

**BEYOND DOCUMENTATION: AN ANALYTICAL APPROACH TOWARDS THE
FUTURE OF MUSEUMS AS INFORMATION CENTRES**

BY

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MASTER OF ARTS IN MUSEUM STUDIES

In the

**DEPARTMENT OF ARCHAEOLOGY, CULTURAL HERITAGE AND MUSEUM
STUDIES**

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DECLARATION

I, Forget Chaterera, hereby declare that this thesis is my own original work and has not previously in its entirety, nor in part, been submitted to any other university for a degree.

.....

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June 2013

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APPROVAL FORM

The undersigned certify that they have supervised, read and recommended to Midlands State University for acceptance a research project entitled, '*Beyond documentation: an analytical approach towards the future of museums as information centres*', submitted in partial fulfilment of the requirements for the degree of Master of Arts in Museum Studies in the Department of Archaeology, Cultural Heritage and Museum Studies, Midlands State University.

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DEDICATION

To my late father, Titus Chaterera, I wish you had lived longer to witness my academic prosperity.

ABSTRACT

In view of the records preservation status in Zimbabwe's National Museums, this study tries to ascertain the future of museums as information centres. Using the records life cycle principle and the continuum model which state that documents should be properly managed from the time they are created until their ultimate disposal, this study examined the preservation strategies employed by Zimbabwe's National Museums to ensure their records survive into the future. For the museum's purpose in life to be justified and meaningful, records that are generated as a result of the museum's programmes and activities must be regarded as corporate assets, whose preservation should be given due consideration. Using the survey research design, the study employed interviews; questionnaires, observations and the social media to collect data from the informants of the study. An overview of the significant findings of the study reflects that museum records management issues are not yet an appreciated phenomenon in Zimbabwe's National Museums. That was evidenced by the lack of knowledge and practice on basic records management activities such as the availability of a records management policy, records procedures manual, conducting records surveys, creating retention and disposal schedules. Objects are the raison d'être of museums and this renders object records as mission critical, to the extent that museums cannot function without them. The study established that museum practitioners in Zimbabwe's National Museums focus absolutely on objects and object related records. The value of records related to other museum functions or those that document wider administrative and business activities is largely overlooked. These records include documentation concerning building maintenance, development, finance, staff, exhibitions and projects. To that effect, museum practitioners are encouraged to consider managing museum records as part of their key duties.

Keywords: Museum records management, records preservation, information centre, collections management, service delivery, museum records, records appraisal, retention and disposal schedules, disaster preparedness, digitisation, photographic records, records management policy, records procedures manual, records storage facilities

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LIST OF ACRONYMS AND ABBREVIATIONS

AFRICOM	International Council of African Museums
ASU	Archaeological Survey Unit
CHIN	Canadian Heritage Information Network
CIDOC	International Committee for Documentation
ICCROM	International Centre for the Study for the Study of the Preservation and Restoration of Cultural Property
ICOM	International Council of Museums
ISG	International Solutions Group
MSU	Midlands State University
NMMZ	National Museums and Monuments of Zimbabwe
SPECTRUM	The united Kingdom Documentation Standard
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UZ	University of Zimbabwe
ZMHS	Zimbabwe Museum of Human Sciences
ZMM	Zimbabwe Military Museum

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CHAPTER I

BACKGROUND AND THEORETICAL CONCEPTS

“Museums are information businesses and their records are corporate assets which should be maximised and protected” (Brunskill and Demb 2012:35).

1.0 Introduction

The value of good information and records management has become more widely recognised in the museum community. Although museums are inherently information businesses, their information is often generated at local, departmental or project levels with specific targets and outputs in mind (London Museums Hub 2010). Whilst this approach may meet immediate information goals, it does not always take into account the overall business needs of an organisation or its potential future requirements. This situation can result in uncoordinated systems, information duplication, poor preservation strategies and an inability to consistently locate relevant information sources. It can also lead to missed opportunities, compromised public service delivery and restricts the ability of a museum to innovate (International Records Management Trust 2000). From that perspective, this study examines the preservation status of records that are generated as a result of museum programmes and activities.

Amongst the purpose in life of museums is to ensure that collections in their custody are well documented, preserved, interpreted and communicated to members of the public (Mullen and Soltis 2008). For that noble obligation to be fulfilled there has to be appropriate

documentation practices within the museum. The current study observed a trend for literature to provide documentation standards to museum professionals without providing guidance on how to manage the records generated from documenting museum collections. The United Kingdom Documentation Standard (SPECTRUM) is one of the key resources that provides guidance on documenting museum collections. There are also organisations that have facilitated the publication of resources regarding museum documentation issues. These organisations include the International Council of African Museums (AFRICOM), the International Committee for Documentation (CIDOC), United Nations Educational, Scientific and Cultural Organisation (UNESCO), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and the International Council of Museums (ICOM). These resources provide comprehensive information on how and why museum collections should be documented. However, very little has been done to provide museum practitioners with guidelines on how to preserve the crucial records that are generated as a result of museum activities and documentation processes. To that effect, this study discusses the extent to which those resources provide guidelines in the preservation of museum records. Museum collections management will be inadequate if the data formats produced from museum documentation processes are not well preserved.

This study was informed by the records life cycle and the continuum model which states that documents should be properly managed from the time they are created until their ultimate disposal (Yusof and Chell 2000). Using these theoretical underpinnings, this study investigated how National Museums in Zimbabwe are preserving both their photographic and conventional paper records from the time they are created up to the time of their disposal.

1.1 Scope and limitations of the study

The scope of this thesis is limited to a discussion of conventional paper and photographic records preservation. This thesis differs from other studies in that it gives practical approaches that museums in Zimbabwe might easily implement with their minimal budgets. The thesis did not discuss digital media preservation but instead examined how museums in Zimbabwe can digitise their paper records as it is perceived that the bulk of museum records are still held in paper form. Research after successful launching of digitisation programme may then look into how digital records are preserved. This study has deemed it appropriate to leave out managing electronic records as the subject is too broad to be treated as a subsection and therefore requires a separate extensive treatment.

1.2 Record keeping at the National Museums and Monuments of Zimbabwe: an overview

In this section, a brief background of record keeping practices in Zimbabwe's National Museums is provided. The National Museums and Monuments of Zimbabwe (NMMZ) was established by an Act of Parliament which is called the National Museums and Monuments Act (Chapter 25:11). The vision for NMMZ is to guarantee a secure future for Zimbabwe's heritage and the mission is to provide excellent heritage management services while promoting an understanding and appreciation of that heritage within the nation and beyond. (NMMZ Website 2007). For the vision to be attainable, there is a need to develop a sound records preservation programme of documents generated as a result of museum programmes and activities.

Mahachi (2008) gave a report that showed that museum collections in Zimbabwe were at high risk of being stolen. The report indicated that Zimbabwe's loss of cultural objects will persist unless museums ensure the physical infrastructural aspects as well as the storage facilities of collections are well secured. While that is very true and commendable, this study argues that physical protection of objects alone may not be adequate if the supporting documents of museum objects are not well preserved. As such, the attention which is given to provide museum objects with a secure environment must also be given to the records that accompany them.

Zimbabwe's National Museums have experienced a number of incidences where objects have been stolen. For instance, the Natural History Museum lost the 1000 Guineas Trophy which contained 175 ounces of gold in 1998, King Lobengula's gold bracelet was stolen on an unknown date and seven leopard skins were stolen on the 3rd of July 2003 (Mahachi 2008). At the National Mining Museum in Kwekwe, two gold crucibles were stolen between the 5th and the 9th of October 2000 while four gold crucibles were stolen on the 24th of December 2001 (Mahachi 2008). These incidences emphasise the need for appropriate documentation of museum collections and most importantly, the ability to preserve those records in a good state. The need for sound record keeping in our museums follows the realisation that some of the stolen objects were discovered but could not be returned to Zimbabwe as there was no documentation to prove the ownership of the objects. For instance, Mahachi (2008) reported that in 2005 NMMZ received information from a source in South Africa that objects stolen from the ethnography department at the Zimbabwe Museum of Human Sciences were on sale in Cape Town. Efforts to get the objects were in vain as there was no documentation to prove that NMMZ were indeed the owners. Following that report, Mahachi (2008) urged NMMZ to ensure objects are documented in terms of the object identity guidelines. While standard

documentation is a critical first step in collections management, record keeping should also be made a museum core activity if the entire documentation process is to yield the desired results.

The context in which this study was carried out shows that the need for sound records management practices aids the security of museum collections, improves public service delivery, promotes easy access to museum records and helps in attaining the overall purpose in life of museums. In essence, the centre of museum operations lies in appropriate records management practices.

1.3 Background to the study

This section provides a comprehensive review of information surrounding museum record keeping, the preservation of photographic and conventional records within the museum environment as well as the digitisation of paper records. This background provides the valuable sources that are going to be discussed in detail in Chapter two.

Proper management of museum records is fundamental to unlocking the potential of our museums. For instance, UNESCO, ICCROM, CIDOC, AFRICOM and ICOM have been working towards capacitating museums in ensuring the preservation of their collections through sound documentation practices (Avaro and Godonou 2008, and Boylan 2004). The initiatives by the above identified organisations focus on preventive conservation issues especially the need for reliable and dynamic documentation of collections. The perceived common ground of weakness shared by UNESCO, ICCROM, CIDOC, AFRICOM and ICOM initiatives is that they do not extend beyond documenting museum collections to look

into the care of records once they have been created. Initiatives offered by those organisations are aimed at ensuring that museums are able to number, mark and register their collections appropriately. This study sought to demonstrate the need to go beyond providing advice on how to appropriately document collections and recommends appropriate records management practices which museums can adopt to ensure their records are well preserved. The need to go beyond providing documentation guidelines is based on the understanding that for museum documentation to be complete, the produced data formats should be well preserved.

Other museum documentation guidelines include the SPECTRUM. The standard contains procedures for documenting objects and their processes, as well as identifying and describing the information which needs to be recorded to support these procedures. It sets out a definition for each unit of information, guidance and examples of how and when to record the information. It is a well-respected standard internationally, and is increasingly used as the basis for international interchange of museum data especially by museums in the United Kingdom (Mckenna and Patsazi 2005). While this study appreciates the vital importance of the SPECTRUM and its objectives, it has been observed that little has been offered regarding the care of museum records generated as a result of museum documentation activities. From that view point, this study sought to explore the preservation status of museum records so that a sound records management programme is established. Similar initiatives to the SPECTRUM were offered by the Canadian Heritage Information Network (CHIN) (2011) documentation guide that provides guidelines on how to catalogue collections. The guide mainly provides advice on data format and vocabulary standards that museums need to use when documenting their collections. Again, the guide did very little to provide museum practitioners with guidelines of how to preserve their museum records but does not address the preservation of museum records.

