



CHALLENGES OF HYBRID RECORD MANAGEMENT THROUGH THE LIFE-CYCLE OF RECORD KEEPING: A CASE OF PRIMARY SCHOOLS IN LIVINGSTONE DISTRICT, SOUTHERN PROVINCE.

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ABSTRACT:

The study investigated the challenges of Hybrid Record Management through the life-cycle of record keeping in primary schools found in Livingstone district in Southern Province. It was guided by the following research objective; to establish the human resource professional capacity in Hybrid Record Management through the life-cycle of record keeping primary Schools, to examine the availability of support Infrastructure, to examine the administrative will-power towards Hybrid Record Management, and to investigate cost-effective strategies in Hybrid Record Management. Descriptive research design guided this study that had an estimated population of two thousand two hundred (2200) people comprising of school managers, teachers and the support staff. Out of the estimated population, two hundred and twenty (220) people were sampled by use Simple random sampling technique. There was a 100% return rate of the questionnaires from all the 220 respondents that had been sampled. The Data was coded and analyzed using Excel and Statistical Package for Social Sciences version twenty-five (SPSS V25). The findings were that; primary schools in Livingstone district had record keepers that lack the basic computer skills and competences for handling hybrid records through the life cycle of record keeping. The findings were that; Clerical staff had insufficient training to make optimum use of hybrid record management support features on their computer systems, primary schools lack records management policies and procedures that affected greatly to hybrid record management through the life cycle of record keeping and that primary schools in Livingstone district had not adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices. Additionally, the respondents were not aware that Hybrid records management involves establishing systematic controls at every stage of the record's life cycle and that this was one of the challenges affecting hybrid record management through the life cycle of record keeping, there was no support infrastructure for record keeping and that affected the implementation of Hybrid record management through the life cycle of record keeping and that Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management through the life cycle of record keeping. Further, there was insufficient quantity of hardware to use the hybrid record management, that include phone lines, computers and internet connections. The following recommendations were made; Train record keepers in basic computer skills and competences for handling hybrid records through the life cycle of record keeping to be deployed in all primary schools, Capacity-build the exiting record keepers through workshop to enable them make optimum use of hybrid record

management support features on their computer systems, Headteachers and other stakeholders to develop and adopted an easily identifiable regulatory frame-work that shall have systematic controls at every stage of the record's life cycle to strengthening hybrid records management practices at school level and establish support infrastructure such as record office, computers, shelves/cupboards, computer interconnectivity, security system and phone lines for implementation of Hybrid record management through the life cycle of record keeping.

Key words: *Hybrid records, Record keeping, life-cycle, management, computers, infrastructure, interconnectivity, implementation, cost-effective.*

I. Introduction

Rather than having to make the decision between having only hard-copy records or electronic documents, hybrid records management allows the utilization of both paper and digital formats of files. Therefore, Hybrid Records Management is one in which some of the documents are kept in hard-copy format while others are scanned and converted to a digital format (Read-Smith and Ginn, 2011). Nakpodia, (2011) asserts that hybrid record management involves the creation, storage, retrieval maintenance, disposition and the use of compact and other manual or electronic means. While Brown and Stephens, (2006) on the other hand argues that the concept of hybrid records management refers to a sharing of technology between micrographic systems and electronic imaging systems. Hybrid record management combines paper records with either a document imaging, server or cloud-based electronic system in the management of records.

There are a number of reasons that a business may prefer to keep paper copies of certain records, such as ensuring that confidential information can only be found on one specific piece of documentation, easily being able to update the information contained, or simply because of ease of use because everyone knows how to use and manage paper records. On the other hand, hybrid record keeping offer a number of other benefits that can help to improve the efficiency and security of the records (Safady, 2012). Maintaining electronic copies of records

keeps them protected in the case of a disaster at your location or place of work as well as making searching for specific information much faster, and provides you with the option to limit access to certain data. The benefit of using a combination of the two forms of records is to maximize the cost-efficiency with regard to record management in an institution.

This chapter presents the background of the study, the statement of the problem, research objectives, research questions, purpose of the study, significance of the study, limitations and operational definitions of terms as they apply to this study.

Records management is regarded as one of the pillars of good public management because Government and institutional activities are based on access to information contained in records. Records management is the area of administrative management that is concerned with achieving economy and efficiency in the creation, maintenance, use and disposal of records of an organization throughout its life cycle. Implementing good records management practices in school would provide information for educational planners and administrators. Records serve as historical source for documenting history of the school, a means of showing transparency and accountability in handling school finance, they are evaluation tools for accessing progress made by schools and also show evidence of compliance with legislative laws.

A record is defined by Akor and Udensi (2014) as any document or other source of information compiled, recorded or stored in written form or on film, or by electronic process, or in any other manner or by any other means. In short, records contain information important to the daily running of organisations such as schools. Some activities in a school need to be accounted for, especially when resources have been or need to be used. It is important for a teacher or school head to justify certain actions. In the absence of proof of the activity having taken place, it is difficult to explain or account for the resources that may have been expended in the course of the activity.

Records are valuable resources of the Government and all government institutions such as schools (Yampolskiy, 2011). The records are the basis on which decisions are made, services provided and policies developed and communication are based on. The rapid development of digital information technology and the widespread use of networked computers to conduct business have resulted in exponential growth of records being created digitally (Wamukoya and Mutula, 2005). More and more records relating to decision making and programme delivery are created and kept in electronic forms such as e-mails, spreadsheets, digital images, schemes of work and administrative policies and directives. Nevertheless, non-electronic records are still created and kept in the meantime under various business functions, processes and transactions also in government and all its institutions. Non-electronic records have co-existed with electronic records for some time for various reasons among the being that; paper is still the medium of communication and dissemination of information preferred by many users; records such as contracts, deeds, tenders, supplies or accounting records may need to be retained in their original paper format to maintain their authenticity and/or

to meet regulatory or legal requirements; and non-electronic records which are inconvenient or difficult to be digitized like bulky books, oversized maps, audio/video tapes and exhibits, to mention but a few, may have to be kept in their original formats (Lappin, 2010). The co-existence of electronic records and non-electronic records creates a hybrid records management (RM) environment. It is therefore important to maintain the links between related electronic and non-electronic records to ensure that the records kept in the departmental recordkeeping system for example the paper-based recordkeeping system supplemented with the use of removable storage media are completed and the necessary contextual information was captured to facilitate understanding of both electronic and non-electronic records within the government and all its institutions like schools.

Traditionally, primary schools in Zambia had adopted a paper-based record keeping system to manage their records. However, proper storage, keeping of an accurate inventory, convenient retrieval and effective access control were the primary challenges for managing paper records in many primary schools be it rural or urban primary schools. For instance, it was very common to find that Grade teachers in schools do not have up to date class attendance registers. The same applies to school guidance offices who fail to give appropriate records of enrolment levels in schools discriminated according to gender. This all goes to show how poor the culture of record keeping was in many primary schools in Africa and Zambia in particular. The assertion above was confirmed by Greenhalgh, et al (2008) said that despite the drastic innovations that have characterised record management in the last few decades, records management still remained a daunting task in Africa and this affects educational service delivery.

On the other hand, in a hybrid record management where electronic records have become increasingly prevalent in addition to the

use of paper records, managing electronic records brings many new developments especially in primary schools were realized (Weggant, 2005). It is government record management policy, principles and requirements as well as best Record Management (RM) practices and guidelines that schools have up-to-date records of all the activities being undertaken be it teaching or administrative.

The purpose of a hybrid record management is to manage records throughout their life cycle

(Lappin, 2010). A record has a life cycle that begins from record creation or receipt, through its useful life to final disposal for example destruction or permanent retention as archival record (Lappin, 2010). All electronic and non-electronic records need to be actively managed according to established practices and procedures to retain their authenticity, reliability, integrity and usability. Record management processes involved in a record's life cycle is diagrammatically depicted below;

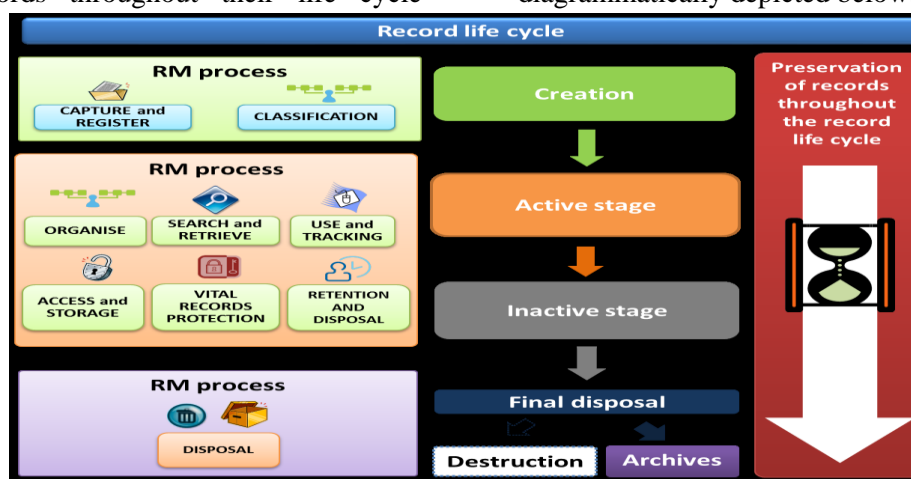


FIGURE 1.1: Record's Life Cycle

SOURCE: (Lappin, 2010), What will be the next records management orthodoxy?

Figure 1.1 above illustrates that records have a life cycle that begins from record creation or receipt, through its useful life to final disposal for example destruction or permanent retention as archival record. During record creation, two important processes take place that include the capturing and register of the record and secondly is classification. Then under the active usage of the record, six processes are involved;

II. Literature review:

This chapter will review relevant literature relating to was to the challenges of Hybrid Record Management through the life-cycle of record keeping in primary school found in Livingston district in Southern Province. For the

CONCEPTUAL FRAMEWORK

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organization, search and retrieval, use and tracking, access and storage, vital record protection and lastly is retention and disposal. During the third stage in the life cycle of records is inactive stage that comprise three processes among them; access and storage, vital records protection, and retention and disposal. The last stage is final disposal of the record that is either destroyed or archived.

purpose of understanding the context of the literature, the study was guided by a conceptual framework as diagrammatically represented below:

Effective Hybrid Record Management through the life-cycle of record keeping in primary school.

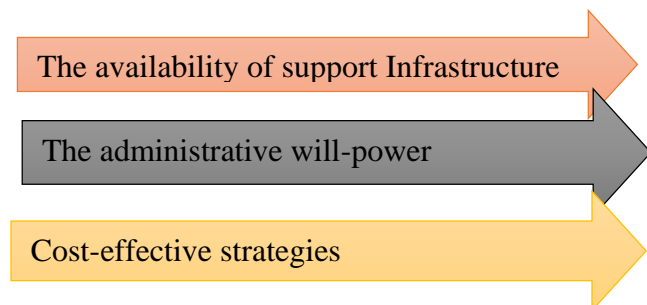


Figure 1.2: Conceptual Framework.

Source: Research Writing, 2021

The Conceptual Framework above identified four concepts that influence positively Hybrid Record Management through the life-cycle of record keeping in primary school found in Livingston district in Southern Province.

