

**CHALLENGES OF DIGITAL FILING SYSTEM ON RECORDS  
MANAGEMENT IN SOME SELECTED BANKS IN AUCHI**

**BY**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF OFFICE  
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MANAGEMENT**

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**CERTIFICATION**

We, the undersigned, certify that this project work was carried out by **HARUNA HALIMATU SADIA** with **MAT. NO.: ICT/221200086** in the Department of Office Technology and Management, Auchi Polytechnic, Auchi.

We also certify that the work is adequate in scope and quality in partial fulfilment of the requirements for the award of Higher National Diploma (HND) in Office Technology and Management.

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**Date**

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**Date**

## **DEDICATION**

This project work is dedicated to Almighty Allah for His infinite mercies and grace upon my life.

## ACKNOWLEDGEMENTS

I wish to express my profound gratitude to Almighty Allah, for His infinite mercy, grace, love and protection over my life throughout this programme.

My special thanks goes to my wonderful and exceptional Project Supervisor, **Mrs. G. A. Oboh**, whose indispensable advice, counsel and corrections made this work a great success. May God bless you copiously, ma.

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I wish to express my warmest appreciation to my wonderful parents, **Mr. and Mrs. Haruna**, for their parental care, love, support and prayers throughout my programme. May you live to enjoy the fruits of your labour. Also to my brothers and sisters for their love, care and prayers towards my academic achievement.

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## **ABSTRACT**

This study examined the challenges of digital filing system on records management in some selected banks in Auchi. Four research questions were propounded by the researcher to guide the study. A survey design was used with questionnaire as an instrument for gathering necessary data for the study. The population of the study comprised the entire 105 staff in the four selected banks in Auchi. No form of sampling technique was used since the population is within a manageable range. With simple percentage method of data analysis, data gathered via the administered questionnaire were analyzed. Based on the data analysis, the study revealed amongst other findings that training on the use of digital filing system ease the process of filing and increase secretaries performance. It was also revealed that digital filing system have a positive impact on records management in organizations. Based on the findings, the study recommends that every prospective secretary be trained on the use of digital filing system. It was also recommended that organization should provides necessary equipment used for digital filing system.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background to the Study**

With the advancement in technology, the way information is provided and exchanged among interested parties, presented in institutions, communicated to the public, stored, and archived, is changing. Institutions can and should take advantage of these new technological ways of doing daily transaction to increase its productivity and enhance services to the public (Afeidia, 2001).

The ability of the computer to receive, process, store, retrieve, and distribute large volumes of information, combined with current telecommunication technologies, makes it an essential tool for the administration of an organization records. The challenges of digital filing are not an exception. It is faced with some issues in the organization, such as: lack of resources, the need for higher quality service, the necessity for better access to information, etc. The secretary also faces the challenges of data across filing system as well as the burden of retrieving archived files from offices in the other sections. For example, a panel member residing in London is appointed to a case administered in Mexico. He requires brief filed from 1995 proceeding to date, which is archived in the Mexican section. Just think of the coordination effort, time, and cost associated with getting this document to the awaiting panel member under current practices. The issue of digital filing system is a viable project to be eventually undertaken and to which this study is devoted. For the past several years organizations have introduced changes through the use of technology to enhance its service and support to stakeholders. The study goes further and explores the potential implementation of digital filing system (DFS), which is the next logical step in a series of technological advances that have been implemented for

improving access to case information and management of office operations of dispute settlement proceedings under the digital filing system.

Akporowho, (2006) noted that digital filing is an endeavor that requires a great amount of effort to implement, and for which organizations often underestimate the impact. It is important to recognize the opportunity offered by technology to break with traditions, and to modernize office processes. While implementation of a digital filing system is not beyond the capability of most organizations it is a complex activity. If organization's leaders plan carefully, most of the bumps in the road should be relatively small and manageable.

The purpose of this project is to outline issues and requirements pertaining to digital filing system, and to guide the thought process to initiate discussions. The study aims to provide a greater understanding of the complex implementation of digital filing by identifying what it entails, the options available, its merits, and best practices on the way to a more rapid adoption. A complementary objective is to raise the awareness of organization and government officials regarding what digital filing means for their organization, as well as, for stakeholders and the benefits that can be derived from its implementation. The study cannot provide all the answers, but raises key questions to be considered to get the digital filing of the ground. The implementation of digital filing system should have a significant impact on the quality of services delivered to organizations and on the way case administration is carried out (Akporowho, 2006).

### **Statement of the Problem**

Retrieval of files as at when due is a major prerequisite for quick decision making in any organization. Many organizations whose decision have been found to be watery and porous had been found to face such dilemma as a result of poor filing system which prevented them from accessing the right documents at the right time.

However, the advent of computer has brought about a new phase in the filing procedure of which some organizations are not aware of. It is in the light of the above, that the researcher wishes to evaluate the challenges of digital filing system on records management in the 21<sup>st</sup> century organization.

### **Purpose of the Study**

The main purpose of this research is to show the relevance of digital filing system on records management in the 21<sup>st</sup> century organizations. The following are the specific purposes of the study:

- i. To determine the extent to which secretaries have been trained to use digital filing system.
- ii. To evaluate if digital filing system is cost effective.
- iii. To evaluate the impact of digital filing system on records management.
- iv. To compare the modern digital with manual filing system.

### **Research Questions**

The following research questions were raised to find solution to the challenges of digital filing system on records management in the 21<sup>st</sup> century organization. These are:

- i. What is the extent to which secretaries are trained to use digital filing system?
- ii. To what extent is digital filing system cost effective?
- iii. What is the impact of digital filing system on records management?
- iv. What is the comparison between modern digital filing system and manual filing system?

### **Significance of the Study**

The usefulness of this study will be of a wider range to many secretaries, workers, office staff and training secretaries. It will help in achieving some objective because through this method, proper filing will be maintained, and it will be easier for

documents to be retrieved. This study is also hope to be an innovable resource materials to future researchers who may which to embark on similar or related study.

### **Scope of the Study**

This study is limited to the records officers in some selected Banks, Auch. It also covers the relevance of digital filing system on records management in the 21<sup>st</sup> century organizations.

### **Operational Definition of Term**

For adequate clarity some words used in this research work are defined as contextually used in this study:

**Filing:** This is the process of arranging and storing records so that they can be located when required.

**Digital:** Digital is describes as electronic technology that generates, stores, and processes data in terms of two states. Thus, data transmitted or stored with digital technology is expressed as a string of filing of data.

**Digital Filing System:** A Digital Filing System enable users to get better organized, save time, and increase your productivity. There are numerous tools and systems riding today's productivity trend.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter of the research work is designed to review related literatures on challenges of digital filing system on records management the 21<sup>st</sup> century organization. The chapter is reviewed under the following sub-headings:

- Concept of Digital Filing System
- Using Digital Filing System
- Records managements Policy
- Filing Structures
- Constructing the Filing Structure
- Evaluation of the Impact of Digital Filing System on Cost Effective
- Current Requirements Standard
- Evaluation of the Impact of Digital Filing System on Records Managements
- HER System Design Flaws
- Reduce HER System Design Flaws
- Comparison Between Modern Digital filing With Manual Filing System  
DBMS vs File System
- Summary of Literature Reviewed

#### **Concept of Digital Filing System**

Ezmeralda (2015), posited that an electronic filing system is a system of organizing files that utilizes hard drive space or network space. The system may either be computer software, an Internet-based program, or a simple file and folder system on the desktop of a computer. Electronic filing systems are used on multiple devices, ranging from our cell phones to our video game consoles to our digital video recorders.

The Electronic Filing System (or EFS) is the Singapore Judiciary's electronic platform for filing and service of documents within the litigation process. In addition, it provides the registries of the Supreme Court and the Subordinate Courts with an electronic registry and workflow system; and an electronic case file. Recent enhancements have added a module which facilitates the conduct of hearing using documents that have been electronically filed (Wikipedia, 2011).

The EFS provides the legal profession with a rudimentary online case file from which documents can be electronically filed with the courts or served on the other parties in a case. The EFS is also the source for electronic cause book searches that are provided through the Litigation module of Law Net. EFS is set to be replaced by Institute of English Language Studies (iELS) eventually.

