

**DEVELOPING A MANUAL FOR PROPER STORAGE AND SECURITY OF
RECORDS AT NANSANA MUNICIPAL COUNCIL REGISTRY**

BY

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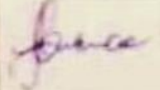

NAME	REGISTRATION NUMBER	STUDENT NUMBER
RUNYUNYUZI NICKSON	19/U/9253/PS	1900709253
NASINGURAH BABRAH	19/U/11213/EVE	1900711213
NAMUBIRU FLORENCE	19/U/10745/EVE	1900710745
AMANYA EMILLY	19/U/10724/EVE	1900710724

**A PROJECT REPORT SUBMITTED TO THE EAST AFRICAN SCHOOL OF
LIBRARY AND INFORMATION SCIENCES IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF
RECORDS AND ARCHIVES MANAGEMENT OF MAKERERE UNIVERSITY,
KAMPALA**

NOVEMBER 2022

DECLARATION

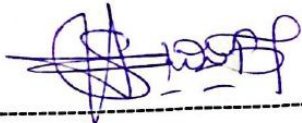
We, Runyunyuzi Nickson, Nasingurah Babrah, Namubiru Florence, Amanya Emmily do declare that this project report titled "*Developing a manual for proper storage and security of records at Nansana Municipal Council Registry*" is our original work and has not been submitted for any other degree award to any other University before

NAME	REGISTRATION NUMBER	STUDENT NUMBER	SIGNATURE
RUNYUNYUZI NICKSON	19/U/9253/PS	1900709253	
NASINGURAH BABRAH	19/U/11213/EVE	1900711213	
NAMUBIRU FLORENCE	19/U/10745/EVE	1900710745	
AMANYA EMMILY	19/U/10724/EVE	1900710724	

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APPROVAL

This is to certify that the research project titled, "*Developing a manual for proper storage and security of records at Nansana Municipal Council Registry*" has been completed under my guidance and supervision



Signature: -----

Date: -----

24 - NOV - 2022

Mr. Joseph Ssebulime

Supervisor

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DEDICATION

This work is dedicated to our beloved parents for the good parental care, love and financial assistance. Your love for us gives us joy, may the Lord reward you abundantly.

ACKNOWLEDGEMENT

The completion of this work depended on the great support of many people to whom we owe our sincere acknowledgement.

We wish to extend my special thanks and appreciation to our family members who have supported us unconditionally, spiritually and financially.

Our sincere gratitude and special appreciation go to our supervisor Mr. Ssebulime Joseph for the continuous guidance and advice we received throughout the research process.

We cannot forget to appreciate the staff and management of Nansana Municipal Council for the guidance and hospitality showed to us during the data collection.

Lastly, we thank the almighty God for guiding us throughout our academic endeavors. We pray to Him to bless all those who were there for us.

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LIST OF ACRONYMS

ARO	Assistant Records Officer
ISO	International Standards Organization
NMC	Nansana Municipal Council
RO	Records Officer
SAA	Society of American Archivists
SRO	Senior Records Officer

ABSTRACT

The practice of records storage and security started years back, however, implementing it as a professional practice totally became a serious aspect after organisations realizing the priceless benefits of establishing and following recordkeeping procedures. Like other organisations, Municipal Councils generate quite a lot of records through their business activities, therefore, they need to be stored properly for easy and quick retrieval in time of need.

The purpose of this project was to analyse the current records storage and security measures at Nansana Municipal Council (NMC) registry with an intention of developing a manual for proper storage and security of records at the municipal council. The project was guided by five objectives which were to: find out the various categories of records kept at NMC; examine the current procedures followed to ensure proper storage and security of records at NMC; examine the current records storage and security practices at NMC; determine the challenges encountered in storage and security of records at NMC; and develop a manual for proper storage and security of records at NMC.

The project used interview, observation and document analysis methods to collect data pertaining to each of the objectives. Among the major findings, the project found out that the storage of records at NMC was overwhelmed by the increasing volume of records. As a result, there was congestion in the registry which covered up much of the physical storage and working space. To remedy the insurgencies, the project proposed a manual for the improvement of records storage and security. Recommendations were also made to improve on records storage and security of records at NMC. Recommendations outlined the need to construct standard records storage areas, implementation of a records management policy, among others. This project concluded that; if the above recommendations are put to action, NMC registry would be better off in service delivery and in terms of records storage and security.

CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter presents the background of the project, problem statement, purpose of the project, specific objectives of the project, research questions, significance of the project, project justification, scope of the project, definition of operational terms and chapter conclusion.

1.2 Background of the project

1.2.1 Conceptual background

Records are essentials for the effective and productive functioning of an organization. World Bank (2006) noted that records support decision making and other activities of both government organizations and private organizations, they provide a bench mark against which these organizations can measure their efficiency and effectiveness. Penn and Pennix, (2017) stated that for any organization to manage its records effectively, they must develop the capacity to manage records and information. The reason is that the challenges of conceiving, initiating, implementing, monitoring and evaluating activities always require reliable and timely use of records and information. Information needs to be stored and managed well, effectively to in order for it to be recognized as authentic and accurate, and this can be managed through having procedures for proper storage and security of these records.

This practice of records storage and security started thousand years ago however implementing it as a professional practice totally became a serious professional practice after companies realized the priceless benefits of establishing procedures that can be followed to perform these records management functions. Both aspects (records storage and security) are part of the records management function that encompasses all other aspects arising from the stages of records lifecycle, that is, records creation, use, distribution, storage and retrieval and disposal.

Records management is so essential in organizational performance because it deals with records, one of the key assets of any organisation representing its accumulated intellectual capital (Musembe, 2016). Usually, proper records storage contributes to their safety, guarantees their integrity and highly scores the organisation's records management function. That withstanding, there are several incidents in organisations featuring poor storage of records and compromise of

their security. A point in case is a study by Touray (2021) where it was found out that many of the organisational documents get lost and some of them are misplaced because of poor storage and poor management of records generally. This background justifies why proper records storage and adequate security have to be employed in organizations so as to ensure that records are secure, complete and quickly retrieved by authorized users only.

Duranti and MacNeil (2009) recommended that every record must be stored in some way so it can be protected located and retrieved when needed and that security measures should be employed to protect records from unauthorised access, accidental loss, theft, damage and negligent destruction. This project focused on analysing the current records storage and security measures at Nansana Municipal Council (NMC) registry with an intention of developing a manual for proper storage and security of records at the municipal council. Like other organizations, NMC generates a lot of records through its business activities and therefore they need to be stored properly in a secure manner for easy and quick retrieval when needed. It is for this reason that the project aimed at developing a manual for proper storage and security of records at Nansana Municipal Council registry.

1.2.2 Nansana Municipal Council

Nansana Municipality is one of the five municipalities that make up Wakiso district located in the central of Uganda (Mugerwa, 2015). The municipality has an approximate population of 368,694 people (National Population and Housing Census, 2014). It was formed under statutory instrument 2015 No. 47 on the 9th day of September 2015 but attained the municipality council status in July 2015. It is located in Wakiso District, about 9.6km from the centre of Kampala along Kampala-Hoima Road. The municipal council, comprises of four divisions; Nanasana, Nabweru, Gombe and Busukuma divisions (Mugerwa, 2015). The municipal council envisions “a transformed municipality from unplanned to an orderly, vibrant and prosperous city”. It also serves “to provide timely and quality services for improved livelihood”

The council has a registry from where records and most of the document management work are done on behalf of NMC. The records and all other document correspondences arise from the work which the council does in four divisions of Nansana, Nabweru, Gombe and Busukuma. Examples of such records include reports, policy statements, contract documents, administrative letters,

meeting minutes, statutes, memoranda of understandings, licence agreements among others. The registry thus serves to ensure that these records are efficiently processed for storage and preservation, access and retrieval and use by stakeholders. This project investigated the measures that are undertaken at NMC to guarantee proper storage and security of all records maintained at NMC registry. This was done for the purpose of developing a manual for proper storage and security of records at the municipal council. This manual was to address all the gaps (articulated in the problem statement below) surrounding the storage and security of records at NMC registry.

1.3 Problem statement

Storage and security of records is very important in making any organization's activities successful and effective in its functions. So far, there isn't any organization whether public or private, large or small that can operate effectively without proper storage and security of records (Crockett, 2016).

Reports arising from the preliminary visits at NMC registry revealed that the municipal registry had huge volumes of records that are generated both manually and electronically. This scenario necessitated fulltime commitment from record staff to ensure that the records generated are secure and properly stored. Reports from preliminary visit further revealed that this process of securing records and according them proper storage was associated with lots of hinderances which often compromised and affected the security and storage of records at the registry.

Among the hindrances, the absence of well-established procedures to guide in the proper storage and security of records which resulted into compliance issues, unauthorized access, records misplacement, as well as records security bleaches in its registry accompanied with failure of locating some of the records were cited. Similar incidents were also reported by BMAU (2018) who recommended suggestions to improve the situation. For this particular project, the suggested remedy was to develop a manual for proper storage and security of records at the NMC registry to guide the storage and security of records at the registry. This same remedy was the premise for all investigations aimed at analysing the current records storage and security measures at NMC registry.

1.4 Purpose of the project

The purpose of this project was to analyse the current records storage and security measures at NMC registry with an intention of developing a manual for proper storage and security of records at the municipal council.

1.5 Objectives of the project

The objectives of this project were to;

1. Find out the various categories of records kept at Nansana Municipal Council.
2. Examine the current procedures followed to ensure proper storage and security of records at Nansana Municipal Council.
3. Examine the current records storage and security practices at Nansana Municipal Council.
4. Determine the challenges encountered in storage and security of records at Nansana Municipal Council.
5. Develop a manual for proper storage and security of records at Nansana Municipal Council.

1.6 Research questions

1. What are the various categories of records kept at Nansana Municipal Council?
2. What are the current procedures followed to ensure proper storage and security of records at Nansana Municipal Council?
3. What are the storage and security practices employed at Nansana Municipal Council?
4. What are the challenges associated with the absence of a records storage and security manual at Nansana Municipal Council?
5. What are the strategies for improvement of the records Storage and security of records are managed at Nansana Municipal Council?

1.7 Significance of the project

This project has primary benefit to NMC, Knowledge, Future researchers and Records staff at NMC and other similar organisations in the following ways;

Nansana Municipal Council: this project analysed the current records storage and security measures at NMC registry and developed a manual for proper storage and security of records at

the municipal council. The manual is records management tool that can be used at NMC registry to ensure effective storage and security of records.

Knowledge: the different project findings pertaining to each project objective as established in this project are a contribution to the body of knowledge of “records management” as a broad subject and “records storage and security” as a specific subject.

Records staff: the findings of this project provide insights to records staff on the consequences of poor records storage and insecurity.

Future researchers: this project provided a proper path of what the researchers covered and recommendations on what needs to be covered in further studies. These project findings and recommendations can be the basis for research by researchers.

1.8 Project justification

Records management entails a couple of activities well described in a records lifecycle; creation, distribution, maintenance and use, and finally disposition (Magill, 2005). This project picked interest in examining the procedures prescribing how records are stored and secured for the fact that they contain confidential information that supports organisational continuity and pose a need to stored and secured in a pre-determined way that does not compromise their safety and integrity.

1.9 Scope of the project

This covered the conceptual scope, geographical scope and time scope as described below.

1.9.1 Conceptual scope

The project was confined to the different aspects of the Records storage and security Procedures at NMC registry.

1.9.2 Geographical scope

The project was carried out in the registry of NMC located along Kampala-Hoima highway in Wakiso district.

1.9.3 Time scope

The project was conducted for a period of four (4) months, from August, 2022 to November 2022. This time period encompassed proposal writing, data collection and report writing.

1.10 Definition of operational terms

Procedure Manual: a detailed document that specifies step-by-step rules for records and information management in an organization (Norris, 2002)

Records: Information created, received, and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in transaction of business (ISO, 2016)

Records Security refers to the policies, procedures and technical measures used to prevent unauthorized access, alteration, theft and physical damage to information (SAA, 2016). According to (Cunningham & Montana, 2006) record security is one of the most important aspects of record management which is along storage discipline in many organizations.

Records storage: Read and Ginn, (2015) define storage as the actual placement of records according to a plan on a shelf or file drawer. Also, storage can be electronically saving a record to a medium readable by a computer.