Brief overview on Hybrid Records

In the world, many organizations continue to create both paper and electronic records as a normal part of their daily activities. Managing this hybrid record keeping is expected to continue as it is likely that a pure electronic record as will not be found anywhere in the world in the near future. These varying regulations present issues in terms of privacy, legality, storage and staffing. Johnston, and Bowen, (2005) argues that the concept of hybrid records management systems refers to a sharing of technology between micrographic systems and electronic imaging systems. In the 1970s and 1980s mechanization-secure fax, for example-continued to spread, and the FCO made its first tentative experiments with the computerization of records. The registries were all instructed to give documents a very constricting range of file names that the computers could recognize. This got nowhere, because the computer systems didn't work. There was a similar fiasco in the middle to late 1980s, when a great deal of money was spent on a system of electronic document handling and messaging which in the end was not introduced: it was undercapitalized, and the senior management never gave it the attention or understanding it needed during the development phase. According to the government of America, In February 2009, President Obama signed the American recovery

and reinvestment act into laws. Part of the act goal was to encourage health organizations to adopt electronic health records through financial incentives because of the slowness of adoption, funding barriers and competing technical priorities. Therefore, many health cares are finding themselves maintaining a hybrid health record as an alternative to full automation of the legal health record (American Health Information Association, 2009). This allowed participants to focus on the objective of identifying and documenting record management activities. An organization that has vital records for business continuity has to maintain its record in a hybrid system in the event of a major disaster, the organization will benefit from having its vital records and other records organized in an electronic record management system with backup copies so that they can be recovered using the alternative infrastructure as in the organizations business continuity plan American Health Information Management Association, (2009).

Records management has become one of the most difficult tasks associated with educational service delivery. This, according to Sprehe, (2005) is due to the poor management of accurate, reliable and trustworthy records so as to fulfil evidential requirements. As noted by the National Archives of Australia (2002), student academic records must endure and remain trustworthy for a long time, sometimes permanently. Many administrative heads of academic institutions complain of a lack of funds and material resources for records keeping. This certainly

affects the life cycles of many records generated within institutions and thus results in serious lapses. This reality reveals a gross inadequacy of qualified personnel and facilities, complications introduced by a burgeoning student population and space challenges (Attwood and Gill, 2008).

Records should be well managed in order to ensure they are protected for both administrative purposes and to serve as evidence of the institution's work. The process of caring for records is known as records management. The records management function should therefore impact across the whole institution and not be confined to one central department. Due to its far-reaching nature integrating the records management function into institution's business systems, processes and culture often requires a significant number of resources.

The benefits synonymous with records management are well understood and often repeated. These commonly include: institutions that manage their records well reap immediate benefits in terms of being able to utilize all available information resources for competitive advantage. Kemoni and Wamukoya (2000) state that effective records management systems provide information required for the proper functioning of organizations, including universities. On the other hand, poor records management can be risky to organizations. Djorka and Conneen (1984) summarize the consequences of poor records management as follows: In an institution where paperwork is poorly managed, the flow of records through the life cycle is retarded, chaotic, or non-existent. Records and the information they contain are difficult to retrieve, and costly duplication of paperwork is a frequent occurrence. The net effect of poor management is a decrease in the efficiency of the institution and an inflation of its operating costs.

The other benefit of proper record management has something to do with informed decision making that is very cardinal in any learning institution ranging from Kindergarten to tertiary education. Decision making in the any educational system is an administrative function and invariably requires information in the form of records. Administration is ordinarily discussed as the art of forgetting things done." Emphasis is placed upon processes and methods for insuring incisive action. Principles are set forth for securing concerted action from groups of people. Decisions are made at different levels in the educational institutions. Suffice to mention that, it is fairly obvious that the lower one goes down the organization the lower the level of decision that must be made and in reverse, the higher one goes the higher the level of decision; irrespective of the level, information will be required one way or another. In all spheres of activity decisions are being made about the allocation of budgetary resources and the prioritization of programmes within an institution. (Seniwoliba et al, 2015). Records and archives provide the information that is required by those who make the decisions. The question only is whether these records are available to these decision makers and whether the decision makers are aware of their existence and thus make use of them when making decisions.

Senowoliba et al (2015) assert that records and information are the lifeblood of any institution. Records and information are the basis on which decisions are made, services provided and policies developed and communicated. Effective management of records and other information brings the following additional benefits: it supports an institution's business and discharge of its functions, promotes business efficiency and underpins service delivery by ensuring that authoritative information about past activities can be retrieved, used and relied upon in current business; supports compliance with other policies

which requires records and information to be kept, employment legislation and health and safety policy; improves accountability, enabling compliance with policies and other rules and requirements to be demonstrated to those with a right to audit or otherwise investigate the institution and its actions. Records equally enable protection of the rights and interests of the institution, its staff and its stakeholders; increases efficiency and cost-effectiveness by ensuring that records are disposed of when no longer needed. This enables more effective use of resources, for example space within buildings and information systems, and saves staff time searching for information that may not be there; and provides institutional memory.

Schools are responsible for the creation, management and disposal of records relating to all aspects of school administration. These records include school student files, student reports, Departmental confidential student files, school based personal staff files, financial records, inventory, building and facilities records, school council files, staff selection documents and correspondence. Schools need to properly manage records in order to: meet legislative responsibilities, ensure records are stored when needed and destroyed when permissible and meet administrative responsibilities to staff and students.

School records are seen as the collection of information on school personnel (students, teachers and non-teachers), facilities, funds and school activities which are preserved for future use or reference purposes. The information or data which are written manually or electronically are preserved in books, files, diskettes and other electronic Medias (Akubo, 2004). According to Oluwole (2007), school records are books, documents, diskettes and files in which are embodied information on what goes on in the school like social, academic and non-academic

activities. She further stresses that, record keeping connotes all activities concerned with the creation, storage, retrieval, retention and deposition of all information relating to what goes on in the school, who is in the school, the school plant as well as other information pertinent to the growth of the school. Also, Durosaro (2002) explained that school records are official transcript or copies of proceedings of actions, events, other matters kept by the school manager. School records could be viewed as authentic registers or instruments of official accounts of transaction or occurrence which are preserved in the school's office.

The human resource professional capacity to Hybrid Record Management through its life-cycle of record keeping.

Information and Communication Technology (ICT) is revolutionizing our life, our ways to interact with each other, and day-to-day life and work. ICTs have made significant impact on a number of private and well as government public institutions on the globe. Its adoption and use, which result into e-smart institutions, has transformed the way goods and services were delivered. Its application in the education system is described broadly as e-Education, which includes electronic students' records management, education information systems with decision support, Open and eLearning tools and many others just to mention but a few. E-Education, has shown potential in facilitating a better education delivery system especially during this Covid-19 Pandemic times.

Studies by Kemoni and Wamukoya (2000), confirmed that African records keepers lack the basic skills and competences for handling records and archives in the public sector. There were endless problems about sharing information across Whitehall, because departments had incompatible systems, and or often grossly exaggerated reasons of security (and

departmental jealousy) were unwilling to share information anyway the activities of their department seemed to be shrouded in mystery – something to do with records or filing, it was thought, nobody knew for certain, but it was evidently women’s work the kind of thing that could easily be replaced by a computer (Lowry, 2013). Duplication of records can lead to breakdowns in security, difficulties in keeping up-to-date, and problems with accuracy. A centrally administered computerized system should avoid these problems, and access by different users can be better controlled. Therefore, in order to manage personnel records the organization has to maintain both manual and electronic records.

Based on surveys many researchers have concluded that physicians have insufficient skills and technical knowledge in dealing with Electronic Management of Records (EMRs), and that this has resulted in resistance (Jha et al, 2009). EMR system is actually very complex to use by the physicians and providers do appear to underestimate the level of computer skills required from these physicians. Further, people require good typing skills to enter information, notes and other related data into the EMR system, and many clerical officers lack them. As it is not only the clerical staff but also other staff in most of the institutions lack adequate computer skills and these needs to be improved. The Clerical workers lack computer skills as well as general skills for the use of hybrid information systems. Omary *et al*, (2010) attributes low adoption of electronic record management among developing countries to lack of computer skills amongst the clerical staff.

According to Makhura, (2005). sluggish internet use among doctors in Pakistan was due to unavailability of proper technology and lack of computer training. Hounsou, (2001) is of the opinion that those health care professionals who lack the ICT skills of processing the online health

data end up spending too much time on the same. Without adequate ICT skills, user involvement in selection and development of ICTs becomes difficult and if it happens, it is only to rubberstamp the experts’ decisions.

The routine use of Electronic Management Records has an impact on training as recently qualified practitioners had all trained with one or several EMR systems and consequently appeared more comfortable in using or switching from one system to another (Avery, Cantrill, and Sheikh, 2005). Yet, even recently qualified practitioners had some difficulties and reservations when using their practice EMR which raises the question of whether further computer training would be a useful. The lack of ICT skills among practitioners handling records has been identified as a safety concern in other studies. A previous study by Morris et al. suggested that – although practitioners in primary education in England ranked learners’ safety highly – they often had insufficient knowledge and training to make optimum use of embedded record management support features of their computer systems (Morris, Savelyich, 2005)

Practitioners do regard the EMR system as extremely complicated and this is due to lack of general training and support for problems associated with the EMRs (Randeree, 2007). (Ludwick and Doucette, 2009) similarly notes that physicians struggle to get the necessary and appropriate technical training as well as support for the systems from the vendor. Considering that physicians are not technical experts and the systems being inherently complicated, physicians perceive a need for proper technical training and support, which leads to the physicians getting reluctant to use EMR system without it. For developing countries (Sood et.al, 2008) identifies lack of training in ICT and computer illiteracy as the source of hybrid record management resistance. As a short-term solution, in service training is the appropriate way to ensure

availability of the required skills at the required time.

Tambudzai, (2009). outlined the challenges hindering proper records management to include: lack of records management policies and procedures, lack of qualified staff such as a records manager and archivist, limited resources to implement a system according to requirements (legislation), records management costs that are not immediately apparent and may only become significant over a period of time and thus not attract management's attention, and limited resources to implement a system according to requirements. Gama (2010) revealed that problems such as shortage of storage facilities, absence of computers, insufficient space, lack of shelves, absence of records managers, and lack of sufficient knowledge on the part of the school administrators on how to manage the records effectively, and absence of records management policy are some of the major challenges affecting the effective management of records in educational institutions.

Studies by Kemoni and Wamukoya (2000), confirmed that African records keepers lack the basic skills and competences for handling records and archives in the public sector. There is a serious problem of technophobia in most offices in Africa especially among the older employees. Therefore, WHO (2006) highlighted the need for a basic form of training if e-healthcare has to be implemented in a country. In the long-term, healthcare institutions, where Nurses and Midwives and other healthcare workers are trained, should incorporate e-healthcare syllabus to its respective courses (Omary et al., 2010). This initiative will also help when in cooperated in the education system. Training boost awareness and confidence level as users are able to overcome technophobia while relating usage to expected benefits (Sahay and Walsham, 2006).

Although initial formal training is depicted favorably by some, insufficient training is often identified as a barrier, either because there is not

enough training or because classroom training was ill-suited to the personal needs and learning styles. Institutional record managers complain about their training and post-sale experience with the vendor. Instead of a training regimen similar to that described in the literature, record managers' report that the vendor simply offers one training session of one half to a full day in duration. Training is often too soon after implementation where they have not developed sufficient experience with their new EMR to ask relevant questions or appreciate the answers. Physicians report that they don't always access the vendor's technical support anytime they required after the EMR is deployed, and hence becomes a challenge in implementing the EMR adoption. It's necessary that a follow-up mentorship happens more often so as to fully embrace and implement the EMR system.

Chachage and Ngulube (2006) assert that "proper records management involves establishing systematic controls at every stage of the record's life cycle, in accordance with established principles and accepted models of records management". Practising proper records management leads to good public management because institutional activities are based on access to information contained in records (IRMT 1999). This implies that if records are not managed properly at every stage of the record's life cycle in the office of origin, the product transferred to the archive's repository will also be poor.

The availability of support infrastructure

Electronic Management Records systems provide the basic infrastructure upon which other electronic solutions can be laid. Electronic Management records infrastructure pertinently affects the implementation of Hybrid record management system (Qureshi *et al.*, 2013). In a study conducted in Kenya, which focused on

adoption of ICT in SMEs in the health sector, quality of ICT systems is noted as a significant factor in determining adoption of ICT (Muathe, Wawire and Ofafa, 2013). However, insufficient ICT resources limit development of Hybrid record management. According to a study conducted by Micevska Maja (2005), which focused on the complementarities that exist between information technologies and public health promotion based on two countries, Bangladesh and Lao, the stock of telecommunication infrastructure plays a key role in public health. Therefore, telecommunication infrastructure plays a pivotal role even in the education system towards the implementation of Hybrid Record Management System.