### **An Overview of the Electronic Filing System**

The Electronic Filing System (EFS) was implemented by the Singapore Judiciary to provide a platform for Law Firms (LFs) to file documents to the Courts electronically over the Internet. The EFS was specifically designed to fully exploit the electronic super highway to minimise not just the physical movement of people and paper court documents from LFs to the Courts, but also to leverage the benefits of electronic storage within the Courts: i.e. faster document filing and retrieval, eradication of the misplacement of case files, concurrent access to view the same case filed by different parties, etc. Within the Courts, the EFS allows electronic documents to be automatically routed to the appropriate registry staff for processing. The system allows further routing within the courts e.g. for approvals by the Duty Registrar and a reply is then sent out by the Registry staff which is routed back to the originating LF. This has enabled realisations of improvements in efficiency by minimising paper flow to shorten case processing time. Fees payable by the LFs for filing documents to Court are deducted automatically by the EFS. The whole process is fast, convenient and



efficient. For the LFs, the EFS provides an electronic case file showing hearing dates and documents file by them, served on them or received from the Courts. It also provides an electronic platform for the service of documents on other LFs. The EFS also allows for faster response as well as accurate and up-to-date information. Hence, other benefits of the EFS include the speedy inspection of documents electronically and the ability to request for and receive electronic extracts of documents via the Internet. Electronic cause book searches and legal research are also available through Law Net. Lawyers can even obtain details of hearing fixtures via Short Messaging System (SMS) using their mobile phones. Within the court room, registrars make use of the EFS to conduct hearings in chambers electronically using the EFS:

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### **Function**

An electronic filing system utilizes an electronic device, such as a computer, to store and organize files for easy access. Simply placing school assignments in a folder on the desktop of your computer creates an elementary electronic filing system. Electronic filing systems offer the ability to organize various types of files on one operating system, or one type of file on a specific operating system. Electronic filing systems are used by gaming consoles, MP3 players, and throughout various applications on a computer.

### **Features**

A computer alone is a vast electronic filing system offering various features. It begins with a large filing system, the hard drive, and splits into smaller and smaller electronic filing systems within the programs and applications on the computer. The "My Documents" folder on a computer is an electronic filing system arranging your documents in order of time created, alphabetically, or most often used, depending on your preferences. Most electronic filing systems offer the ability to search or browse through the files, allowing you to pinpoint the needed file out of the lot.

## **Benefits**

Electronic filing systems allow users to easily find the information and files needed timely. Libraries and bookstores use electronic filing systems to keep track of the location of books. Thanks to these filing systems we can visit a kiosk, type in the book we are looking for, and be directed to it in a fraction of the time it would take us to fumble through the room trying to figure it out on our own.

## **Warning**

While electronic filing systems relieve us of a lot of stress when they are working, they can cause chaos when they are out of order. Doctor's offices that run on electronic systems are at a loss when the power is out, or when a server tears up and must be replaced. It is always best to have a backup system when the primary system is out of commission.

## **Potential**

Gaming consoles, computers and various handheld devices are becoming more and more advanced and the Internet is being utilized even more as a large, infinite capacity electronic filing system. Inventors and technicians believe that in a few short years we'll be able to access files from various locations all over the world, from wherever we are, at the touch of a button. In some instances, this belief is already coming to life

## **The Components of Electronic File System**

The EFS consists of the following components according to Ezmeralda (2015):

- The Front-End (FE) accessed via the Internet from each 'EFS ready' Law Firm's desktop.

- A Gateway (GW) that receives submissions from the LFs or the replies from the Courts, routes it to the appropriate party and computes the fees payable by the LF for the transaction.
- The Courts' Workflow (WF) application that resides on Courts' computers and caters for the internal routing and workflow processes within the courts.
- A Hearing Module that is used to conduct hearings electronically.
- A stand-alone Key Management System (KMS).

### **Using Digital Filing System**

Managing electronic records presents a significant challenge for an organization of any size or sector. For those that store their records in file systems (including shared drives), which have no formal controls in place, the risk of alteration or deletion makes this challenge even greater. [www.acs121.com/html/one2one](http://www.acs121.com/html/one2one).

Organization may have a well maintained paper records system but this not necessarily appropriate as a template for managing electronic records. This is because of the volume of electronic records, and variety of file formats, combined with the ease of creation.

Electronic records management needs to be very carefully considered and structured to ensure the integrity of the records is not compromised upon capture and they remain retrievable for as long as they are required.

This guidance uses some terms in a specific way:

Aggregation Record assemblies existing within a filing structure (groups of folders) or a folder containing records. In a file system aggregation is limited to folders that contain folders and folders that contain records. [www.jiscinfonet.ac.uk/infokits/records](http://www.jiscinfonet.ac.uk/infokits/records)

- 1. Business Classification Scheme:** An intellectual structure categorizing business functions/activities or subjects to preserve the context of record

relative to other, it is useful for aiding activities such as retrieval, storage and disposal scheduling or records. [www.fsa.go.uk/pages/information/pdf/records\\_policy.pdf](http://www.fsa.go.uk/pages/information/pdf/records_policy.pdf)

2. **Disposal:** A formal decision taken on the final status of a record (or set of records) to either destroy the records, transfer to another organization for permanent preservation or retain within the organization's file system for further review at a later date.
3. **Electronic Records Management System (ERMS):** An electronic records management system (ERMS) is a computer program (or set of programs) used to manage electronic records stored in an associated database. It provides a variety of functions including access controls, auditing and also disposal using a combination of system and user generated metadata. Depending on the system it can also used to manage paper records held by an organization.
4. **Filing Structure:** A hierarchical structure of folders within a file system which provides a coherent location for capturing records. The term 'filing structure' is synonymous with the term file plan. However this term is not used here as it is typically used to characterize the business classification scheme of an ERMS.
5. **File System:** A method for storing and organizing computer files and the data they contain to make it easy to find and access them. File systems may use a data storage device such as a hard disk or CDROM and involve maintaining the physical location of the files.
6. **Folder:** A type of aggregation or container within a file system used to store records (and other folders). It is the principal building block of a filing structure.

- 7. Management Rules:** Management rules are set of explicit instructions to users on the preferred means of managing records. These include direction on appropriate capture, access management and disposal and all records Irrespective of format or media. [www.connectingforheath.nhs.uk](http://www.connectingforheath.nhs.uk).  
The term ‘management rule’ is synonymous with the term ‘business rule’. Within this guidance ‘management rule’ is preferred explicitly for records management within a file system. However either term is acceptable and can be used when producing a rule set for managing records.
- 8. Metadata:** Data describing the context, content and structure of all records and folders within a file system. In a file system this is essentially user-generated and ‘passive’ in that it can rarely be used for active management and the records. By contrast, metadata in an ERMS is more functional, often system-generated, extensive and linked tightly to system processes.
- 9. Operating System:** An interface between computer hardware and a user that manages and coordinates use and computer applications using the available resources provided by a computer’s processor.
- 10. Records:** Information created received and maintained as evidence and information by an organization or person, in fulfilment of legal obligations or in the transaction of business.
- 11. Records Management:** The practice of formally managing records within a file system (electronic art paper) Including classifying, capturing, storing and disposal.
- 12. Shard Drive:** A specialization of an operating system file system, comprising a shared device (for example, hard disk or server space) used by multiple users and accessed over either a local area network or a wider area network connection.

## **Records Management Policy**

According to Iso (2016), a record management policy can be described as an authoritative statement of intent to manage records in an appropriate and suitable manner for as long as they are required for business purposes. It is intended to form the initial framework or principles which express how records should be managed within the organization. Where the record management policy comprises part of a broader information management or knowledge management policy, it should still be easily identifiable and available to users. The policy should be derived from an analysis of business activities. It should define areas where legislation, regulations, other standards and best practices have the greatest application in the creation of records connected to business activities.

British Standards Institute (2002), cautions that the record management policy should not be so vague that no ownership or authority can be attributed to it. It must be signed off at the highest level possible (board level) and it should provide, as a minimum: a description of what a record is and the reason for capturing and managing it a statement of commitment by the organization to manage record appropriately and accurately for as long as the records are required identification of records management roles and responsibilities for all staff at every level of the organization an explanation of the objectives of the records management policy and how it aids compliance with spec standards and legal responsibilities to the organization detail of the relationship between the records management policies within the (organization email management or data security policies). Creating a records management policy should be the first priority for an organization looking to improve or consolidate its records management. Do this in consultation with the business, with senior management endorsement and support.

It should encompass paper and electronic records created and managed by the organization. Management rules for creation and management of electronic and paper records should be explicit and should support the principles laid out in the policy.

There should also be a regular review of the records management policy. The timeframe for review should be at least every five years, but with flexibility to review it if significant changes in the business of the organization require it (a new business activity or introduction of a new business system).

### **1. How the Policy Aid Records Management**

A records management policy provides an authoritative mandate for implementation across the organization. It exists to reinforce the importance of records management at a senior level and determine its direction within the organization.

