

Information and Communication Technology (ICT) As A Tool for Records Management and Security Improvement in Business Organizations

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Abstract

Records Management has to do with everything involving how records are controlled right from when they are created down to when they are finally disposed of. It is very important for the success of any business organization. Records security is a critical issue since businesses deal with sensitive information daily. This paper therefore described how Information and Communication Technology (ICT) has helped business organizations on how to properly manage their records as well as security of the records for improved performance of their businesses. The paper explored the concept and importance of records and records management together with the life cycle of both physical and digital records management in an organization. With the advent of ICT, physical records can be read and converted automatically into electronic records. This saves cost and labour. The paper explained the importance of security in records management and how to quickly access electronic files. It was suggested amongst others that digital records should be properly kept and maintained in their own form. This is to preserve the records as well as have access to them when needed. Also, when electronic records still have value, they should be properly secured so as prevent accidental or deliberate alteration or even total deletion of such records.

KEY WORDS: Record Management, ICT, Information Security

Introduction

Records management has to do with everything involving how records are controlled right from when they are created down to when they are finally disposed of. It involves how records are created, received, maintained, used and finally disposed of. It is very important for the success of any business organization. When we say a record, we are simply referring to a document that involves business transaction which has to be documented. This may be letters,

memoranda, reports etc that exist both in the paper form and electronic form. Records in paper form may be physically saved in cabinets, boxes or other means while records in digital form may be saved using electronic storage devices or cloud (Association of Information and image management 2018).

Managing records has to do with making sure that records are systematically managed throughout their lifecycle. Since records are the life and sole of any business organization, they should be efficiently and systematically controlled from their creation, reception, usage as well as their disposition. Oyedokun (2012) stated that records management has to do with the way an organization systematically controls its records throughout the records' life cycle. This is necessary in order for business organizations to meet all the requirements for the successful operation of their businesses including the legal aspects as well as what the community expects of them.

In all business organizations, to be a good records manager means recognition of the significance of records and how to manage such records together with a good strategy on how to make sure that the records remain safe and also in a good format. This is necessary for the successful operation of any business. For this reason, an organization needs to keep the necessary documents that will be accessible for both business operations and other matters.

Before the era of electronic records, organizations had only physical records. These physical records are often kept in filing cabinets, shelves, boxes, rotary trays etc. This system has its strengths and weaknesses. One of the advantages of keeping records in filing cabinets and other systems is that almost every staff of the organization can access the records. There is no need for specialists to handle the records of the organization. The system is very simple to understand and operate. Another advantage is its cost effectiveness. The system saves organizations money as it is a very cheap system. One of the challenges of managing physical records in organizations is that records are not easily found when needed. This is due to the fact that as almost every staff has access to the records, anybody can take any records without authorization. This often leads to loss of vital records which may cause harm or damage to the organization. Another challenge of this system is that sometimes, the records get damaged due to damp or water or can even get burnt through fire outbreak. These and other challenges led to the

adoption of electronic records in the era of ICT. The process of creating, using and managing records has undergone series of changes since this adoption.

Concept of Records and Records Management

Records are any official documents that have value and are useful for the growth and development of any business organization. They are any form of written correspondence. Since records are important and valuable documents, they need to be stored or kept and managed properly for future use. Records therefore, are sources of documentary evidence.

According to Bello (2015), the word record is anything that provides proof of decisions taken or action performed. It must have been documented on certain medium that has been created and saved for governmental, organizational or individual support. Though records are forms of evidences, this does not mean that they are the only forms of evidences available to individuals or organizations. As forms of evidences, they need to be protected against all odds or danger so as to serve their purpose which is to help in the day-to-day operations of an organization. Daine (2010) observed that a record is a documented transaction and that information is what a record contains, stores and transmits. Management is the art of planning, organizing, leading and controlling the resources of an organization in order to realize the objectives set by that organization. For this to be effective, up-to-date records or information must be readily available to management in the exact form they were kept for effective decision making (Read and Ginn, 2007).

Usman (2009) on the other hand, sees records as anything that can be used to prove the state of existence of something. This is to say such a thing must represent proof of existence irrespective of the means or nature. A record is something that is either created or received by an organization and must comply with the legal obligations as it relates to transacting businesses. The records that relates to governmental agencies must be such that contain information that can be used in protecting the rights and interests of all concerned i.e. the citizens, the government itself as well as the business entities. Such records should also have the characteristics of preserving the historical and cultural values together with a proper documentation of information about important places, events and people.