The museum documentation initiatives presented in the two sections above serve to demonstrate that fair efforts have been put to make the documentation of museum collections a success. However, the museum documentation initiatives are incomplete in the sense that they did not provide guidance on how to preserve the crucial museum records born out of the museum documentation processes. Therefore this study sought to find out how museum practitioners at NMMZ were managing their museum records without formal guidelines and adequate resources that address issues to do with preserving records that are created and kept within the museum environment.

Trimble and Marino (2003:100) observed that although people have been advocating for archaeological records preservation for over 40 years, not all archaeologists seem to understand its importance. They further indicated that once museum practitioners have documented their collections accurately they must save it from deteriorating. Trimble and Marino (2003) noted that if collections managers take the time to create documents, they should also take the time to save them. Bradsher (1988) states that it is not good scientific practice to record information then not preserve it. As such, this research project was carried on the basis that museum practitioners should work actively for the preservation of museum collections and the associated records and photographs. Using the five regional museums for NMMZ, this research provides basic approaches that museums in the country may adopt to effectively manage their conventional records, photographic records and begin digitisation projects.

The Museums and Galleries Commission (1992:13) indicated that all documents created about a project should be preserved. The Commission noted that museum records that should be preserved include but not limited to documents regarding ownership, records regarding

conservation treatments, loan information, exhibition information, inquiries about a project, bound registers of all accessions and long-term loans, the object catalogue, location lists, field notes, maps, background research, field forms, photographs and object treatment reports. The commission also emphasised that it is better to have too many records than not enough.

Bacon (2010) observed that the care of records is a separate subfield within museology and requires museum practitioners to have knowledge about document and photograph preservation. There is need for museologists to understand what records to retain, for how long and which records to dispose and when (Barker 2003:76). It is crucial that museum practitioners understand why they need to keep certain records and how to keep them. This thesis sought to address these issues by providing museum practitioners with a theoretical and practical premise for museological records preservation.

Photographic conservation is a new and somewhat separate field which has to be treated separately. Hendriks (1978) noted that the photographic record is indispensable to information business centres as well as researchers. Photography has preserved a unique view of the past in a form particularly suited to an increasingly visually oriented society. Like traditional manuscript material, such records can be read for information and fully exploited by researchers. The need to ensure such types of records are well preserved should therefore not be over emphasised, hence the present study sought to establish the status quo regarding photographic records preservation in Zimbabwe's National Museums.

Clark (1990) and Keefe (1984) added that there is an increasing awareness of photographic collections and their inherent problems. In the past, many paper conservators applied paper conservation techniques and storage criteria to photographs and did not treat them as

particularly different from any other paper artefacts. Photographic conservation is widely discussed in terms of chemical treatment. The British Library (2009) revealed that photographic preservation and conservation strategies based on specialism and treatment options are often expensive. That means museums in developing countries such as Zimbabwe may not afford them. Due to minimal budgets that museums in Zimbabwe operate under, it has been deemed necessary to focus on improving handling and house-keeping procedures and providing suitable storage conditions. These areas are particularly important and achievable as they do not need a trained conservator and can be done on a limited budget. They can also benefit large numbers of photographs more quickly than individual repair work (Keefe 1984). This study therefore concentrates more on giving practical information on photographic preservation and mentions areas in which this differs from general paper.

Rey (2009) indicated that an analytical approach into the preservation of photographic records requires an understanding of possible causes of deterioration. A knowledge of these helps records custodians in museums to manage them accordingly so that records do not deteriorate. In light of this observation, this study explores the causes of deterioration and examines how museums in Zimbabwe are controlling threats to records such as high temperatures, direct light (especially sunlight), damp conditions and pollutants.

Amongst the key issues under the spotlight in this study is the digitisation of museum records. In digitisation, institutions should have clear goals (Jephcott 1998:13) and Serventi (2010). A museum considering digitising its records should predict the possible outcomes of the project, the potential benefits to users, to collection managers, and to the institution. Chaterera (2012) recommends the need to embrace user expectations for digitisation efforts to yield the desired results. More importantly, Marty (2010:4) noted that before starting

digitisation, the collection has to be carefully surveyed. In this study, the preservation status of photographic and conventional records in National Museums is to be established so that appropriate digitisation strategies are adopted. The Commonwealth of Australia (2011) advised that the fragility of the records will need to be considered when planning the digitisation; hence the need for this study to establish the preservation status of the museum records in Zimbabwe's National Museums to see the appropriate mechanisms that could be adopted to begin the digitisation of museum conventional paper and photographic records.

1.4 Research problems and Justification

As already indicated above, the lack of appropriate record keeping systems in museums compromises the security of museum collections and threatens public service delivery. In a global climate where effective public service delivery, accountability and transparency are top priorities, records management should play an important role in all museums. Planned management of records delivers efficient savings in organisations of all shapes and sizes including museums (London Museums Hub 2010). It also improves museums' programmes and activities thereby leading to effective public service delivery. While it is appreciated that issues to do with managing photographic and conventional records and the need for digitisation of records are well documented, it should be acknowledged that very little has been specifically produced for museums across the world and specifically within the Zimbabwean context.

Managing museum records is a critical issue which museum practitioners and authorities cannot afford to handle using assumptions based on results obtained from other fields. The culture of always borrowing models and practices from other disciplines presents the museum

industry as unable to develop their own practices and theories. It may be unwise to assume that results and solutions obtained from other studies outside the museum discipline and the Zimbabwean context can be applicable to museums in Zimbabwe. There is need to carry out a contextualised empirical research so that real issues are identified, thereby permitting the development of working solutions. However, the current study did not dismiss the fact that information yielded by other studies outside the country and outside the discipline can be applied to Zimbabwean museums. In fact, the justification for this study was that there has to be a verification of applicability to see what works better within the Zimbabwean context.

1.5 Research objectives and questions

During the master's course in museum studies, the author was mentored to appreciate and understand museums as information centres whose purpose in life is to collect, generate, interpret and disseminate information about their collections, social, historical contexts and wider trends in society. It was observed that records management is an important stream within the museum information environment and for the museum's purpose in life to be meaningful, records that are generated as a result of the museum's programmes and activities must be regarded as corporate assets.

The study examined the current preservation status of photographic records in Zimbabwe's National Museums and sought to establish a starting point for the implementation of a digitisation programme. According to Brunskill and Demb (2012:38), records management benefits the museum business as it increases efficiency, saves resources, ensures that corporate memory is retained, facilitates compliance with legislation and protects and enhances an organisation's reputation.

The objectives of the study are therefore;

- a) To establish the nature and format of records that are generated as a result of museum programmes and activities
- b) To underscore the need for a museum records management policy as a starting point for introducing sound records management practices within the museum environment.
- c) To examine the storage facilities in which museum records are kept
- d) To establish the training needs for museum practitioners in Zimbabwean museums
- e) To determine the appropriate digitisation mechanisms for records in Zimbabwean museums (paying attention to available resources)

Guided by the above set objectives, this study tries to examine measures that National Museums in Zimbabwe have put in place to ensure their conventional and photographic records are well preserved and tries to establish digitisation strategies that can work better using the available resources. The current study looks at how sound preservation strategies of records in museums enhances the security of objects and service delivery in museums, examines the training needs for museums in Zimbabwe that are required to establish an integrated records management programme and sought to initiate the migration of museum photographic and conventional records into electronic form.

This study also looks into how digitisation programmes can be successfully introduced across the National Museums in Zimbabwe. As noted by Jephcott (1998), digital records are much easier to preserve, backup, organise, share and enjoy. Once digitised, the record image will no longer fade and deteriorate. This study contributes to the existing body of literature and

may aid museums in Zimbabwe to improve the preservation, accessibility and use of museum records through transferring their paper records into electronic form.

Once a digitisation programme is successfully established, museum records can be placed on the internet for access anytime and anywhere. This would benefit the museum in that it permits the exchange of ideas among museum practitioners and that would positively impact on the museum's products and services. As indicated by Smith (2010), State of Florida (2010), and the New South Wales State Records (2009), digital records provide easier access points and significantly reduce amounts of physical storage space.

1.6 Area of study

The current study focused on the National Museums in Zimbabwe. Museums covered by the current study are Natural History Museum in Bulawayo, Zimbabwe Military Museum in Gweru, Zimbabwe Museum of Human Sciences in Harare, Museum of Transport and Antiquities in Mutare and Great Zimbabwe Site Museum in Masvingo.

1.7 Definition of key terms

This section provides the definition of terms that seem not to have everyday meaning.

1.7.1 Digitisation.-The process of migrating paper records into electronic form.

1.7.2 Museum records.-These are records generated as a result of museum documentation practices and other museum's programmes and activities.

1.7.3 Photographic record.-Within the museum context, these refer to visual records created with aid of a camera in the execution of various museum activities.

1.7.4 Recordkeeping.-Making and maintaining complete, accurate and reliable evidence of business transactions in the form of recorded information.

1.7.5 Records management.-is the task of ensuring that recorded information, paper and electronic, is managed economically and efficiently. Records management controls the creation, maintenance, use, and disposal of records so that the right records are provided to the right person at the right time.

1.7.6 Records preservation.-These are mechanisms put in place to ensure that records are protected from deteriorating. Measures could be physical or intellectual.

1.8 Outline of presentation

Chapter one has presented the need to examine current preservation status of records that are generated as a result of museum documentation processes and other museum activities. The Chapter also presented the problems that the current study attempts to solve. It looks beyond documenting museum collections and seeks to establish what happens to the data formats after they have been generated.

Chapter two presents theoretical frameworks in records management and preserving conventional and photographic records. It defines the applicability of the records

management theoretical underpinnings within the museum environment. The Chapter also provides detailed literature review on the preservation of records in public institutions. Particular attention is given to photographic material and those records which museums generate as a result of documenting collections. In this chapter, the study attempts to demonstrate a gap in previous researches regarding the care of records within the museum environment.

Chapter three discusses the methodology by systematically outlining the research design, approach and instruments that were used to establish the preservation status of photographic and conventional records in museums. In this chapter, a discourse is provided on how and why the study had to triangulate qualitative and quantitative methods of data collection. The target population for the study and research ethics observed by the study are also discussed.