This framework can guide the development of file systems and records management processes. This should lead to overall better understanding and delivery of records management across the organization. [www.rms-gb.org.uk](http://www.rms-gb.org.uk) within smaller organization the records management policy may be the single resource for records management. As the principal statement it provides new and existing users with a direction on records management to ensure it is taking place correctly. In this way: the policy is directly responsible for guiding the development of records management within an organization. (William, 2018).

In larger organizations it is more likely that the records management policy will provide a broad instruction that record managers can refer to as their authority for promoting records management. If difficulties with records management activities cannot be resolved at a procedural level with business managers, reference to the records management policy can help in resolving them.

## **2. Implementation Guidance**

Organizational arrangements to support records management. A brief implementation guide developed to help public authorities achieve compliance with the code of practice issued under the freedom of information act (2000), intended for the Public Sector with its principles applicable to anyone establishing a records management policy.

### **Filing Structures**

Cheryl (2018) observed that the filing structure reflects the relationship of business activities through careful structuring of folders (with meaningful titles) ‘containing’ the records. This structure illustrates what the organization’s business is, and it provides a means of managing its records. A filing structure provides an environment for presenting a common understanding of how records should be stored and retrieved. This is particularly important not just for users working in a team, but also when working across the organization by improving the retrieval of content and making it understandable to every user. If the filing structure is well designed it will allow the organization to control access more effectively, ensuring that unauthorized users are not inadvertently granted access.

A filing structure may be modelled on the functions of an organization Alternatively it may also use subject themes for parts of the structure. In either circumstance avoid using names of business units (or individual users) as this can cause problems such as: inhibition of sharing content and information across the organization unnecessary duplication of records causing problems with routine disposal policies separate (or silo) work areas within a corporate filing structure making it difficult to shape records management at a strategic level legacy filing areas for discontinued work groups and obsolete business units remain in place and



unresolved reduced efficiency in terms of compliance with the data Protection Act or Freedom of Information Act.

### **How the Filing Structure Aid Records Management**

From the organizations perspective, there is rarely sufficient standard functionality within a file system that can be used to control the creation, deletion or movement of folders. Most file systems options are limited to a simple on/off option depending on the user's access rights. This provides further complications as folders and records have to be moved (and archived) manually with no audit control. If a mistake is made there will be no report or audit trail that could be examined easily to confirm where a folder (or record) has been moved to. [www.a-k-a.com.au/](http://www.a-k-a.com.au/)

From the user's perspective, a filing structure helps mitigate this by providing a logical structure which makes it easy to see where a specific record (or new folder) should be located.

Organized filing structures support records management by providing an understandable and accessible location for all records which encourages users to work within it. This helps an organization reduce the risk of business critical information being lost within an uncontrolled file system. It also helps motivate users to move records out of personal drives or email accounts where it may be deleted without anyone knowing it existed.

### **Constructing the Filing Structure**

Freedom (2019), noted that designing a filing structure is often a time consuming task, particularly where there has never previously been any formal order or agreed layout for records and folders. There are products that can help with reducing the time it takes to design the filing structure. In all cases it must be thorough and with a focus on usability. There are proprietary software tools for developing the structures needed to manage documents and records. Such tools can be used to create

and maintain a comprehensive range of business classification schemes, taxonomies, thesauri, glossaries, records retention and disposition schedules. However using them will incur additional costs.

### **Management Rules**

Jay (2018), sees management rules as set of explicit instructions that direct users in the organization's [referred means of managing records. these direction specify a variety of activities and should also explain why the rule has been created. Whilst the style and detail of management rules may between organization they should include instruction on: appropriate means of capturing electronic records into the filing structure clear definition on what records should be captured into the filing into the filing structure and what may be held in a personal drive (such as users' appraisals)specific criteria for the application and management of access controls specific criteria for the disposal of all records and folders with explicit reference to the organization's disposal policy.

Management rules should always be expressed as an instruction and should not be ambiguous in their interpretation. Their purpose is to provide a mandate and authority that helps ensure a level of consistency is applied across an organization in terms of records management.

Without management rules implementation of the records management policy will be very difficult. Finding a balance between use of software that may automate certain activities and ensuring users still engage in records management is a difficult balancing act, only managed by implementing effective management rules.

With a file system, records might be moved and edited without the actions being auditable. Management rules are one of the most practical ways of ensuring that activities within the file system such as capture, classification and disposal of records are carried out with a degree of logic and accuracy by all users. Management rules

provide direction on a range of records management activities and included, but are not limited to: naming conventions for folders and records management of the filing structure allocation of access controls management and execution of disposal.

There is no standard profile for management rules and may decide how they should be written and made available to users. However there are some basic principles that should: reflect and reference the good practice presented in the records management policy be written in natural language (non-technical or plain English) be made available to all users (via an intranet or central guidance library, for instance) indicate where specific records. (Such as vital records for disaster recovery) need to be managed to comply with regulations or other external review processes.

The management rules should be framed in terms of their benefits to the organization records management capability. This must necessarily outweigh individual preferences for managing records. To avoid a conflict between these two needs, the management rules should be developed in consultation with the users.

This helps ensure that the rules do not prevent the efficient conduct of business, but also that users are not disenfranchised by an enforced set of rules that does not allow them to do their job.

According to Jay and Cheryl (2018), records management is a guide to corporate record keeping. This guide to records management covers information technology, the Australian records management standard, and the increasing shift toward accountability and the expectations this places on the record manager.

Many organizations do not yet have a formal programme of records management, but increasingly they are recognizing the benefits of well managed records and the serious consequences of inadequate records systems. Establishing records management and maintaining an effective programme requires specialist expertise. This essential manual of practice provides a detailed organizational staff

who have a responsibility for setting up, maintaining or restructuring a records management programme. (William and Geoffrey, 2018).

It offers invaluable advice on the management of records in both electronic and traditional paper media, and focuses on the following areas:

- Understanding records management
- Analysing the context for records management
- Classifying records and documenting their context
- Creating and capturing records; managing appraisal, retention and disposition
- Maintaining records and assuring their integrity
- Providing access
- Implementing records management

This provide a wealth of additional information including a list of standards for records management, an annotated bibliography and sources of further information, and details of professional and advisory bodies. (William and Geoffrey, 2018).

### **Evaluation of the Impact of Digital Filing System on Cost Effectiveness**

The strategic focus of the Office of Management and Budget's (OMB) Electronic Government (E-Gov) Initiatives is to utilize commercial best practices in key government operations. The National Archives and Records Administration (NARA) is the managing partner for the Electronic Records Management (ERM) E-Gov Initiative. NARA's (2003) ERM Initiative will provide a government-wide policy framework and guidance for electronic records management.

This guidance document is one of a suite of documents to be produced under NARA's ERM Initiative that, when taken together, form the structural support for ensuring a level of uniform maturity in both the federal government's management of

its electronic records and its ability to transfer electronic records to NARA.  
<http://www.archives.gov/recordsmgmt/initiatives/erm-overview.html>.

This document is the second of four documents to be produced under the Enterprise-wide ERM Issue Area. The Enterprise-wide ERM documents are aimed at helping agencies understand the technology and policy issued associated with procuring and deploying an enterprise-wide ERM system. They include guidance for evaluating Capital Planning and Investment Control (CPIC) proposals; guidance on developing agency-specific functional requirements for ERM system; guidance on developing and launching an ERM pilot project; and a “lessons learned” paper from the Environmental Protection Agency’s proof of concept ERM pilot as well as other agencies’ implementation experiences (Doculabs, 2019).

### **Application of the Guidance Document**

This document is intended to help agencies manage and scope the requirements analysis step of an enterprise-wide ERM acquisition project. It provides a process for identifying potential electronic records management system requirements that are not included in the Design. ([http://www.archives.gov/records\[mgmt/bulletins/2003/bulletin2003-03.htm](http://www.archives.gov/records[mgmt/bulletins/2003/bulletin2003-03.htm))

As a product of the electronic record management (ERM) and E-Gov initiative, this guidance should be interpreted as a “best practice” that agencies should adhere to when deciding to customize 5015.2-certified RMA software.

Differences in agency cultures, business needs, and technology infrastructure may generate unique RM requirements for an enterprise-wide implementation of ERM systems that the DOD standard doesn’t address. Furthermore, enterprise-wide ERM systems may interact with other record-producing, enterprise-wide applications, including document managements, correspondence tracking, content management, and

workflow systems. These additional requirements are not addressed in DOD 5015.2-STD, as they are outside of the RM scope of the design standard (Nara, 2018).