Storage equipment: shepard and Yeo, (2003) defines storage equipment as anything used to house records and archives in a safe and secure manner, while facilitating ease of retrieval for reference purposes. Sufficient and appropriate equipment and materials should be provided for the handling, storage and preservation of records throughout their lifecycle.

1.11 Conclusion

This chapter covered the introduction to the project, background of the project, problem statement, purpose of the project; objectives, research questions, significance of the project, scope of the project and the definition of operational terms.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the literature related to records storage and security in organizations, giving insights on the literature about the types of records, procedures followed in storage and security of records, equipment used for storage and security of records, management of records storage and security, challenges of records storage and security and best practices of storage and security of records.

Sara efrat efron (2019) defined literature review as a search and evaluation of the available literature in your given subject or chosen topic area. A literature review presents to readers an in-depth grasp of the subject under study; gaps and contributions to the existing body of agreed knowledge.

The literature review for this project summarized, interpreted and critically evaluated the existing literature on records storage and security in order to establish current knowledge as recommended by Hempel (2019).

2.2 Types of records

There are many types of records which are generated by the organization and as described by different scholars, these include the following.

2.2.1 Operational records

Operational records are records that implement administrative policies, procedures and operations as their name suggests, provide for daily operations of an organization (Franks, 2018).

Operational records basically provide direction and instructions on how an organization operates (Penn and Pennix, 2017).

Typical examples include mandates, procedural records, records that give direction, the equipment and visitor's register.

2.2.2 Administrative records

Administrative records are records that help employees perform office operations (Read and Ginn, 2015). They are fiscal records used to document operating funds and other financial

process for example policy and procedures manuals, handbooks, organizational charts, tax returns, invoices and purchase and sales orders.

2.2.3 Financial records

These are records created for accounting and fiscal use for example financial statements and tax forms, formal documents that are representing the transaction of the business, individual or other organizations (Touray, 2021).

Touray (2021) further noted that financial records permit accountants to prepare useful financial reports for managing the organizations resources.

2.2.4 Legal records

Legal records have evidence of legally enforceable rights or obligations of the government. Legal records facilitate the organisation in complying with regulatory frameworks and audits (Cunningham and Montana, 2006).

Typical examples include records related to property rights like land, probate, contracts, agreements, leases, licenses or executive orders, rules and regulations, records relating to citizenship rights: vital statistics, such as birth, death, marriage, some legal proceedings, and criminal cases, records relating to employment: veterans' records involving legal rights attached to employment, basic state personnel records, and, in some cases, payroll records, records containing information required to protect the State against claims or to enforce statutes: executive orders, rules, regulations, and records to establish or support judicial opinions and interpretations.

2.2.5 Fiscal records

Records that have fiscal value relate to an agency's financial transactions. These may be budgets, payrolls, vouchers, and accounting records. After records have served their primary administrative purpose, it may be necessary to preserve them to document the expenditure of public monies and to account for them for audit purposes and requirements (Coleman, 2011).

2.2.6 Historical records

Read and Ginn (2015) defined historical records as records that document the organization's operations and major shifts of direction over the years for example minutes of meetings,

corporate charter, public relations documents and information on corporate officers. Records can be created in a variety of forms. These forms include paper, image and digital based records and are explained below;

Paper based records: these include all information recorded on any form of paper which support the operational functions of the organization such records may include memos, business forms and application forms. All paper records are referred to as hard copies.

Image based records: these include all information recorded on any type of microfilm which supports the operational function of an organization is considered as image-based records, such records are generated from hard copies that are filmed and then reduced and are sometimes referred to as micro images.

Digital based records: these include all recorded information in digital form on computer disc, computer tapes, and they are also called electronic records. Digital based records are also usually referred to as soft copies or soft records.

2.3 Procedures followed to ensure proper storage and security of records

2.3.1 Records storage procedures

Storage is a process of keeping records/information in a particular place until when they are needed. A school may keep records on a variety of media: paper, magnetic media such as computer disks or tape, and micrographics (documents reduced and placed on film).

A good records management system includes a program for analysing the needs of the organization to determine which storage medium or combination of media is best. Each medium has particular advantages and disadvantages.

Storage equipment such as filing cabinets should be chosen with specific storage media in mind. For example, if your records are on paper, you might use a filing cabinet. This cabinet would not be appropriate for filing micrographic records. You may need file folders to hold paper records, but you would not use them for storing computer tapes (Oliverio, Pasewark, and White, 2006).

There are many records storage practices done to ensure proper and efficient records storage for example identification and assessment of records storage areas, training and awareness, use of technology in records storage among others and these are mentioned below.

Identification and assessment of records storage areas

This practice includes identification and assessment of probable causes of concern such as heating, fire, electronic faults, and flood. Computer failures, viruses in electronic storage devices, backup devices and other external and internal issues (Smallwood, 2013).

This storage practice makes any issues relating to records storage to be detected earlier enough and corrected before the situation gets worse (Cowling, 2013).

Awareness and training

As part of records storage sensitization programme, organizations carry out staff training on the modern and best practices for records storage, vulnerabilities to records and other issues and this is mostly done through workshops and seminars.

This makes the records staff and users to be abreast with up-to-date knowledge on records storage (Magill, 2005).

Backing up records

Furthermore, another best records practice is backing up files in both electronic and paper files. Backing up records is ideally one best practice which every organization has to do to protect their vital records.

According to Kamatula (2003) organizations should establish a schedule for backing up critical computer files frequently and all files periodically and these backup files should be stored in a secure offsite facility. Therefore, it is a good practice to have backup systems-including backup of files and backup of systems of records applications (Saffaday, 2009).

Automation

Automation is yet another best practice for improving records storage. It refers to the use of machines in carrying out records work for example robots, biometric machines, digitization among others. (Stephens, 2007).

Setting up rules and policies on records management

Rules and regulations and policies govern the organization in proper records management for example they guard records against hazards that pose specific dangers to records such as no smoking, access to records among others (Magill, 2005).

Putting notices such as ‘no smoking’, ‘no food and drinks’ in the storage area can lead to proper records storage conditions.

2.3.2 Record security procedures

Security is the degree of protection against danger, loss, and criminals. It goes without saying that records should be protected both from damage and unauthorized access. The method of security depends entirely on the storage method that had been adopted.

Where computers are used, confidentiality can be maintained by giving password to a document or file which makes it difficult for another user who does not know the password to gain access to the file. Most organizations now store their information in the computer thereby creating more space in the office. Below are some of the measures applied to protect records.

Access to records

The level of security required for a record varies, depending on the content of the record. Some records may have a very low level of sensitivity, requiring very little or no security. Others have a high level of sensitivity, needing high security (Iannarelli and Michael O’Shaughnessy, 2014).

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

Transferring records

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

Authenticity of records

This applies to both hard copy and electronic records. There are some specific difficulties with maintaining the integrity of electronic records, for instance records kept on email, or data contained in a database, both of which can be changed easily. Measures to be taken should include: Controlling access to the record or data, knowing who has responsibility for and access to the record or data, preventing accidental or malicious change as far as possible, checking the accuracy of the information or data recorded, at regular intervals (Colbert and Kott, 2016).

Preservation of records

Organizations should consider which format or medium to keep records in, and choose that which is most likely to be the most secure. And in order to guard against loss they may need to back up their documents, particularly if they are vital or business critical in some way.

Location of records

Records should be stored safely and securely, both electronically and physically. Sensitive documents should not be left on the desk or computer screen when unattended. Organizations should consider the best method of disposal of the records, at the end of their lifetime (Kamatula, 2003).

Preventing fraud and theft

Two records management techniques - certified shredding and off-site storage- is aimed at keeping your sensitive information secure. In many cases, the perpetrator is simply in need of extra cash when he happens upon some financial documents lying about the office; these documents contain information such as credit cards numbers, tax ids, bank account information and more.

Whether carelessly strewn about, or stored neatly in paper boxes, leaving such documents in plain sight is poor records management practice. To remedy the situation, consider storing your financial and other sensitive documents in a safe, secure, off-site records storage facility (Smallwood, 2013).

2.3.3 Best practices in records security

There are many records security practices which are employed to safeguard the security of records for example access control measures, authentication, identification among others and these practices protect records from improper access, accidental loss, theft, damage and unwanted destruction.

Security policy

In far too many organizations security is not taken seriously. Everyone in an organization should be security conscious as well as safety and cost conscious, this can only happen if there is a clearly defined policy approved and implemented at all levels including the top, every individual ought to know what security procedures have to be followed in all situations which they are likely to meet in the course of their work and as part of normal daily activities such as entering the building (Cowling, 2013).

Access control

Access control refers to the process of preventing unauthorized access to records. Once a user has been identified the next step is to determine the rights that the user has in terms of accessing services and information.

Access control to physical storage areas can be enabled through use of access points such as doors and other barriers that can detect unauthorized users and by using adequate locking systems (Duranti and MacNeil, 2009).

Using burglar alarms

MoReq (2008) stated that there are two main types of burglar alarms. One type sets a bell ringing when the circuit is broken by a door or window being opened. The bell may or may not be heard by any burglar and may or may not be reported to the police.

The second type is connected to the telephone which automatically shows an alarm at the local police station in the event of a break-in. Cowling (2013) noted that regular patrols by security men or night watchmen is another method of making entry to the premises difficult.

Putting up security notices

This is yet another practice which is used to ensure records security for example notices instructing visitors to report to the security or reception should be large and clear and in a prominent position so that they are clearly seen by everyone entering the building. The security or reception point must be managed and manned at all times (Harkins, 2014).

Authentication

Mooradian (2018) defined authentication as a process which verifies the identity of an entity which is a source of records request or response in a records interface. Authentication helps in knowing the authorized users of the records and this can be done using keys, passwords cards, and electronic signatures among others.

Installation of integrated security systems

Cox (2001) stated that organizations can improve the security of both their paper and electronic records using integrated security systems which are methods of controlling access to facilities such as office buildings, floors and rooms.

They stated that these include infrared invisible light beams, microwave sensors and ultra-sonic detectors which recognize body heat as well as movement in the targeted areas and transmit the signal to a control panel.

Installation of digital cameras and CCTV

Another best security method is the use of technology enabled monitoring systems such as CCTV surveillance Cameras. To help monitor records insecurity such as theft, unauthorized use, malicious damage to records from the records storage areas, for example the Closed-Circuit Television technology which enable easy monitoring of records movement and authentication and by reviewing CCTV footage, investigators identify criminals and know about any malicious activity which happened in the records storage areas (McLeod, 2002).

Records tracking

The practice of tracking records monitors the movement of records from one office to another and from one person to another hence preventing records against misplacement and loss

(Coetzer, 2012). According to Blake (2014) the practice of tracking records is done by recording where the record is, who has the record, where the record is and similarly the time when the record has been returned. This practice therefore traces the location of the records to ensure their safety alteration from unauthorized users.

Identification system

Mooradian (2018) asserted that every employee should have some form of identification preferably an indestructible card with the photograph and signature of the individual and he also stated that all users should as well put on temporarily identity cards throughout their visit and anyone without any identity should be questioned. McLeod (2002) stated that the practice enables easy tracking of intruders.

In conclusion therefore Penn and Pennix (2017) stated that security measures must seek to protect the most important records and systems and while it is the systems and records that are to be protected and not just the machine that houses them. Security precautions for buildings, equipment and personnel should include the following; Staff responsibility for locking windows and doors at closing time, automatic security alarms, locks on all doors and windows, Strict control of all building keys with locks changed when keys are lost, Strict supervision of non-staff who enter the building especially of cleaners and maintenance workers, bars or toughened glass on ground floor windows (but ensuring bars or grills can be opened in case of fire), nightly locking of all rooms which contain main frame or personal computer and records rooms, and confidential destruction of classified records such as by shredding or burning them.

2.4 Records storage equipment

Read and Ginn (2015) asserted that records managers are responsible for identifying and evaluating the need for storage equipment based on the types of records, records formats, and records location. Levels of importance of the records and the records retention schedule.

Storage Equipment are objects or materials used to store and protect records kept by Organizations. Luyombya (2010) stated that every record must be stored in some way so that it can be protected, located and retrieved when needed. Storing records requires not only storage but also filing supplies. They are very important in providing security to records. Luyombya

(2010) further stated that file cabinets and folders hold the records, lobes, identify the contents within a cabinet and content within a folder.