Solomon (2019) defined records management as an organized way of controlling the records of an organization from their creation to their final disposition. This is necessary to meet the operational business needs as well as the statutory and fiscal requirements and expectation from the community. When an organization's records are managed effectively, it gives room for accuracy and reliability, thus, ensuring fast access to records as well as quick disposition of information that have outlived their usefulness. This enables proper identification of vital records so as to give them the protection they deserved. Records management ensures easy access to information, routinely destroys information that have outlived their usefulness and helps organizations fulfill all their legal and financial requirements in addition to ensuring that such organizations function on a day-to-day basis. This is because information is an essential asset to every organization and when such information is recorded, it must be effectively managed (Solomon, 2019).

Concept of Information and Communication Technology (ICT)

Information and Communication Technology (ICT) has to do with all the technologies that are used in communication ranging from internet, cell phones, social networking, computers, wireless networks, video conferencing, telecommuting etc that have the capability to enable users to have access to information, retrieve information from storage medium, store information, distribute information etc using digital format. ICT also refers to all audio and visual technologies as well as telephone networks through computer networks using cable system or link system. ICT is the wider term for Information Technology (IT). It is the transmission and manipulation of information using scientific or technological methods (Anderson, 2017).

The era of ICT has made the world to be interconnected and interdependent. It is obvious that a highly developed ICT is a necessity for the attainment and sustenance of global relevance of every nation including the business world. The way and manner businesses operate has changed due to changes in technology. Also, ICT has made it very easy for everybody in the world to exchange goods and services thus, helping to create a global market place. ICT has also created a lot of threats to the business world as the information system can easily be vandalized or sabotaged through computer-assisted fraud. There is also the damage as a result of computer viruses and hacking that has become increasingly common among the cybercrimes. When

organizations depend so much on information systems and services, such organizations can be highly exposed and vulnerable to these security threats.

Records management is a way of making sure that records are systematically managed throughout their lifecycle. Since records are the life and sole of any business organization, they should be efficiently and systematically controlled from their creation, reception, usage as well as their disposition. Before now, organizations manage their internal records in an old fashion way devoid of any modern touch. In this era of technology, it is clear that for organizations to be capable of handling the demand of the numerous records created there is need to adopt a records management approach that will be comprehensive enough and also consistent in its dealings. This is the focus of this paper as it tends to discuss the significance of ICT with regards to records management and security of records in business organizations.

Importance of Records Management in an Organization

Management of records is very important in an organization as it helps in maintaining the organization's records. It is through the management of records that the information and other vital records of an organization can maintain their authenticity as well as safety and usability. It ensures that any records used within the organization is valid and accurate. This is because it ensures the safety and authenticity of all records that are created, received and utilized by the organization both now and in the future.

Ukunegbu (2013) stated that "records management helps an organization to be efficient, effective, accountable and transparent. Organizations that develop and maintain a sound and well-planned records management programme are efficient – they work at peak performance; they are effective – they accomplish tasks successfully; they are accountable – they are able to justify their actions or decisions; and they are transparent – they operate in an atmosphere of openness and inclusiveness". However, Popoola (2010) opined that what actually keeps business organizations going is information that is recorded which is called "records," and which are utilized for effective planning and decision making as well as controlling for the realization of targets. This recorded information has to be properly managed in order for them to serve their purpose.

According to Alex (2017), an organization can do the following through records management:

- By establishing a strategy, policy and procedure for making and keeping records.
- By managing records effectively through allocation of resources.
- By ensuring the accuracy and reliability of records regardless of their nature.
- By ensuring the consistency of records created and managed.
- By separating obsolete records from valuable records and evidence.
- By ensuring safety storage and appropriate disposal of records.

Classification of Records

Records are classified according to their nature, forms or medium. Letters, memoranda, reports, circulars and books are common records because they appear on paper. They can also appear on digital or optical storage media or the firm's intranet. These records can be received regularly through physical mail, electronic mail or through other means. Edwin (2010) classified records under the following three basic ways:

- ❖ **Use:** This refers to both the routine (day-to-day) transaction documents as well as the periodic (reference) documents. Every organization deals with records such as invoices, requisitions, orders, bank cheques, etc. These are the transaction documents as they are meant for the day-to-day running of the business. In addition to the routine records, organizations also deal with information that can stand the test of time such as e-mail, reports, business letters, etc. These are the reference documents meant to take on business for a long time.
- ❖ **Place of Use:** The place of use simply means whether the records are external or internal. In all organizations, external records are meant for the outsiders' use such as business letters, fax messages and e-mail; while the internal records are meant for the insiders who are staffers of the organization. These records are needed to operate the organization and the records include circulars, bulletin, memoranda etc.
- ❖ **Relevance to the Business Organization:** The relevance of any records to a given business organization is determined by the manager of that organization. Special protective measure is required for all valuable records.