Hybrid record management software and hardware cannot be used straight "out of the box", and therefore to generate the desired benefits it has to be interconnected with other devices to "complement" it. Such interconnectivity problems are a major obstacle to the wide adoption of hybrid record management systems (Menachemi, Langley, and Brooks, 2007). In essence, hybrid record management systems are not compatible with the existing practice systems that record keepers in the schools are used to, and therefore record keepers are reluctant to get rid of functional systems they already have in order to have an integrated system and this includes hybrid record management system (Davidson and Heslinga, 2007) Further, (Valdes, Kibbe, Tolleson, Kunik, and Petersen, 2004) concluded based on a survey that due to the lack of consistent data standards within the industry, the format of data varies among the different software packages and systems and this makes data exchange difficult if not impossible between systems.

According to the International Telecommunication Union, ITU, (2007), by the year 2006, the Internet penetration in Tanzania was 1 percent of the population compared to 6.0,

7.9 and 10.5 percent of the population in Nigeria, Kenya and South Africa respectively. The low rate of internet penetration and low bandwidth are among the challenges to implement Hybrid Record Management System in developing countries. (Omary *et al* (2009) points out that due to poor ICT infrastructure and internet penetration in Tanzania, the majority of areas in the country cannot support internet deployment, which in turn, hampers hybrid record management implementation. Therefore, since hybrid record management system need to be shared between users located in different facilities and departments, these factors subsequently hinder its adoption and use. Even in developing countries and urban areas that have high internet penetration, bandwidth may still be a challenge as it is low which again hampers its utilization, thereby limiting the implementation of hybrid record management system.

As long as internet penetration remains low in developing countries, adoption of eHealth will continue to lag behind compared to countries with high adoption rates such as Denmark (broadband connection per household in Denmark stands at 83.9% according to Yampolskiy, (2011). However, to fully realize the importance of internet for accessing healthcare information for example, there are some issues that must be addressed, for example, poor internet skills on the part of record keeping professionals prevent them to understand the difference between biased and unbiased information, to differentiate evidence-based claims, and to interpret the information (Qureshi *et al.*, 2013).

Computer infrastructure is the backbone to electronic record management services implementation. Sufficient quantity of hardware is required in order to use the hybrid record management systems, which includes phone lines, computers and internet connections. Lack of these 'basic' facilities/hardware blocks the

widespread adoption of Electronic Management of Records system as they needed to support hybrid record management implementation (Vishwanath and Scamurra, 2007). Therefore, considering the fact that setting up a hybrid record management system will require more resources the start-up costs will be higher and as a consequence, only a few researchers directly refer to the unavailability problem of computers/hardware. In a study conducted by (Ouma and Herselman, 2008), it is indicated that cost of computers and lack of computers hinder adoption of the hybrid record management system amongst many government institutions especially in the rural areas. Additionally, the government has to control computer and computer systems prices, so that the majority of people can possess them, as well as controlling Internet access costs. (Omary et al., 2010)

Lack of physical security creates a resistance to the adoption of EMR systems. A secure facility is a physical location engineered with controls designed to minimize risk of attacks from physical threats. All Computer labs should be secured through cabling, locks, grilled windows and doors etc., to enhance physical security. Access to the lab facility should be monitored either through electronic means (card swipe, security camera, web cam, etc.) or by a designated lab monitor technician and lack of this becomes a barrier to the widespread adoption of EMRs (Ford EW et al., 2006).

Administrative will-power

The rapid evolution of information and communication technology (ICT) is the usual reason that motivates the organizations to allocate their resources to technology-based investments. They describe the situation by saying that the field of electronic management is very useful and that many organizations understand the need to move forward (Mokhtar and Yusof, 2009). Additionally, the authors highlight one issue that

can be proved vital and this is the existence of a policy. Sometimes the most important thing in the implementation of a new plan is the existence of a good policy. For instance, in the specific case, keeping pace with the steps of technology is the key for a good ERM (Mokhtar and Yusof, 2009). Another existing opinion is this of O'shea (1997) that the ERM is not just a challenge that has to do with technology but the secret of success is hiding behind the strategic planning of the activity. This is not wrong but when we are talking about a transition from manual to electronic era, then technology is a challenging issue for the coordinators (Henriksen and Andersen, 2008). Naturally, when it is demanded the proper implementation of an ERMS it is vital to pay attention to the legislative and policy environment (Henriksen and Andersen, 2008).

Records management policy can be described as an authoritative statement of intent to manage records in an appropriate and suitable manner for as long as they are required for business purposes. It is intended to form the initial framework or principles which express how records should be managed within the organization. Where the records management policy comprises part of a broader information management or knowledge management policy, it should still be easily identifiable and available to users. Shepherd and Yeo (2003) have explored that organizations need to manage their records in order to deliver efficient and effective services. McLeod and Hare (2006) argue that a legal and regulatory frame-work is a key to strengthening records management practices.

In the same way, Tough, (2006) reports that the best way to manage records is through well guided records management practices positioned through an institutional legal framework. According to the International Standards Organization (ISO 15489-1), organizations should set policies and regulations as strategies for effective records management. It recognizes that records are inputs and outputs of business

processes and therefore their creators and users have a role in managing them. In the same way, Yampolskiy, (2011) explain that the adoption of records management standards and integrating them assists by ensuring that records are managed consistently for the required periods. Business records should be managed for them to comply with regulatory, legal and ethical requirements. Compliance is mainly concerned with information integrity, privacy and records retention Marobella (2005). Put differently, compliance fosters accountability and good governance, especially in the private sector where business activities are not always open to public scrutiny. Compliance with legislation and standards has an impact on how records and information are captured or created, transmitted and used, stored, indexed, retrieved, controlled, retained and preserved. Compliance can be mandatory or optional. Staffing Training Influence in Record Management Chachage and Ngulube, (2006) they argue that information professionals need to realize that an utter transformation is taking place in the world of information. This in turn requires a completely new paradigm, or intellectual framework, to situate our ideas and practice. As remarked ten years ago, in searching for this new paradigm, archivists (and their information professionals allies) will move from focusing on information to seeking and conveying knowledge and understanding. We will move from databases to knowledge bases. Lack of trained records managers affects the work practices in an organization and the quality of services offered (Young, 2005). Trained records management staff is required in an organization to provide a solid foundation for the management of its records Barata, Cain and Thurston, (1999). Barata and Cain (2001), and Lipchak (2002) are also of the opinion that employing trained records human resource is a prerequisite to effective corporate records management.

Cost-effective strategies

Record Management comprises of controlling the creation, maintenance and use, and disposition of the records (Onifade, 2004). Researchers (Uwaifo 2004; Akporhonor and Iwhiwu, 2007) explained that these records to be kept in record management should meet certain criteria such as confidentiality, proper maintenance, security, preservation of the content, and context. Records in organizations are kept in two main forms which are manual (use of office file, pen, paper, pencil to process records and electronic (computers; other information management tools/devices), according to researchers (Edem, 2002; Akubo, 2004; Igwoku, 2008).

Empirical studies have identified many problems in record management in institutions from the perspective of the main stakeholders (governments, university management, the staff and the students) of the institutions. The identified problems are lack of record manual; lack of filing guidelines; inadequate computer terminals; difficulty in record retrieval; lack of appreciation by management and staff of the need for well-controlled records; inadequate manual classification; lack of security; lack of storage facilities; inadequate funds; weak legislative; weak organizational infrastructures; lack of basic skills and competences; corruption; absence of an archival institution; the problem of oral traditions; high staff turn-over; absence of an archival law; poor transport and communication network. Therefore, the strategies for cost-effective implementation of Hybrid record Management System require that records management process is regarded as a continuous activity that focuses on the operations that produce records (Bantin 2002). Specifically, archivists and records managers need to be involved together with information systems designers in the creation of records keeping systems. Young, (2005) refers to this design stage as the pre-natal phase. Records managers and archivists appraise records and decide on what

records would support the functions of an organization during the records keeping system design. Scholars such as Kennedy and Schauder (1999), Myburgh (2005) and Shepherd and Yeo

(2003) emphasize the need for collaboration between records professionals and information systems experts during systems design.

III. Methodology

This chapter provided an account of the study methods, the design and steps undertaken in conducting the study. The methods used were important as they reflected on the quality of the data collected, findings and interpretation of the data. The chapter detailed out the study tools and techniques that were employed for data collection. The study population and how the study sample was selected were described. Data collection and data analysis procedures were also discussed in this chapter. Gall (2003) refers to the method as a channel used to demonstrate an activity during instruction.

Research design

Orodho (2012) defined research design as the scheme or framework within which research was carried out. Additionally, Creswell, (2014) described a research design as the planning of any scientific research from the first to the last step. The research design adopted was a descriptive design involving both qualitative and quantitative analysis with a view to maximise on their strength while minimizing on the limitation of each (Creswell, 2014).

The study utilised a descriptive survey design as it was considered as the most suitable research design by the researcher. According

to Baxter and Jack, (2008), the descriptive research design was useful for assessing group of people's knowledge, attitudes, practices and perceptions. The main characteristics of the research design were that the researcher had no control of the variables and the researcher could only report what had transpired or what was happening (Jackson, 2012). Consequently, a descriptive design was selected because of its high degree of representativeness and the ease with which a researcher could obtain the participants' opinion. (Miles, Huberman, and Saldana, 2014). This design was the most appropriate since it allowed the researcher to study a relative population for accuracy of findings and is concerned with describing, recording, analysing and reporting conditions that exist (Miles, Huberman, and Saldana, 2014).

Study area or site

The study was carried out in primary schools found in Livingstone district of Southern Province Zambia. The researcher picked on this location because of the proximity in residence with the researcher for easy canvassing for the collection of data from the respondents. As such, it was hoped that the researcher would encounter very minimal challenges in terms of movements. Additionally, the researcher is a teacher in one of the primary schools and thus has an in-

depth knowledge of the primary school distribution in the district. In fact, Berg (2004) advises that the ideal setting for any study, was one where the researcher had interest in, easily accessible and one that allowed the researcher immediate support with the respondents.

Estimated population

According to Zikmund (2000), population is a specific sample group relevant to the research project. Yin, (2003) defines population as all members of any well-defined class of people, events or objects. The study's estimated population therefore, was referred to as a larger group of individuals or objects with unique attributes and characteristics for which the researcher was interested at (Creswell, 2013). In this study therefore, the estimated population was two thousand two hundred (2200) people comprising of school managers, teachers and the support staff.

Sample size

The sample size for the study was two hundred and twenty (220) people that were school managers, teachers and support staff that was a 10% minimum sample representation from the estimated population.

According to Punch (2014) a sample was a small group which was actually studied, drawn from a larger estimated population. A sample was also defined as a portion of the population selected from the entire population as a representative (Creswell, 2014). The sample size was an ideal number that was larger enough to serve as an adequate representation from which the

researcher wished to generalise findings (Yin, 2009).

Sampling procedures

Simple random sampling technique was used to select the respondents from the primary schools found in Livingstone district that were involved in the study. The use of simple random sampling technique was aimed at ensuring that each of the respondents selected was a representative of the estimated population with the characteristics relevant to the purpose of the study.

According to Mugenda and Mugenda (2009), a sampling fraction of between 10-30% of the total population in a simple random sampling design is considered representative. Using this Principle of getting the sample size, the researcher used 10% to get a sample random representation.