Kamatula (2003) stated that the storage equipment used in records storage facilities has great impact on the overall management of records in an organization especially their preservation and conservation.

Mooradian (2018) defined storage equipment as anything used to house records and archives in a safe and secure manner, while facilitating ease of retrieval for reference purposes. Sufficient and appropriate equipment and materials should be provided for the handling, storage and preservation of records throughout their lifecycle. He mentions different storage equipment and these include, file folders, filing cabinets, enclosures, shelving among others and these are explained below.

2.4.1 Paper based records storage equipment

Vertical cabinets

For general office use vertical filing cabinets are fitted with drawers which can be obtained to accommodate foolscap. A4 or A5 size documents. The drawers may also be shallow and contain dividers to take cards or microfilm. The cabinets are made of steel or wood. Read and Ginn (2015) stated that vertical cabinet is deeper than it is wide. They said that generally the arrangement of folders in file drawers is from front to back.

These are conventional storage cabinets in one to five drawers. The type and volume of records to be stored determines the width, depth, number and size of the drawers. The most common widths of vertical file cabinet drawers are appropriate for letters or legal-size documents.

Lateral cabinets

These are storage equipment that is wider than it is deep. Records are accessed from the side horizontally Records can be arranged in drawers from front to back or side by side. The standard vertical filing cabinet requires a floor area of approximately a square metre including space to open drawers and for the operator to stand. Magill (2005) stated that lateral cabinets are considered to be the best storage equipment for active records that are frequently accessed for use in reference areas.

Storage boxes

This is the easier and most used equipment for storing semi-active records and archives and these boxes are mostly placed on strong shelves for easy location, retrieval of the request and they save space (Shepherd and Yeo, 2003).

Multi-purpose cabinets

Cabinets can be obtained to provide various kinds of file storage in one cabinet for example lateral suspension filing, card trays, suspension rails for stencils/plans/computer printouts, shelves for ring binders/lever arch or box files.

Mobile cabinets

Another innovation giving maximum utilization of space is the mobile cabinet. A series of lateral filing cabinets set on wheels stand on metal tracks, the cabinet are double-sided as if two cabinets were standing back-to-back. The tracks are long enough to accommodate the cabinets plus the width of aisle.

The cabinets can be moved along the tracks by either mechanical or electrical operation, thus providing space to move between the cabinets from which files are required. Read and Ginn (2015) asserted that these are good in places of limited space where these mobile shelves can be moved as needed for storage and retrieval.

File shelves

is open shelving equipment in which records are accessed horizontally from the open side. Shelf may be an open style or have roll-back or roll-down fronts. They may be stationery shelves or shelves arranged in rotary form. Rotary shelf have a rotating bank of shelves so that records can be stored and accessed from both sides of the shelves (Yusof and Chell, 2000).

Mobile shelves

Read and Ginn (2015) stated that areas with limited space may use mobile banks of shelves that can be moved as needed for storage and retrieval. It is a series of shelving units that move on tracks attached to the floor for access to the records and files. In some movable shelving equipment, the shelves slide from side to side. The records on shelves behind the moved shelves

are then exposed for use. The units may be operated with electronic power or may be moved manually by the operator.

File folders

Duranti and MacNeil (2009) stated that folders are containers used to hold and protect the records in a file. Folders are usually made of heavy material such as manila, plastic or press board and can have either top or side tabs in varying sizes. There are different types of file folders used in the storage of records and they include manila folders and wallet folders.

Read and Ginn (2015) also mention different kinds of folders which include Pocket folder, suspension folder; ring binders, Lever Arch Files and Box files: these have a lid, sometimes with a strap fastening and may have a spring clip inside to hold the documents firmly in place. Box files are ideal for bulky documents such as catalogues, insurance policies or manuals.

2.4.2 Ancillary equipment

Trays

It is essential that documents awaiting filing should be temporarily stored in trays, which are available in wood, metal, plastic or wire mesh. Where large quantities of documents are constantly being received for filing as in a central filing registry, several trays can be used to provide the first “rough” sorting into main filing sections (Smallwood, 2013).

Sorters

To facilitate preliminary sorting prior to filing, there are special devices available. A rack of pigeon-holes marked with letters, number or dates is a cheap, simple and easy method. A flap-sorter is very useful because it requires less space. It consists of hinged flaps on which are indicated alphabetical, numerical and chronological divisions. Documents are placed under the appropriate flap as they are sorted.

Transfer files

There comes a time with every filing system when either the equipment cannot accommodate any more folders, however tightly packed and or there is a vast amount of dead material which needs clearing out. Certain documents must be available for reference for a minimum period even

though they may be non-active. They can be stored in cardboard or steel boxes known as transfer files to ensure that they are kept clean and in correct sequence (Smith, 2016).

Filing shelf and stool

Where a great volume of filing is involved, it can become a laborious job, especially when it comes to filing in the lower drawers of cabinets. There are two simple but useful adjuncts which can be used in this connection. The first is a filing shelf which hooks onto the handle of a drawer and speeds up filing by bringing material to be filed within easy reach.

The shelf can be moved about from one cabinet to another in a matter of seconds and has a paper bail to prevent papers from blowing away and can be provided with a pull-out tray at a suitable height. The second is a filing stool which reduces fatigue for bottom-drawer filing and ensures more accurate filing. (Read and Ginn, 2015)

2.4.3 Computer storage devices

Harvard records management office (2002) stated that in addition to manual storage equipment, there are a number of different computer storage devices that can be used to store electronic records.

Flash drives

Wiley (2006) stated that these are also known as thumb drives and these are used to store electronic records and are extremely popular today.

Conclusively, effective and efficient storage equipment should be purposed by every organization in order to promote a sense of productivity and efficiency in an organization. The most suitable equipment for individual storage system may be expensive, but it may be a worthwhile investment.

On the other hand, the cheapest and simplest is often perfectly adequate. It is essential to determine the types of equipment required on the basis of present and future volume, types of records, operator expertise and availability and security requirements (Robels and Langemo, 2007).

2.4.4 Storage media for records

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

Paper: Each time you print a copy of a letter, record and address on an index card, complete a telephone message form, or print a statistical report or complicated graph from the computer, you are recording information on paper. These paper records are referred to as hard copy. The advantage of keeping paper records is that you can immediately read the information recorded. With magnetic media, on the other hand, you need a display screen or printer to access the information. Two disadvantages of storing records on paper are that such records take up a great deal of space and can be easily misfiled.

Magnetic Media: Magnetic media are reusable and contain information that is stored electronically. The most frequently used forms of magnetic media are hard computer disks (hard drives), flexible (floppy) disks, flash drives and tapes. Hard disks are metal disks that are specially magnetized to hold the information put onto them and are usually internal to a computer. These disks vary in size and may hold up to nine gigabytes (9,000,000,000 bytes) of information.

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

Tapes: Tape is used primarily for backing up (making a copy of the files on) hard drives and for holding large amounts of information that is not used on a regular basis. Because tape may be of great length, it has a large storage capacity. However, with the invention of the compact laser disc, tape may become a thing of the past. Compact discs are far more portable than tape and hold equally large quantities of information.

Flash Drives: A **USB flash drive** consists of flash memory data storage device integrated with a USB (Universal Serial Bus). USB flash drives are typically removable and rewritable, much smaller than a floppy disk, and most weigh less than 30 g.

Compact Discs (CDs): The CD or compact discs, is another storage form. Information is put on the disc by laser and read by a CD drive in the computer. These discs are in many ways better than most magnetic media, such as floppies, because they can hold more information than any but a hard disk.

Micrographics: Micro imaging system also called micrographics, photographically reduce documents to a fraction of their original size to fit on film or microfiche.

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

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

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

2.5 Challenges of records storage and security

According to Luyombya (2010), there is evidence that clearly shows that developing countries have severe records management problems as a result effectiveness public administration is directly undermined in a number of ways. He added that the administration of justice is greatly compromised and government revenues cannot be fully collected because the records on which their calculations must be based on are not comprehensive enough. He also says that since records are kept in poor environment, proper auditing is practically impossible, concluding that good management cannot be achieved in an environment in which records are poorly managed and situations in which records are regularly missing.

2.5.1 Challenges in records storage

Duranti and MacNeil (2009) stated that there are many different challenges that are encountered by records during their storage which lead to their deterioration. Perhaps the most significant factor is the nature of records materials themselves: many records and archives are composed of materials that are acidic, which means they are inherently fragile and prone to degradation. Other factors in the degradation of records are fluctuations in or excessive levels of temperature and relative humidity; excessive exposure to light; air pollution; water damage; destruction from biological agents such as mould or insects; or abuse and mishandling.

Lack of clear policies on records management

Mbaaga (2002) pointed out that lack of clear policies on records management and disposal in an organization may often bring about inadequate storage managements which includes poor, disorganized and inadequate or little space which in turn impacts on the efficiency and effectiveness of service delivery if for example records are simply piled up without any set order it makes retrieval extremely very difficult.

Tear and wear

Abioye (2007) asserted that tear and wear are the most common challenges that are attributed to long term access and use by information users. He further noted that most of the collections are transferred to the archives after they have been continuously used and as such, they lose their physical integrity and this is most true with paper-based records.

Lack of professionalism in records management

Ngulube (2004) stated that there is lack of professionalism in Records management. People who manage records in organizations in Africa lack the skills required for managing records throughout their entire life cycle which also includes knowledge on proper records storage. He stated that in most cases they do not have the competencies of adequate training in the management of electronic records.

Fire and water

Fire and water are also records storage concerns. Fire can cause total ruin to records, by burning records storage materials completely or by distorting data with soot from the fire, (Chaturvedi, 2020). Fire can be caused accidentally through short circuit, abandoned cigarette ends, or intentionally when someone sets out fire. Interestingly most damages to records during fire outbreak come about when putting out fire with water. Water is life to living things but not records in that it causes paper records to tear, ink dissolves onto the records and hence rendering them useless.

Disasters

These are unlikely to occur but they cannot be ruled out because sometimes they happen and cause a great deal to loss and destruction. These include natural disasters like floods, earthquakes, lightning, storms and others. Artificial disasters include fire outbreak, power failures among others (Sorkhabi, 2015). According to Kelvin, Public Sector Records Management: A Practical Guide (2007), the risk of records loss from disasters is catastrophic, yet it is difficult and at times impossible to protect against all disasters.

Duplication of records

Penn and Pennix (2017) stated that poor records management practices such as poor records storage led to duplication of records especially when records officers assume that they lost a given record yet it is required for the daily operations of the organization. Records personnel tend to create substitute records the moment they realize that they lost the original record. This increases the rate of duplication in a given organization and reduces the integrity of a given record for chances of manipulation of different records are measurable.

Limited space

Registries and records centres have limited space observed that due to the high number of records accumulating every day; the space to which records can be put is very small as compared to the rate of their increase and disposal. Most of the generated records are managed in hard copy or paper form and paper is affected by pests, dust light from the bulbs and sun, humidity heat and mechanical damage due to poor handling practices which results into a record lasting for short period of time than expected (Okello_Obura, 2011).

Loss and misplacement of documents

Mooradian (2018) stated that evidence clearly shows developing countries have severe records management problems, as a result of effectiveness public administration is directly undermined in a number of ways. He added that the administration of justice is greatly compromised and government revenues cannot be fully collected because the records on which their calculations must be based on are not comprehensive enough.

He also said that since records are kept in poor environment, proper auditing is practically impossible, concluding that good management cannot be achieved in an environment in which records are poorly managed and situations in which records are regularly missing.

2.5.2 Challenges of Electronic records storage

Smallwood (2013) stated that the growing use of information technologies in records storage creates a lot of problems in securing of records in both public and private organizations. He added that in Africa most of the countries have few knowledge on proper management of electronic records. Ngoepe (2017) stated that there are challenges affecting electronic records and some of the mentioned include;

Computer viruses

These are rogue software program created and designed by malicious computer wizards and these attach themselves on other computer programs such as the recycle bin, Microsoft office among fff4rtytrrtyybnn others.

Incompatibility and interoperability of data storage media and systems

According to Marcia (2012), increasing data storage capacities and the fast development, implementation of proprietary compression and back up technologies are hastening the obsolescence and increasing the incompatibility and interoperability of data storage media and systems.

Worms and trojan horses

Lastly, worms and Trojan horses are storage challenges for electronic records. These are malicious software which are capable of destroying files or records within the hard drives of computers, flash disks and other storage media rendering them useless (MoReq, 2008).