Transfer and Elimination of Files

It is important to know when records are to be transferred and when they are to be eliminated as well as the type of elimination they should go through. Inactive or Non-Current Records and evidence that are rarely used but which may be required for reference purposes should not be eliminated but taken to the archives. Records that are of obsolete nature that have outlived their usefulness should be destroyed by shredding them with the use of a shredding machine. They can also be destroyed by burning the documents or burying the records. Records that are valuable should be kept active while current records and evidence regularly accessed and used should be retained. Whether records should be retained or disposed should be determined by the retention schedules and disposal authorities.

The Role of ICT on the Management of Records

Records management has gone through series of advancements for a long time now as a result of the adoption of ICT. This has improved the way tasks are performed in organizations (Alex, 2017). Tsubira and Mulira (2012) argued that the integration of ICT in the performance of functions at the organizational level is necessary for increased efficiency, competitiveness and cost effectiveness. On the other hand, ICT which is computer-based technology has to do with the processing, storage and distribution of data. It refers to technology used for collecting and processing various forms of information (Olayemi, 2007). The adoption of technology has changed the management of records in organizations. Lyman (2014) stated that most organizations in today's world now use ICT in their businesses. This is necessary so as to cope with the increase in the volume of information the organizations generate.

Solomon (2019) stressed further on the role of ICT on records management when he stated the necessity to fully understand the positive changes taking place in the world today as a result of technology. When ICT is applied to the management of records in offices, it will ensure a quick accessibility and usability of such records. Read and Ginn (2017) believe that more businesses are investing in new technology in order to deal with the increasing number of records as a result of the current explosion in information creation.

Zafar (2020) outlined the following roles of ICT on records management:

- ICT enables information and knowledge management through the use of electronic technologies and techniques.
- ICT facilitates the creation, storage, processing, exchange and distribution of information through the use of information handling tools.
- It has a superior data storage capacity as it ensures faster data retrieval and quicker data analysis.

According to Katulwa (2019), the application of ICT has positively impacted the records management profession and life cycle of records. Some of these impacts are enumerated below:

- ✓ Improving productivity as a result of easy and fast access to document as well as document sharing.
- ✓ Records are protected from damage or loss and also from deterioration.
- ✓ Reduction in physical space with electronic storage system.
- ✓ Ensuring convenience as information are accessed anywhere and at any time.
- ✓ Ensures backup of information thus recovery disaster.
- ✓ Facilitates the setting of access level of information thus improving security
- ✓ Facilitates flexible retrieval and indexing together with monitoring records retention schedule thereby improving internal operation.
- ✓ Enhances improved customer service and satisfaction.

Records Storage

Records storage simply means how records or information is kept in a certain location till when such records or information is needed. Records storage is an important aspect in records management. To have a good records storage system, there should be a programme in the organization that determines the type of storage medium to be put in place based on the nature of the records to be stored. In choosing the medium, the strengths and weaknesses of the medium should be considered. For hard copy documents, filing cabinets and shelves are appropriate. These should be chosen with care for easy retrieval of information which is the ultimate aim for

records storage in the first place. Electronic records should be stored appropriately using electronic media. White, (2015) outlined the following as ways of storing records:

- **Paper:** This is referred to as hard copy. Paper records should be stored using filing cabinets, shelves or the rotary tray. Some small organizations store their hard copies in drawers or boxes. Paper records are stored for ease of reference as it ensures immediate reading of the information stored even though it takes up a lot of the firm's space for storage as well as misfiling of information.
- **Micrographics:** Micrographics storage has to do with taking a photograph of records or information in order to reduce its size to a fraction of its original. This is to enable it fit into film or microfiche. A major advantage of this storage media is that it ensures a great saving in an organization's floor space. Micrographics transfer information into film and it involves the techniques and processes associated with the production, handling and use of microfilm of different types and in different formats.
- **Magnetic Media:** This is soft copy storage of records as it ensures the electronic storage of information. Information stored in a magnetic media like the computer hard disks, floppy disks, tapes and flash drives are often reusable.
 - **Floppy Disks:** These are portable to use though they are not very durable and their storage capacity is low. They can be used between computers.
 - **Tapes:** Tapes are used primarily for backing up data. This is usually done in hard drives. They can also be used to hold high volume of information especially when such information is rarely used.
 - **Flash Drives:** USB (Universal Serial Bus) flash drives are smaller than the floppy disks and are usually removable and rewritable drives used for copying information for immediate use as well as for future use.
 - **Compact Discs (CDs):** Computer Compact Discs drives are disks that store information and are accessed by the computer.