The primary audience for this document is the project management team of those federal agencies that have already made the decision to acquire and implement an ERM system. This document makes a number of assumptions (detailed below) about the level of knowledge of ERM systems and about the capabilities an agency possesses to acquire and implement an ERM system. Those agencies that are contemplating implementation of an ERM system should use this guidance document in their early planning efforts. The assumptions are:

- An enterprise- wide ERM system is being planned and has successfully emerged from the capital planning investment process (<http://www.whitehouse.gov/omb/circulars/all/current/year/s300.pdf>).
- Enterprise- wide deployment of an ERM system is accounted for in the agency enterprise architecture and conforms to the Federal Enterprise Architecture Framework (FEAF). <http://www.whitehouse.gov/omb/egov/afea.html>.
- The agency records officer has a understanding of ERM (purpose, components, and functionality) and how it differs from paper recordkeeping.
- Some enterprise- wide analysis of business process has already gone on and ERM was selected, among other business processes, for enterprise- wide automation. These include, but are not necessarily limited to, business process re-engineering and cost/benefit analysis that would be part of making the value proposition substantiating a enterprise –wide move towards ERM.
- The agency will incorporate all of the mandatory requirements of the Design Criteria Standard for Electronic Records Management Application, DOD

5015.2 –STD into their ERM system. The agency will also incorporate applicable DOD 5015.2 –STD non –mandatory requirements (e.g. relating to national security classified information).

This guidance was developed from the experience of federal agency managers whose aim was to have one enterprise –wide ERM system but found the need to incorporate additional, agency –unique requirements beyond those contained in the 5015.2 (v.2) specifications. It is intended to assist other agencies as they plan and design their own enterprise –wide ERM systems.

Gathering requirements is just one of the steps in implementing an ERM system or any information technology (IT) system. Prior steps may include business process analysis. Further steps may include product evaluations, cost –benefit analysis, pilots, and implementation. Each organization must map out its own process for implementing an ERM system.

This methodology provides additional guidance, based on the experience of one federal agency, regarding the requirements gathering step. While every organization will perform this step, each may perform it differently and will obtain different results. This methodology discusses the process of gathering requirements at a high level so that each organization can apply it to their own environment.

A glossary is included at the end of this document for the general understanding of the terms and concepts used throughout this document.

### **Current Requirements Standard**

In November 1997, the Defence Department (DOD) released the Design Criteria Standard for Electronic Records Management Application; DOD 5015.2 –STD. This standard described the minimum requirements derived from federal statute and regulation that an ERM application must support for use within DOD. DOD revised 5015.2 in June 2002 to include additional requirements including classified

markings, access control, declassification, and downgrading. The DOD Joint Interoperability Test Command (JITC) has also developed a test program to certify products against 5015.2.

The 5015.2 standard set minimum functional requirements for ERM applications. It specifies design criteria needed to identify, mark, store, and dispose of electronic records. It does not define how the product is to provide these capabilities. It does not define how an agency manages electronic records or how an ERM program is to implemented. Its original purpose was to specify mandatory and optional design requirements that a commercial off –the –shelf (COTS) product must support before DOD components could use it. While 5015.2 mandates ERM application requirement for DOD, it has become the recommended standard for the rest of the federal government. Many agencies and government organization, including the Department of Education, the Environmental Protection Agency, Department of Energy, the Federal Deposit Insurance Corporate.

Social Security Administration, U.S. Patent and Trademark Office, and others, require 5015.2 certification in selecting ERM application. As part of the ERM Initiative, Bulletin 2003 -03, released January 2003, recommends that alt agencies use the second version of the 5015.2 standard and the DOD–certified products as a baseline when selecting an ERM application to manage the agency’s electronic records.

DOD 5015.2 provides a generic set of requirements for ERM applications. These requirements may not be sufficient for use by other agencies or organizations. An organization will want to start with the 5015.2 requirements as a baseline and then determine if they have additional specific requirements.

The steps in Section 1 will assist in identifying agency –specific ERM requirements by examining project scope, existing electronic records systems,



information technology architecture, and information policies. After a list of non - 5015.2 requirements is identified, each requirement will be reviewed for inclusion in the ERM system.

### **Step One –Determine ERM Scope**

While the intent is to develop an enterprise –wide system, some agency records may not be managed by the ERM for operational reasons (e.g., budget, security). The goal of this step is to gather basic information on what records the system will (and won't) manage. Defining the scope will establish what end users can expect the system to accomplish.

Even if an ERM system is implemented enterprise-wide, it may not be practical or cost-effective to manage all records in all formats. You should identify the various types of agency-specific records that are created. Record formats to consider including:

- E-mail
- Office automation software suites
- Forms (including electronic)
- Web content
- Paper
- Faxes
- Output and transactions from agency information systems

### **Step Two-Review Infrastructure/IT Architecture**

Identify unique agency infrastructure of architecture that could result in unique requirements for the ERM system. Agencies should have an enterprise-web IT architecture that provides the baseline for the existing infrastructure and lays the foundation for future infrastructure improvements. Any ERM system must fit within

the existing infrastructure and the organization must incorporate ERM into the enterprise architecture.

Items to review include:

- Network – servers and system software
- Security
- Desktop applications
- Standard desktop configuration

An ERM system managed at the agency level will have different IT architectural implications than one managed at the branch level. For example, an agency-level ERM system might require different server resources or architecture than a system for a single division or branch.

- At what organization level will the system be administered?
- Agency or at a lower level (e.g., sub-agency, program, division, branch)

### **Step Three – Review Agency Records and Information Resources Management (IRM) Guidance and Directives**

Organizations have records and organizationally –unique IRM policies that support paper records. Some organisations have organizationally –unique RM policies to address a limited set of electronic records (e.g., e-mail). Any ERM system should be required to support provision.

### **Evaluation of the Impact of Digital Filing System on Record Managements**

US health spending far surpasses that of other countries, yet our healthcare system fails to regularly deliver high –quality healthcare. The quality of healthcare across the continuum depends on the integrity, reliability, and accuracy of health information. Adoption health information technology (HIT), including electronic health records (HER5), is essential for the transformation of the current US healthcare

system into one that is more efficient, is safer, and consistently delivers high-quality care Phillips (2019).

Singh (2016), noted that adoption of HIT has failed to achieve projected benefits and cost savings because of shortcomings in the design and implementation of HIT systems, including safe and effective use of these systems. Despite the promise of EHRs' improving quality of care and patient safety, a growing body of evidence has found potential safety hazards associated with their use, sometimes referred to as "e-iatrogenesis". The emergence of EHR-related errors results in data being lost or incorrectly entered, displayed, or transmitted, leading to loss of information integrity. Although little published evidence quantifying the magnitude of HIT-associated risks exists as HIT products have become more intimately involved in the delivery of care, the potential for HIT-induced medical error, harm, or death has increased significantly.

Although EHR-related errors, and their actual and potential impact on the quality and usefulness of EHR documentation, quality of care, and patient safety, have been documented for years, much work still needs to be done to measure the occurrence of these errors, determine the causes, and implement solutions. Currently there are no regulatory requirements to evaluate EHR system efficacy and safety. 9EHR certification does not guarantee that EHRs will be implemented and that they will work as planned.

Policies, usability principles, and best practices for proper EHR system use have not been widely and consistently adopted. There is no sense of shared accountability between system developers and users for product functioning. Adverse outcomes associated with EHR5 are not being systematically and consistently tracked.

### **Electronic Health Record Risks Adversely Impacting Information Integrity**

It has been suggested that the introduction HIT, rather than leading to improvements in the quality of data being recorded, has led to the recording of a

greater quantity of bad data)’ ‘ although some of the studies cited in this article are several years old, recent literature continues to cite these studies. While a primary goal of EHR implementation is the reduction of medical errors, reports of new types of errors patient safety have emerged. For example, a patient’s treatment for cancer was delayed by several years because a setting in her physician’s EHR defaulted to an old normal Pap test result instead of the more recent abnormal results) In another case, a baby died from a handwritten order was entered into the computer system. This medical error could have been prevented if automated alerts had been activated.

Since there is no regulatory framework to monitor EHR system safety, these systems may:

- Have been developed from erroneous or incomplete design specifications;
- Be dependent on unreliable hardware or software platforms;
- Have programming errors or bugs;
- Work well in one context or organization, but be unsafe or fail in another and;
- Change how clinicians do their daily work, thus introducing new potential failure modes.