Chapter four uses figures, tables and plates to present and analyse the data obtained from NMMZ regional directors, heads of departments and observations made from museum records storage areas. In this Chapter, data is presented and analysed to provide the basis on which the discussion and the interpretation will be done in Chapter Five. Data obtained by the study is organized around key issues under the spotlight in this study. These include the care of photographic records, environmental conditions of museum records storage areas, disaster preparedness in the museums, records management training needs for museum practitioners, records management policy, photographic records preservation within the museum environment, digitising museum records and museum records retention and disposal schedules.

Chapter five interprets and discusses the data presented and analysed in Chapter Four. The Chapter attempts to communicate the implications of the records management practices and the preservation status of museum records to museum collections management and public service delivery. The meaning making process provided in this chapter is based on what similar studies in the past have said concerning similar situations. The Chapter provides a discussion of the significant findings of the study. The discussion is done in light of the conceptual frameworks that were adopted by the study as well related previous studies. Overall, the Chapter examines the implications of the findings to the future of museums as information centres.

Chapter six draws the dissertation together by fusing the results of the study so as to gain deeper insights on key issues that were under the spotlight by the research project. The chapter discusses the challenges of trying to introduce an almost side lined practice in an environment that considers caring for collections as their main reason of existence. The chapter argues that without records to support the existence of an object, its life becomes meaningless, hence the need to consider museum records management a core activity. While documentation of collections is widely recognised and respected in museums, very little attention has been given to the professional care of records after museum documentation activities. From that perspective, this chapter suggests possible areas for future research.

CHAPTER II

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

“There should be no rigid dichotomy of theory versus practice” (Buckland 1994:346).

2.0 Introduction

This Chapter discusses the theoretical underpinnings of museum records management and reviews relevant literature regarding the preservation and digitisation of records within the museum environment. The aspects that were under the spotlight in the literature review included the importance of records management policy, records procedures manual, records storage facilities, records management training for museum practitioners, the management of photographic records and records digitisation. It is demonstrated in this Chapter that much of the available museum documentation resources have tended to focus on the need to appropriately document museum's collections without going further to communicate the preservation needs of the museum records. As highlighted in Chapter one, it is on that basis that this study sought to establish the preservation status of records that are generated in Zimbabwe's National Museums.

2.1 Museum records management: an overview

What make museums unique and valuable institutions are the cultural objects they keep in trust for members of the public. However, for the museum's objects to be valuable they need

to be accompanied by some information (Fruth 1985:1). Keeping accurate and usable records is the cornerstone to accountability, transparency and effective service delivery (Chaterera and Nyawo 2013). Mkenna and Patsatzi (2009:15) revealed that documentation helps museum personnel to quickly locate objects and make them available to users when they are needed. Information recorded about objects is vital for the management of collections, responding to public enquiries, publications, research and exhibitions.

The current study observed that because scholarship for the museum industry is biased and deeply rooted towards preserving the museum objects, theories that define museum records management have not yet been developed. As a result of this situation, the current study deemed it appropriate to borrow applicable concepts, models and guidelines from related disciplines like records management and library science. Realising the need to ensure museum records are preserved into the future, the study considered it proper to borrow records management concepts that are meant to ensure records are well preserved. Additionally, relating the records management discipline to the museum industry promotes an interdisciplinary approach which helps the museum to benefit from applicable practices from other fields. This study recognises museums are valuable cultural institutions whose existence is mainly justified by the objects they keep in trust for members of the public. For the museum objects to be meaningful, complete and usable, they have to be accompanied by relevant information. The current study appreciates that the nature of museum records may be different from those records created in other environments. However, the study understands that the definition of a record does not change despite the environment in which the record is created. As a result, it was deemed appropriate to employ the records management models as these are aimed at ensuring that records are properly managed throughout their life cycle.

This implies that the management of records whether in the private or public sector and in any industry need not be rigidly maintained.

2.2 The records life cycle model

This study was informed by the records life cycle concept which states that for efficiency and effectiveness to be attained in the conduct of an organisation's business, records have to be properly managed throughout their life cycle (Buckland 1994:346; Yusof and Chell 2000; Atherton 1985). The life cycle concept began in the United States of America in the 1930s. It is an analogy from the life of a biological organism, which is born, lives and dies. In the same way, a record is created, used for so long as it has continuing value and is then disposed of by destruction or by transfer to an archival repository (Yusof and Chell 2000). In the life cycle concept, records pass through three main phases. The first phase is referred to as the current phase. This is when records are used regularly in the conduct of current business and maintained in their place of origin, in the file store of an associated records office or registry. The second phase is known as the semi-current phase. In this phase, records are used infrequently consulted in the conduct of current business and are maintained in a records center. In the non-current phase, records are destroyed unless they have a continuing value which merits their preservation as documentary heritage (Roper and Miller 1999).

The records life cycle model is the corner stone for creating an effective records management programme because it allows for the development of appropriate tools, systems and procedures to appropriately manage each phase of the life of a record (Yusof and Chell 2000). However, in the museum context, object records do not have an 'expiry' date, they are created and remain in constant use for as long as the object remains in the collection which in

most cases would be for the life of the museum or until it has been de-accessioned or even after the object has been de-accessioned. This means object records do not follow the phases of the records life cycle. They are created and remain active. This implies that object records have an immediate archival status. Their value to future generations is recognised at the time of creation. The records life cycle concept nonetheless remains valid in this study because museums generate various types of records which pass through the three phases of the life cycle identified earlier on. The object related records fall into the final stage of the records life cycle where strategies to manage archives or records of enduring value are provided. Overall, the current study uses the records life cycle concept to examine how museum practitioners working in Zimbabwe's National Museums are preserving their records from creation, use, maintenance to disposition.

2.3 The models of museum documentation

This study acknowledges the existence of several models of museum documentation and their contribution to this research. The models discussed include the International Committee for Documentation (CIDOC) guide for museums, the United Kingdom Documentation Standard (SPECTRUM), the International Council of African Museums (AFRICOM), the Canadian Heritage Information Network (CHIN) and the Collections Link-United Kingdom. The study also consulted museum documentation initiatives that are offered by the International Council of Museums (ICOM), the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Except for the CHIN and the Collections Link-United Kingdom models, the models and initiatives identified above are discussed under one section

because their areas of interest and points of emphasis on museum documentation are the same.

The CIDOC guide is compatible with the standards provided by ICOM Code of Ethics for Museums (2006) and it has an international focus on the documentation interests of museums and similar organizations such as the libraries and archives. CIDOC has been committed to the development of museum documentation standards for over 40 years (Grant and Petersen 1995: 11) and has provided a platform for the discussion of standards issues and practical initiatives. The SPECTRUM model represents a common understanding of good practice for museum documentation. It contains procedures for documenting objects and the processes they undergo, as well as identifying and describing the information which needs to be recorded to support the procedures (McKenna and Patsatzi 2005). The resource provides legal procedures, minimum documentation standards, policies and resources in all the documentation phases of a collection, from pre-entry records to disposal (McKenna and Patsatzi 2005). The SPECTRUM is a collection of the experience and insight of hundreds of people from the European continent working in the museum community. For that reason, the SPECTRUM is recognised in the United Kingdom as the museum industry standard for documentation practices. As a way of acknowledging the valuable contribution of the SPECTRUM, the British Museum Accreditation Scheme includes eight of the twenty one SPECTRUM procedures as a requirement (McKenna and Patsatzi 2005:186). Through the use of the SPECTRUM as a standard guide, most museums in the United Kingdom have managed to shape their organisations' management systems.

Closely related is the AFRICOM handbook of standards which provides advice on how to begin the digitisation of inventories and the documentation of collections using a standardised

and rigorous organisation of information. Similar efforts are recognised from ICOM which produced a handbook in 2006 that provides basic definitions relating to collections management and general information on numbering and marking of objects (Boylan 2006:31).

The SPECTRUM, CIDOC and AFRICOM acknowledge that museum documentation is more than simply a means of managing an object in a collection but a way of turning objects into working artefacts (McKenna and Patsatzi 2005: 185). That means appropriate documentation enlivens museum activities. The SPECTRUM, CIDOC and AFRICOM regard museum documentation as a vital part of the creative process which transforms recognition into inspiration for museum users. CIDOC, the SPECTRUM (McKenna and Patsatzi 2005) and ICOM (Boylan 2006) indicate that with effective documentation, a museum should be able to facilitate collection policies, care, accountability, access, interpretation, research and use. The guidelines for museum documentation provided by CIDOC and SPECTRUM mentioned the need for museum practitioners to consider the preservation needs of museum records. CIDOC indicated that the museum must implement a documentation system which ‘maintains the information’ about the objects and supports practical collections management procedures, such as accessioning, loans management, object location and movement control (Avaro and Godonou 2008). Similarly, the SPECTRUM highlights that the accessions register should be made of archival quality paper and be bound in permanent form (Brunskill and Demb 2012:4). In a meeting held in 2007, UNESCO and ICCROM agreed that all the museum artefacts be numbered, marked and registered in a hard backed, bound accession register, and that an appropriate location system be in place. These sections in the CIDOC, SPECTRUM as well as UNESCO-ICCROM initiative suggest the need for museum practitioners to ensure that the preservation needs for museum records are met.

Using documentation specialists, CIDOC, SPECTRUM and AFRICOM has managed to offer the international guidelines for museum object information. The CIDOC guidelines provide a definition of the information categories that should be used when recording details about objects and outline the format rules and conventions governing how information is entered in these categories (Grant and Petersen 1995:19). The guidelines are very useful and can be adopted by an individual museum, national documentation organization, or system developer, as the basis for a working museum documentation system.

The CIDOC, SPECTRUM and AFRICOM guidelines were designed to ensure accountability for objects, aid the security of objects and to provide an historic archive about objects as well as to support the physical and intellectual access to objects (Grant and Petersen 1995:20). The need to protect cultural property against damage, loss, theft, and crimes against humanity has acted as an incentive to the development of standardised documentation practices. As a result, the 1970 UNESCO Convention on the means of prohibiting and preventing the illicit import, export, and transfer of ownership of cultural property recommends that national inventories be established to identify cultural property. The implication was that inventorying objects in a standardised way could help prevent loss and aid the recovery of lost items. The availability of good documentation also ensures that knowledge about objects extends beyond the objects themselves. It provides a foundation for the use of a collection by curators, researchers, and the public. Overall, CIDOC, the SPECTRUM and AFRICOM guidelines are elaborate resources that clearly explain the importance of inventorying (documenting) museum objects.