2.5.3 Challenges of records security

Security refers to the policies, procedures and technical measures used to prevent unauthorized access, alteration, theft or physical damage to information (Ngoepe 2017). According to Stewart and Melesco (2002) record security is one of the most important aspects of record management which is along age discipline in many organisation. Security measures protect records from improper access, theft, damage and un wanted destruction.

Duranti and MacNeil (2009) stated that security ought to be the top priority in every organization, not only against the more dramatic risks but against every day risks such as pilfering, by the public and by staff, against fire and safety hazards and against carelessness generally. In large organizations security is under the control of a senior executive, in a smaller organization the office manager may well find himself responsible for the normal confidentiality requirements in any office

Penn and Pennix (2017) stated that Security violations are of two types intentional or negligent and both are generally easy to prevent. (It is often argued that the best source of security is complete lack of records management on the assumption that the intruder could sift through the disorder.

Duranti and MacNeil (2009) stated that there are many challenges which affect records security which result from un authorized visitors, undesirable staff, unguarded entrances and exits and obscure places and these challenges are mentioned below;

Improper disposal of records

Some records disposal methods which do not completely destroy records raise security questions. Take for instance most methods used to erase hard disks, actually involve rewriting header files (not actually erasing the entire disk) implying that sensitive data may be left on magnetic media, which can be decoded easily after a computer is discarded or retired Even the memory chips in some electronic devices scanned for remnants of data or files. Similarly, some paper records destroyed or disposed in ways like improper shredding and discarding compromises records privacy (United Nations 2017).

Records breaches

Apart from the above, there are records breaches which are a security concern. Records breach occurs when sensitive information lands into wrong hands (United Nations, 2017). This can happen when theft or loss of information has occurred or when there are unauthorized viewings of information (Yaya et-al, 2015). records breaches are mostly as a result of sloppy security practices by records users and employees.

Theft and sabotage

Penn and Pennix (2017) stated that theft and sabotage are not natural disasters as are fires and floods, but they are disastrous acts to the organization that has had its records purloined or destroyed and these are mostly from unauthorized users and the records staff themselves who maliciously destroy the records.

User negligence

User negligence can also be a serious security concern. Sometimes lack of concern by users can cause security issues to the records ignorantly or knowingly (Saffaday, 2009). Negligent practices like sharing or writing down passwords and sensitive data, using weak password, losing security devices such as identity cards to mention but a free. User negligence is mostly caused by lack of responsibility for records security issues by employees and records users.

Employees' behaviors and conduct

Employees' behaviors and conduct is also a serious security issue. Employees can do many insecure things such as influencing unauthorized access to records through their social interaction, customer interaction or emailing documents and data, mailing and faxing documents, removing or disabling security tools, letting unauthorized persons into the office, opening spam emails among others.

Conclusively there is no doubt that most organizations rely mostly on paper records the most common challenges are theft, loss and misplacement, fire and damage and for electronic records, employee breaches, viruses and other malware programs are common challenges (Cox, 2001).

Electronic records and systems especially those on personal computers are much more vulnerable to negligence and crime and the consequences much more severe than with paper records. It takes

time and hard work to break into the records store but it takes only moments for a user to leave a screen or print out visible to the wrong person or to mistakenly enter data or to leave a disk in an unsafe place such as a car (Penn & Pennix, 2017).

2.6 Benefits of the procedures manual

According to Buggy, (2010) In spite of the time and effort required to develop effective operations manuals, the dividends the effort pays to the organization are high. A well-designed policies and procedures manual provides many benefits to the organization including:

Management Tool: The operations manual provides managers with the blueprints of the organization. It provides guidance for doing the work of the organization, and it provides documentation of how the work is intended to be done.

Training: Good policy and procedural manuals are instrumental in providing training to employees, both new and veteran. Regarding agency goals, objectives, functions, and activities.

Reference Document: The manual provides a single, easily-accessible source of authoritative answers to questions about official procedures and policy positions.

Information Repository: Operations manuals provide a central repository for often scattered official documents for easy reference, review, and revision.

Organizational Archive: A well-maintained and frequently up-dated manual provides a record of organizational changes over time in programs, patentees, and philosophy.

Implementing Records storage and security procedures can be challenging. Institutions, departments, and individuals develop their own ways of managing their records over time, so it can be difficult to get staff engaged and willing to change ingrained habits. When preparing to develop and implement new or improved procedures, remember the following:

Be engaged. Senior management should understand the importance of Records storage and security procedures to the legislated obligations of the acts and actively support the efforts to introduce or update Records storage and security procedures in the institution.

Communicate often. It is essential to keep Records storage and security procedures top of mind to ensure that staff don't slip into old practices.

Communicate clearly. Communication and training on RIM should be clear and straightforward, using plenty of examples and real world scenarios so that staff can fully understand their responsibilities and how to implement new procedures.

Commit to maintaining practices over time. Implementing Records storage and security procedures is not a simple one-time event. It takes time and dedication to ensure that best practices become everyday practices.

2.7 Requirements for setting up procedures for proper storage and security of records

According to Joseph et al. (2012), organizations need to comply with records management procedures, as prescribed by ISO 15489 of 2001. Universities, therefore, need to be familiar with these ISO 15489 (2001) provisions and those as revised in 2016 to understand how and under what circumstances the records management procedures should be applied. According to Healy (2010), the procedural requirements in ISO 15489 will assist jurisdictions that are developing their own records management procedural specifications or looking to adopt them from elsewhere, or will inform the update and revision of previously existing procedures, including electronically captured, stored and retrieved records. With the existence of more records and in different formats, the need for records management procedures for all types of records becomes immense (Kyobe, Molai and Salie 2009). Smith (2012) recommends that full support from top management and commitment to the development and implementation of records management procedures are essential.

Research work by Coetzer (2012) and Magara (2006) suggest that it is policies and internal regulations that drive records management procedures. Popoola (2009) agrees that a policy defines procedures for all records regardless of the records format, whether paper or electronic. Thornhill (2008) notes that it is also important for managers to ensure that staff understand how records management procedures affect their work. Employees need to bear in mind that it is their responsibility to develop and adopt records management procedures.

Kendall and Mirza (2006) emphasise that, for sound records management practices to take place, the head of the university should appoint a records manager at senior management level to whom the university can delegate the responsibility of ensuring that sound records management procedures are put into practice.

A trained records manager is needed to spearhead the implementation of records management practices (Muhenda and Lwanga, 2011). Atulomah (2011) cautions that records managers should develop records management procedures and ensure that they are endorsed by the heads of the institutions and their top management teams, otherwise their full implementation will not be realised. Ifedili and Agbaire (2011) recommend that a records manager should be appointed to facilitate the free flow of records through the university, so as to ensure that information is rapidly available where and when it is needed.

Nasieku, Kemoni and Otike (2011) hold that the records manager should be appointed to help the records users do their jobs better and more easily by enforcing the application of records management procedures. Purcell (2012) advises that adherence to records management procedures should be continuously monitored and reviewed by the records manager to ensure compliance.

Ensuring compliance with records management procedures implementation would require continuous sensitisation of the university staff (Ifedili and Agbaire 2011). This will help in understanding the procedures required to facilitate the control, custody, care and disposal of the university's records in an effective manner for quality and better services (Ifedili and Agbaire 2011). Consequently, Asogwa (2012) and Iwhiwhu (2005) advise that there is a need to streamline records management procedures in universities through continuous training of staff to enable them to manage records efficiently and effectively. One can, therefore, assert that service delivery requires focus on records management procedures as the most effective vehicle for managing records in today's universities.

2.8 Research gap

A lot of research has been carried out and published by different scholars regarding records management in areas of conservation and preservation. However, the researcher has found out that regardless of the insecurity in records at the council there is nothing much done in records storage and security and hence this calls for deeper assessment in such areas. The researchers have therefore targeted to do research in records storage and security so as to cover up the gap.

2.9 Conclusion

Duranti and MacNeil (2009) stated that records storage and security are important issues which every organization must focus on to ensure efficient and effective records management. This chapter has therefore presented the types of records, storage equipment, storage and security challenges, and finally best practices in records storage and security and the research gap.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, area of study, population, sampling and sample size, data collection methods, instruments, research procedures, data quality control, validity, reliability, data analysis, issues relating to ethical considerations and limitations of the project.

3.2 Research design

Creswell (2014) defined research design as the overall strategy used in research to integrate the different components of the project in a coherent and logical way, thereby, ensuring that the researcher effectively addresses the research problem. It constitutes the blueprint for the collection, measurement, and analysis of data (Pagadala, 2017).

The researcher used the case study design in gathering information from people's opinions and views about Records Storage and Security at Nansana Municipal Council and this design enabled the researcher to describe the characteristics of a large population. Case study refers to an empirical inquiry that investigates contemporary phenomenon in-depth and within its real-life context (Yin 2009).

It is often used to narrow down a very broad field of research into one or a few easily researchable examples. The case study research design is also useful for testing whether a specific theory and model actually applies to phenomena in the real world. It is a useful design when not much is known about an issue or phenomenon.

3.3 Area of study

The project was conducted at Nansana Municipal Council registry.

3.4 Population of the project

Kumar, (2011) defined population as the people that the investigator has in mind from whom he expects to get information. The population study can also refer to a group of individuals, objects or items from which the samples are taken for measurement (Paul and Lemeshow, 2008). Nansana Municipal Council registry is comprised of Six (06) staff involved in the registry/records management work. These include one (01) Senior records officer, two (02) Records officers and three (03) Assistant records officers

3.5 Sampling and sample size

Paul and Lemeshow (2008) defined sampling as a process of selecting a number of individuals or objects from a population such that the selected group contains elements representing the characteristics of the entire group. A sample is a group of people, objects, or items that are taken from a larger population for measurement. (Crossman 2018).

3.5.1 Sample size

The project used purposive sampling to select respondents who were familiar with records storage and security at Nansana Municipal Council. Crossman (2018) defined a purposive sample as a non-probability sample that is selected based on characteristics of a population and the objective of the project. Purposive sampling is also known as judgmental, selective, or subjective sampling. In purposive sampling, the samples are selected on the basis of a very strong reason according to the researcher's judgment about which respondents to choose, and picks only those who best meet the purpose of the project (Carreiras and Castro, 2013).

The sample size of 3 key informants comprised of one Senior records officer, one Records officer and one Assistant records officer at NMC registry were purposively selected from the population of registry workers at NMC registry to participate in the study. The reason behind this selection was the idea that the selected respondents were the key informants who dealt with records on a daily basis thus these had enough information pertaining the project being conducted.

Table 1: Population and sample size distribution

Staff Category	Population (N)	Sample size (n)
Senior records officer	01	01
Records officers	02	01
Assistant records officers	03	01
Total	06	3

Source: Researcher (2022)

3.6 Data collection methods

Data collection methods means the range of approaches used by researchers to collect data that forms the basis for reference and interpretation for explanation and prediction (Marshall and Rossman, 2011). The data collection methods which were used by the researcher included interviews, observation and document analysis.

3.6.1 Interview method

Neuman, (2014) described an interview as a dialogue between the interviewer and the respondent with the purpose of eliciting certain information from the respondents. An Interview can also be defined as the verbal conversation between two people with the objective of collecting relevant information for the purpose of research. (Boyce and Neale, 2006).

The project adopted the personal interview where the researcher asked questions to one records manager, two assistant records managers, one stores manager, one records secretary, one archivist and the system administrator who provided information in line with the project objectives and research questions and responses were recorded in a note book. The reason behind this selection is the ideal that the selected respondents dealt with records on a daily basis thus they provided enough information pertaining the project.

3.6.2 Observation method

Observation is a systematic data collection approach. Researchers use all of their senses to examine people in natural settings or naturally occurring situations (Denscombe, 2003) Participant observation was used where by the researcher actively interacted with the

participants in doing different activities like filing, shelving, archiving and also through observation the researcher involved in finding out the types of records kept at Nansana Municipal Council, storage and security measures used, Storage equipment used, storage space and status of the records stored file covers.

3.6.3 Document analysis

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (Flick, 2014). Analysing documents incorporates coding content into themes similar to how focus group or interview transcripts are analysed (Flick, 2014). Different documents were reviewed and these included mission statements, annual reports, policy manuals, incident reports, newspapers, journals, agendas, hand books and posters. This method supported data that was collected using other methods like the interview and Observation.