The increasing scope and complexity of tasks clinicians can perform using EHRs, in conjunction with unprecedented pressure to rapidly adopt these systems (as a result of the incentives created by the Health Information Technology for Economic and Clinical Health [HITECH] Act), increase the potential for HER-related patient safety hazards. In a complex healthcare environment, in which interactions with other computer systems and provider workflow impact how the systems work, it is challenging for users to anticipate potential problems or understand how a particular failure occurred. Also, once providers have invested money in system implementation

and training, they are likely to retain a system even if they discover it is flawed rather than incur the high cost of replacement

### **Electronic Health Record (HER) System Design Flaws**

Sullivan (2017) argued that the expanding capability of EHR systems requires increasingly complex software, which heightens the likelihood of software failures that may harm patients. A software flaw in an EHR system containing hundreds or thousands of medical records, such as a glitch that causes an inaccurate recording of patients' allergies or medications could adversely affect a large number of patients. Software bugs may jumble data, deleting information or depositing it in the wrong place. Computers may spew forth a slew of disorganized data, such that physicians are unable to quickly find critical patient information. Data may be missing or corrupted (e.g., a laboratory value may come back with an extra character inadvertently inserted). System interface problems can lead to poor decisions, delays, data loss, errors, unnecessary testing, and system downtime.

#### **1. Poor System Usability and Improper System Use**

In addition to EHR design features and functions that can potentially contribute to suboptimal healthcare quality, errors can result from improper system use. Usability errors occur as a result of system complexity, lack of user-friendly functionality (e.g., confusing user interfaces), workflow incompatibility, or limitations of the user. Faulty functionality could mislead clinicians where there is a confusing screen display or when incorrect values result from a programming error that incorrectly converts from one measurement system to another (e.g., pounds to kilograms or Celsius to Fahrenheit). A new kind of error occurring in EHRs that is not an issue with paper-based record is an "adjacency error", in which a provider selects an item next to the intended one in a drop-down menu, such as the wrong patient or medication.

Spencer (2018), noted that discrepancies between data fields can cause errors, such as when a structured data field (a list of choices that cannot be altered) and free-text field are inconsistent. For example, a structured data field may indicate that one pill should be taken twice a day, while the free-text instruction field says to take two pills in the morning and one pill in the evening other errors can be caused by inconsistent drug dosing and missing information.

Clinicians increasingly share control of complex processes with computers; in some instances, they assume a higher-level oversight role and allow computers to make routine decisions and carry out appropriate action (e.g., the computer automatically generates a laboratory order when certain medications are ordered). Although EHR systems do not directly impact patient care without human intervention, this technology is often so complicated that users are unable to analyze or understand its computations and therefore cannot exercise competent human intervention. For example, clinicians may rely on computer-generated diagnoses and treatment recommendations without fully understanding how the algorithm was developed or that the algorithm did not take into account certain medical conditions or clinical factors that are relevant to the patient at hand. Also, competent human intervention depends on users having the time, motivation, and ability to reflect on and challenge computer-generated data and recommendations, which may not be true in the midst of surgery or in the intensive care unit.

Workarounds are often employed by users when systems are not flexible enough to support real-life clinical practice and workflow patterns. However, these workarounds can further undermine patient safety. For example, when a medication system does not allow administration of a drug until the order has been entered in the system by the physician, even in urgent situations, documentation of the order may

occur after it has been administered, which could result in the medication being administered again.

## **2. Inappropriate Documentation Capture**

EHR system vendors often add functionalities to assist with documentation, such as copy and paste, templates, use of standard phrases and paragraphs, and automatic object insertion (e.g., clinical values brought in from other parts of the electronic record). Benefits of these features include improved efficiency of data capture, timeliness and legibility, and consistency and completeness of documentation.

However, when used inappropriately, without proper education and controls, these features can lead to inaccurate documentation and potentially result in medical errors or allegations of fraud. Errors related to copy/paste functionality and templates, described in further detail below, represent two of the most common EHR risk associated with inappropriate documentation capture.

A study of records in the Veterans Health Administration's EHR system found that 84 percent of progress notes contained at least one documentation error, with an average of 7.8 documentation errors per patient. Types of errors included copied text, incomplete or inaccurate templates, documentation entered in the wrong patient's medical record, inconsistent text, and out dated embedded objects. Although this study was published 10 years ago, more recent studies are consistent with these findings. Current literature suggests there has been little or no improvement in the prevalence of EHR-related errors, which is not surprising since little has been done to identify the root causes and address them. Also patient harm resulting from EHR-associated errors is likely under recognized and underreported.

In a 2008 survey of physicians at two affiliated academic medical centers 90 percent of physicians used the copy/paste functionality in daily electronic progress

notes, and 71 percent felt that inconsistencies and outdated information were more common in copied and pasted notes.

### **Reduced Electronic Health Record System Design Flaws**

Adeboye (2019), stated that currently EHR products are held to few standards with respect to both design and development. Greater focus should be placed on improving EHR design. By identifying EHR features that users believe present new opportunities for error and the tactics that physicians employ to work around them, EHR system developers can enhance current functionalities and create new tools to minimize new HER-associated errors. To reduce EHR system design flaws and other unintended consequences, the following changes in how EHR systems are regulated, approved, and monitored have been recommended:

- Federal regulations should be promulgated that establish approval and monitoring processes and EHR system standards and implementation specifications.
- Federal regulations should mandate that EHR system vendors employ design and usability standards that optimize system safety, efficacy, and information integrity.
- EHR systems should not be able to be marketed without being scrutinized, approved, and subject to ongoing oversight to assess their safety, effectiveness, and accuracy.
- An industry standard should be established for quality principles and processes for EHR design, and EHR system developers should be required to adopt these principles and processes.
- An industry standard is needed to ensure that comprehensive quality management principles and processes are adopted throughout the EHR industry



to provide assurance that FHR products meet a minimum level of safety, reliability, and usability.

## **1. Improve System Usability and Proper Use**

To prevent medical errors (including errors that stem from flawed or erroneous information), it is not merely the design of the EHR system that is important, but also its implementation, or how it is incorporated into clinical processes and workflow and how users actually use it in routine clinical care. The risk of patient harm associated with a specific application should be systematically assessed, and quality and safety procedures that are proportional in stringency to the identified clinical risk should be adopted (Weng, 2018)..

The current approach to EHR standardization and certification does not address system implementation, usability by clinicians (including integration with workflows), or information integrity Certification criteria used to establish eligibility for use in the centers for Medicare and Medicaid Services EHR Incentive Program, while slowly starting to address EHR safety and usability issues, are not yet sufficient to ensure EHR-related safety-3 and improve information integrity. Strategies to address EHR usability problems and reduce improper system use include the following:

- EHR usability should be included in the EHR certification process.
- EHR certification requirements should define what a vendor's product is not allowed to do in addition to what it must do.
- Healthcare organizations and other providers should develop and implement policies and procedures pertaining to appropriate EHR use.

- Healthcare organizations should ensure that all users receive thorough training on system use, including the organization's expectations regarding the use of the system.
- For each application, quality and safety procedures that are consistent with the degrees of safety risk associated with that application should be adopted.
- An internal reporting system to identify problems using the EHR, EHR-related errors, and any other HER-related issues should be established.

## **2. Improve Documentation Capture Processes**

Recommendations for improving EHR documentation creation include the following:

- EHR content standards should be defined, which would enhance efficiency, reduce redundancy, alleviate the documentation burden, and improve integrity.
- Guidelines should be developed for both vendors and users of EHR systems regarding the appropriate use of documentation techniques to ensure complete, accurate, and quality documentation.
- Policies and procedures should be developed and implemented pertaining to appropriate EHR use.
- Organizational policies should promote ethical documentation practices.
- Policies should be designed to minimize insertion of patient data available elsewhere in the record and discourage copying as a way of improving clinician productivity.
- Organizational policies should address the limits on what type of information can be copied, outline the provider's responsibility for copied

information and notification of errors, and specify corresponding sanctions or disciplinary actions.

- Source attribution for text should be required.
- A “zero tolerance” policy on unethical copying practices should be adopted.
- Error-prone EHR documentation practices, such as copying and pasting text, should be monitored to ensure they are appropriate. Corrective action should be taken if a pattern of inappropriate documentation practices is identified.

### **Comparison Between Modern Digital Filing With Manual Filing System DBMS vs File System**

Roshan (2016), maintained that Data Management System and File System are two ways that could be used to manage, store retrieve and manipulate data. A File System is a collection of raw data files stored in the hard-drive whereas DBMS is a bundle of applications that is dedicated for managing data stored in databases. It is the integrated system used for managing digital database, which allows the storage of database content, creation, maintenance of data, search and other functionalities. Both systems can be used to allow the user to work with data in a similar way. A File is one of the earliest ways of managing data. But due the shortcomings present in using a File System to store electronic data, Database Management Systems came in to use sometime later, as they provide mechanisms to solve those problems. But it should be noted that, even in a DBMS, data are eventually (physically) stored in some sort of files.

