of law. If the integrity or authenticity of a record is called into doubt in court by suggestions of tempering, incompetence, improper system functionality or malfunction, the evidential weight or value put on the document by the court may be cost or over least reduced to the detriment of the case. ICA report is wisely presenting ISO standards to somehow unity the management of electronic records at international level. There

is no doubt multiple practical management differences among nations and concerns will arise, YET, crating uniformity atleast as to what is an authentic record should be a great accomplished for e-commerce and e-government projects. Thus, ICA efforts as an international organization and the application of ISO standard (which are widely accepted by most countries to the management if electronic records is an excellent ways, be presented in foreign courts.

Records Management Practice-General

According to TilGon and Jackson, (2014) says in order to apply these practices to electronic information you must first determine as you would in the case of information preserved on paper which electronic information is a "record" and which is a "non-record", as a result or answering the question that a record becomes a pivotal step in determining which information should be a records management concern. The glossary in this publication defines a record as "all paper, maps, exhibits, magnetic or paper tapes, photographic films and prints, and other documents produced, received, owned or used by an agency, regardless of media, phys

E-mail

Is a document created and transmitted as electronic information within an electronic communication medium. "An e-mail message and associated information (Meta data), is a document; it is also a record if it meets records keeping criteria established within an organization record management plan. That is the fact the e-mails is the organizations property renders it subject to management under the records, management plan regardless of media.

Voice Mail

Is usually a non-record, unless preserved in a manner that would meet records criteria as with other records, such as containing information necessary for that organizations business? Depending upon your requirement you may consider managing a voice mail as a computer site, as voice communications and computer functionality continue to merge.

- One set if computer data containing accounting and tax information plus one copy of the visible output (e.g. printed report of computer output microfilm) are records under the internal revenue service's procedure 59-91.
- Computer backup tapes and other duplicate computer file are non-records.
- Word processing files are records if they meet the criteria to be a record
- Database and other date compilation that are used for multiple purposes are often records, this is especially true when they are referred to by a record document that requires the information for understanding a stated policy, decision, etc.
- Electronic transactions are records, implementation of records management practices will depend on the needs of the organizations.
- When electronic information is defined to meet the criteria of a "record" it must be managed according to sound records management practices and retained according to each organization's records retention schedule. Electronic information that is defined to be a: non-record" can be destroyed at the discretion of user-generally, after a transitory period or after the official records is produced.

Management Responsibility

Vail (2012) stated that, it is important to note that each agency is required to have a records management analyst and or manager (and an assistant or back-up) in keeping with Californiastate law, the appointment is mad by the head of the agency, in writing, announcement of this appointment should be disseminated throughout the agency so all are aware if this individuals position role and responsibility regarding the agency wide records management program. This trained and knowledgeable person acts as a liaison for the organization records management programme. It ensures that the agency establishes and maintains an active, continuing program for the economical and efficient management of all records and information collection practices.

The challenges of Electronic Records Management in today's office.

O' Brien, (2013) stated that records management is based on relevant and reliable information and can in turn sustain well-grounded and persuasive arguments. Electronic record can extend knowledge of pass actions to influence future decision making which are faced with these challenges in today's office system. Record management can evidently be assessable in today's officers as the need for the installation and maintenance of the electronics equipment arise in Nigeria, some average organization are not able to procure electronic gadgets needed for effective office records keeping because this electronic equipmentis very expensive.

There is also arise the need for effective men power to face the challenges of manipulation and maintenance of these electronic equipments. Successful management if electronic records then is dependant not only on a well-documented administration context but as well, maintenance of thee electronic equipment, for consistency in retrieval and update of thee electronic records.

The fragile nature of electronic medium and the dynamic way in which information technology is deployed, threats the reliability and authenticity of the records if appropriate information management disciplines are not applied. In essence, advancement n technology has rendered almost every aspect of electronic world bear for touring as most of the organization's sent data are made accessible to unauthorized users which are a very uncomfortable state for the organization (online "theft"). Unfortunately in today's offices systems environment information is often created, collected or received without being subject to the procedures or rule governing the record keeping. For instance, e-mail messages and other electronic document are often sent across a network without rules for keeping and filling in records systems.

Conforming this, (|Equnleti, 2010), stated that the difficulties associated with records retrieval was connected to lack of appreciation by management staff, need for well controlled records in addition to inadequate power supply which formed part if the major problems encountered in the system.

Hardware and Date Security

Security for the electronic records created, used, stored on computer system is an important system which is an impotent issue and responsibility of the records management coordinators in addition to the information technology mangers. The protection of records in whatever format is too identified on the RRS. This is even more relevant if the data personal or confidential.

Confirming (Heller and Hinder, 2010) stated that mainframe computer system has traditionally been protected but other computers have not because they are frequently considered single user devised. As a result, security weakness may threaten the confidentiality, integrity or availability of electronic information.

There are two major means of protecting electronic records.

i. Physical security of the computer hardware
ii. Security data through controlling access.

Data Concerns

According to Ekemezie, (2013). A good security system for protecting electronic data will employ a number of different products, services and resources, which are customized to an agency's particular needs. Not every system or device is appropriate for all agencies. Those responsible for implementing security systems must weigh the potential cost of suffering a loss then, consider the valve of each of method and develop a complete security system that is tailored for the situation. In order to be successful, computer security has to be an on-going management concern.

The Difficulties faced by Workers in keeping Electronic Records Management

The problems encounter in maintain effective electronic records management in an organization are as thus: inadequate knowledge and skills of personal is one of the problem encounters in maintaining effective electronic

records management also inadequate electronic records management equipment is another problem affecting electronic records management. Furthermore the course of maintain effective electronic records constitute a problem in the management of records in an organization.

CONCLUSION

From the findings of this study conclude that, the finding show that storage/filling is one of the most important/parts of electronic records management. There is need to move along with the trend of the technology; proper training if staff and maintenance of electronic records should be the priority of the organization and that there is the need for electronic records to be safeguarded by the use of back-ups, removable disk etc. There is need for provision of electronic software for storing and retrieval of documents.

RECOMMENDATIONS

- Based on the findings of the study, it is recommended that the following measures be put in place.
- Staff handing electronic records should be trained to be able to handle electronic records.
- Proper filling/storage method should be used in the organization to enhance record retrieval.
- Electronic gadgets, software should be installed and managed by trained personal on the system.
- Seminars and workshops should be organized by the organization in order to facilitate the training of staff handling electronic records.

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