3.7 Data collection instruments

The data collection instruments that were used in the project were interview guide, observation guide and document analysis guide.

3.7.1 Interview guide

Before conducting interviews, you need an interview guide that you can use to help you direct the conversation toward the topics and issues you want to learn about (Khan, 2008). According to (Pagadala, 2017) an interview guide lists questions, topics and issues to cover while collecting data especially in qualitative studies. Interview guides had questions which were in line with the project objectives. The data which was elicited was carefully recorded, coded and made ready for analysis. (See Appendix I)

3.7.2 Observation guide

Creswell (2014) stated that an observation guide is a list of aspects or subjects that the researcher could be keen to study in the field. An observation guide was designed prior to the project and it involved physical elements and activities that the researcher focused on while making observations. The observation guide was used to find out the conditions of the records, the storage and security equipment used and the storage space. (See Appendix II)

3.7.3 Document analysis guide

The researcher also designed a document analysis guide which was used to collect secondary data. This instrument guided the researcher to remain focused on the area of study and enabled the researcher to obtain a wider knowledge on the subject and to provide background information related to records storage and security. The documents which were reviewed included the incident reports, newspapers, posters, handbooks, annual statistics and the annual reports. (See Appendix III)

3.8 Research procedures

Before embarking on research the researcher submitted the research topic to the supervisor for approval. After being approved, a research proposal was written by the researcher and as well approved by the supervisor. Before going for data collection, a letter was to be issued from The Director of Studies of East African School Of Library and Information Sciences which introduced the researcher to the host organization (Study area) and this was only issued after the supervisor's approval. The introductory letter was taken to the Directorate of Research, Planning and Development who allowed the researcher permission to conduct research from the organization. Finally, an acceptance letter was issued to the researcher and research was embarked on.

3.9 Data quality control

Flick, (2014) stated that the quality of research report depends to a larger degree to the quality of the data used to compile the report. He further stated that such quality is ensured by three elements of data. These are accuracy, reliability and validity of the data.

3.9.1 Data validity

Krathwohl, (2009) defines validity as the degree to which an instrument measures what it's supposed to measure. Validity is an indication of how sound your research is. Hopkins (2000) also defines validity as how well a variable measure what it is supposed to measure. Validity of information is based on the extent to which the methods measure what they are expected to. To ensure validity, the data collection methods used in this study (interviews, observation and documents) were proved to be reliable.

3.9.2 Reliability of research instruments

Reliability, like validity, is a way of assessing the quality of the measurement procedure used to collect data in a dissertation. In order for the results from a study to be considered valid, the measurement procedure must first be reliable. Reliability also refers to a measure of how consistent the results from a test are. To ensure Reliability the interview guide, the document analysis guide and the observation guide were revised to ensure that no errors were made and that confidentiality was assured. Reliability was also assured through comparing responses from different participants.

3.10 Data analysis

Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. An essential component of ensuring data integrity is the accurate and appropriate analysis of research findings. (The office of research integrity 2018). The data was critically analysed qualitatively basing on research objectives using percentages of responses from different respondents which showed the magnitude of storage and security of records at Nansana Municipal Council. The data was fully interpreted and presented according to the required procedure and guidelines. It involved coding the data by building themes and sub themes.

3.11 Ethical considerations

Ethical considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between acceptable and unacceptable behaviors (Center for Innovation in Research and Teaching 2018). Awareness of ethical issues in research protects the integrity of the researcher and ensures honest research results. Some of the ethical issues which were considered included:

Research participants were informed that they were free to participate in the research or not to and were as well assured of confidentiality by not disclosing their names and they were also assured that the data that was collected from the interviews was to be treated as collective responses from all the respondents. Furthermore, all sources used in the project were acknowledged through citations and the research instruments were revised which ensured that embarrassing questions were avoided. Finally, the researcher also made sure that the research did

not pose any physical or psychological danger to the respondents and this was done through avoiding emotional questions.

3.12 Limitations of the project

Limitations are influences that the researcher cannot control. They are the shortcomings, conditions or influences that cannot be controlled by the researcher that place restrictions on your methodology and conclusions. The following were some of the limitations that the researcher faced.

Bureaucratic tendencies: during request approvals to get access to conduct research at Nansana Municipal Council this is because Police Information flow is still through the old vertical procedure of operations. The information flows through the channels of command, even if it is classified as distributable. For instance, to conduct research from Nansana Municipal Council, the researchers had to get written permission from the council; there were also high levels of controlled access to some sections of council records. This was overcome through following the required procedures given from the headquarters.

Bias: The researchers also faced a problem of bias by some respondents who were hesitant to reveal correct and relevant information even though anonymity and confidentiality were assured. The researchers overcame this through being hospitable to every respondent and greeting them before interviewing them and ensuring them of the confidentiality.

Limited research documents: The station did not have enough documents to be reviewed like the journals, manuals, posters and handbooks. To overcome this, the researchers used the internet to get some of the information online and also utilized the few materials which were available.

3.13 Conclusion

The above presentation has described the research methodology that was used in the project. The methodology involved examining Records Storage and Security at Nansana Municipal Council. It highlights the research design, area of the project, population of the project, sample and sampling techniques, data collection methods, data collection instruments, data analysis, ethical issues, data quality control and limitations of the project and chapter four showed the presentations, interpretation, analysis and discussion of the project findings.

CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents the findings of the project and the subsequent interpretation of the data collected about storage and security of records at NMC registry.

Data was collected using face to face interviews, observation and document analysis in relation to the project objectives which included; to find out the various categories of records kept at Nansana municipal council, to examine the current records storage and security practices at Nansana municipal council, to determine the challenges associated with the absence of a records storage and security manual at NMC registry, and to develop a manual for proper storage and security of records at NMC registry.

4.2 Description of the respondents

The researcher sought to establish the characteristics of the respondents as it would help in understanding the study participants better considering their characteristics before engaging them deeply into other matters pertaining to the study.

Findings showed that all the staff in the registry were trained and as such, they were capable of managing records processes. These respondents were purposively selected for data collection because of their role in managing records in the central registry.

These included; one Senior records officer, one Records officer and one Assistant records officer at NMC registry.

4.2.1 Response rate

The project targeted 3 key informants to participate in the study. These included all the aforementioned respondents; one Senior records officer, one Records officer and one Assistant records officer at NMC registry who all accepted to participate in the study thus yielding a full project response rated at 100.0% as shown in Table 2 below.

Table 2: Response rate

Staff Category	Response rate	Percentage
Senior records officer	01	33.3%
Records officer	01	33.3%
Assistant records officer	01	33.3%
Total	03	100

Source: Primary data (2022)

4.2.2 Gender of respondents

Among the 3 respondents engaged for their response during interviews, 2 were females whereas 1 was male. Categorically, this showed that, NMC registry employed both females and males to execute registry duties. Table 3 presents this gender distribution as established from the analysed data.

Table 3: Gender of respondents

Sex	Response rate	Percentage
Male	01	33.3%
Female	02	67.7%
Total	03	100%

Source: Field data (2022)

4.2.3 Age of respondents

The researcher engaged respondents of different age and age category. The findings showed that, among the 3 respondents engaged for their responses during interviews, 2 respondents were aged between 40-49 years whereas the other was aged between 30-39 years. These findings are presented in Table 4 below

Table 4: Age group of respondents

Age	Response rate	Percentage
30-39	01	33.3%
40-49	02	67.7%
Total	03	100%

Source: Field data (2022)

4.2.3 Education level of respondents and years of service

The project engaged respondents with differing education qualifications. The findings for example revealed that, out of the 3 respondents engaged in interviews, 2 respondents had a Bachelor's degree whereas the other had a diploma. Interestingly, all of them had served for more than 2 years at NMC registry.

Table 5: Education level of respondents

Level of education	Response rate	Percentage
Diploma	01	33.3%
Bachelor's degree	02	67.7%
Total	03	100%

Source: Field data (2022)

4.3 Types of records kept at NMC registry

Objective one of this project sought to find out the various categories of records kept at NMC registry. Through triangulation of interview, observation and document analysis methods, the researcher found out that NMC registry kept majorly; administrative, financial, legal, personal and policy records.

When asked during interviews, “*What types of records are kept at NMC central registry*” respondents responded with mention of different types of records. These responses were analysed and presented thematically respective of each record type as follows.

Administrative records

The research findings indicated that the municipal council keeps administrative records which are records of evidential and legal value.

“We have administrative records which are created for documenting policies, procedures and guidelines, for example; directives, rules regulations, manuals reports. Administrative records especially policy documents ensure that staff comply with NMC set principles and also work directly with other members” (Respondent 2).

Financial records

The project findings revealed that these are records that deal with the use, allocation of funds and activities pertaining to financial transactions of NMC.

“The financial records we have include audit reports, financial statements, receipt books, payment vouchers and annual reports. NMC maintains financial records about audit reports, procurements reports, contracts and agreements detailing the policies between the organization and its clients” (Respondent 1).

Legal records

The project findings revealed that legal records were part of the records kept at the registry and these are records created to evidence business transactions or legal decisions

“We also have legal records which include records relating to property rights, land, probate, contracts, agreements, leases, licenses. Records relating to citizenship rights: vital statistics, such as birth, death, marriage, and some legal proceedings” (Respondent 3).

Personnel records

These are records pertaining to employees of an organization,

“We keep personnel records such as application letters, appointment letters, performance appraisal forms, attendance, annual leave and sick leave records, retirement records, education, training and development records. They are obtained from processes of recruitment and appointment, induction and initial training, confirmation in

posts, performance appraisal, promotions, transfers, disciplinary proceedings and dismissal, attendances, death in service, retirement and pension payment” (Respondent 2).

Policy records

“We also have files containing policy records pertaining to plans, methods, techniques, or rules which the agency has adopted to carry out its responsibilities and functions include three basic categories. More so, there are vital records which are essential to the continuation of NMC business in the event of catastrophic loss. Some vital records are held by records offices either because they are active or because they have been recently closed. All these records were generated internally and externally especially mails and correspondences” (Respondent 1).

Records formats created and received in the Registry

The researcher asked the respondents a question “What records formats do you keep in the registry?” and the responses were as follows;

Paper based records

According to the interviews that were conducted, respondents pointed out that papers based records are the commonest types of records created and received.

Respondent 3 commented that;

“Most of the records we store here most are in paper based formats as you can see those manuals, monthly district reports, personnel files, and finance and administration records”.

The researcher attested to this finding through observation. Paper records were kept in large volumes more than electronic records mainly because incoming correspondences were mainly in paper formats.

Electronic records

The research findings accordingly indicated that electronic records are stored in the registry however these were few in number.

These records in electronic formats are generated by the staff and received through scanning and emails (Respondent 3).

The researcher observed only 2 computers in the registry implying there were a few electronic records managed in the registry

Discussion of findings

Administrative records; they are created for documenting policy, procedures and guidelines for example directives, rules regulations, manuals reports. Administrative records especially policy documents ensure staffs comply with NMC set principles and also work directly with other members. This is in line with Stewart and Jeffery (2002) who noted that administrative records are further sub-divided into policy and operational records. Policy records include plans, methods, techniques or rules which the agency has adopted to carry out its responsibilities and functions. Operational records are necessary to implement administrative policies and operations.

Financial records; include audit reports, financial statements, receipt books, payment vouchers and annual reports. NMC maintains financial records concerning their obligations, agreements, and financial performance, primarily to satisfy legal requirements for example financial claims, audit reports, procurements reports, contracts and agreements detailing the policies between the organization and its clients.

Legal paper records; these files enclose records of legal value include those with evidence of legally enforceable rights or obligations of the institution or state. These include records relating to property rights: land, probate, contracts, agreements, leases, licenses. Records relating to citizenship rights: vital statistics, such as birth, death, marriage, some legal proceedings, and criminal cases.

Personnel records; such as application letters, appointment letters, performance appraisal forms, attendance, annual leave and sick leave records, retirement records, education, training and development records. The active personnel records also provide the authority to determine pay and other benefits, including pensions. Personnel records must be accurate and complete, and they must also be trustworthy to both the organization and the employees.

Policy paper records; these files contain records that relate to the organization such as plans, methods, techniques, or rules which the agency has adopted to carry out its responsibilities and

functions include three basic categories. Organizational documents like budgets and budget planning records, fiscal records, organizational and functional charts. Governing documents like manuals, directives, orders, and interpretations issued from top authority levels, correspondence files of high-level officials, regulations, circulars, instructions, memoranda or regular issuances that establish a course of action, and staff studies or special reports relating to methods of workloads and performances.