#### **1. File System**

Ankit (2016), posited that, in a typical File System electronic data are directly stored in a set of files. If only one table is stored in a file, they are called flat files. They contain values at each row separated with a special delimiter like commas. In order to query some random data, first it is required to read sequentially (because,

there is no control mechanism in files), therefore it is quite inefficient and time consuming. The burden of locating the necessary file, going through the records (line by line), checking for the existence of a certain data, remembering what files/records to edit is on the user. The user either has to perform each task manually or has to write a script that does them automatically with the help of the file management capabilities of the operating system. Because of these reasons, File Systems are easily vulnerable to serious issues like inconsistency, inability for concurrency, data isolation, threats on integrity and lack of security.

## **2. DBMS**

Missnala (2016), sees DBMS, sometimes just called a database manager, as a collection of computer programs that is dedicated for the management (i.e. organization, storage and retrieval) of all databases that are installed in a system (i.e. hard drive or network). There are different types of Database Management Systems existing in the world, and some of them are designed for the proper management of databases configured for specific purposes. Most popular commercial Database Management Systems are Oracle, DB2 and Microsoft Access. All these products provide means of allocation of different levels of privileges for different users, making it possible for a DBMS to be controlled centrally by a single administrator or to be allocated to several different people.

There are four important elements in any Database Management System. They are the modeling language, data structures, query language and mechanism for transactions. The modeling language defines the language of each database hosted in the DBMS. Currently several popular approaches like hierarchal, network, relational and object are in practice. Data structures help organize the data such as individual records, files, fields and their definitions and objects such as visual media. Data query language allow for maintaining and the security of the database. It monitors login data,

access rights to different users, and protocols to add data to the system. SQL is a popular query language which is used in Relational Database Management Systems. Finally, the mechanism that allows for transactions help concurrency and multiplicity. That mechanism will make sure same record will not be modified by multiple users at the same time, thus keeping the data integrity in tact. Additionally, DBMSs provide backup and other facilities as well. With all these advancements in place, DBMS solves almost all problems of the File System, Mentioned above.

### **3. Difference between DBMS and File System**

Missnala (2016), notes that in File System, file are used to store data while, collections of databases are utilized for the storage of data in DBMS. Although File System and DBMS are two ways of managing data, DBMS clearly has many advantages over File Systems. Typically when using a File System, most tasks such as storage, retrieval and search are done manually and it is quite tedious whereas a DBMS will provide automated methods to complete these tasks. Because of this reason, using a File System will lead to problems like data integrity, data inconsistency and data security, but these problems could be avoided by using a DBMS. Unlike File System, DBMS are efficient because reading Une by line is not required and certain control mechanisms are in place.

### **Summary of Literature Reviewed**

The study reviewed some of the sub-headings under the challenges of digital filing system in records management in the 21<sup>st</sup> century organization by different authors. Using digital filing system, using electronic records presents a significant challenge for an organization of any size or sector. Records management policy, records management policy can be described as an authoritative statement of intent to manage records in an appropriate and suitable manner for as they are required for business purposes. Filing structures, constructing the filing structure, evaluation of the

impact of digital filing system on cost effective, current requirements standard, this standard described the minimum requirement derived from federal statute and regulation that an ERM application must support on records managements, EHR system design flaws, the expanding capabilities of EHR systems require increasingly complex software, which heightens the likelihood of software failures that may harm patients. Reduce EHR system design flaws, EHR products are held to few standards with respect to both design and development. Comparison between modern digital filing with manual filing system DBMS vs File System, File System are two ways that could be used to manage, store, retrieve and manipulate data.

## **CHAPTER THREE**

### **RESEARCH METHOD**

This chapter explains the method and procedures used in gathering data for this research work. Those include: Research Design, Population of the Study, Sample/Sampling Techniques, Instrument for Data Collection, Method of Data Collection and Method of Data Analysis:

#### **Research Design**

The design used in this study is the survey design. This was carried out by distributing copies of questionnaire to the respondents in some selected banks in Auchi metropolis.

#### **Population of the Study**

The population of this study is made up of the entire 105 staff in some selected banks in Auchi, Edo State. These are:

**Table 1**  
*Population of the Study*

<b>S/No</b>	<b>Banks</b>	<b>Population</b>
	Zenith Bank Plc	25
	Fidelity Bank Plc	25
	Guarantee Trust Bank Plc	30
	Eco Bank Plc	25
	<b>Total</b>	<b>105</b>

#### **Sample/Sampling Technique**

No form of sampling technique was used in this study since the population of the study is manageable. The entire 105 staff was used as the sample size of the study.

#### **Instrument for Data Collection**

The questionnaire is the only research instrument used in gathering data in this study. The questionnaire is divided into two (2) parts- part I sought background

information of the respondents and part II sought answers to the items related to the research questions draw up for the study.

### **Method of Data Collection**

Data was collected from both primary and secondary sources. The primary source data collection was the questionnaire which form the major instrument used to collect data for the study. Questionnaires were designed to solicit information from the study participants, while secondary sources of data collection which were employed for the study in gathering data consist of textbooks, past project works, newspapers, journals, articles and internet.

### **Method of Data Analysis**

The method adopted by the researcher in analyzing data collected was the simple percentage method. The formula for computing the percentage is:

$$\frac{\text{Number of Responses}}{\text{Total Number of Respondents}} \times \frac{100}{1}$$



## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSION

This chapter deals with the presentation, analysis and findings from data gathered for the study with the questionnaire.

Based on the sample of the study, a total number of one hundred and five (105) questionnaires were distributed to the respondents and the entire 105 respondents were successfully retrieved and used for the study, representing 100% retrieval rate.

#### Data Analysis

##### Section A: Background Information of Respondents

**Table 2**  
*Sex Distribution of Respondents*

<b>Sex</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Male	50	47.62%
Female	55	52.38%
<b>Total</b>	<b>105</b>	<b>100</b>

Table 2 above shows the distribution of respondents according to sex variable. 50 respondents (representing 47.62%) of the population were males while 55 respondents (representing 52.38%) were females. This shows that female respondents were more in the population.

**Table 3**  
*Age Distribution of Respondents*

<b>Age</b>	<b>No. of Respondents</b>	<b>Percentage</b>
21-30 years	17	16.19%
31-40 years	28	26.66%
41-50 years	50	47.62%
<b>Total</b>	<b>105</b>	<b>100</b>

Table 3 above shows the distribution of respondents according to age. 17 respondents (representing 16.199%) of the population were between 21-30 years of

age, 28 respondents (representing 26.66%) were between 21-30 years of age, 50 respondents (representing 47.62%) are within 41-50 years of age while the remaining 10 respondents (representing 9.53%) were between the age of 51 years and above. This shows that respondents within 25-30 years of age were more amongst the respondents.

**Table 4**  
***Marital Status of Respondents***

<b>Marital Status</b>	<b>No. of Respondents</b>	<b>Percentage</b>
Single	48	45.72%
Married	57	54.28%
<b>Total</b>	<b>105</b>	<b>100</b>

Table 4 above shows the marital status of respondents. 48 respondents (representing 45.72%) of the population were single, while 57 respondents (representing 54.28%) were married. This indicates that respondents who are married were more in the population.

**Table 5**  
***Educational Level of Respondents***

<b>Educational Level</b>	<b>No. of Respondents</b>	<b>Percentage</b>
SSCE	21	20.00%
ND	30	28.57%
B.Sc/HND	42	40.00%
<b>Total</b>	<b>105</b>	<b>100</b>

Table 5 above shows the distribution of respondents according to educational qualifications. 21 respondents (representing 20.00%) of the population were SSCE holders, 30 respondents (representing 28.57%) are ND holders, 42 respondents (representing 40.00%) are HND/B.Sc holders while the remaining 12 respondents (representing 11.43%) are M.Sc holders. This shows that respondents working HND/B.Sc are more amongst the respondents.

## Section B: Items Related to Research Questions

### Research Question One

What is the extent to which secretaries are trained to use digital filing system?

Responses to items 1, 2, 3 and 4 of the research questionnaire were analyzed and used to answer research question one as show in the table below.