Research instruments

Questionnaires were used as the main data collection instrument for this research and it was chosen because it helped the researcher to collect large amount of data within a short time thus saving time for the study (Orodho, 2009). Although the major disadvantage of the questionnaire was that illiterate respondents were unable to interpret and respond to the questions as required. This case however was different in this study as all the targeted respondents were literate and able to understand and answer the questions in the questionnaire accurately. The questionnaire contained both closed ended questions and Likert rated scale questions.

The researcher chose to use the questionnaire because it gave greater consistency in the manner that the responses come out

therefore, providing greater compatibility in the responses. Orodho (2012) asserts that a questionnaire allows dimension for or beside a particular viewpoint and that questionnaire had the capability to gather a great amount of information in a reasonably short time and on a large geographical distribution (Gall, 2003). Additionally, Kisilu and Tromp (2011) explained that the questionnaire upholds respondents' confidentiality and had no opportunity for the researcher's bias in the study.

Data collection procedures

Upon the successful presentation of the research proposal and given a go ahead comment from the panel of examiners, the researcher requested for a letter of introduction from Rockview University Faculty of Post Graduate Studies and Research to the District Education Board Secretary (DEBS) office for permission to

proceed into questionnaire distribution within the primary schools in the district. The researcher followed all the ethical guidelines with regard to permission and proceeded to question distribution and collection.

Data analysis

Orodho (2009) posits that data analysis was the lifeline of a research and the method of analysis was the backbone and conduit wire. Qualitative data will be reduced by condensing the material systematically, and then structured into themes and patterns for effective analysis. The results were presented using frequency tables, pie charts and bar graphs. Qualitative findings were reported based on the objectives of the study and conclusions and recommendations were made based on study findings. The statistical package for social sciences version twenty-five (SPSS –V25) was used to analyze the raw data.

IV. Findings

Records are 'information created, received, and maintained as evidence by an organization or person, in the transaction of business.

The respondents were asked if they know that records were information created, received, and maintained as evidence by an organization or person, in the transaction of business. Their responses are indicative in table 1 and figure 1 below:

Table 1 Records are ‘information created, received, and maintained as evidence by an organization or person, in the transaction of business.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	189	85.9	85.9	85.9
NO	22	10.0	10.0	95.9
NOT SURE	9	4.1	4.1	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

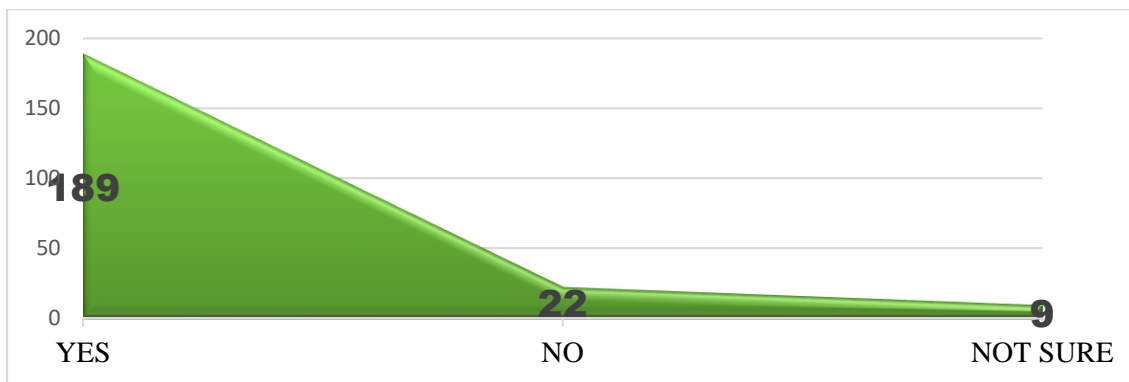


Figure 1 Records are ‘information created, received, and maintained as evidence by an organization or person, in the transaction of business.

Source: Research Findings, 2021.

The responses indicate that a frequency of 85.9% (n=189) stated that ‘YES’, 10% (n=22) stated that ‘NO’ and a frequency of 4.1% (n=9) were NOT SURE. It was therefore concluded that the majority of the respondents knew that records were information created, received, and maintained as evidence by an organization or person, in the transaction of business.

Records pass through several phases in their life cycle.

The question was given to establish whether the respondents were aware that records pass through several phases in their life cycle. Table 2 and figure 2 below brought out the raw data representation as shown:

Table 2: Records pass through several phases in their life cycle.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	61	27.7	27.7	27.7
	NO	58	26.4	26.4	54.1
	NOT SURE	101	45.9	45.9	100.0
	Total	220	100.0	100.0	

Source: Research Findings, 2021.

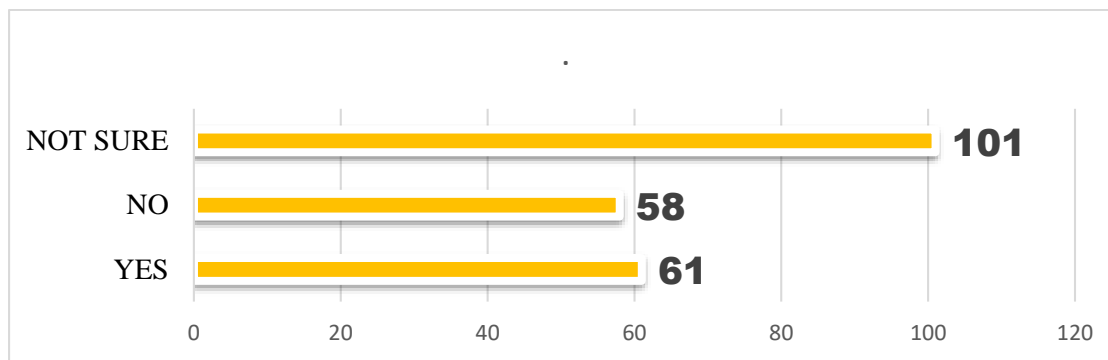


Figure 2: Records pass through several phases in their life cycle

Source: Research Findings, 2021.

A frequency of 27.7% (n=61) indicated that ‘YES’, a frequency of 26.4% (n=58) stated that ‘NO’ and 45.9% (n=101) stated that they were ‘NOT SURE’. It was concluded that the respondents were not aware that records pass through several phases in their life cycle.

Hybrid Records Management is one in which some of the documents are kept in hard-copy format while others are scanned and converted to a digital format.

The researcher wanted to find out if whether the respondents were aware that Hybrid records Management was one in which some of the documents were kept in hard-copy format while others were scanned and converted to a digital format. Table 3 and figure 3 below is showing the raw data from the respondent as shown:

Table 3: Hybrid Records Management is one in which some of the documents are kept in hard-copy format while others are scanned and converted to a digital format.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	72	32.7	32.7	32.7
NO	72	32.7	32.7	65.5
NOT SURE	76	34.5	34.5	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

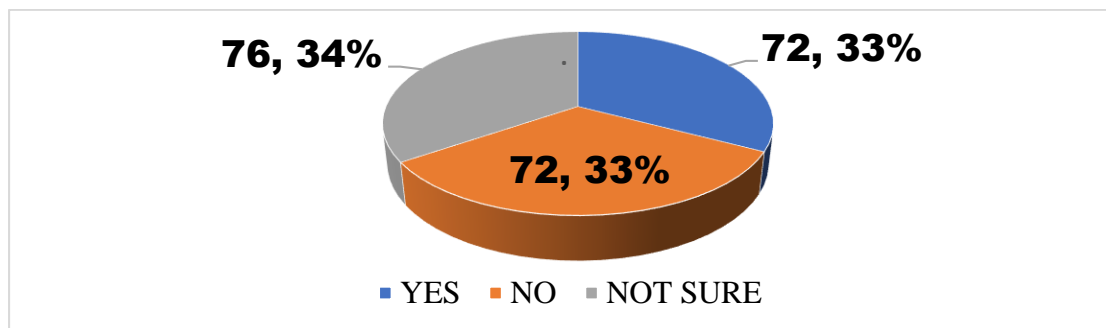


Figure 3: Hybrid Records Management is one in which some of the documents are kept in hard-copy format while others are scanned and converted to a digital format.

Source: Research Findings, 2021.

A frequency of 32.7% (n=72) said ‘YES’ while 32.7% (n=72) responded ‘NO’ and 34.5% (n=76) indicated that they were ‘NOT SURE’. It was concluded that the respondents were aware that Hybrid Records Management was one in which some of the documents were kept in hard-copy format while others were scanned and converted to a digital format, although a good number of them did not know with yet another portion of the respondents were not very certain of what hybrid records management was.

Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal.

When the respondents were asked whether Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal. Figure 4 and table 4 below show the responses from the respondents as follows:

Table 4: Hybrid records management is the practice of maintaining the records in schools from the time they are created up to their eventual disposal.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	142	64.5	64.5	64.5
NO	36	16.4	16.4	80.9
NOT SURE	42	19.1	19.1	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

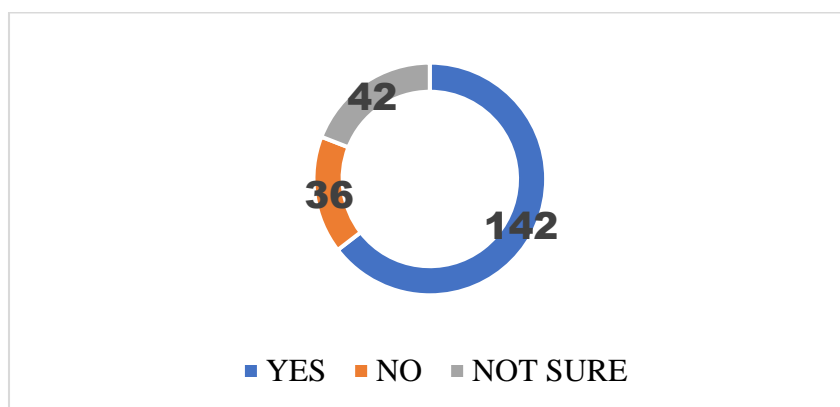


Figure 4: Hybrid records management is the practice of maintaining the records in schools from the time they are created up to their eventual disposal

Source: Research Findings, 2021.

The data show that 64.5% (n=142) said ‘YES’, 16.4% (n=36) said ‘NO’ and 19.1% (n=42) were ‘NOT SURE’. It was concluded that the respondents were aware that Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal.

Hybrid records management practices in school would provide information for educational planners and administrators.

The respondents were asked whether Hybrid records management practices in school would provide information for educational planners and administrators. The responses from the respondents indicated in table 5 and figure 5 that:

Table 5: Hybrid records management practices in school would provide information for educational planners and administrators.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid YES	192	87.3	87.3	87.3
NO	17	7.7	7.7	95.0
NOT SURE	11	5.0	5.0	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

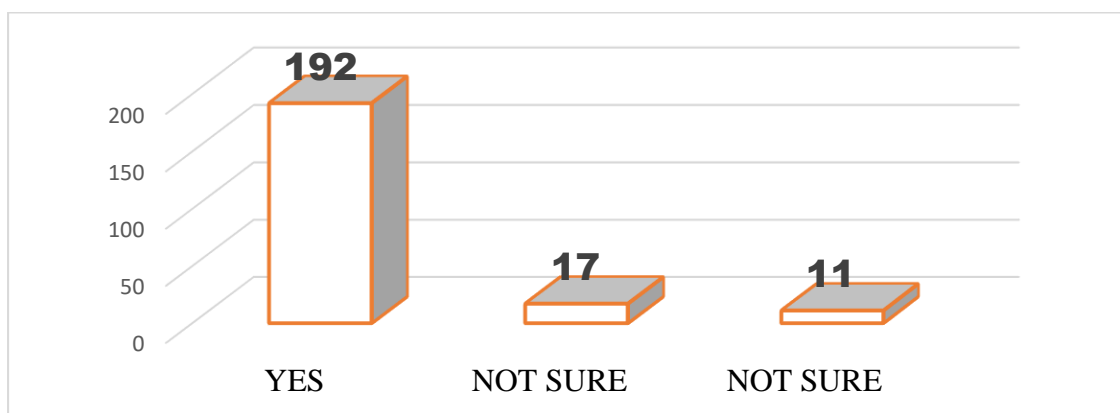


Figure 5: Hybrid records management practices in school would provide information for educational planners and administrators.