The museum documentation initiatives offered by UNESCO and ICCROM are slightly different in that they focused on providing smaller museums from developing countries with the necessary skills and tools to analyse their current documentation systems and to guide

them through a user-friendly method for computerised documentation systems for their collections (Avaro and Godonou 2008:5). The UNESCO-ICCROM resource (2008) urged small museums in developing countries to develop and adapt inexpensive, powerful, easy-to-use and efficient software. In 2007, UNESCO and ICCROM conducted a survey of the various initiatives and documentation systems for museum collections which have taken place during the past twenty years in the smaller museums in Africa. The survey was done in order to better orientate further activities. A total of 14 museums were surveyed and 50% of those museums did not have an accessions register while 90% of museums who had attempted computerisation had failed (Avaro and Godonou 2008). In as much as the SPECTRUM, CIDOC, AFRICOM, ICOM, ICCROM and UNESCO initiatives provide a common understanding of good practice for museum documentation, the current study found them unfulfilling because their focus is solely on documentation and other information associated with objects. Museum records in their wider sense are barely mentioned. The resources do not provide much on how the generated records should be looked after. The aspect of records preservation within the museum environment seem to have not only been overlooked by museum documentation scholarship but has also been ‘ignored and looked down upon’ by the museum practitioners as shall be presented in Chapter four under the results of the study.

As educational institutions, museums acquire objects because they convey significant messages. When an object is brought into the museum, it would have been moved from its place of origin and its context. Its significance becomes more reliant on the documentation linked to it (Avaro *et al* 2010:7). It is therefore crucial that museums ensure records that accompany objects are well preserved. Avaro *et al* (2010:8) indicated that documentation enables the museum to efficiently and effectively;

- Establish proof of ownership
- Locate a specific object
- Find out the total number of objects making up the collection
- Carry out an inventory
- Establish the identity of an object
- Link information to an object
- Access information in an efficient and economical way
- Contribute to the safety of collection
- Carry out an insurance valuation
- Understand an object and bring it to life
- Present it in a permanent or temporary exhibition
- Make it of interest to the public or researchers
- Analyse collections with a view to making acquisitions

- Have a record of conservation and restoration which the objects might have undergone
- Plan preventive conservation

2.4 The Canadian Heritage Information Network (CHIN)

Another museum documentation model which was used to inform this study is the CHIN 'Documentation Guide. This model is used in Canada and it offers a quick reference that helps museum practitioners to catalogue collections. It also gives advice on data format and vocabulary standards for key data fields that museums may need for documentation of their collections. What distinguishes the CHIN model from the above discussed museum documentation models is that the model is mostly centred on budgetary issues which museums have to take into consideration for their digitisation efforts to be successful. The guide indicated that for a successful museum digitisation project, anticipated costs have to be worked out and funding should be secured before the commencement of the project. The CHIN guide noted that expenses to be incurred may include but not limited to the needed hardware and software, scanning equipment, image manipulation software, digital image storage costs, hiring new or training existing staff on how to perform the digitisation operations and transportation or handling of objects to be digitised if they are going to an outside source and insurance costs related to objects being transported off-site. The resource is specifically meant for the digitisation of museum objects and not records. However, some of the guidelines provided in this model could be equally applied in the digitisation of records and photographic material. Museum practitioners and relevant scholars should seriously consider providing standards regarding museum records management issues. That may serve

as a powerful instrument towards the attainment of museum documentation goals of enhancing collections management as well as effectively serving as research institutions.

CHIN noted that when deciding on whether or not you can undertake a digitisation project one of the most important considerations is whether or not the project can be undertaken by staff using resources within the museum (in-house) or utilising local contractors, or a mix of both. When deciding which route to take it is important for a museum to consider the following pros and cons:

- **Advantages of in-house digitisation**

- i. Museum personnel will learn by doing and in-house expertise is developed.
- ii. It builds production capability.
- iii. The museum is enabled to retain control over all aspects.
- iv. It provides flexibility in defining requirements.
- v. There is improved security of source material.
- vi. Prices can be negotiated.
- vii. Labour costs are relatively lower.
- viii. There is limited risk on the destruction of source material as in-house staff is likely to be more careful than people coming from outside.

- **Disadvantages of in-house digitisation**

- i. There is need to set up technical infrastructure.
- ii. The museum incurs costs of technological obsolescence.
- iii. The museum pays for equipment, maintenance and personnel rather than for product.

- iv. There is need for trained staff.
- v. Possible inexperienced museum staff.

For contracting out, CHIN indicated that the following issues need to be considered:

- i. It is not recommended to give commercial digital service providers such things as original art works, fragile textiles, early printed materials and large-format originals.
- ii. If a museum decides to contract out, it must carefully define its needs to the digital service provider. The museum has to be clear on what it wants.
- iii. A museum must clearly define the need for consistent results and should set benchmarks to check the quality of the products.
- iv. A museum must be sure to include in the contract a clause outlining action that a museum may take in case of poor quality output by the service provider.
- v. A museum may also wish to share costs by pooling their expertise and funds with other museums interested in embarking on a digitisation project.

Using the guidelines provided in the chin model, the current study examined the status quo regarding digitisation in Zimbabwe's National Museums and accordingly recommends the way forward.

2.5 The Collections Link (UK) Model of Museum Documentation

The Collections Link-United Kingdom (2009) is one of the comprehensive museum documentation models available for museums in United Kingdom. The Collections Link-United Kingdom (2009) model differs from the SPECTRUM in that it goes beyond the need

to document museum collections and addresses the need for museum practitioners to protect their records once they have created them. The Collections Link (2009) model emphasised that without the proper management of museum records, the entire process of museum documentation may be a waste of time and resources. To that effect, the Collections Link (2009) model provided guidelines on how to protect museum records once they have been generated. The resource stressed that the information held by a museum about its collections is at least as valuable as the collections themselves, with the former being even more valuable to a visitor or researcher than the latter. For that reason, it makes sense to take precautions against mislaying this information, or its destruction through gradual decay or sudden catastrophe, such as fire or flood.

A museum database holds much of the museum's collections information. Recognising that a museum database is a very valuable resource, the Collections Link (2009) encouraged museums to ensure that museum records are given the best possible chance of survival. The Collections Link model for museum documentation and records management practices recommended that crucial museum records should be kept in a fire-proof safe. It also indicated that the best quality materials should be used for all permanent records and that backup copies should be made as soon as the originals are created. The resource emphasised that the museum's key records should not be left more than a year without making copies. It was also stressed that the museum must at least have a professionally trained person to assume the responsibility of ensuring that the museum's records are properly managed throughout their life cycle. The emphasis on the need to ensure museum records are properly managed is what mainly distinguishes the Collections Link (2009) model from the other models discussed above.

2.6 Types of museum records

In the course of museum business, varied types of records are created. These records range from personnel records, catalogue cards, accessions registers, minutes of meetings, financial statements, monument inspection reports, annual reports, strategic plans, site management plans, policy documents, object locations registers, loans in and out registers, visitors comment books, site maps and photographic records from exhibitions, documentation, field work and museum events amongst other museum activities. These records provide the basis on which museum activities are executed. As such, the need to ensure that these records survive for as long they are necessary cannot be overemphasised.

Acknowledging the fact that objects are indeed mission critical to museums, the accessions register is considered as amongst the most crucial records that are found within the museum environment. Avaro *et al* (2010:10) noted that the accession register proves that the object belongs to the museum. According to the Heritage Council (2004) the accessions register provides the basis for setting up the museum's entire documentation system. Avaro *et al* (1996) considered the accession register as the museum's memory. As an acknowledgement of the importance of this record, Avaro *et al* (2010:12) encouraged its preservation and safekeeping in case of disasters.

The card catalogue represents another important and commonly found type of a museum record and is considered the basic file of the documentation system. Avaro *et al* (2010:14) noted that the cards should be classified in ascending order of accession number, in the same order as the accession register and they should not be removed from the catalogue. To achieve that Edgar (2010:217) advised that the cards should be perforated at the bottom and

held in place in the file by a metal bar. The catalogue card is a critical and sensitive type of a museum record as it shows the location code of the object concerned. For this reason, the card catalogue should not be made publicly available.

The loans and object movement register represents another type of a museum record. Avaro *et al* (2010) indicated that the loans and object movement register is a document whose pages are numbered and stamped. This register serves to record an object whenever it is moved either from the permanent exhibition or from the store. If this type of a record happens to be lost or destroyed, a museum risks losing its objects on loan and those that could have been to other locations for various reasons. It is therefore crucial that museums adopt certain records management and preservation strategies to ensure the safety of this record.

The management of personnel records within the museum environment helps to know what staff resources are available to meet service requirements and know what is happening with absence levels, employee turnover, sickness, accidents, lateness, discipline and take appropriate and timely action. All personnel records and files must be kept safely and securely because they help an organization in increasing the efficiency of recruitment, training and development and promotion. They can also provide the raw data to monitor equal opportunities issues and the legal requirements placed on all organizations (Roper and Miller 1999). Keeping records of individual skills and competencies should help a museum pinpoint any particular opportunities to improve skills to match requirements. For instance, if a museum needs staff with computer skills, then scrutiny of records of current staff competencies may well show that there are staff available that have some previous computer experience and can be readily trained to fill the new vacancies (Cain 1999). Members of staff are among an organization's most important and usually most expensive assets. Like any

other asset, members of staff are a resource that must be deployed to maximum advantage. The proper management of personnel records can make a significant contribution to this objective by ensuring that information is available to take decisions and to protect the rights both of the organization and individuals. Moreover, because personnel systems are closely linked to payroll systems, improved personnel records will have a positive impact upon payroll management and thus upon the overall budget of the organization. It is therefore crucial that employees' personnel records be maintained in a secure location (Cain 1999).

Minutes of meetings are crucial records that museums also generate in the conduct of its business. Minutes of meetings serve as the public memory of an organisation and they are also the way in which decisions are disseminated. Minutes are the way in which people are kept informed of changes and debates. Considered across a longer length of time, minutes allow an organisation to build on what has gone before. Minutes of meetings are therefore invaluable records which must be properly managed for the organisation to be in a position to make informed decisions (Gutmann 2007).