**Table 6**  
*Analysis of Responses to Research Question One*

S/No	Items	Variables	No. of Respondents	Percentage
1	Secretaries are trained to use digital filing system in your organization.	Strongly agree	45	42.86%
		Agree	37	35.24%
		Disagree	12	11.43%
		Strongly disagree	11	10.47%
		<b>Total</b>	<b>105</b>	<b>100</b>
2	Secretaries have enough knowledge of the training giving to them on the use on digital filing system.	Strongly agree	8	36.19%
		Agree	29	27.62%
		Disagree	23	21.91%
		Strongly disagree	15	14.28%
		<b>Total</b>	<b>105</b>	<b>100</b>
3	Training of digital filing system ease process of filing by secretaries.	Strongly agree	51	48.57%
		Agree	39	37.14%
		Disagree	10	9.53%
		Strongly disagree	5	4.76%
		<b>Total</b>	<b>105</b>	<b>100</b>
4	Training of secretaries on the use of digital filing increase performance.	Strongly agree	48	45.72%
		Agree	32	30.47%
		Disagree	15	14.28%
		Strongly disagree	10	9.53%
		<b>Total</b>	<b>105</b>	<b>100</b>

Item 1 on the questionnaire: “Secretaries are trained to use digital filing system in your organization”. was provided with four variable. 45 respondents (representing 42.86%) strongly agreed that secretaries are trained to use digital filing system in the organization; 37 respondents (representing 35.24%) agreed; 12 respondents (representing 11.43%) disagreed, while 11 respondents (representing 10.47%) strongly

disagreed. It is clear that secretaries are trained to use digital filing system in the organization.

Item 2 on the questionnaire: “Secretaries have enough knowledge of the training giving to them on the use on digital filing system”. was provided with four variable. 38 respondents (representing 36.19%) strongly agreed that secretaries have enough knowledge of the training giving to them on the use on digital filing system; 39 representing (representing 37.14%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. This shows that secretaries have enough knowledge of the training giving to them on the use on digital filing system.

Item 3 on the questionnaire: “Training of digital filing system ease process of filing by secretaries”. was provided with four variables. 51 respondents (representing 48.57%) strongly agreed that training of digital filing system ease process of filing by secretaries; 39 respondents (representing 37.14%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. This shows that the training of digital filing system ease process of filing by secretaries in the organization.

Item 4 on the questionnaire: “Training of secretaries on the use of digital filing increase performance”. was provided with four variable. 48 respondents (representing 45.72%) strongly agreed that training of secretaries on the use of digital filing increase performance; 32 representing (representing 30.47%) agreed; 15 respondents (representing 14.28%) disagreed, while 10 respondents (representing 9.53%) strongly disagreed. This shows that the training of secretaries on the use of digital filing increase their performance in the organization.

From the above analysis, it can be deduced that training on the use of digital filing system ease the process of filing and increase secretaries performance.

## Research Question Two

### To what extent is digital filing system cost effective?

Responses to items 5, 6, 7 and 8 of the research questionnaire were analyzed and used to answer research question two as show in the table below.

**Table 7**  
*Analysis of Responses to Research Question Two*

S/No	Items	Variables	No. of Respondents	Percentage
5	The cost of operating digital filing system is high.	Strongly agree	41	39.05%
		Agree	36	34.28%
		Disagree	15	14.28%
		Strongly disagree	13	12.39%
		<b>Total</b>	<b>105</b>	<b>100</b>
6	The high cost of digital filing system have negative effects.	Strongly agree	38	36.19%
		Agree	27	25.72%
		Disagree	23	21.90%
		Strongly disagree	17	16.19%
		<b>Total</b>	<b>105</b>	<b>100</b>
7	Some organization cannot afford to use digital filing system.	Strongly agree	51	48.57%
		Agree	39	37.14%
		Disagree	10	9.53%
		Strongly disagree	5	4.76%
		<b>Total</b>	<b>105</b>	<b>100</b>
8	The high cost of digital filing system discourage management.	Strongly agree	58	55.24%
		Agree	32	30.47%
		Disagree	5	4.76%
		Strongly disagree	10	9.53%
		<b>Total</b>	<b>105</b>	<b>100</b>

Item 5 on the questionnaire: “The cost of operating digital filing system is high”. was provided with four variable. 41 respondents (representing 39.05%) strongly agreed that the cost of operating digital filing system is high; 36 respondents (representing 34.28%) agreed; 15 respondents (representing 14.28%) disagreed, while 13 respondents (representing 12.39%) strongly disagreed. This shows that the cost of operating digital filing system is high.

Item 6 on the questionnaire: “The high cost of digital filing system have negative effects”. was provided with four variable. 51 respondents (representing 48.57%) strongly agreed that the high cost of digital filing system have negative

effects; 39 respondents (representing 37.14%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. It is clear the high cost of digital filing system have negative effects.

Item 7 on the questionnaire: “Some organization cannot afford to use digital filing system”. was provided with four variable. 51 respondents (representing 48.57%) strongly agreed that some organization cannot afford to use digital filing system; 39 respondents (representing 37.14%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. It is clear some organization cannot afford to use digital filing system.

Item 8 on the questionnaire: “The high cost of digital filing system discourage management”. was provided with four variable. 58 respondents (representing 55.24%) strongly agreed that the high cost of digital filing system discourage management; 32 respondents (representing 30.47%) agreed; 5 respondents (representing 4.76%) disagreed, while 10 respondents (representing 9.53%) strongly disagreed. It is clear the high cost of digital filing system discourage management.

From the above analysis, it is obvious that some organization cannot afford to provide digital filing system on their secretaries because the cost of purchasing them is high.

### **Research Question Three**

#### **What is the impact of digital filing system on records management?**

Responses to items 9, 10, 11 and 12 of the research questionnaire were analyzed and used to answer research question three as show in the table below.

**Table 8**  
*Analysis of Responses to Research Question Three*

S/No	Items	Variables	No. of Respondents	Percentage
9	Digital filing system increase records management in organization.	Strongly agree	43	40.95%
		Agree	34	32.38%
		Disagree	15	14.28%
		Strongly disagree	13	12.39%
		<b>Total</b>	<b>105</b>	<b>100</b>
10	Digital filing system on records management contribute to organizational growth.	Strongly agree	40	38.09%
		Agree	27	25.72%
		Disagree	21	20.00%
		Strongly disagree	17	16.19%
		<b>Total</b>	<b>105</b>	<b>100</b>
11	Digital filing system brings about effective management of records.	Strongly agree	55	52.38%
		Agree	35	33.33%
		Disagree	10	9.53%
		Strongly disagree	5	4.76%
		<b>Total</b>	<b>105</b>	<b>100</b>
12	Digital filing system ease transfer of files from one place to another.	Strongly agree	58	55.24%
		Agree	31	29.53%
		Disagree	5	4.76%
		Strongly disagree	11	10.47%
		<b>Total</b>	<b>105</b>	<b>100</b>

Item 9 on the questionnaire: “Digital filing system increase records management in organization”. was provided with four variable. 43 respondents (representing 40.95%) strongly agreed that digital filing system increase records management in organization; 34 respondents (representing 32.38%) agreed; 15 respondents (representing 14.28%) disagreed, while 13 respondents (representing 12.39%) strongly disagreed. This shows that digital filing system increase records management in organization.

Item 10 on the questionnaire: “Digital filing system on records management contribute to organizational growth”. was provided with four variable. 40 respondents (representing 38.09%) strongly agreed that digital filing system on records management contribute to organizational growth; 27 respondents (representing 25.72%) agreed; 21 respondents (representing 20.00%) disagreed, while 17 respondents (representing 16.19%) strongly disagreed. This shows that

digital filing system on records management contribute to organizational growth.

Item 11 on the questionnaire: “Digital filing system brings about effective management of records”. was provided with four variable. 55 respondents (representing 52.38%) strongly agreed that digital filing system brings about effective management of records; 35 respondents (representing 33.33%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. This shows that digital filing system brings about effective management of records.

Item 12 on the questionnaire: “Digital filing system ease transfer of files from one place to another”. was provided with four variable. 58 respondents (representing 55%) strongly agreed that digital filing system ease transfer of files from one place to another; 31 respondents (representing 29.53%) agreed; 5 respondent (representing 4.76%) disagreed, while 11 respondents (representing 10.47 %) strongly disagreed. This shows that digital filing system ease transfer of files from one place to another.

From the above analysis, it can be inferred that digital filing system have a positive impact on records management in organization.

#### **Research Question Four**

**What is the comparison between modern digital filing system and manual filing system?**

Responses to items 13, 14, 15 and 16 of the research questionnaire were analyzed and used to answer research question four as show in the table below.