Source: Research Findings, 2021.

The raw data in table 5 and figure 5 above indicate that 87.3% (n=192) said that ‘YES’, 7.7% (n=17) indicated that ‘NO’, and 5% of the total respondent’s representation stated that ‘NOT SURE’. It was concluded that the responded were aware that Hybrid records management practices in school would provide information for educational planners and administrators.

Records keepers in schools lack the basic computer skills and competences for handling records.

When asked whether Records keepers in schools lack the basic computer skills and competences for handling records. The respondents had the following to say that was recorded in table 6 and figure 6 below:

Table 6: Records keepers in schools lack the basic computer skills and competences for handling records.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STONGLY DISAGREE	15	6.8	6.8	6.8
	DISAGREE	33	15.0	15.0	21.8
	NEUTRAL	15	6.8	6.8	28.6
	AGREE	123	55.9	55.9	84.5
	STRONGLY AGREE	34	15.5	15.5	100.0
	Total	220	100.0	100.0	

Source: Research Findings, 2021.

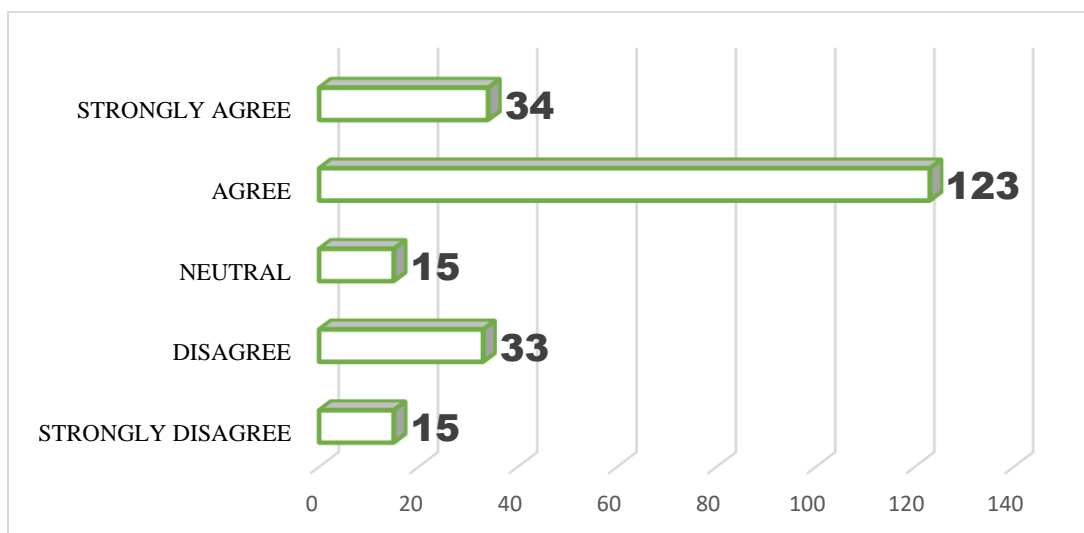


Figure 6: Records keepers in schools lack the basic computer skills and competences for handling records.

Source: Research Findings, 2021.

A frequency of 6.8% (n=15) strongly disagreed, 15% (n=33) of the total sample disagreed, 6.8% (n=15) were neutral and 55.9% (n=123) agreed while 15.5% (n=34) strongly agreed that Records keepers in schools lack the basic computer skills and competences for handling records. Based on the high frequency representation of those that agreed and strongly agreed, it was concluded that primary schools in Livingstone district of Southern province had record keepers that lack the basic computer skills and competences for handling records.

Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features on their computer systems.

The responses to whether Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features on their computer systems were shown in table 7 and figure 7 below:

Table 7: Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features of their computer systems.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	26	11.8	11.8	11.8
DISAGREE	47	21.4	21.4	33.2
NEUTRAL	16	7.3	7.3	40.5
AGREE	114	51.8	51.8	92.3
STRONGLY AGREE	17	7.7	7.7	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

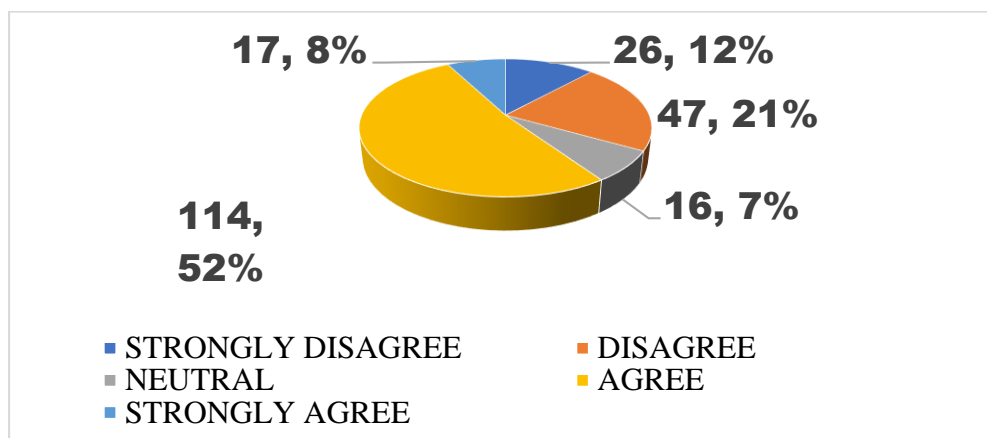


Figure 7: Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features of their computer systems.

Source: Research Findings, 2021.

A percent representation of 11.8% (n=26) strongly disagreed, a frequency of 21.4% (n=47) disagreed. A respondent representation of 7.3% (n=16) disagreed, 7.3% (n=16) were neutral, 51.8% (n=114) agreed and 7.7% (n=17) strongly agreed that Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features of their computer systems. It was concluded based on the majority of the responses that agreed and strongly agreed that primary schools in Livingstone district had Clerical staff with insufficient knowledge and training to make optimum use of hybrid record management support features on their computer systems.

School lacks records management policies and procedures.

The respondents were asked whether schools lack records management policies and procedures as one of the challenges for hybrid record management through the life cycle of record keeping. Figure 8 below show the responses:

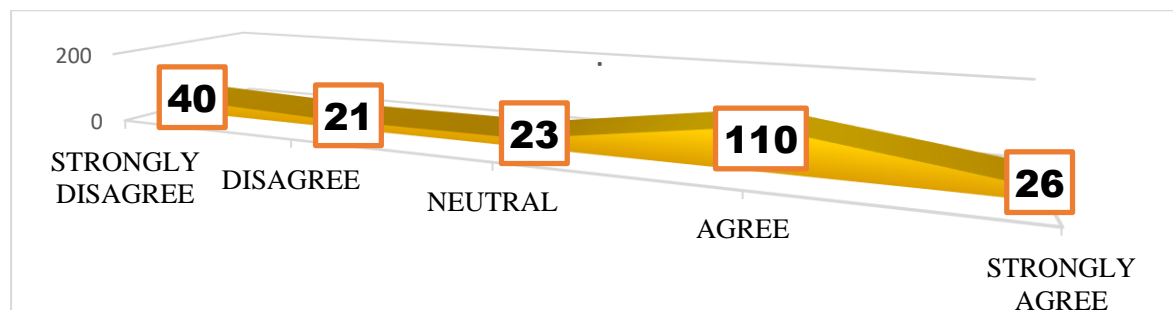


Figure 4.12: School lacks records management policies and procedures.

Source: Research Findings, 2021.

A frequency of 18.2% (n=40) strongly disagreed, 9.5% (n=21) disagreed, 10.5% (n=23) were neutral, 50% (n=110) agreed and 11.8% (n=26) strongly agreed that School lacks records management policies and procedures. Based on the high frequency of the respondents who agreed and strongly agreed, it was concluded that primary schools lack records management policies and procedures that affected greatly to hybrid record management through the life cycle of record keeping.

Hybrid records management involves establishing systematic controls at every stage of the record’s life cycle.

The researcher sought responses from the respondent as to whether they were aware that Hybrid Records Management involves establishing systematic controls at every stage of the record’s life cycle. Table 8 and figure 9 below is indicative of their responses as shown:

Table 8: Hybrid records management involves establishing systematic controls at every stage of the record’s life cycle.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	39	17.7	17.7	17.7
DISAGREE	43	19.5	19.5	37.3
NEUTRAL	89	40.5	40.5	77.7
AGREE	37	16.8	16.8	94.5
STRONGLY AGREE	12	5.5	5.5	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

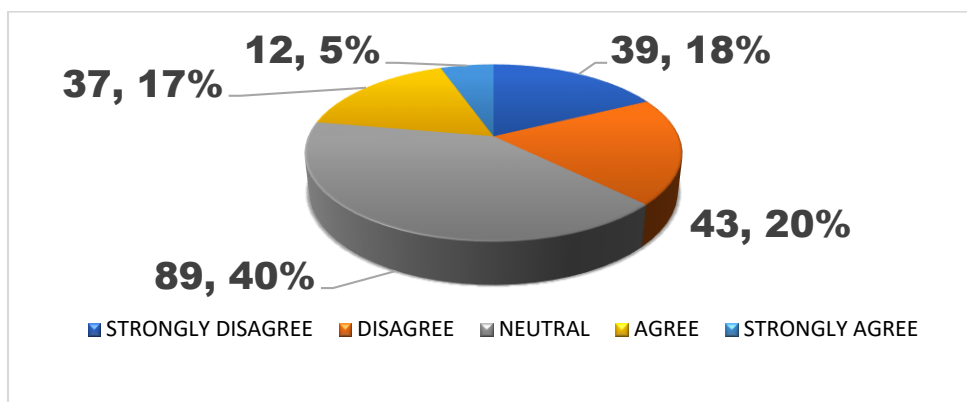


Figure 9: Hybrid records management involves establishing systematic controls at every stage of the record's life cycle

Source: Research Findings, 2021.

A frequency of 17.7% (n=39) strongly disagreed, 19.5% (n=43) disagreed, 40.5% (n=89) were neutral, 16.8% (n=37) agreed and 5.5% (n=12) strongly agreed. It was concluded that the respondents were not aware that Hybrid records management involves establishing systematic controls at every stage of the record's life cycle and that this was one of the challenges affecting hybrid record management through the life cycle of record keeping.

Hybrid Management records infrastructure pertinently affects the implementation of Hybrid record management system.

When the respondents were asked if at all Electronic Management records infrastructure pertinently affects the implementation of Hybrid record management system, table 4.14 and figure 9 below has the responses as shown:

Table 9: Hybrid Management records infrastructure pertinently affects the implementation of Hybrid record management system.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	55	25.0	25.0	25.0
DISAGREE	75	34.1	34.1	59.1
NEUTRAL	71	32.3	32.3	91.4
AGREE	19	8.6	8.6	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

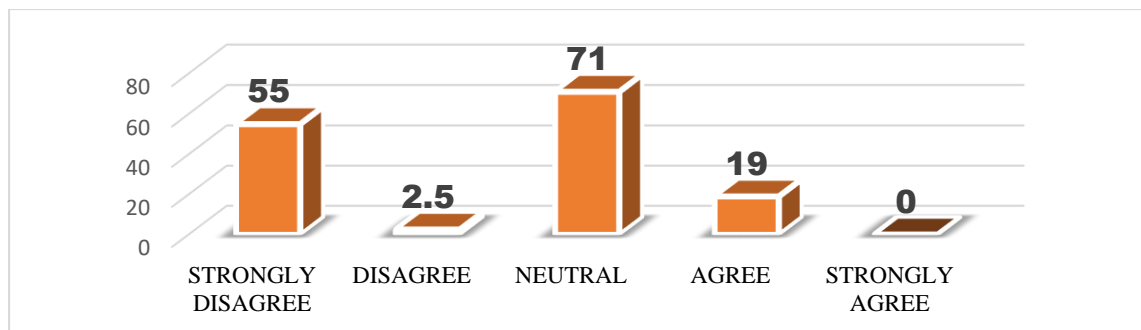


Figure 10: Hybrid Management records infrastructure pertinently affects the implementation of Hybrid record management system.