Financial records are also a type of a record produced in the course of museum businesses. If these records are not well managed the financial management function suffers. Financial records make an important contribution to an organization particularly in the areas of accountability, efficiency; ensuring resources are matched to objectives and economic stability. Financial records provide decision makers with the means to control spending, prioritise expenditures in order to allocate resources efficiently and equitably and make better use of budgeted resources to achieve outcomes (Barata *et al* 2001). A financial records management programme should enable the physical and logical control of records and prevent unauthorised access, tampering, loss or destruction, whether intentional or accidental.

Financial records are a powerful tool in constraining individuals from engaging in corruption. But if financial records management systems are weak, museum personnel cannot be held accountable for their decisions and actions. Fraud and corruption will flourish, hence compromising the museum's ability to execute its operations as they are dependent on financial support (Cain and Brech 1999).

2.7 Preserving the museum record: strengthening the position of museums as information centres

Records preservation is a component within the broader subject of records management. Records management is about applying the necessary controls to the museum's records to ensure authenticity, reliability, integrity and usability of records. The Preservation Policy Public Record Office of Northern Ireland (2007:3) indicated that to preserve the museum's documentary heritage effectively, museum practitioners regardless of their designation must share a common responsibility for the physical security and protection of records. Appropriate records preservation strategies require records to be placed and handled in a way that minimises the risk of damage and should take into account the nature and physical condition of records (Tyner 2006:6; Roper and Miller 1999:25; the Preservation Policy Record Office of Northern Ireland 2007).

Accessible documentation is a key strategy to successful collections management, research and public services (Simmons 2010). The Getty Conservation Institute (2001) demonstrated that an appropriate museum documentation system provides guidance to the multiple functions involved in theft response. The Code of Practice on Archives for Museums and Galleries in the United Kingdom (2002) emphasised the need for museum records

preservation strategies. It indicated that records are fragile and need to be appropriately cared for and managed.

Good record keeping in museums improves operational efficiency and access to information allowing for more rapid response to issues. It also supports and provides evidence of museum activity, controls the growth of paper taking up valuable office space and protects the museum in cases of litigation, investigations and audit by providing complete and accurate information (Neilson 2010:3739; Eriksen and Unger 2009:9; Marty 2010:3718). Unmanaged records systems can make the performance of the museum's duties more difficult, costs time, money and resources, and makes the museum vulnerable to security breaches and litigation, hence the need for not only effective documentation practices but also sound records preservation strategies. Museum records are essentially the corporate memory of the organisation and society as a whole.

Museum records also play an important role as a cultural resource. Trimble and Marino (2003:100) note that for most of the 1990s, the only effort made to save archaeological and museological data was to preserve the artefacts and not the associated documents. Sullivan and Childs (2003:79) suggested that the long-term management of records should not just be the job of the curator, but a key responsibility of every department that exists within the museum. A collective effort towards the preservation of museum records by all museum practitioners would go a long way in establishing appropriate records preservation strategies within the museum environment. The current study paid attention to the ability by individual museum departments to provide clean air with good circulation, controlling light levels, stopping biological infestations, maintaining good housekeeping measures, employing security measures and protecting records from disasters (Ritzenthaler 1993:51).

Samuel (1988:142) indicated that since the 1970s, documentation of museum objects has emerged as a major concern for museum professionals. For instance, the American Association of Museums (1984:53) notes that the lack of information about the number, location, and condition of objects, artefacts and specimens in the nation's museums is a handicap to adequate care and maintenance of these collections and to scholarly progress in general. However, as long as previous researches and existing literature do not address the need for appropriate records management practices within the museum environment, then the mission of museum documentation may not be fulfilled.

Michalski (2004:53) indicated that documentation is central to the care and preservation of collections and for museum programmes and activities to be successful there is need for direct or indirect collaboration of many specialists. All have major contributions to make towards the successful management of museum collections.

Demb (2012:27) observed that the importance of records management might not be obvious to everyone yet its impact on the ability of the museum to function effectively is indisputable. The State of Florida (2009:14) emphasised that it is only through the operation of a well-run records management program that a museum retains control of its corporate memory, which allows an organisation to conduct its business. The State of Florida (2009:14) further indicated that a sound records management system is characterised by its ability to manage and control records throughout their life cycle, from their creation and to ultimate disposition.

In competitive business environments and strict accountability structures, it is important that museums have the information they need to drive and support their business operations. Informed museum records management practice avoids the retention and clutter of ephemeral

records, or the loss or unintentional destruction of significant records and it makes the management of records an asset and information resource, rather than a liability.

The effectiveness and efficiency of the public service across the range of government functions depends upon the availability of and access to information held in records (ISG 2000:11). Badly managed records adversely affect the broad scope of public service delivery in museums and museum projects are often difficult to implement and sustain effectively in the absence of well managed records (ISG 2000:12).

2.8 Preserving the museum's photographic collection

Bacon (2010) revealed that substantive and organised research about museological, archaeological records and photographic material preservation are few. The bulk of the literature which is available on records and photographic material preservation is directed to other disciplines such as archiving, records management, information science and library science. While records preservation literature from other related disciplines can be equally applied to the museum situation, the current study deemed it crucial to have documentation which is directly produced for museum practitioners. That may instil a sense of urgency in museum practitioners on the need to seriously consider records preservation as one of their core duties.

According to Rey (2009:33) photographic images, digital images and scientific drawings are a valuable resource, both for internal reference purposes and for use by researchers and the public. The photographic record is therefore indispensable to museum institutions and researchers. Hendriks (1978:92) indicated that photography has preserved a unique view of

the past in a form particularly suited to an increasingly visually oriented society. The Queensland State Archive (2011) observed that similar to traditional manuscript materials; photographic records can be consulted for information and fully exploited for visual evidence or information by researchers. The preservation of photographic materials should therefore be of prime interest to museum practitioners. To this end, the current research project paid attention to the suitability of storage conditions in which photographic materials are kept in Zimbabwe's National Museums.

The reason why the study had to treat the museum photographic material independently is because photographic records require special treatment which is different from ordinary conventional records. In addition to their difference in chemical and physical properties to ordinary conventional museum records, photographic records provide vivid evidence of museum objects. Additionally, photographic documentation makes it relatively easy for law officers and customs officials and the media to identify an object if it is stolen (Bacon 2010:34).

According to Rey (2009:16), photographs can play a powerful role in attracting new audiences from school children to researchers and major donors. Rey (2009:16) added that an interesting photograph in a museum repository's collection could be the inspiration for a successful exhibit or fundraising effort.

Bacon (2010:33) indicated that it is possible to prolong the life of a photograph through good preservation practices in handling, housekeeping and storage. Other simple and inexpensive steps which museums may adopt include wearing gloves when handling photographic media, ensuring forms, field notes, site survey forms and other documents are on acid-free paper,

ensuring maps are printed on Mylar D, watching for signs of damage and contamination, limiting the use of fragile records, controlling temperature and Relative Humidity (RH), having clean air with good air circulation, controlling light levels, stopping biological infestations, maintaining good housekeeping measures, employing security measures and protecting records from disasters (Bacon 2010:35; Bachmann and Rushfield 1992:5; Bennett 1998:231; Blackmar 2002; Hester 1997; Kenworthy 1985:80; Sullivan and Childs 2003:69; Ritzenthaler 1993:51; Sutton and Arkush 1996:32; Trimble and Marino 2003:105).

With regards to the challenge of dust and dirt on museum's conventional and photographic records, Bacon (2010:35) noted that the problem can be reduced by simply washing all curtains and dust-sheets regularly. Clark (1990) observed that in the past, many paper conservators applied paper conservation techniques and storage criteria to photographs, and did not treat them as particularly different from any other paper artefacts. While it is understood that some of the photographic material problems occur with general paper, it has now been realised that photographic conservation is a relatively new and a distinct field which has to be treated separately. With photographs, there are other problems such as adhesion of gelatin layers and glass rot at high humidity levels and flaking emulsion at low humidity levels (Scottish Museums Council 2003). Among the specific problems of photographs is that they are made up of so many layers, each of which reacts differently to fluctuating humidity (Bacon 2010). This is what often causes the layers in a photograph to separate. Tyner (2006:12) observed that photographic conservation is widely discussed in terms of chemical treatment. However, due to shoestring budgets that museums in Zimbabwe operate under, it has been deemed necessary to focus on improving handling and house-keeping procedures. These aspects are particularly important and achievable as they do not

need a trained conservator and can be done on a limited budget. They can also benefit large numbers of photographs more quickly than individual repair work.

What makes photographic material preservation complex is that each photograph consists of multiple layers and each layer contains different substances which behave in a variety of ways (Rey 2009:11). This complex structure is what separates conventional paper records management from photographic material care. Tyner (2006) noted that the complexity of some photographs can make certain types of deterioration untreatable in the sense that what might be beneficial to one layer may be harmful to another. The implication of such a situation is that the probable first line of defence for the museum records keeper will be to prevent the problems from occurring in the first place, thus adopting records preservation strategies. Cowan (2002:95) observed that photographic media are physically very complex and require expert knowledge to identify and advise on their care. For museums to be able to provide acceptable care on photographic records, they may need to recruit photographic conservation specialists or to have the personnel responsible for records get in-house training through workshops and seminars.

2.9 Summary of the Chapter

The future of museums as information centres lies with the ability of an institution to properly care for the data formats that are produced as a result of museum documentation processes as well as other museums' programmes and activities. The theoretical underpinnings regarding museum documentation seem to be restricted on the need by museums to ensure that their collections are appropriately documented. Similarly, the vast amount of literature that has been written on museum documentation places much emphasis

on the why and how parts of museum documentation. Where sources talked of museums' records preservation needs the information provided tends to be very little and mostly presented in passing. From such trends, the current study concluded that records management has not yet received the attention it deserves from the museum academic and even professional circles and that compromises the preservation of significant records housed within the museum environment. The following Chapter communicates the research design, approach and instruments that were used to collect data for the current study.

CHAPTER III

RESEARCH METHODOLOGY

3.0 Introduction

According to Bryman (2004:33), without a systematic way of producing evidence, findings may be dismissed as guess work or common sense that has been made complicated. Ngulube (2005), Coolican (2004) and Kothari (2004:31) emphasised that it is essential for researchers to clearly communicate their research methodology for their studies to be credible. The overall concern of this Chapter is to present the research design, research strategies, target population, data collection methods and instruments as well as how data for the study was pre-tested. To gather the information that was required to answer the research questions and to solve the research problems, the current study conducted an empirical field research in museums in the country. This research project employed the survey research design because it allowed the study to gather large amount of data from a sizeable population in a highly economical way (Saunders *et al* 2007 and Durrheim 2006). Questionnaires, interviews, observations and *facebook* as well as *whats-up* were used as the data collection instruments. The research ethics which were observed during the research project are also presented in this Chapter.