**Table 9**  
*Analysis of Responses to Research Question Four*

S/No	Items	Variables	No. of Respondents	Percentage
13	Digital filing system is better than manual filing system.	Strongly agree	44	41.91%
		Agree	40	38.09%
		Disagree	10	9.53%
		Strongly disagree	11	10.47%
		<b>Total</b>	<b>105</b>	<b>100</b>
14	Digital filing system is preferable compare with manual filing system.	Strongly agree	43	40.95%
		Agree	25	23.81%
		Disagree	20	19.05%
		Strongly disagree	17	16.19%
		<b>Total</b>	<b>105</b>	<b>100</b>
15	Digital filing system have advantage over manual filing system.	Strongly agree	55	52.38%
		Agree	35	33.33%
		Disagree	10	9.53%
		Strongly disagree	5	4.76%
		<b>Total</b>	<b>105</b>	<b>100</b>
16	Manual filing system is easy to manage compare to digital filing system.	Strongly agree	5	4.76%
		Agree	11	10.47%
		Disagree	58	55.24%
		Strongly disagree	31	29.53%
		<b>Total</b>	<b>105</b>	<b>100</b>

Item 13 on the questionnaire: “Digital filing system is better than manual filing system”. was provided with four variable. 44 respondents (representing 42.91%) strongly agreed that digital filing system is better than manual filing system; 40 respondents (representing 38.09%) agreed; 10 respondents (representing 9.53%) disagreed, while 11 respondents (representing 10.47%) strongly disagreed. This shows that digital filing system is better than manual filing system.

Item 14 on the questionnaire: “Digital filing system is preferable compare with manual filing system”. was provided with four variable. 43 respondents (representing 40.95%) strongly agreed that digital filing system is preferable compare with manual filing system; 25 respondents (representing 23.81%) agreed; 20 respondents (representing 19.05%) disagreed, while 17 respondents (representing 16.19%) strongly disagreed. It is clear that digital filing system is preferable compare with manual filing system.

Item 15 on the questionnaire: “Digital filing system have advantage over manual filing system”. was provided with four variable. 55 respondents (representing 52.38%) strongly agreed that digital filing system have advantage over manual filing system; 35 respondents (representing 33.33%) agreed; 10 respondents (representing 9.53%) disagreed, while 5 respondents (representing 4.76%) strongly disagreed. This shows that digital filing system have advantage over manual filing system.

Item 16 on the questionnaire: “Manual filing system is easy to manage compare to digital filing system”. was provided with four variable. 5 respondents (representing 4.76%) strongly agreed that manual filing system is easy to manage compare to digital filing system; 11 respondents (representing 10.47%) agreed; 58 respondents (representing 55.24%) disagreed, while 31 respondents (representing 29.53%) strongly disagreed. It was indicated that manual filing system is not easy to manage compare to digital filing system.

From the above analysis, it is clear that digital filing system is better compare with manual filing system in an organization.

## **Findings**

Based on the analysis of the data from the research instrument, the following findings emerged:

- ❖ Training on the use of digital filing system ease the process of filing and increase secretaries performance.
- ❖ Some organization cannot afford to provide digital filing system on their secretaries because the cost of purchasing them is high.
- ❖ Digital filing system have a positive impact on records management in organization.
- ❖ Digital filing system is better compare with manual filing system in an organization.

## **Discussion of Findings**

The main purpose of this research is to examine challenges of digital filing system on records management in some selected Banks in Auchu metropolis. Four research questions and one hundred and five (105) questionnaires consisting of sixteen question items were raised for the study.

It was found out that training on the use of digital filing system eases the process of filing and increases secretaries' performance. Also the existence of modern filing system increases secretaries' performance and organizational growth.

The researcher discovered that it is not easy for some organizations to acquire those modern digital filing systems due to the high cost of purchasing them.

The study also found out that digital filing system is more preferable compared with manual system of filing. The study also stated that the effectiveness of modern digital filing system has contributed positively to organizational growth.

Finally, digital filing system is good, reliable, durable and preferable over the use of manual system of filing in any organization.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **Summary**

The study focused on “challenges of digital filing system on records management in some selected Banks in Auchi”. Today, most organizations use digital filing system due to the fact that the world is now a global neighborhood”, therefore for digital filing system to be relevant in this age of technology and in order for them to be more effective in organization, influence and performance in the organization, there must be installation management information system to be able to handle the records management in some selected Banks in Auchi, which were used in order to get answers to the research questions. The researcher reviewed some literature of other authors. 105 questionnaire was administered to seek the experts’ opinions from the selected Banks in Auchi.

The findings revealed that secretaries undergo effective training on how to use digital filing system in organizations. And the effective training they undergo improve their performance in the organization, the findings also shows that digital filing system contribute effectively to organization records management functions.

The finding further revealed that digital filing system is better than the old method of filing system in the organization and the amount of purchasing digital filing system is cost than the amount of manual filing system. The digital filing system has increase records management in the organization and provides more social activities to the organization, it also reveal that digital filing system reduce the stress of searching for records in the organization.

#### **Conclusion**

The following conclusions are based on the findings of the research:

It was concluded that it was highly relevant for a secretary to undergo effective training on how to use digital filing system in organizations. And the training improve secretaries performance in organization. It was also concluded that digital filing system contributed to effective function of an organization. And the cost of digital filing system is costlier than old method of filing system. The use of digital filing system is cost than old method of filing system in an organization and digital filing system has influence on records management in and organization and the use of digital filing system provide more social activities to and organization.

### **Recommendations**

Based on the findings of the study the following recommendations are made:

1. It is essential that every prospective secretary should be trained on the use of digital filing system on records management.
2. Organizations across the nation that do not have digital filing system on records management should introduce it to keep staff and customer's records.
3. The digital filing system adopted by the management of any organization should increase the performance of secretary. And organizations should ensure that secretaries are properly trained to access files on the digital filing system.
4. It is also recommend that old method of filing should be encourage in case of failure of network work.
5. Organization should at least, periodically check their machines/equipment used for digital filing system.

### **Limitations of the Study**

**Financial Constraint:** Much money was expended in the course of gathering data from the internet.

**Time Constraint:** There is no doubt that much time was used in writing and typesetting this project. The time was short as both school normal lectures were going on simultaneously with typesetting of the project. This was a major constraint.

**Scarcity of Books:** Recent books especially secretarial books are very difficult to come by as most of the authors are foreigners.

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## **APPENDICES**

Department of Office Technology and Management,  
School of Information and Communication Technology,  
Auchi Polytechnic,  
Auchi.

4<sup>th</sup> August, 2022.

Dear Respondent,

### **Letter of Introduction**

I am a final year (HNDII) student of the above named department and institution carrying out a research work on the **“Challenges of Digital Filing System on Records Management in Some Selected Banks in Auchi.**

This is in partial fulfilment of the requirements for the award of Higher National Diploma (HND) in Office Technology and Management.

Attached to this letter is a questionnaire meant to gather information for the research study. I wish to assure you that this questionnaire is meant to aid the researcher to get data needed for the research exercise and any information supplied by you will be treated confidentially.

Thank you for your anticipated cooperation.

Yours faithfully,

**HARUNA HALIMATU SADIA**  
**(Researcher)**

## Questionnaire

**Instruction:** Please fill the blank spaces by marking (x) in the appropriate boxes provided.

### Section A: Background Information of Respondents

1. **Sex:** Male ( ) Female ( )
2. **Age:** 15 – 20 years ( ) 21 – 25 years ( ) 26 – 30 years ( ) 31 years and above ( )
3. **Marital Status:** Single ( ) Married ( )
4. **Educational Level:** SSCE ( ) ND ( ) B.Sc/HND ( ) M.Sc ( )

### Section B: Items Related to the Research Questions

S/No	Items	SA	A	D	SD
1	Secretaries are trained to use digital filing system in your organization.				
2	Secretaries have enough knowledge of the training giving to them on the use on digital filing system.				
3	Training of digital filing system ease process of filing by secretaries.				
4	Training of secretaries on the use of digital filing increase performance.				
5	The cost of operating digital filing system is high.				
6	The high cost of digital filing system have negative effects.				
7	Some organization cannot afford to use digital filing system.				
8	The high cost of digital filing system discourage management.				
9	Digital filing system increase records management in organization.				
10	Digital filing system on records management contribute to organizational growth.				
11	Digital filing system brings about effective management of records.				
12	Digital filing system ease transfer of files from one place to another.				
13	Digital filing system is better than manual filing system.				
14	Digital filing system is preferable compare with manual filing system.				
15	Digital filing system have advantage over manual filing system.				
16	Manual filing system is easy to manage compare to digital filing system.				