Source: Research Findings, 2021.

A frequency of 25% (n=55) strongly disagreed, 34.1% (n=75) disagreed, 32.3% (n=71) were neutral, 8.9% (n=19) agreed and none of the respondents strongly agreed. It was concluded based on the high frequency representation of the respondents who strongly disagreed and disagreed to the assertion that indicated that the respondents were not aware that Hybrid Management records infrastructure pertinently affects the implementation of Hybrid record management system.

Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems.

The respondents were asked whether Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems. Table 10 and figure 11 below show their responses:

Table 10: Interconnectivity problems are a major obstacle to the wide adoption of hybrid record management systems.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	28	12.7	12.7	12.7
DISAGREE	64	29.1	29.1	41.8
NEUTRAL	103	46.8	46.8	88.6
AGREE	18	8.2	8.2	96.8
STRONGLY AGREE	7	3.2	3.2	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

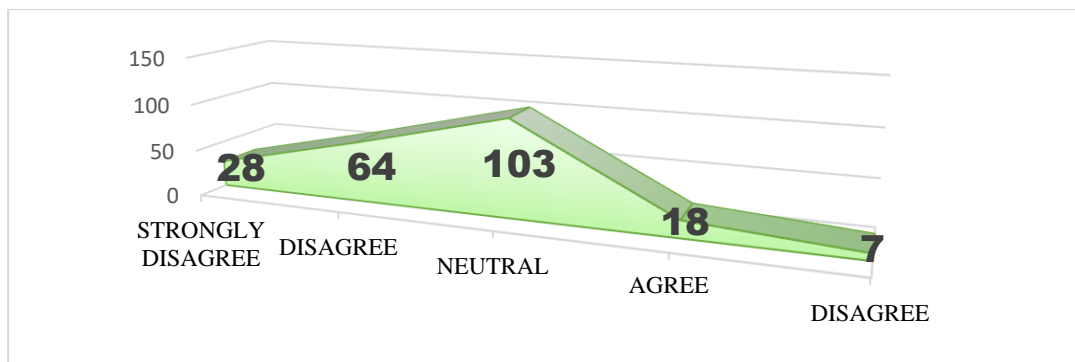


Figure 11: Interconnectivity problems are a major obstacle to the wide adoption of hybrid record management systems.

Source: Research Findings, 2021.

Results in table 10 and figure 11 above revealed the following; 12.7% (n=28) strongly disagreed, 29.1% (n=64) disagreed, 46.8% (n=103) were neutral, 8.2% (n=18) agreed and 3.2% (n=7) strongly agreed. Based on the high frequency of the respondents who were neutral and an addition high representation of those that disagreed, it was concluded that the respondents were not aware that Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems making it one of the challenges for hybrid record management through the life cycle of record keeping.

Schools had sufficient quantity of hardware required in order to use the hybrid record management systems, that includes phone lines, computers and internet connections.

The responses to whether Sufficient quantity of hardware was required in order to use the hybrid record management systems, that includes phone lines, computers and internet connections were presented in table 11 and figure 12 below:

Table 11: Schools had sufficient quantity of hardware required in order to use the hybrid record management systems, which includes phone lines, computers and internet connections.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	35	15.9	15.9	15.9
DISAGREE	71	32.3	32.3	48.2
NEUTRAL	85	38.6	38.6	86.8
AGREE	23	10.5	10.5	97.3
STRONGLY AGREE	6	2.7	2.7	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

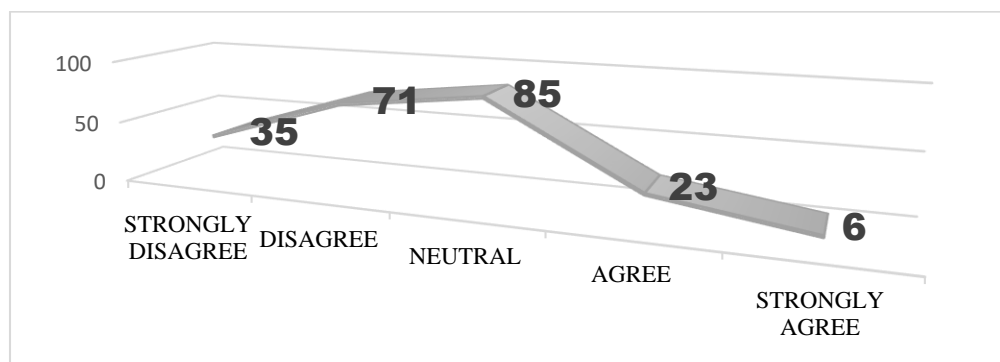


Figure 12: Schools had sufficient quantity of hardware required in order to use the hybrid record management systems, which includes phone lines, computers and internet connections.

Source: Research Findings, 2021.

The raw data above show that a frequency of 15.9% (n=35) strongly disagreed, 32.3% (n=71) disagreed, 38.6% (n=85) were neutral, 10.5% (n=23) agreed and 2.7% (n=6) strongly agreed. It was concluded that one of the challenges that affect hybrid record management through the life cycle was that the responses were not aware that sufficient quantity of hardware was required in order to use the hybrid record management systems, which includes phone lines, computers and internet connections.

Lack of physical security creates a resistance to the adoption of hybrid record management through the life cycle.

The researcher wanted to find out whether lack of physical security created a resistance to the adoption of hybrid record management through the life cycle. Table 12 and figure 13 below has the following information:

Table 12: Lack of physical security creates a resistance to the adoption of hybrid record management through the life cycle.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	28	12.7	12.7	12.7
DISAGREE	43	19.5	19.5	32.3
NEUTRAL	13	5.9	5.9	38.2
AGREE	90	40.9	40.9	79.1
STRONGLY AGREE	46	20.9	20.9	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

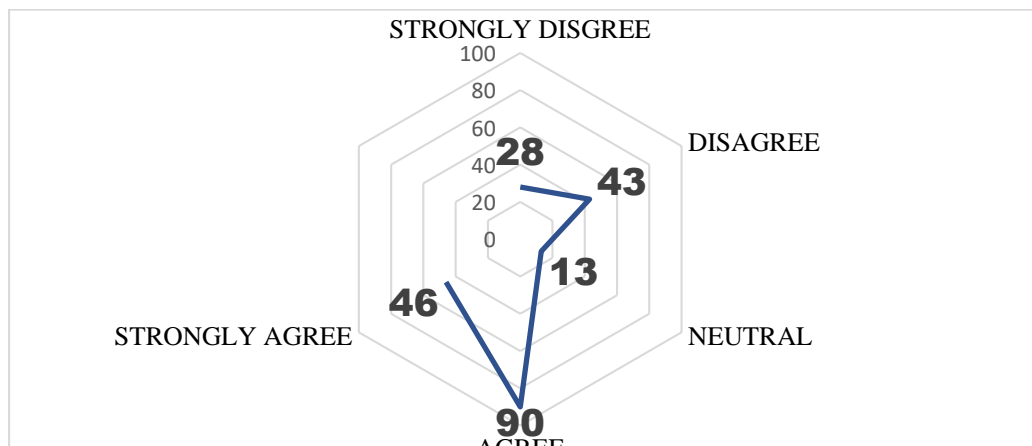


Figure 13: Lack of physical security creates a resistance to the adoption of hybrid record management through the life cycle.

Source: Research Findings, 2021.

A frequency of 12.7% (n=28) strongly disagreed, 19.5% (n=43) disagreed, 5.9% (n=13) were neutral, 40.9% (n=90) agreed and 20.9% (n=46) strongly agreed that Lack of physical security creates a resistance to the adoption of hybrid record management through the life cycle. It was concluded primary schools in Livingstone district Lack of physical security that creates a resistance to the adoption of hybrid record management through the life cycle and was one of the challenges that affect hybrid record management through the life cycle.

There is a Policy that is as an authoritative statement of intent to manage records in an appropriate and suitable manner.

Asked whether there was a Policy that was as an authoritative statement of intent to manage records in an appropriate and suitable manner. The responses were shown in table 13 and figure 14 below:

Table 13: There is a Policy that is as an authoritative statement of intent to manage records in an appropriate and suitable manner.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	79	35.9	35.9	35.9
DISAGREE	95	43.2	43.2	79.1
NEUTRAL	27	12.3	12.3	91.4
AGREE	19	8.6	8.6	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

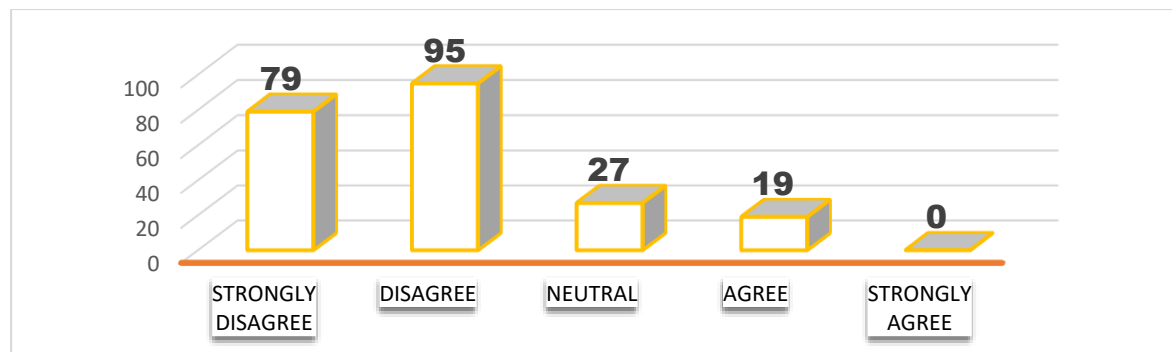


Figure 14: There is a Policy that is as an authoritative statement of intent to manage records in an appropriate and suitable manner.

Source: Research Findings, 2021.

The table and figure above show that 35.9% (n=79) strongly disagreed, 43.2% (n=95) disagreed, 12.3% (n=27) were neutral, 8.6% (n=19) agreed and none of the respondents strongly agreed. It was concluded that primary schools in Livingstone had no Policy that acted as an authoritative statement of intent to manage records in an appropriate and suitable manner that was another challenge to hybrid record management through the life cycle of record keeping.

The school has adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping.

Whether the school had adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping. The sample's responses are in table 14 and figure 15 below:

Table 14: The school has adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	51	23.2	23.2	23.2
DISAGREE	120	54.5	54.5	77.7
NEUTRAL	14	6.4	6.4	84.1
AGREE	35	15.9	15.9	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

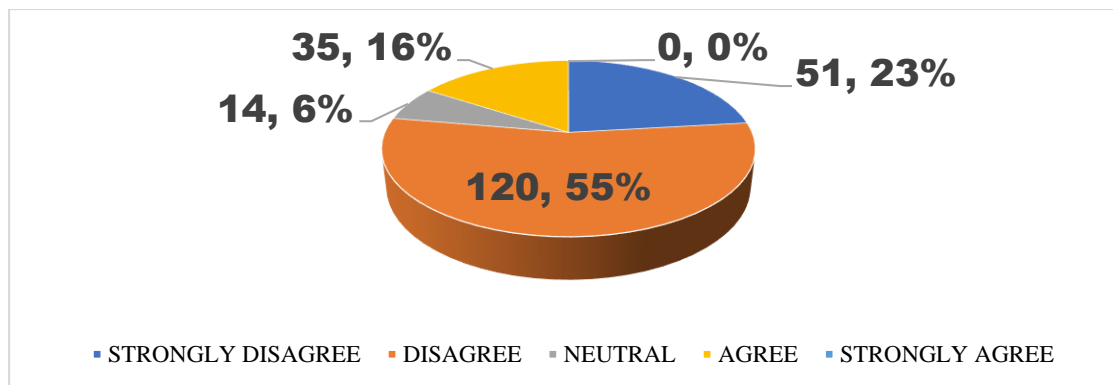


Figure 15: Where the records management policy comprises part of a broader hybrid record management, the school has adopted an easily identifiable regulatory framework to strengthening hybrid records management practices.