3.1 The survey research design

The survey research design was the most appropriate for the current study because of its potential to produce data that can be applied over a broad area (Dooley 2003:64; Owens 2002:12 and Glasgow 2005:4). As already presented in Chapter 1, the issues addressed by the study included the storage facilities in which museum records are kept, museum departmental efforts towards the preservation of museum records, the records management training needs for museum practitioners, the availability of disaster management plans, records management policies as well as the need for digitising museum records as a mechanism for preserving the documentary heritage housed in museums. The investigator sought to gather descriptive data about how museum practitioners were caring for records produced as a result of a museum's programmes activities. This rendered the survey research design the most ideal for the study.

3.2 The triangulation approach

Ngulube (2005) indicated that it is essential to identify and understand the research approach underlying any given study. This is because the selection of a research approach has a bearing on the questions asked, the methods used, the analyses used, the conclusions made and the ultimate goal of the research (Bryman 2004:36; O'Leary 2005:21). In this study the choice of the research approach was mainly guided by the objectives of the study, the research problem, available resources and the audience of the research. Lund (2005:119) and Hussein (2009:2) recommend that acceptable research practice requires the researcher to triangulate. Based on that knowledge, the current study considered it helpful to use methods from both the quantitative (questionnaires) and qualitative (interviews and observations) paradigms, or the triangulation approach.

This study methodologically triangulated questionnaires, interviews and observations. Data yielded through questionnaires was cross checked by responses provided by the interviewees while observations were employed for further verification of observable aspects. The reason for adopting the triangulation approach was that the flaws of one method could be neutralised by the strengths of another. Olsen (2004:18) and Hussein (2009) observed that by combining methods, the research can achieve the best of each while overcoming their unique deficiencies. The use of both qualitative and quantitative research instruments was an attempt to attain reliability for the research findings. The triangulation approach was used to enhance the credibility of the current research and as an attempt to eliminate bias.

It should however be known that the triangulation strategy is not an absolute solution towards attaining reliable or credible findings. Thurmond (2001:254) observed that difficulties may arise from trying to fit qualitative data into a quantitative nature. Additionally, Marty (2008:31) indicated that the inaccuracies of data from one approach may not necessarily lessen the inaccuracies of the other. The implication is that while the added method (which happens to be observation and interviews in this study) contributes to the strength of the research, the primary method (questionnaires) must be thorough enough to be able to sustain the study by itself. Nevertheless, when appropriately used, the triangulation strategy promotes the completeness of research findings.

3.3 Study population and justification

The study investigated the future of museums as information centres by looking at the preservation of the museum's conventional paper records and the photographic material. The nature of the study automatically placed museum practitioners as the chief informants of the

study. Data for the research project was collected from heads of departments and regional directors for NMMZ. The study consulted all the five regional National Museums in Zimbabwe. These included are;

- Zimbabwe Military Museum (ZMM) in the Central Region
- Zimbabwe Museum of Human Science (ZMHS) in the Northern Region
- Mutare Museum of Transport and Antiquities in the Eastern Region
- Natural History Museum in the Western Region
- Great Zimbabwe Museum in the Southern Region

No sampling was done, the current study looked at all the above identified five National Museums found in Zimbabwe. This was done to obtain a fair assessment of the preservation status of museum records in Zimbabwe. The study assumed that the records preservation status in Zimbabwe's National Museums might differ from one museum to another. As such, it was deemed appropriate to examine all the five regional museums. Data was gathered through self administered questionnaires which were distributed to thirty five heads of departments for NMMZ. Data obtained from questionnaires was verified through the interviews that were conducted with five Regional Directors as well as personal observations made in Zimbabwe's National Museums. The total study population size stood at forty respondents.

3.4 Questionnaires

Questionnaires were used because they are easy to analyse and very useful for collecting survey information (Blaxter *et al* 2006:179). The questionnaires were sent out to the museums for completion, although some were not returned and others were incomplete.

Compared to other data collection techniques, the use of questionnaires was affordable and permitted the study to gather data from respondents who were widely distributed in a relatively short period of time (Milne 1999:2). Another factor which rendered the questionnaire collection technique favourable for the current study was that it provided a high degree of confidentiality through anonymity for respondents (Nachmias and Nachmias 1996:226). The respondents were assured that their responses will be unidentified and used for the academic purposes for which they were collected. To that effect, the researcher presumed that respondents were more truthful especially on seemingly sensitive issues. In addition questionnaires were used because they afford respondents the chance to look up for information in cases where they were not sure of answers (Nachmias and Nachmias 1996: 226).

However, Walliman (2011) noted that questionnaires usually have a low response rate compared to interviews. That was true to the current research as 14 out 35 distributed questionnaires were not returned while 8 were incomplete. Another disadvantage was that in situations where informants did not understand some questions, there was no opportunity for them to have the questions clarified. That probably contributed to incompletely filled questionnaires. Moreover, the control over the questionnaires was lost once they were sent.

3.5 Interviews

Hartman (2011), Silverman (1993: 90) and O’Leary (2005) observed that interviews are one of the most used and powerful methods in which researchers try to understand the issue(s) under investigation. Sarantakos (1998) noted that interviews are appropriate when a research project is meant to gather qualitative data such as views, beliefs and feelings about a subject. Tashakkoori and Teddie (2009:222) indicated that researchers are permitted to simplify questions that may not be understood by respondents. Owing to those factors, the interview research instrument was deemed appropriate for this study to compliment the questionnaire research instrument. As communicated in the triangulation research approach section, the current study had to use interviews because of their ability to neutralise some of the weaknesses inherent in questionnaires. With face to face interviews, NMMZ Regional Directors had enough room to share information of relevance regarding the preservation of museum records. Although the interviews were structured, respondents were given the opportunity to share with the investigator information they thought might be of relevance to the study.

The current research took some measures to eliminate or at least reduce the potential drawbacks of using interviews. The investigator did preparatory thinking regarding how respondents were likely to react. In addition, appointments for interviews were made through the telephone in order to avoid disruption of normal work. Management support was very critical to the success of the current research. The investigator managed to obtain written authority from the Executive Director for NMMZ as well as Regional Directors. The support obtained permitted the investigator to access respective departments of the National Museums of Zimbabwe and it instilled a sense of cooperation within the targeted employees.

3.6 Observation

Observations were used in this study because they provide evidence of the actual situation (Sarantakos 1998:207; Pickard 2007:201). Powell and Connaway (2004:157), Cohen *et al* (2007), Nachimias and Nachmias (1996:206) have shown that the observation research process offers an investigator the opportunity to gather live data from naturally occurring social situations. In light of the highlighted scholars, this study considered it commendable to use the observation research technique. Particular attention was given to the storage environment in which museum records were kept. In an effort to obtain systematic and consistent data, the investigator used the structured observation technique where the recording of information was guided by specific predefined aspects (See Appendix D).

Overall, the current study had to adopt the observation research instrument because it allows one to compare what people actually did with what they said they did (Powell and Connaway 2004: 157). Further, the observation method is free from informant's willingness to respond and as such is relatively less demanding of active cooperation on the part of respondents as happens to be the case in the interview and questionnaire method (Kothari 2004:96).

However, as is the case with other research instruments, the observation technique has its draw backs. The technique proved to be a bit expensive as the investigator had to physically visit all the five National Museums of Zimbabwe under study.

3.7 The social media networks (*Whats-up and Facebook*)

The social media was also used in the current study to gather information from the respondents. The study resorted to the social media platform after all the respondents from the Zimbabwe Museum of Human Sciences failed to return the questionnaires. Despite the fact that questionnaires to ZMHS were physically distributed by the researcher, these were not returned. Telephone and physical follow ups to the questionnaires were made, but unfortunately the efforts did not yield any results. As a result of the non response, the study resorted to the *Facebook and Whats-up* social networks for information. Friendship requests were sent to eight Head of Departments, five accepted the friendship request and this opened the way to administer the questionnaire, hence gathering the data that was needed for the study. The data gathering technique was however not very smooth as it relied on the availability of both the researcher and the respondent on-line. More so, the questions from the questionnaires took longer than necessary to be respondent to as some respondents could go offline in the middle of a discussion only to be available after a couple of days.

3.8 Reliability and validity of the instruments

The quality of a research study largely depends on the accuracy of the data collection procedures. What it means is that the information obtained by a researcher must be able to provide answers for the research questions (Mugenda and Mugenda 2003: 95). Whether a study is qualitative, quantitative or both, it is important that it communicates to the reader that its findings are reliable and valid (Babbie and Mouton 2001: 119).

In an effort to attain reliability and validity, the current study pre-tested the research instruments before they were administered to the respondents. According to Ngulube (2005:136), no matter how carefully a researcher designed a data collection instrument, there is always the possibility of errors. The surest protection against such errors is to pre-test the data capture sheets before they are administered. As mentioned by Babbie and Mouton (2001:244) and Ngulube (2003:215), pre-testing data capture sheets is necessary in order to uncover any defects in questions. The purpose of the pre-test was to find out how the data collection instruments would work under realistic conditions (Fowler 2002:112). A pre-test permitted the researcher to identify questionnaire items that tend to be misunderstood by the participants (Powell and Connaway 2004:140). According to Powell and Connaway (2004:140), pre-testing gives the respondents the chance to pick on problem questions, poor instruction, and unnecessary or missing questions, and to give their general reactions to the instrument (Powell and Connaway 2004:140). In essence, pre-testing the data capture sheets permitted the refinement of the data collection instruments, the discovery of various problems of the instruments and the prediction of the meaningful of results.

The data capture sheets were sent to a panel of experts comprised of records and information management professional, two National Archives of Zimbabwe personnel, a research methodology lecturer at Midlands State University and a curator from the Zimbabwe Military Museum. The pre-testing participants were selected on the basis of their ability to provide professional opinions concerning the instruments. The list of participants in the pre-testing of the instruments and their occupations are shown in Appendix A. The pre-testing panel was asked to give their views on the data collection instruments concerning typographical errors, presence of incorrect spellings, whether or not the vocabulary used was appropriate for respondents, if the topics in the instruments adequately covered the research questions of the

study as well as the clarity of the questions. All the five participants commented and some adjustments had to be made to the questionnaires.