Records Security

According to Nwoko and Oseni (2021), security is the extent to which something is protected from all dangers including theft or loss. Records security on the other hand, is the extent to which records are protected from all dangers including theft or loss. Many companies have records that are confidential which they need to secure. Records management improves the security of these records by adopting security protocols featured by various records management systems to protect sensitive records. This increases the accountability of the employees as they ensure that the documents are handled as they should be. One of the top priorities of a good record manager is the implementation of a good security measures for safety of such records and also to prevent them from being vulnerable to any breach of agreement. This is necessary as any breakdown of security measure can put the company at risk.

Measures used to Protect Records

Different security measures are used to protect the records of an organization. Among them are the following according to Ryan (2020):

- ❖ **Lock Everything Down.** The drawers and cabinets as well as the room records are kept should be locked for the records to remain safe and secured. This is necessary in order to prevent unauthorized entrance and hence illegal possession of the files. Also ensure that additional measures are taken for the records to be properly secured.
- ❖ **Installation of Security and Fire Alarms.** The installation of alarms for security and fire is necessary to drastically minimize the danger of the records being consumed by fire. It also ensures that nobody enters the records storage room without permission. There should also be a proper backup in place especially if you have set up a records management programme.
- ❖ **Limiting Access to Critical Records.** Handling and disposal of organizations' records should be done by employees who are experts in this field. There should be some limitations as to who has access to some important records and who is in charge of filing and copying of such records. This reduces human error of loss or theft of the records.
- ❖ **Labelling All Records, Files and Cabinets Appropriately.** It is important that all records, files and cabinets are labelled appropriately in order to avoid misfiled or

misplaced documents as this act costs the company money. It is also necessary in order to reduce the time it takes in searching for a particular record or information. Consistency in the labelling system also reduces wrong placement of a file in a place other than its own.

- ❖ **Conducting Regular Audits.** Regular audits of vital and important records should be conducted from time to time in order to maintain the records management system put in place by an organization. This is necessary for the smooth running of the organization.
- ❖ **Proper Destruction of Records.** Records should be destroyed properly and securely once it has been ascertained that such records have outlived their usefulness. Firstly, determine the records management system to adopt. Then, adhere to whatever retention plan you have decided and carefully and safely destroy the records. Lastly, ensure proper documentation of any document destroyed in order to avoid legal prosecution.

Protecting Electronic Records

According to Solomon (2019), the following steps are necessary for safeguarding electronic documents:

1. Do not use computer hard drives (C: drives) to store sensitive information. Instead, store sensitive information in formally established electronic record-keeping systems or in the absence of such systems, in secured network drives.
2. Regularly clean up computers and network locations by destroying superseded or obsolete records that have met their retention periods.
3. Recognize that deleting electronic records is not the same as destroying them.
4. Contact specialists for guidance and ensure your computer systems are configured with appropriate security systems, anti-virus software, password protection and automatic time out/lock features to restrict access to password holders only.
5. Also contact the specialists for guidance about how to create, store, and manage electronic records so that they are safe, accessible and authentic now and in the future. Remember, secured records-keeping involves protecting records as long as they need to be kept, then disposing of them appropriately. Good record-keeping also involves keeping full and accurate documentation about which records were destroyed and which were sent to the archives for permanent preservation.

Just as you may keep physical documents locked in fire-resistant file cabinets, protect your computers by putting passwords and changing the passwords regularly. Also encrypt the computers and put antivirus computer software that is up-to-date and scanned regularly for viruses.

Conclusion

Records, which are essential to the smooth running of an organization, are great assets of the organization. Organizations perform their tasks through proper records. These records may be physical papers (hard copies) or electronic records (soft copies). Whether physical or electronics, records need to be properly cared for in order for them to serve their purpose. For the records to be readily and easily available in their exact format when needed, proper care and attention must be given to them. Records need to be protected from unauthorized usage and from prying eyes as well as theft or loss. This is records management.

As the volume of work in organizations increase, the need for a more viable records management system became paramount. This necessitated the use of technology for the management of records in business organizations. ICT has impacted positively on the management of records in today's organization. The adoption of ICT has resulted to an easy retrieval of records using digital means. This saves time, space as well as cost. Also, management of records improved tremendously with ICT.

Suggestions

The following suggestions were made:

1. Digital records should be properly kept and maintained in their own form. This is to preserve the records as well as have access to them when needed.
2. Sensitive information should be kept in a well secured digital form rather than computer hard drives.
3. When electronic records still have value, they should be properly secured so as prevent accidental or deliberate alteration or even total deletion of such records.
4. Organization should ensure that only authorized personnel have access to both physical and electronic records.

5. Organizations should always retain and save backup copies in a different location. This is to avoid loss of vital records especially when the computer system fails.
6. Confidentiality in computer systems should be maintained by the use of passwords.

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