Source: Research Findings, 2021.

A frequency of 23.2% (=51) strongly disagreed, 54.5% (n=120) disagreed, 6.4% (n=14) were neutral, 15.9% (n=35) agreed and none of the respondents strongly agreed to this assertion. It was therefore concluded that primary schools in Livingstone district had not adopted an easily identifiable regulatory framework to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping.

Administrative will power at employing trained records human resource for effective hybrid records management through its life cycle.

When the respondents were asked whether in their school was administrative will power at employing trained records human resource for effective hybrid records management through its life cycle. Their responses are indicated in table 15 and figure 16 shown below:

Table 15: Administrative will power at employing trained records human resource for effective hybrid records management through its life cycle.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	65	29.5	29.5	29.5
DISAGREE	113	51.4	51.4	80.9
NEUTRAL	17	7.7	7.7	88.6
AGREE	16	7.3	7.3	95.9
STRONGLY AGREE	9	4.1	4.1	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

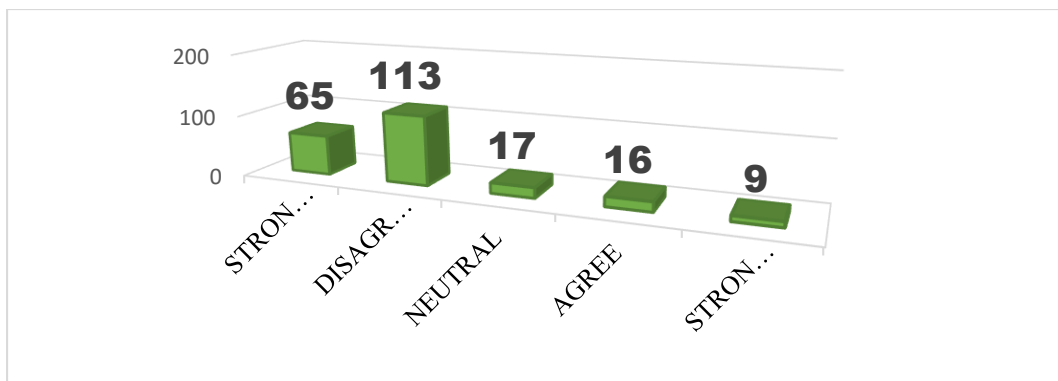


Figure 16: Administrative will power at employing trained records human resource for effective hybrid records management through its life cycle.

Source: Research Findings, 2021.

Table 15 and figure 16 above show that; 29.5% (n=65) strongly disagreed, 51.4% (n=113) disagreed, 7.7% (n=17) were neutral, 7.3% (n=16) agreed and 4.1% (n=9) strongly agreed to the question. It was concluded based on the high frequency of their respondents that disagreed that primary school in Livingstone did not have administrative will power at employing trained records human resource for effective hybrid records management through its life cycle.

Hybrid record Management require that records management process to be regarded as a continuous activity that focuses on the operations that produce records.

When the respondents were asked on the cost-effective strategy that Hybrid record Management require that records management process to be regarded as a continuous activity that focused on the operations that produce records, they had the following to say as shown in table 16 and figure 17 below:

Table 16: Hybrid record Management require that records management process was regarded as a continuous activity that focused on the operations that produce records.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	20	9.1	9.1	9.1
DISAGREE	34	15.5	15.5	24.5
NEUTRAL	24	10.9	10.9	35.5
AGREE	110	50.0	50.0	85.5
STRONGLY AGREE	32	14.5	14.5	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

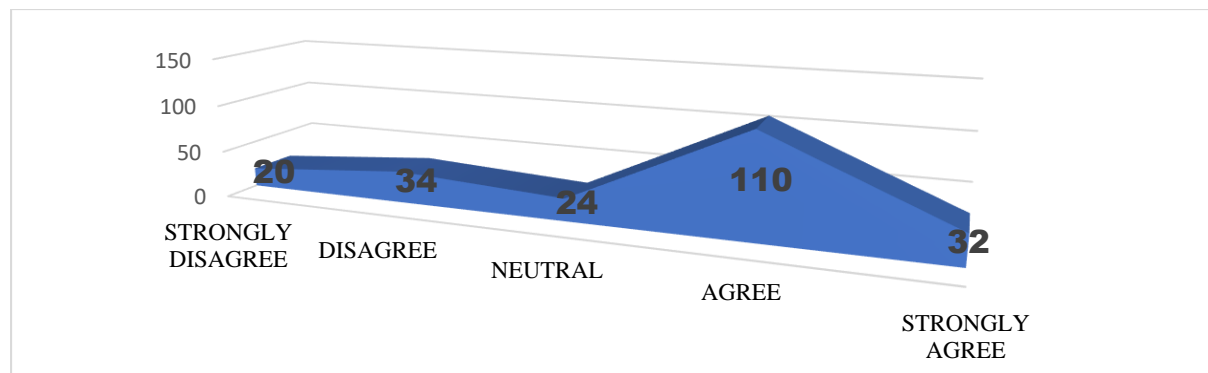


Figure 17: Hybrid record Management require that records management process was regarded as a continuous activity that focused on the operations that produce records.

Source: Research Findings, 2021.

A frequency of 9.1% (n=20) strongly disagreed, 15.5% (n=34) disagreed, 10.9% (n=24) were neutral, 50% (n=110) agreed and 14.5% (n=32) strongly agreed that Hybrid record Management require that records management process to be regarded as a continuous activity that focused on the operations that produce records. It was concluded that the respondents agreed that the cost-effective strategy for Hybrid record Management through the life cycle of record, require that records management process to be regarded as a continuous activity that focused on the operations that produce records.

There was in your school a system of disposing off records that were no longer needed.

As to whether primary schools in Livingstone district had a system of disposing off records that were no longer needed as a cost-effective strategy of hybrid record management through the life cycle of record keeping, the respondents had this to say as indicated in table 17 and figure 18 below:

Table 17: There was in your school a system of disposing off records that were no longer needed.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid STRONGLY DISAGREE	78	35.5	35.5	35.5
DISAGREE	106	48.2	48.2	83.6
NEUTRAL	19	8.6	8.6	92.3
AGREE	17	7.7	7.7	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

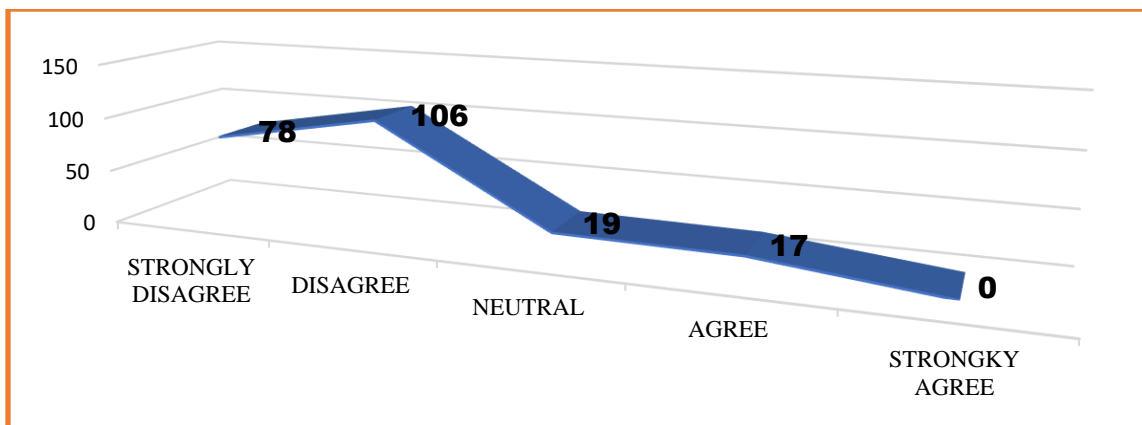


Figure 18: There was in your school a system of disposing off records that were no longer needed.

Source: Research Findings, 2021.

The responses were that; 35.5% (n=78) strongly disagreed, 48.2% (n=106) disagreed, 8.6% (n=19) were neutral, 7.7% (n=17) agreed and none of the respondents strongly agreed that there were in school a system of disposing off records that were no longer needed. It was concluded that primary schools in Livingstone district had no system of disposing off records that were no longer needed as a cost-effective strategy of hybrid record management through the life cycle of record keeping.

All members of staff should be involved in hybrid record management system for effective record management through its life cycle.

Responses were sought from the respondents whether all members of staff should be involved in hybrid record management system for effective record management through its life cycle as a cost-effective strategy, the responses are shown in table 18 and figure 19 below:

Table 18: All members of staff should be involved in hybrid record management system for effective record management through its life cycle.

	Frequency	Percent	Valid Percent	Cumulative Percent
STRONGLY DISAGREE	74	33.6	33.6	33.6
DISAGREE	64	29.1	29.1	62.7
NEUTRAL	31	14.1	14.1	76.8
AGREE	35	15.9	15.9	92.7
STRONGLY AGREE	16	7.3	7.3	100.0
Total	220	100.0	100.0	

Source: Research Findings, 2021.

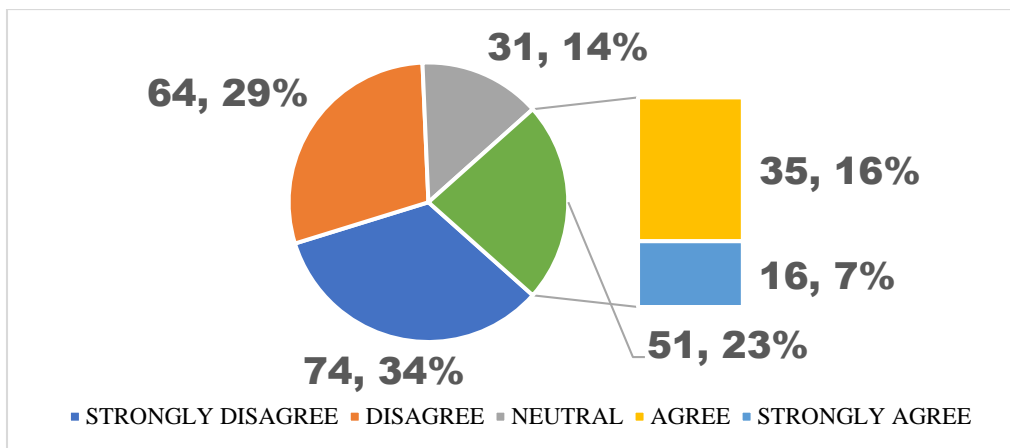


Figure 19: All members of staff should be involved in hybrid record management system for effective record management through its life cycle.

Source: Research Findings, 2021.

The responses were that 33.6% (n=74) strongly disagreed, 29.1% (n=64) disagreed, 14.1% (n=31) were neutral, 15.9% (n=35) agreed and 7.3% (n=16) strongly agreed that all members of staff should be involved in hybrid record management system for effective record management through its life cycle. It was concluded that the respondents disagreed with the assertion that all members of staff should be involved in hybrid record management system for effective record management through its life cycle as a cost-effective strategy.

V. Discussion

Records were ‘information created, received, and maintained as evidence by an organization or person, in the transaction of business.