3.9 Ethical considerations

Wassenaar (2006:60) advised that research ethics should be a basic concern of all social science researchers. In addition, Welman, Kruger and Mitchell (2005:181) warned that researchers may be subject to litigation and could lose professional indemnity if they are not seen to have adhered to the appropriate code of ethics. As advised by Pickard (2007:73), the researcher of the current study wrote a formal letter to the Executive Director and Regional Directors for NMMZ seeking permission to carry out research at NMMZ National Museums. The letter communicated the nature, purpose and significance of the study. Further, it is important to obtain voluntary consent from participants as it may be unethical to only seek for permission from their management without asking for their individual consent (Kumar 2005:212). Informed consent creates a mutual understanding that remains constant throughout the research and provides a reference point for both the researcher and the participants (Pickard 2007:74). Neuman (2006:135); Welman, Kruger and Mitchell (2005:181) noted that informants have a right to participate voluntarily and the right to withdraw at any time. To this effect, the current research provided the research participants (NMMZ Head of Departments) with adequate information that helped them to make informed decisions about whether or not they wish to participate in the study.

Respecting the privacy of research participants was amongst the ethical considerations by the current study. In an effort to uphold the right of participants to privacy, the researcher kept the collected information confidential and used it only for the academic purpose for which it

was collected. Anonymity is an excellent way of protecting privacy because it means that the identity of the participants is not known to the researcher and it also implies that the research participant remains totally anonymous during and after the research activity (Johnson and Christensen 2008:119 and Pickard 2007:77).

The current study adhered to the Midlands State University research policy which strongly warns researchers against plagiarism. This study acknowledged all sources used. Moreso, the results of the study were reported as they were obtained without exaggeration or concealment of information. As promised to the participants, all the information obtained was and will only be used for academic purposes for which it was collected.

3.10 Evaluation of the research methodology

This chapter discussed the research design of the study and communicated the research techniques which were used to gather data on the preservation of records within the museum environment using the case of Zimbabwe's National Museums. The topics discussed included research design, the study population and justification, data collection instruments and validity and reliability of research instruments and ethical considerations.

Ngulube (2005:48) observed that all research methods are prone to bias and errors. It is therefore crucial that research methods should be evaluated in order to explain what information was needed and how it was obtained. The length of the questionnaire proved to be a challenge for the study as it affected the response rate. Most respondents who were to complete the questionnaire complained that the questionnaire was too long and it was difficult for them to get time to complete since they had busy schedules. Some NMMZ Head

of Departments asked the investigator to conduct an interview using the questionnaire so as to save their time and have quick responses. In response to that request, the current research conducted telephone interviews with four Head of Departments from the Natural History Museum and two from the Zimbabwe Museum of Human Sciences. The following Chapter presents and analyses the results of the study.

CHAPTER IV

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This Chapter presents the obtained data in themes that were developed guided by the set objectives formulated in Chapter One. The study found out that records management in Zimbabwe's National Museums was not yet an established practice. That was evidenced by the lack of basic records management requirements such as a records management policy, records procedures manual, designated records storage facilities, retention and disposal schedules as well as lack of personnel who are trained in records management. The informants of the study bluntly cited that records management was not their core business as their focus was mainly on preserving the museum's collection and not the records. Where efforts were provided to preserve the records, the study observed that these efforts were mainly directed to object related records while the management of other museum records was overlooked.

4.1 Questionnaire response rate

Girden (2001), Kothari (2004), Creswell (2009) and Tripathi (2003) argued that there is no consensus as to what should be regarded as an adequate response rate. However, Kothari (2004:23) indicated that a response rate of 50% may be considered adequate for analysis while a response rate of 60% and 70% may be perceived as good and very good respectively.

Tripathi (2003:38) noted that a response rate of less than 50% may be regarded as poor while a 90% response and above may be considered as excellent. The current study distributed a total of 35 questionnaires to Head of Departments of the five regional museums that are found in Zimbabwe. Out of this 21 (60%) were returned while the other 14 (40%) were not returned. Of the 14 that were not returned, 8 (57.14%) were from the Zimbabwe Museum of Human Sciences. From the above perspectives advanced by Kothari (2004) and Tripathi (2003), the response rate of 60% which was obtained by the current research may be considered adequate and good to make unbiased analysis, interpretations, conclusions and recommendations. For the Natural History Museum and the Museum of Transport and Antiquities, the Regional Directors were not available and the study had to interview those who were in acting capacity. Table 1 depicts how questionnaires for the study were distributed and returned.

Table 1: Questionnaire response rate.

Name of the Museum	Number of questionnaires distributed	Number of questionnaires returned	Number of questionnaires that were not returned
Zimbabwe Military Museum	6	4 67%	2 33%
Zimbabwe Museum of Human Sciences	8	0 0%	8 100%
The Museum of Transport and Antiquities	7	7 100%	0 0%
Great Zimbabwe Museum	7	6 86%	1 14%
Natural History Museum	7	4 57%	3 43%
	35	21 60%	14 40%

As shown in the table no responses were received from ZMHS. Despite several physical and telephone follow ups that were made, the study failed to get a response from the ZMHS. However, the study managed to interview the Regional Director and paid a physical visit to the museum where the archaeological survey unit was examined in relation to the physical protection of records under its care. In an effort to gather the required data from the Head of Departments at ZMHS, the study resorted to the social media facility (*Whats-up and Facebook*). This way, the study managed to administer the questionnaire to five Head of Departments. The sentiments of the respondents were that the questions were irrelevant to

their business as their purpose in life is to look after objects and not records. This was a very strange remark from the respondents as the study feels that museum objects can only be useful or meaningful with accompanying information. Not only object related records are vital, even museum records from administrative processes and projects are equally important as they contribute to the overall mission of a museum. For respondents to have said that managing records was not their core business raises a major cause for concern on the future of museums as information centres.

4.2 The nature and format of museum records

For records preservation initiatives to be successful, an organisation must know the types of records that they generate and keep. As such, this study sought to establish the types of records that are generated in Zimbabwe's National Museums (See items 4 and 5 Appendix B). This will enable them to employ the most appropriate preservation mechanisms that are suitable

for the nature of the records that they have. Table 2 depicts the responses obtained by the study when respondents were asked to identify the types of records generated in their museum.

Table 2: The nature of museum records (n=21)

Record types	Number of head of departments indicating yes to the existence of a record type in their departments	Percentage
Personnel records	5	24%
Photographs	19	91%
Catalogue cards	21	100%
Accessions register(s)	21	100%
Minutes of meetings	18	86%
Financial statements	8	38%
Receipts	7	33%
Monuments inspection reports	20	95%
Object locations register	20	95%
Object movement register/ loans in and out registers	19	91%
File movement register	6	29%
Policy documents	5	24%

The types of museum records found in Zimbabwe's National Museums include personnel records, photographic records, catalogue cards, card index, loans in and out registers, accessions registers(s), minutes of meetings, financial statements, receipts, monuments

inspection reports, locations register, site records, site maps, field notebooks, slides, film negatives and object movement registers. The bulk of these records were reported to be in hardcopy. The amount and nature of records generated in museums implies that central to the operations of a museum is the creation, use and maintenance of records. For that reason, it was essential for this study to establish if museums in Zimbabwe had a records management policy that supports the preservation of museum records.

4.3 Records management policy

Central to the successful preservation of records is the availability of a working records management policy (Kew 2010). From this view point, it became apparent for this study to investigate if national museums in Zimbabwe had records management policies (See items 6 and 7 Appendix B and item 1 Appendix C). The International Solutions Group (ISG) in the United Kingdom (2000:21) indicated that it is essential that a records management policy be available in museums as the document serves to nurture good records management practices. The records management policy for the Natural History Museum Archives in the United Kingdom (2010:12) and the Government of Nova Scotia (2003) observed that a records management policy is critical as it ensures that records created and kept by the museum provide an authentic, reliable, complete and trustworthy record of museum activities. It also helps to reduce the time and effort spent in locating documents needed for museum operations, hence increasing the museum's efficiency.

A very disturbing response was obtained as all informants from the five surveyed museums indicated that there was no records management policy in place. As earlier mentioned, the respondents claimed that caring for objects, interpreting them and disseminating information

was the core business for museums and not managing records, hence the absence of a records management policy. This was a very alarming response as one cannot imagine the life of objects and the overall operations of a museum without records. The so called core business of interpreting objects and disseminating information may not materialise if the information about the objects is not available. Ironically, the informants of the study all agreed that documentation of museum collections is very critical to collections management as well as for making museum programmes and activities a success, yet they considered the management of the data formats that are produced as a result of museum documentation and other activities as a farfetched phenomenon. Amongst the mandates of NMMZ as stipulated in their Act of 1972 is to compile and keep a register of all national monuments and of any relics under their custody. Similarly, the 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict of which Zimbabwe is a state party requires museums to keep update inventories of their collections as a protection measure. It therefore causes anxiety and curiosity for museum practitioners not to see the management of their registers and other museum records as a core business.

4.4 The records procedures manual

A registry procedures manual is a critical document which public registries cannot afford to function without as it ensures the preservation of records with long term value (Kemoni 2007:161). A records procedures manual enables a systematic and standardised approach to records preservation. It is a guiding document that clearly defines how records can best be managed. It provides steps of what to do, when and how (New York State Unified Court System Division of Court Operations Office of Records Management 2003). It is more of an operational document that guides personnel in an organisation on how to properly care for the

different types of records that may be available in an institution. Recognising the need for museums to have records procedures manual for a better management of their records, the study deemed it appropriate to establish if the document was available in Zimbabwe's National Museums (See items 18 and 19 of Appendix B).

Despite the importance of this document in facilitating sound records preservation initiatives, the study found that the document was not in place across the five Zimbabwe's National Museums which were under investigation in the study. To a larger extent, the non availability of a records procedures manual which is a basic requirement for sound records management practices confirmed the respondents' sentiments that they are not concerned about the well being of museum records. The absence of such an essential document implies that the management of museum records is compromised. It results in the poor preservation of records. This will eventually lead to the loss of records thereby affecting the efficiency and effectiveness of the museum functions that rely on the affected records.