Vital records; they are essential to the continuation of NMC business in the event of catastrophic loss. Some vital records are held by records offices either because they are active or because they have been recently closed. Other vital records are held by the records centre. This finding agrees with Read and Ginn (2015) who noted that registry staff must be aware of the existence and state of vital records in the records offices and records centre. Records centre staff must collaborate with records office staff to ensure that vital records are given priority treatment in the event of a disaster.

4.4 Procedures followed to ensure proper storage and security of record

Objective two of this project sought to examine the current procedures followed to ensure proper storage and security of records at Nansana Municipal Council registry. Through the application of various methods, the researchers established as follows. Respondents were asked “Do you have records storage and security procedures in the organization?” and below were their responses

Respondent 1 responded,

“No, we don’t have established procedures followed in the storage and security of records”

In response the researchers proceeded “If no, what do you do to ensure proper storage and security of records?”

The Respondent 1 said,

“We have got various ways we ensure proper storage and security of records and these include: storing the records in lockable cabinets, temperature regulation, limiting access to highly confidential records, using passwords in computers”

The Respondent 3 responded,

“The central registry has good quality door hinges that cannot be easily removed therefore thieves cannot just bypass the locking system. The registry also serves the records users from the counter to deny unauthorized staff has access to the central registry” (Respondent 3).

4.5 Storage of records at NMC registry

Objective three of this project sought to examine the current records storage and security practices at NMC registry and through various methods of investigation, the project found out as follows.

The researchers observed that the central registry had cabinets, tables, office trays, chairs, archival boxes and open wooden shelves for records storage.

The records storage equipment used in the central registry provides appropriate protection for records based on the format, volume of the records and frequency of use and security requirements.

Only records which are required frequently were stored in the registry. Shelves and cabinet drawers hold current records and are clearly labelled to indicate the file number ranges. Respondents recommended that adequate space should be left on shelves or in drawers to allow for easy withdrawal and replacement of files.

4.5.1 Storage status of records at NMC registry

It was observed that the current status of storage of records at NMC was overwhelmed by the increasing volume of information. As a result, there was congestion in the registry which caused inadequate storage area and limited working space.

Records were accommodated in shelves, box files, file folders, cabinets as well as floor space, office trays, tables and chairs. These records in the central registry were classified according to subject matter; records relating to the same topic were classified, filed and stored together.

Labelling succeeded filing which was done immediately upon receipt. The researcher observed that the files were clearly labelled to enable easy identification and more so, the shelves were clearly labelled. Labelling was done to ease shelving since the box files, and file folders were placed on the shelves according to numbers.

The archival boxes were mainly used because they are more preservative compared to other boxes

4.5.2 Records storage equipment at NMC registry

Open wooden shelves: The researcher observed that the central registry used open shelves for storage of records. Respondent 1 pointed out that open shelves save floor space compared to file cabinets. Files were arranged in numerical order and the shelves are labelled numerically. Placing files on open filing shelves reportedly allowed staff to maximize registry floor space and access files quicker with greater accuracy. The files were colour coded which enabled fast retrieval of files and reducing the amount of misplaced information as indicated in figure 3 below.

Filing cabinets: The researcher observed that NMC registry had 1 cabinet and was used to store active confidential paper records. It had enclosures with drawers in which files are stored. The cabinet was made of steel and used a drawer slide to facilitate opening and an out stop to prevent the drawer from being pulled completely out of the cabinet. Access to these records was restricted therefore, all the filing cabinet had a keyed lock to prevent unauthorized access to the records being stored.

Archival boxes: The number of files of maintained in the central registry was very high. These files could not fit on the shelves and cabinets therefore some were stored in archival boxes. However, Respondent 1 still explained that the storage of records in the archival boxes posed a challenge in retrieving the record because the boxes are piled in long piles on top of each other. She further explained that *“these boxes are very appropriate for storage of semi current records because they have low retrieval rates.”* This finding agrees with William (2011) who noted that boxes should be used for offsite storage. They provided files with safe and secure offsite storage cost effective solutions.

Hard Drives: The research findings indicated that NMC keeps electronic records which are kept on computer hard drives as storage equipment.

4.6 The security of records at NMC registry

Interview responses pertaining to this investigation established as follows

Responded 1 reported that;

“We ensure that the entrance to the records office is strictly controlled. Cabinets containing confidential records are kept locked. The outer door to the records office is always locked when no member of the records office staff is present and the windows have security grilles/ bars” (Respondent 1)

“Measures have been taken to prevent and control outbreaks of fire. Smoking in any file storage areas is not allowed. Adequate numbers of fire extinguishers are provided and maintained. Regular fire drills are always held. Eating and drinking in the records office should is not allowed because spilt drinks and food cause serious damage to records” (Respondent 1)

4.6.1 Security threats to records at NMC registry

The project established that security threats to records at NMC registry were as a result of deliberate action and some are unintentional for example act of human error or employee mistakes, unauthorized access, deliberate acts of information extortion, deliberate acts of sabotage or vandalism, deliberate acts of theft, forces of nature like fire, lightning, quality of service deviations from service providers among other several threats that not only endangers the records but also leads to total loss of such information that is very crucial for the organizational operations.

It was therefore suggested that in order to strengthen the level of protection of all the organizational information records inclusive, those responsible for that information needed to understand the threats facing the information, and examine the vulnerabilities inherent in the systems that store, process, and transmit the information possibly subjected to those threat.

4.6.2 Security measures for records at NMC registry

The records officer explained that;

“The records assistant noted that the central registry has good quality door hinges with fixed-pin hinges that cannot be easily removed therefore thieves cannot just bypass the locking system and remove the entire door by the hinges. The registry has a key security system that ensures that only authorized persons have access to keys. The registry also serves the records users from the counter to deny unauthorized staff has access to the central registry” (Respondent 2).

“He further noted that it is obvious that records security awareness can bring many benefits to an organization. However, the return on investment for any awareness program should not be looked at merely from a dollars and cents point of view. Due to the explosive growth of the internet, fundamental records security needs to also grow. Companies that connect to the internet in order to expand their businesses, risk the threat of intrusion. Furthermore, when a company is connected to the internet, any user in cyberspace can have access to its website. Moreover, while many tactics provide an assurance of protection, carelessness can also be a key factor” (Respondent 2).

Respondent 2 stated that records security ensures protection of records to the required level by the nature, content and value of the information. It followed accepted standards in respect of the storage environment in order to minimise the risk of damage, loss and unauthorized access.

The records staff were familiar with guidelines and requirements of records security for example a complete records survey conducted on what media types the organization had used registers, list or index of all the records, a proper method of classifying or arranging records, identification of the value of records and for how long they should be kept, listing the format of records to determine the types of storage required.

Lastly, she noted records regardless of format cannot be stored longer than necessary because unnecessary retention consumed time, space and equipment therefore disposal aids effectively as codified in the retention schedules.

4.7 The challenges of storage and security of records at NMC registry

Objective four of this project sought to determine the challenges encountered in storage and security of records at NMC registry. The records assistant indicated that the NMC security registry faced a number of challenges in the promotion of an efficient records service that meets the needs of the organisation to bring benefits, such as better planning and decision making, cost-savings, increased efficiency and productivity, improved working environments and greater accountability which included limited storage equipment, duplication, miss filing, dust, biological agents and inadequate funding.

Limited storage equipment; the researcher observed that the security registry had few cabinets and as a result, some files were piled on floor, on tables and chairs which exposes the records to

excessive amounts of light and accelerated the aging process of records, fading and drying them. Some files were piled on top of drawer cabinets and expose the records to excessive amounts of light which accelerates the aging process of records, fading and drying them. The storage equipment was not enough. The wooden shelves too were not in good condition yet they had most of the central files.

Duplication of files; The assistant records officer noted that NMC registry had a very big problem of duplication which had led to congestion of files as well as rendered the available storage equipment inadequate especially the wooden shelves and the cabinet. More so, poor records management practices such poor records storage led to duplication of records especially when records officers assume that they lost a given file yet it is required for the daily operations of the organization. Records personnel tend to create substitute files the moment they realize that they lost the original file.

Misfiling and shelving; The assistant records officers revealed that there was miss filing and shelving of files constantly rendering information un available. This was caused by the lack of enough registry stationary like file folders. The files folders were colour coded for different public functional category and sometimes when file folders for a certain category are over, the central registry staff were forced to use those of the other category and possibly miss shelved leading to loss of information and tracking these records is rather so hard consequently resulting into disappearance and loss of these records or files. He further indicated that it also a resulted from serving many users simultaneously.

Dust; the researcher observed that the central registry faced a problem of dust and mainly because some files are stored on open shelves, floor space on top cabinets which exposes them to dust and constantly results into dirt as a result of poor cleaning practices. The dirt stained on the records covering the information and making it hard to identify such information.

Inadequate funding; The senior records officer indicated that the central registry did not have money to purchase enough cabinets and the whole registry just had 6 cabinets. He further added that they lacked enough money to buy metallic shelves because they were still using wooden shelves at most. Lastly, he noted that the registry lacked funds to fully automate and computerize

central records management practices and the current digital system ran concurrently with the paper based records system.

Limited space; NMC registry was very small yet it had to accommodate all the day to day increasing number of files from public ministries. This always led to increased wear and tear of file due to constant handling as sometimes it required records staff to first remove a file to create space so as to gain access to the one, they wanted. This caused delays in service delivery. The duping of files at the floor provided a breeding ground for rodents which feed on paper hence loss of important information. This finding is in line with Smith (2007) who noted that the major challenges of storing records are the huge increase in the amount of information and greater interest on the part of researchers in accessing the stored record.

Light; Excessive amounts of light accelerated the aging process of records, fading and drying them. Sunlight causes fading, and ultraviolet light, found in some fluorescent lighting, will increase chemical deterioration of paper. Limit the amount of light in storage areas as much as possible. Respondents thus recommended storage of records away from light. Keeping them in a windowless room or cover the windows with heavy black curtains and blinds

4.8 The appropriate measures for effective and efficient storage and security of records at NMC registry

Objective five of this project sought to develop a manual for proper storage and security of records at NMC registry. Towards achieving that objective, the researcher found it necessary to determine the measures for effective and efficient storage and security of records at NMC registry which would later inform the procedural manual for records storage and security.

The project established as follows:

There was need for adequate metallic shelves, frequent dusting of shelves, cutting down the intensity of light affecting the records, objective filing and shelving of records, on site system administrator, trained personnel in ICT, closing duplicated files/eradicating and procuring the right folders with the right coding. Records office staff needed to be able to determine the location of every file for which they are responsible. Each time a file moves, it needed to be recorded in the records office. File movements needed to be monitored in a number of ways: on file transit

sheets that are filed in a file transit book, on transit ladders that appear on file covers, on file movement slips and through regular file censuses.

Objective shelving; there was need for effective and efficient filing and shelving to enable timely and informed discussion making. The assistant records officers revealed that there was miss filing and shelving of files constantly rendered information un available. This was caused by the lack of enough registry stationary like file folders. The files folders were colour coded for different public servants and sometimes when file folders for stakeholders were over, the NMC registry staff were forced to use those of the traditional staff and possibly miss shelved leading to loss of information and tracking these records is rather so hard consequently resulting into disappearance and loss of these records or files. He further indicated that it also a resulted from serving many users simultaneously

Maintaining and filing paper records properly. Records contained in paper files needed to be managed according to business and legal requirements. This meant that they should be filed correctly, as soon as possible after receipt or creation. If an action is required, staff needed to still file the document, and circulate the file to the appropriate member of staff. Maintain a record of this circulation, to reduce the risk that the file will be misplaced. Documents needed not to be placed loose into files or folders. This helps prevent loss, damage or destruction.

Provision of modern storage equipment; for example, adequate metallic shelves or mobile shelves and enough cabinets. The researcher observed that the central registry had only one cabinet and shelves which cannot accommodate all the records at the registry. Some files were piled on top of drawer cabinets and expose the records to excessive amounts of light which accelerates the aging process of records, fading and drying them. The wooden shelves too were not in good condition yet they most of the central files.