The respondents were asked if they know that records were information created, received, and maintained as evidence by an organization or person, in the transaction of business. It was therefore concluded that the majority of the respondents knew that records were information created, received, and maintained as evidence by an organization or person, in the transaction of business. The

assertion was further supported by the International Standards Organization (ISO) (2001), who defined records that they were ‘information created, received, and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business.’ The Organization goes on to define records management as ‘the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including the processes for capturing and maintaining evidence of and information

about business activities and transactions in the form of records.

Records pass through several phases in their life cycle.

The question was given to establish whether the respondents were aware that records pass through several phases in their life cycle. It was concluded that the respondents were not aware that records pass through several phases in their life cycle. Contrary to the findings of Lappin, (2010) that a record has a life cycle that begins from record creation or receipt, through its useful life to final disposal for example destruction or permanent retention as archival record. Additionally, Senowoliba et al, (2015) stated that Records Management is the efficient and systematic control of records (both paper and electronic) throughout their life-cycle from their creation or receipt until the time of their disposal.

It was concluded therefore that failure by the respondents to know that records pass through several phases in their life cycle was a challenge in itself for hybrid record management through its life cycle in primary schools of Livingstone district.

Hybrid Records Management is one in which some of the documents are kept in

hard-copy format while others are scanned and converted to a digital format.

The researcher wanted to find out whether the respondents were aware that Hybrid records Management was one in which some of the documents were kept in hard-copy format while others were scanned and converted to a digital format. The raw data was concluded that the respondents were aware that Hybrid Records Management was one in which some of the documents were kept in hard-copy format while others were scanned and converted to a digital format, although a good number of them did not know with yet another portion of the respondents were not very certain of what hybrid records management was. This was supported by Read-Smith and Ginn, (2011) who said that Hybrid Records Management is one in which some of the documents are kept in hard-copy format while others are scanned and converted to a digital format. Additionally, Nakpodia, (2011) asserts that hybrid record management involves the creation, storage, retrieval maintenance, disposition and the use of compact and other manual or electronic means. While Brown and Stephens, (2006)

argues that the concept of hybrid records management refers to a sharing of technology between micrographic systems and electronic imaging systems. Hybrid record management combines paper records with either a document imaging, server or cloud-based electronic system in the management of records.

Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal.

When the respondents were asked whether Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal. The responses from the respondents were concluded that they were aware that Hybrid records management was the practice of maintaining the records in schools from the time they are created up to their eventual disposal.

Hybrid records management practices in school would provide information for educational planners and administrators.

The respondents were asked whether Hybrid records management practices in school would provide information for educational planners and administrators. The responses from the respondents indicated were

concluded that the responded were aware that Hybrid records management practices in school would provide information for educational planners and administrators. In supporting the assertion Nakpodia, (2011) in his study found out that implementing good records management practices in school would provide information for educational planners and administrators because records serve as historical source for documenting history of the school, a means of showing transparency and accountability in handling school finance, they are evaluation tools for accessing progress made by schools and also show evidence of compliance with legislative.

Records keepers in schools lack the basic computer skills and competences for handling records.

When asked whether Records keepers in schools lack the basic computer skills and competences for handling records. Based on the high frequency representation of those that agreed it was concluded that primary schools in Livingstone district of Southern province had record keepers that lack the basic computer skills and competences for handling records that was identified to be one of the challenges that affect hybrid record management through the life cycle of record

keeping. Information and Communication Technology (ICT) is revolutionizing our life however, a study by Kemoni and Wamukoya (2000), confirmed that African records keepers lack the basic skills and competences for handling records and archives in the public sector. Additionally, a study that was conducted at a health facility in relation to record keeping, found out that physicians have insufficient skills and technical knowledge in dealing with Electronic Management of Records (EMRs), and that this has resulted in resistance to hybrid record management (Jha et al, 2009). Not only did the clerical staff but also other staff in most of the institutions lack adequate computer skills and these needs to be improved. The Clerical workers lack computer skills as well as general skills for the use of hybrid information systems as researched by Omary *et al*, (2010) and attributed low adoption of hybrid record management among developing countries to lack of computer skills amongst the clerical staff.

Clerical staff had insufficient knowledge and training to make optimum use of hybrid record management support features on their computer systems.

The responses to whether Clerical staff had insufficient knowledge and training to make

optimum use of hybrid record management support features on their computer systems. It was concluded based on the majority of the responses that agreed and strongly agreed that primary schools in Livingstone district had Clerical staff with insufficient knowledge and training to make optimum use of hybrid record management support features on their computer systems.

School lacks records management policies and procedures.

The respondents were asked whether schools lack records management policies and procedures as one of the challenges for hybrid record management through the life cycle of record keeping. Based on the high frequency of the respondents who agreed and strongly agreed, it was concluded that primary schools lack records management policies and procedures that affected greatly to hybrid record management through the life cycle of record keeping.

Hybrid records management involves establishing systematic controls at every stage of the record's life cycle.

The researcher sought responses from the respondent as to whether they were aware that Hybrid Records Management involves establishing systematic controls at every stage of the record's life cycle. It was

concluded that the respondents were not aware that Hybrid records management involves establishing systematic controls at every stage of the record's life cycle and that this was one of the challenges affecting hybrid record management through the life cycle of record keeping.

Hybrid Management records infrastructure pertinently affects the implementation of Hybrid record management system.

When the respondents were asked if at all Electronic Management records infrastructure pertinently affects the implementation of Hybrid record management system. It was concluded based on the high frequency representation of the respondents who disagreed that there was no support infrastructure for record keeping and that affected the implementation of Hybrid record management through the life cycle of record keeping.

Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems.

The respondents were asked whether Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems. It was concluded that the respondents were not

aware that Interconnectivity problems were a major obstacle to the wide adoption of hybrid record management systems making it one of the challenges for hybrid record management through the life cycle of record keeping.

Schools had sufficient quantity of hardware required in order to use the hybrid record management systems, that includes phone lines, computers and internet connections.

The responses to whether Sufficient quantity of hardware was required in order to use the hybrid record management systems, that includes phone lines, computers and internet connections were presented in table and figure above: It was concluded that one of the challenges that affect hybrid record management through the life cycle was that the responses were not aware that sufficient quantity of hardware was required in order to use the hybrid record management systems, which includes phone lines, computers and internet connections.

Lack of physical security creates a resistance to the adoption of hybrid record management through the life cycle.

The researcher wanted to find out whether lack of physical security created a resistance to the adoption of hybrid record management through the life cycle. Table and figure above has the following information: It was

concluded primary schools in Livingstone district Lack of physical security that creates a resistance to the adoption of hybrid record management through the life cycle and was one of the challenges that affect hybrid record management through the life cycle.

There is a Policy that is as an authoritative statement of intent to manage records in an appropriate and suitable manner.

Asked whether there was a Policy that was as an authoritative statement of intent to manage records in an appropriate and suitable manner. The responses were shown in table and figure above whose conclusion was that primary schools in Livingstone had no Policy that acted as an authoritative statement of intent to manage records in an appropriate and suitable manner that was another challenge to hybrid record management through the life cycle of record keeping. Tambudzai, (2009). outlined the challenges hindering proper records management to include: lack of records management policies and procedures, lack of qualified staff such as a records manager and archivist, limited resources to implement a system according to requirements (legislation), records management costs that are not immediately apparent and may only become significant over a period of time and thus not attract

management's attention, and limited resources to implement a system according to requirements. In support Gama (2010) revealed that the absence of records management policy is some of the major challenges affecting the effective management of records in educational institutions hence the challenges being experienced in primary school in Livingstone district.

The school has adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping.

Whether the school had adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping. It was therefore concluded that primary schools in Livingstone district had not adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices from policy that comprised part of a broader hybrid record management through the life cycle of record keeping. To deal with challenges for managing both non-electronic

records and electronic records in a hybrid environment in an integrated, consistent and effective manner, there was a need to develop a framework which covers strategies, practices and procedures to ensure that government records, regardless of their forms and media, are managed properly and effectively. Chachage and Ngulube (2006) assert that “proper records management involves establishing systematic controls (Framework) at every stage of the record’s life cycle, in accordance with established principles and accepted models of records management”. Practising proper records management leads to good public management because institutional activities were based on access to information contained in records. This implies that if records were not managed properly at every stage of the record’s life cycle in the office of origin, the product transferred to the archive’s repository will also be poor and that depicting the scenario in primary school in Livingstone district. McLeod and Hare (2006) argue that a legal and regulatory frame-work is a key to strengthening records management practices.

Administrative will power at employing trained records human resource for

effective hybrid records management through its life cycle.

When the respondents were asked whether in their school was administrative will power at employing trained records human resource for effective hybrid records management through its life cycle. It was concluded based on the high frequency of the respondents that disagreed that primary school in Livingstone did not have administrative will-power at employing trained records human resource for effective hybrid records management through its life cycle. Many administrative heads of academic institutions complain of a lack of funds and material resources for records keeping. This certainly affects the life cycles of many records generated within institutions and thus results in serious lapses. This reality reveals a gross inadequacy of qualified personnel and facilities, complications introduced by a burgeoning student population and space challenges (Attwood and Gill, 2008).

Hybrid record Management require that records management process to be regarded as a continuous activity that focuses on the operations that produce records.

When the respondents were asked on the cost-effective strategy that Hybrid record Management require that records management process to be regarded as a continuous activity that focused on the operations that produce records. It was concluded that the respondents agreed that the cost-effective strategy for Hybrid record Management through the life cycle of record, require that records management process to be regarded as a continuous activity that focused on the operations that produce records.

There was in your school a system of disposing off records that were no longer needed.

As to whether primary schools in Livingstone district had a system of disposing off records that were no longer needed as a cost-effective strategy of hybrid record management through the life cycle of record keeping. It was concluded that primary schools in Livingstone district had no system of disposing off records that were no longer needed as a cost-effective strategy of hybrid record management through the life cycle of record keeping.

VI. Conclusion and Recommendation

The study investigated the challenges of Hybrid Record Management through the life-cycle of record keeping in primary school found in Livingston district in Southern Province. The findings of the study were that: primary schools in Livingstone district had record keepers that lack the basic computer skills and competences for handling hybrid records through the life cycle of record keeping, Clerical staff had insufficient training to make optimum use of hybrid record management support features on their computer systems, Primary schools lack records management policies and procedures that affected greatly to hybrid record management through the life cycle of record keeping and that the primary schools in Livingstone district had not adopted an easily identifiable regulatory frame-work to strengthening hybrid records management practices. Additionally, the respondents were not aware that Hybrid records management involves establishing systematic controls at every stage of the record's life cycle and that this was one of the challenges affecting hybrid record management through the life cycle of record keeping, there was no support infrastructure for record keeping and that affected the implementation of Hybrid record management through the life cycle of record keeping, interconnectivity problems were a

major obstacle to the wide adoption of hybrid record management through the life cycle of record keeping, there was insufficient quantity of hardware to use the hybrid record management, that include phone lines, computers and internet connections and lack physical security.

The researcher made the following recommendation:

1. Train record keepers in basic computer skills and competences for handling hybrid records through the life cycle of record keeping to be deployed in all primary schools.
2. Capacity-build the exiting record keepers through workshop to enable them make optimum use of hybrid record management support features on their computer systems.

“Blessed is the Lord Goddaily” Psalms 68:19. To God be the glory because of the great things He has done in my life. I further thank the Almighty for sustaining me throughout the challenges of this enormous academic work. It was not an easy road God!

I would like to express my sincere appreciation to my Lead supervisor, Professor L. Chitondo for being extreme cautious in ensuring that quality work was realized. Dr B. Mubemba and Professor

3. Headteachers and other stakeholders to develop and adopted an easily identifiable regulatory frame-work that shall have systematic controls at every stage of the record’s life cycle to strengthening hybrid records management practices at school level.
4. Establish support infrastructure such as record office, computers, shelves/cupboards, computer interconnectivity, security system and phone lines for implementation of Hybrid record management through the life cycle of record keeping.

VII. Acknowledgement

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