Closing duplicated files; The senior records officer noted that NMC registry had a very big problem of duplication which had led to congestion of files as well as rendering the available storage equipment inadequate especially the cabinets. More so, poor records management practices such poor records storage had led to duplication of records especially when records officers assumed that they had lost a given file. *“Records personnel tend to create substitute files the moment they realize that they lost the original file.”* Reported Respondent 1

Automation of records. This approach was essential to reduce over reliance on manual systems of records management. Automated systems are more efficient, effective, economical and faster than manual systems. The success of an automated system can be achieved by the records management staff writing convincing proposals to the top management explaining the benefits of automated and computerized records management systems. Alternatively microfilming of semi records that are rather occupying the registry space.

Training the records staff and users on use of ICT. Once electronic records management policies and procedures are created and adopted, it is important to train all staff members in their implementation and to ensure that staff members follow the policies and procedures. Following training, staff members should be held accountable for their records management activities. For good management of e-records, it is important that various categories of personnel involved in the electronic records management.

Controlling and monitoring the intensity of light affecting the records; monitoring light levels regularly, measuring visible light and ultraviolet light, and keep a record of changes in light levels. Keep the lights off or low whenever possible and reduce the wattage of bulbs. Install ultraviolet filters over fluorescent lighting. These filters are plastic covers that slip over the fluorescent tubes, screening out ultraviolet rays. Inspect materials regularly, checking for fading or drying. Closely monitor any items stored in the open or without proper containers.

4.9 Conclusion

Shelves and cabinet drawers should be clearly labelled, and labelling must be kept up-to-date. The records institution should be responsible for all professional and technical matters relating to the delivery of effective and efficient records services including training and inspection. The head of the records office has immediate responsibility for the day-to-day work of the records office and the service it provides to users of records.

CHAPTER FIVE: PROPOSED MANUAL FOR PROPER STORAGE AND SECURITY OF RECORDS AT NANSANA MUNICIPAL COUNCIL

5.1 Introduction

This chapter presents the manual for proper storage and security at Nansana Municipal Council with a proper description of the purpose of the manual, scope and application of the manual, definitions, compliance, procedures, implementation strategy and review of procedures.

5.2 Purpose of the manual

All staff are responsible for the creation and management of records and ensuring proper storage and security of records in the municipal council registry. This manual shall therefore, assist staff to meet their responsibilities.

This manual for proper storage and security of records is designed to complement the records management procedures followed in the management of records at NMC registry.

This manual is aimed to promote consistent and coherent records management processes and practices at NMC registry. The registry unit through their head are responsible for coordinating the development and promulgation of this manual.

5.3 Scope and application of the manual

The manual is designed to provide directions for ensuring proper records storage and security by all full-time and part-time staff, volunteers, consultants, contractors and outsourced providers as part of their duties. The procedures presented in this manual are solely carried out by the NMC registry unit while others are carried out by all the municipal council areas.

5.4 Definitions

Records storage: the actual placement of records according to a plan on a shelf or file drawer. Also, storage can be electronically saving a record to a medium readable by a computer.

Records security: Security in this context refers to the policies, procedures, technical measures used to prevent unauthorized access, retrieval and use of records both paper and electronic

Records management manual: a set of procedures that guide in the systematic control of records creation, receipt, maintenance, use and disposition, including the processes for capturing

and maintaining evidence and information about business activities and transactions in the form of record.

5.5 Compliance

This manual is developed in line with different records management legislations and standards including:

- National records and archives act, 2001.
- Access to information act, 2005
- ISO 15489-1:2016, Information and records management standard

5.6 Records security procedures

All records at NMC regardless of whether they are in paper or electronic form must be protected from damage, loss, destruction, misuse, unauthorized disclosure, modification, and other risks.

Whether or not records are unclassified, confidential, or strictly confidential, all staff at NMC must manage records so that they are safe from loss, destruction, or misuse. These procedures shall be implemented to help offices at the municipal council to protect all their valuable information assets.

Understanding levels of risk

Nansana Municipal Council is constantly exposed to a variety of risks, including: operational risk: the inability to meet operational goals and objectives; financial risk: the failure to document financial decisions or expenditures adequately; reputational or image risk: the loss of status as a reliable, effective, and accountable organization; and physical or security risk: the exposure of personnel and facilities to loss or damage.

The effective management of records can help eliminate or reduce the impact of these risks, by ensuring your office can provide the evidence you need to prove your actions, confirm operational or financial decisions, demonstrate accountability and transparency, and protect employees and property from harm.

Understanding sensitivity classifications

One of the ways NMC registry should manage risks is by classifying documents and records according to levels of sensitivity. The higher the sensitivity of a record, the stringent protection it requires, in order to reduce risk.

Regardless of other specific actions, the registry should always use approved records classification schemes and file plans to ensure records are stored in the right place, whether physical or electronic.

Protecting physical records in offices and storage areas

To protect records and any document correspondences in offices and storage areas, the following basic security measures need to be followed to safeguard them.

- Burglar proofing: Fit doors and windows in all offices and records storage areas with strong locks.
- Keep filing cabinets and other records storage areas locked at all times when not in use.
- Label all files, folders, and boxes so that their contents, dates, and extent are clear.
- Equip offices and storage areas with fire and security alarms and test alarms regularly.
- Only permit access to records storage areas to a small number of qualified personnel.
- Supervise all external visitors whenever they are in offices or records storage areas
- Conduct regular security and facility inspections for all work spaces or records storage areas.
- Transfer records with ongoing value to the archive according to records retention schedules.
- Destroy obsolete and superseded records securely as soon as they are no longer needed.
- Maintain full documentation about all records destroyed or transferred to the archive.

Protecting electronic records in offices and storage areas

To safeguard electronic documents and records, including emails, the following basic security measures need to be followed

- Do not use computer hard drives (C: drives) to store sensitive information. Instead, store sensitive information in formally established electronic record-keeping systems or, in the absence of such systems, in secured network drives.
- Regularly clean up computers and network locations by destroying superseded or obsolete records that have met their retention periods.
- Recognise that deleting electronic records is not the same as destroying them. Work with the IT specialists and the records specialists to guarantee that computer systems are configured to ensure that deleted records are permanently removed from network drives or other storage locations.
- Contact IT specialists for guidance about ensuring your computer systems are configured with appropriate security systems, anti-virus software, password protection, and automatic time out/lock features to restrict access to password holders only.
- Contact records management consultants for guidance about how to create, store, and manage electronic records so that they are safe, accessible, and authentic, now and in the future.

5.7 Records storage procedures

The effectiveness of records storage depends on knowledge of what records are held, what information they contain, in what form they are made accessible, what value they have to the organization and how they relate to organizational functions. Without this knowledge an authority will find it difficult to:

- a) Locate and retrieve information required for business purposes or to respond to an information request;
- b) Produce a Publication Scheme or a reliable list of information assets available for re-use;
- c) Apply the controls required to manage risks associated with the records;
- d) Ensure records are disposed off when no longer needed.

NMC registry shall therefore, need to gather and maintain data on records and information assets. This can be done in various ways, for example; through surveys or audits of the records and information held by the registry. It should be held in an accessible format and should be kept up to date.

NMC registry should consider publishing details of the types of records they hold to help members of the public planning to make a request for information.

Storing records

- Storage should provide protection to the level required by the nature, contents and value of the information in them. Records and information shall vary in their strategic and operational value to NMC, and in their residual value for historical research, and storage and preservation arrangements reflecting their value should be put in place.
- NMC registry staff should be aware of any specific requirements for records storage that apply to them. For example, ISO 15489-1:2016 makes recommendations for the proper storage of documents, mainly those on paper and in electronic format.
- Storage should follow accepted standards in respect of the storage environment, fire precautions, health and safety and, if applicable, physical organization. It should allow easy and efficient retrieval of information but also minimize the risk of damage, loss or unauthorized access.
- Records that are no longer required for frequent reference can be removed from current systems to off-line or near off-line (for digital media) or to off-site (for paper) storage where this is a more economical and efficient way to store them. They should continue to be subject to normal records management controls and procedures. The accessibility of these records should not be compromised.
- The whereabouts of records should be known at all times and movement of files and other physical records between storage areas and office areas should be logged.

5.8 Implementation strategy

All managers and supervisors have a responsibility to foster an environment that promotes good records management.

Effective implementation requires managers and supervisors to train or induct their full-time and part-time staff, volunteers, consultants, contractors and outsourced providers to ensure they understand and apply this manual for proper storage and security of records.

5.9 Review of procedure manual

This manual shall be subject of review following assessment of its effectiveness as may be carried out by the implementers (NMC registry staff) or its users (stakeholders).

The review shall take effect after a grace period of time as may be agreed upon by the Registry staff. For example; once every after two or five years.

The review shall be spearheaded by the registry head in consultation of his subordinate staff and other stakeholders to ensure that all necessary recommendations are put to effect.

CHAPTER SIX: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary, conclusions and the recommendations of the project. It draws conclusions from the findings and makes recommendations for addressing the challenges of storage and security of records at NMC registry. The project used a case study design to carry out investigations and a number of methods namely; interviews, observation and document analysis methods to collect data from the study area. A sample size of 3 key informants comprised of one senior records officer, one records officer and one assistant records officer at NMC registry were purposively selected to participate in the study because they were familiar with records storage and security at NMC. These were engaged in one-on-one face-to-face interviews for their opinions regarding the matters under investigation.

6.2 Summary

A study was undertaken to develop a manual for proper storage and security of records at NMC registry and the findings were presented according to the objectives; to find out the types of records kept at NMC registry, to examine the current records storage and security practices at NMC registry, to find out the security threats to records at NMC registry, to analyse security of records at NMC registry, to find out challenges of storage and security of records at NMC registry and to develop a manual for proper storage and security of records at NMC registry.

6.2.1 Types of records kept at NMC registry

It was established that NMC registry engages in different records management activities for example; opening up new files, routing files, filing of documents, dispatching letters, shelving of files in alphanumeric and ascending order, retrieving of files from shelves or cabinets, file re-dressing, sorting of files and documents, security grading, weeding of files and labelling.

As a result, the various types of records generated at NMC were categorized into administrative records, financial records, legal records, personnel records and policy records.

6.2.2 Storage of records at NMC registry

The researcher observed that the central registry had cabinets, tables, office trays, chairs, archival boxes and open wooden shelves which were used for records storage.

The storage equipment used in the central registry provided appropriate protection for records based on the format, volume of the records and frequency of use and security requirements.

Only records which were required frequently were stored in the registry. Shelves and cabinet drawers held current records and were clearly labelled to indicate the file number ranges.

It was observed that the current status of storage of records at NMC was overwhelmed by the increasing volume of information. As a result, there was congestion in the registry which caused inadequate storage area and limited working space.

Records at NMC registry were accommodated in shelves, archival boxes, cabinets as well as floor space, office trays, tables and chairs.

6.2.3 Security threats to records at NMC registry

The project identified that security threats to records at NMC registry were as a result of deliberate action and some were unintentional for example act of human error or employee mistakes, unauthorized access, deliberate acts of information extortion, deliberate acts of sabotage or vandalism, deliberate acts of theft, forces of nature like fire, flood, earthquake, lightning, quality of service deviations from service providers among other several threats that not only endangered the records but also led to total loss of such information that is very crucial for the organizational operations.

It was therefore recommended that in order to strengthen the level of protection of all the organizational information and records inclusive of the personnel responsible for their storage and security, there's need to for records managers to understand the threats facing the information, examine the vulnerabilities inherent in the systems that store, process, and transmit the information possibly subjected to those threat.

6.2.4 Security of records at NMC registry

Security wise, it was established that entrance and access into the records office at NMC registry was strictly controlled that is, only authorised staff had access into the office where as other staff waited at the counter.

Cabinets containing confidential records kept locked. The outer door to the records office was reportedly always locked when no member of the records office staff was present and the windows had security grilles/bars.

The registry had to undertake measures to prevent and control outbreaks of fire. Smoking in any file storage areas was not allowed. Adequate numbers of fire extinguishers were provided and maintained. Regular fire drills were to always be held. Eating and drinking in the records office should be reportedly not allowed because spilt drinks and food cause serious damage to records.

In addition, the central registry had good quality door hinges with fixed-pin hinges that cannot be easily removed therefore thieves cannot just bypass the locking system and remove the entire door by the hinges. The registry had a key security system that ensured that only authorized persons have access to keys. The registry also serves the records users from the counter to deny unauthorized staff have access to the central registry

6.2.5 Challenges of storage and security of records at NMC registry

The project found out that the NMC security registry faced a number of challenges to promote an efficient records service that meets the needs of the organization to bring benefits, such as better planning and decision making, cost-savings, increased efficiency and productivity, improved working environments and greater accountability which included limited storage equipment, duplication, miss filing, dust, biological agents and inadequate funding.

6.2.6 Measures for storage and security of records at NMC registry

In order to overcome such challenges, project recommended NMC to consider several strategies like developing and operationalize a management policy, provision of modern storage and security facilities, training of staff, mainstreaming of funding modalities, automation and computerization of basic registry functions, construction of a standard records office building and regular cleaning of the registry.

There was need for adequate metallic shelves, frequent dusting of shelves, cutting down the intensity of light affecting the records, objective filing and shelving of records, on site system administrator, trained personnel in ICT, closing duplicated files/eradicating and procuring the right folders with the right coding.

Records office staff needed to be able to determine the location of every file for which they are responsible. Each time a file moves, this fact must be recorded in the records office. File movements are monitored in a number of ways: on file transit sheets that are filed in a file transit

book, on transit ladders that appear on file covers, on file movement slips and through regular file censuses.

6.3 Conclusion to the project

In conclusion therefore, it is important that central registry at NMC ensures that the entrance to the records office is strictly controlled. Cabinets containing confidential records kept locked. The outer door to the records office is always locked when no member of the records office staff is present and the windows have security grilles/ bars. Smoking in any file storage areas is not allowed. Adequate numbers of fire extinguishers are provided and maintained. Eating and drinking in the records office should is not allowed because spilt drinks and food cause serious damage to records.

6.4 Recommendations

Implementation of the manual: The project recommended that all managers and supervisors should take responsibility to provide an environment that promotes good records management. Effective implementation of the manual requires managers and supervisors to monitor their full-time and part-time staff, volunteers, consultants, contractors and outsourced providers to ensure they understand and apply this manual for proper storage and security of records.

Digitization of records: Digitization of records should be done as it enables faster retrieval of records, easy location of files, fast tracking of records, having e-electronic records management service in place, improved security of records, reduced or no cost of buying especially bulky storage facility such as cabinets, metallic shelves and cupboards, improved management decision making and effective administration.

Installation of CCTV: cameras can not only catch criminals in the act, but the very presence of CCTV systems can make a would-be criminal think twice about any wrong-doing. If you suspect one of your employees of wrong-doing but don't know where to begin to try to get to the bottom of things, a camera can be a very helpful tool and source of evidence. If a crime is committed in or around your business and the person accused of committing the crime was caught on camera, you've got an extra piece of evidence for a court case. Jurors and judges can watch footage or view photos from your security cameras and establish that the person on trial did indeed commit

the crime. Not only will you be preventing the same person from causing you more trouble in the future, you'll be helping out your entire community.

Adoption of ERMS: This approach is essential to reduce over reliance on manual systems of records management. The records management software is more efficient, effective, economical and faster than manual systems. The success of such can be achieved by the records management staff writing convincing proposals to the top management explaining the benefits of computerized records management systems.

Purchasing more storage equipment: for example, adequate metallic shelves or mobile shelves and enough cabinets. This project observed that the central registry had only one cabinet and shelves which cannot accommodate all the records of retirees; staff and stakeholders. Files were piled on top of drawer cabinets which exposed records to excessive amounts of light and accelerated the aging process of records, fading and drying them. The wooden shelves too were not in good condition yet they most of the central files.

Increasing funding to the registry: a prerequisite of all the resources is adequate funding. Appropriate provision must be made in annual estimates for sufficient funds to enable the records management unit to perform its functions properly. Ideally, the unit should have its own budget, but if this is not possible, adequate allowance should be made in the budget of the larger agency.

Financial resources, whether from the unit's own budget or from its share in the budget of the municipal council, should be managed prudently and in accordance with established priorities.

Value for money should be achieved through a program of expenditure on staff, equipment and materials that will match the requirements for the delivery of an efficient and economical records management program.

Expansion of the central registry: The district council should consider expanding or construction of a standard records office building. The current registry is very small compared to the volume of records generated and maintained there. NMC should consider constructing a well aerated, air conditioned, well vanished, ventilated and equip thick curtains to avoid direct sunlight rays from entering the registry especially the storage area. The windows should have blinds and the floor should be carpeted to prevent damp conditions which are breeding places for insects and rodents which feed on paper.

Recruiting professional records personnel: The quality of any records management system is directly related to the quality of the staff that operate it. Records work should be seen as a worthwhile career for those who are well educated, intelligent and industrious. It is not the posting of last resort for those who are unqualified, incompetent or idle. The registry records manager at NMC, in collaboration with the human resource office and top management at NMC, are responsible for ensuring that staff members are adequately trained and that action officers are aware of their particular roles. Appropriate standards, manuals and guidelines should be developed to supplement training and instruction.

6.5 Areas for further research

Given time and financial resources, the areas below were identified for further study by future researchers;

1. Management of closed files at NMC
2. Assessment of retention and disposal of personnel records at NMC
3. Classification and filing of records in the central registry at NMC.

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APPENDICES

APPENDIX I: INTRODUCTORY LETTER

MAKERERE

P.O.Box 7062 Kampala Uganda
Email: info@cis.mak.ac.ug
URL: http://www.cis.mak.ac.ug



UNIVERSITY

Tel: +256-392-000-180
Fax: +256-414 540 620
twitter: @cocismak
facebook: makcocis

**COLLEGE OF COMPUTING & INFORMATION SCIENCES
EAST AFRICAN SCHOOL OF LIBRARY AND INFORMATION SCIENCE (EASLIS)**

September 21, 2022

The Town Clerk
Nansana Municipal Council
P. O. Box 7218
Kampala – Uganda

Dear Sir/ Madam,

RE: INTRODUCTION LETTER

This is to introduce to you the following students pursuing a Bachelor's Degree in Records and Archives Management (BRAM Year III) at the East African School of Library and Information Science under the College of Computing & Information Sciences, Makerere University.

- | | |
|-----------------------|----------------|
| 1. Runyunyuzi Nickson | 19/U/9253/PS |
| 2. Nasingurah Babrah | 19/U/11213/EVE |
| 3. Namubiru Florence | 19/U/10745/EVE |
| 4. Amanyanya Emmily | 19/U/10724/EVE |

As part of their degree program, they are entitled to carry out research under the course BRM 3204. The title of their research is *"Developing a Manual for Proper Storage and Security of Records at Nansana Municipal Council Registry"*.

The purpose of this communication is to request you to offer them the necessary assistance required.

Please note that all the information obtained shall be used for academic purposes only.

Sincerely,

Dr. David Luyombya
**HEAD OF DEPARTMENT
RECORDS AND ARCHIVES MANAGEMENT**

APPENDIX II: ACCEPTANCE LETTER



NANSANA MUNICIPAL COUNCIL

OFFICE OF THE TOWN CLERK
P.O. Box 7218, Kampala Uganda, Tel: +256-785-958821
Email : Nansanamc@gmail.com / Website: www.nansana.go.ug



REF: CRM 220/1

29th September, 2022

TO WHOM IT MAY CONCERN

RESEARCH TEAM:

1. Runyunyuzi Nickson
2. Nasingurah Babrah
3. Namubiru Florence
4. Amanyanya Emmily

MAKERERE UNIVERSITY,
College of Computing & Information Science
East African School of Library and Information Science

RE: ACCEPTANCE TO CARRY OUT RESEARCH

Reference is made to your letter dated 21st September, 2022 requesting for clearance to carry out research in Nansana Municipal Council Registry.

Therefore, this is to inform you that you have been accepted to carry out research on **"Developing a Manual for Proper Storage and Security of Records at Nansana Municipal Council Registry"** Case study Nansana Municipality Registry, Wakiso District.

Your attention is drawn to Sec. J-F of the Uganda Government Standing Orders and Circular Standing Instructions No. 3 of 2011, relating to Research/Internship placement in the Public Service.

Please liaise with the Record Officer for guidance and ensure that you furnish my office with a copy of your findings/research report.

All concerned persons are asked to give you maximum co-operation.


Byabagambi Francis
TOWN CLERK

Copy to:

Record Officer, Nansana Municipal Council



APPENDIX III: INTERVIEW GUIDE

MAKERERE



UNIVERSITY

**COLLEGE OF COMPUTING AND INFORMATION SCIENCE
EAST AFRICAN SCHOOL OF LIBRARY AND INFORMATION SCIENCE
INTERVIEW GUIDE**

Interview guide administered to records staff, records officers of Nansana Municipal Council

Dear respondent,

We are a group of 4 final year students of Makerere University, pursuing a Bachelor's degree in Records and Archives Management. We are conducting research on Records storage and security at Nansana Municipal Council. This interview guide is intended to collect data in a topic developing a manual for proper storage and security of records at Nansana municipal council registry. we therefore kindly request you to please cooperate with us. The information to be collected is specifically for academic purpose only, confidentially and privacy is assured.

The interview has five sections

Section A: Bibliographic information

1. Age: 20-29 years and below [] 30-39 years []
40-49years [] 50 and above []
2. Gender: Male [] Female []
3. What is your highest educational qualification?
Basic [] Secondary [] University [] Tertiary []

Others (Specify)

4. How many years have you worked with the town council?

1– 5 years [] 6 – 10 years [] 11 years and above []

Section B: Types of Records storage and security

1. What are the types of records kept at NMC?
2. In what format are the organization’s records?

Paper

Electronic

Others specify

3. What is the proportion of electronic records in the organization if they have some?

.....

4. What are the different types of records storage at Nansana Municipal Council?

.....

5. What storage and security equipments are used in the organization?

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.....

Section C: Records storage and security procedures

1. Do you have records storage and security procedures in the organization?

If yes. Could you please provide us with a copy?

If no, what do you do to ensure proper storage and security of records?

Section D: Management of Records Storage and Security

- 2. How does the organization manage its external compliance regime (for example managing its performance in relation to the regulatory environment, audits, standards and best practice)?

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.....
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.....

- 3. Are there some confidential records in the organization?

Yes

No

- 4. What level of security is given to confidential records, and vital records?

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.....

- 5. Does the organization have a risk management plan? Can you outline its major features and provide a copy?

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.....

- 6. How are risks monitored and managed in the day to day operation of the organization?

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7. Are there special policies or procedures in place to help officers contribute to external compliance or risk management within the organization? If so, what are they?

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8. What security measures are in place to ensure the security of the records?

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Section E: Challenges in records storage and Security

1. What challenges are faced in records storage at the organization?

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2. What are frequent record security problems or concerns that you are aware of?

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3. What are the main causes of these challenges?

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How do you intend to address the challenges in records storage and security?

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Which level of security measures are applied in records?

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What level of security is given to confidential records, and vital records?

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Section F: Best practices in records storage and security

- 1) What are some of the best practices done to improve on records storage at the organization?

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What strategies have previously been employed to improve organizational records security?

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Can you suggest some best practices in records storage that can be done to improve on records storage?

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What records security measures do you want to see applied in the organization?

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What key records management practices would you recommend the organization to obtain?

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Thanks for your cooperation

APPENDIX IV: OBSERVATION GUIDE

The guide will be for activities which will not be questionable in the interview for example

1. Records Storage space
 - Level of the records office
 - Level of the archive
 - Condition of the records office
2. The quality of storage and security equipments
 - Manila covers
 - Box files
 - Cabinets
 - shelves
3. Records handling and Storage at Nansana Municipal Council?
 - Condition of the case file storage
 - Number of shelves
 - Office level
4. Security measures employed at Nansana Municipal Council.
 - CCTV cameras
 - Visitors cards
 - Use of visitors books
 - Transit ladders
5. Condition of the records.
 - Torn
 - Torn file covers
 - Fasteners
 - Placement of the records
 - Arrangement
 - Dust

APPENDIX V: DOCUMENT ANALYSIS GUIDE

The project will be guided by the following

- 1) Are there some procedures followed in the handling of the records? Who generates them and are they followed?
- 2) Level of supervision for records users.
- 3) Is there any manual on proper records storage?
- 4) Are there any disposal procedures?
- 5) Are there any guidelines followed when ensuring the security of the records?
- 6) Are there any trial cases you have had with loss of records at the station?
- 7) Does the organization have a risk management plan?