4.5 Museum records management training

Ngulube (2001) highlights that education and training are the basic needs for promoting the management of records and archives. Acknowledging the crucial role that training plays in the proper management of records, this research enquired if museum practitioners in Zimbabwe's National Museums had received some form of training in records management (See items 9, 10 and 11 in Appendix B and items 3, 4 and 5 in Appendix C). The preservation of museum records can only be a success if the responsible personnel have received the relevant training. The levels of training vary from in-house training mechanisms to attending formal learning institutions. Training is a very essential component that helps

individuals to execute any given work successfully. It does not only enhance one's skills in executing a task but also improves the appreciation of why the tasks should be undertaken.

The study found out that before the inception of the Midlands State University (MSU), it was only the University of Zimbabwe (UZ) which offered programmes in archaeology and this university did not include records management and the work related learning components. As a result, the bulk of museum practitioners in Zimbabwe do not have an appreciation of the records management component. Interviewees from the Northern and Southern Regions lamented the high rate of staff turnover which has seen some museum employees who had grasped well the concept of record keeping leaving the museum for employment somewhere else. They pinpointed individuals who had a better understanding of managing museum records like Caroline Thorp, Loraine Swan, Rob Burret and Juliet Maradze.

4.6 Museum records storage facilities

Lewis (2007:4) states that records should be stored with consideration to their physical care. A records storage facility which protects records from agents of deterioration is a prerequisite for successful preservation (Lewis 2007). Appropriate records storage facilities are the primary means of guaranteeing the physical security and long-term survival of records within the museum environment. The museum's records storage area must be safe and secure to minimise the risk of theft or malicious damage. As such, the study examined the physical condition of the museum's departmental records storage facilities (See item 8 in Appendix B, item 3 in Appendix C and items 1-9 in Appendix D). That was done to find out if the museum's records are kept in controlled environments that permit the records to live longer.

The preservation of museum records was a core subject this study. If records are not well protected physically throughout their life-cycle, they will not survive long enough to serve their administrative and cultural purposes (Ritzenhaler 1990:23). Ritzenhaler (1990:24) noted that storage areas should be maintained to the highest environmental and physical standards possible in order to protect valuable records. These requirements include controlled temperature and humidity, controlled lighting, adequate shelving and adequate storage containers and controlled and secure access to storage areas to prevent loss or damage to records.

The study found that there were no centralised records storage facilities in Zimbabwe's National Museums and there was no such person or people specifically designated to ensure that records generated within the museum environment are well looked after. Respective departments were responsible for the creation, maintenance, use and the disposal of the records which they generate. Such a situation serves as evidence that museum practitioners in Zimbabwe indeed believe that records management is an independent discipline which may not be married to the museum industry. The divorced perception that museum practitioners in Zimbabwe's National Museums have towards record keeping is contrary to how other museum practitioners in the world have embraced the whole concept of museum records management. Some museums such as the British Museum have museum records managers or museum archivists as an acknowledgement and appreciation on the need to ensure museum records are properly managed and preserved. The current study understands that records management posts may be a luxury for Zimbabwe's National Museums which are operating under tight budgets as revealed in the study conducted by Chiwara (2013). However, constrained budgets should not be an excuse for museum practitioners to disassociate records management practices from their core business.

In relation to the issue of a museum records storage facilities in Zimbabwe's National Museums, the study obtained a slightly different response from the Zimbabwe Museum of Human Science that indicated the existence of the Archaeological Survey Unit. In this unit, researchers in Zimbabwe are obliged to deposit their archaeology research related material which usually come in the form of lists of sites that they came across during excavations, note books or field notes and photographs. Despite this, individual departments at ZMHS still kept their own records. The Regional Director for ZMHS clearly explained that the Archaeological Survey Unit is not a central storage repository for the region's records but a repository of archaeology research related material from all the five regional museums in Zimbabwe. Further, it was reported that the archaeological survey unit is managed by curators and these are also the 'keepers' of objects and their records.

While it may not be an issue to have the same practitioners caring for both the objects and records, what raised a concern for the study is the lack of both records management training and appreciation by the curators. This probably explains the point I have mentioned earlier on that the Archaeological Survey Unit has a backlog from the 1970s of undocumented material culture. In as much as respondents pointed to financial constraints as the cause for such a backlog, I feel that the situation largely owes its existence to the lack commitment, motivation and a reluctant approach to duties. The study was also informed that some researchers were violating the requirements by NMMZ as they personalised the material they produce during field work and take it with them when they leave the institution. Harsh as it may sound, the prevailing situation in Zimbabwe's National Museums forces the study to question the professional ethics of our museum practitioners and the non-existence of mechanisms to stop this.

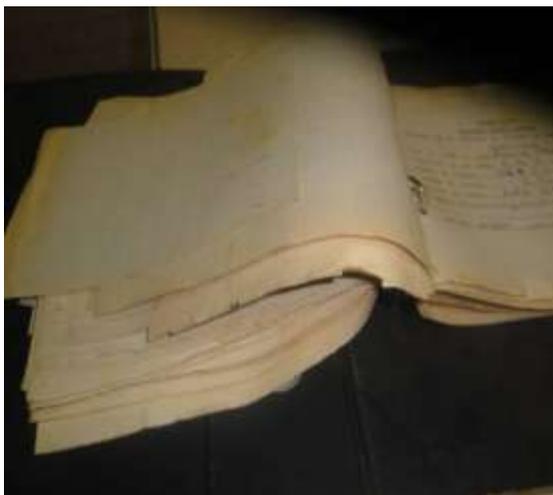
4.7 Protecting museum records from agents of deterioration

Having established that records in Zimbabwe's National Museums are created, kept, used and disposed of at departmental level, the study made an effort to physically inspect the museums' departmental offices. The study managed to look into 18 departments distributed across the five surveyed National Museums. Particular attention was on how departments were providing physical protection for records against direct sunlight, relative humidity, fire, pests, theft, floods, inappropriate temperature levels as well as dust (See items 1, 5, 6, 7 and 8 in Appendix D). These constitute basic agents of deterioration to records and the study deemed it essential to establish what museums in Zimbabwe were doing to protect their records from deteriorating.

Amongst factors that may disturb the physical stability of records include direct light, both natural and artificial. Light can cause fading on photographs while conventional records tend to turn yellowish (Saffady 2011:33; Patkus 2003:6; Scottish Museums Council 2003:5). The study observed that some of the departments in each of the surveyed museums had nothing on the windows to prevent the ultra violet rays which have a damaging effect from reaching the records. Such museum offices included the Archaeological Survey Unit where the museums mission critical records are kept. In the Archaeological Survey Unit, the dark environment preserves the archaeological collections while the records for these collections are housed in a partition of the survey unit where direct sunlight is not controlled. Across the museums that were under investigation, the study observed the presence of blinds, curtains and shutters. However, in discussions held with the respondents of the study, it was revealed that the presence of blinds, curtains and shutters in offices was not meant to ensure the records are protected from the negative effects of direct sunlight. Instead, these were said to

be in place for the convenience of office holders. This explains why the blinds, shutters and curtains were not strategically positioned to ensure the museum records are not exposed to light.

From the discussions which were held with the respondents and even from the body language through facial expressions, the study realised that the protection of records from direct sunlight did not make much sense to museum practitioners in Zimbabwe's National Museums. The protection of records from direct light was regarded a petty issue that does not warrant the attention of museum personnel. The study observed that direct sunlight to records might lead to the total loss of contents in a record, hence compromising the business that goes with the affected records. Figure 1a, b and c depicts museum records whose contents are slowly but surely disappearing as the paper is becoming brittle and turning yellow because of direct sunlight.



a



b



c

Figure 1. The lack of protective measures for records from direct sunlight.

The map records depicted in Figure 1c were slowly becoming brittle and turning yellow. Some of these maps were reported to be original and cannot be found anywhere else even from the Surveyor's General Office. The gravity of how the museums' operations will be affected if records are not preserved into the future need not be over emphasised.

In relation to the control of temperature and relative humidity, respondents indicated that there was nothing in place. At Great Zimbabwe Museum, the study was informed that the gadgets that were in place to ensure the correct temperature and humidity levels had since stopped working and the repairs were reported to be not at anytime soon.

The current study was also concerned with how museums protected their records from such potential threats as fire outbreaks. Patkus (2003) observed that fire is the number one enemy of records. To that effect, the study sought to establish the mechanisms that were in place to ensure Museum records are protected in the event of a fire outbreak. The study observed fire

extinguishers at all the five surveyed regional museums. The informants of the study indicated that these were well serviced and most staff members had obtained in-house fire fighting skills. ZMHS went further on fire prevention and placed smoke detectors in the Archaeological Survey Unit. However, at the time of field work, not all museums had disaster management plans to guide personnel on what exactly to do, when and how? As for dust control, except for the Archaeological Survey Unit, the study observed good housekeeping practices which was evidenced by tidy offices.

Patkus (2003) observed that the main pests which threaten photographic collections as well as conventional paper records are silverfish, carpet beetle, book lice, clothes moth larvae and woodworm. To protect the museum's photographic records from the problem of pests, Roper and Millar (1999) encouraged museums to do regular inspections, monitoring with insect traps and maintaining high standards of cleanliness. That will help ensure pest infestations remain inactive. Roper and Millar (1999) added that food consumption should not be permitted in records storage areas and procedures should be in place for the quick and effective eradication of pests should an outbreak occur. In some offices, the study observed that consumables that attract pest infestations were kept in the same offices where records were kept. Figure 2 serves to illustrate such situations.



Figure 2: The presence of food stuffs in offices.

The presence of sugar (Figure 2) attracts insects and that places the records in the office in danger of being destroyed. Such findings which are extremely against record keeping ethics imply that records preservation is still a very distant phenomenon in Zimbabwe's National Museums.

Water is amongst the chief enemies of records. Bacon (2010:66) noted that flooding has the potential to create a major disaster for an institution. It can result in total loss and irreversible damage on records. From that perspective, the study sought to establish if museums had strategies in place to ensure their records are protected from the possible effects of floods. Dawson (2009) noted that people should be wary of floods because a flood can go undetected for a substantial time unless staff is constantly monitoring all areas of the building. To minimise the risk of floods, Roper and Millar (1999:34) urged museums not to allow water pipes in records storage areas, install automatic shut-off valves, have water alarms, keep the records in water proof boxes, place documents at least six inches off the floor away from the

walls, fix all leaks and train all staff as well as volunteers in flood prevention, control and response. The Public Record Office in the United Kingdom (2007:12) indicated that adequate drainage should be provided in buildings where there is a possibility of flooding. The Public Record Office in the United Kingdom (2007:14) observed that photographic items are particularly susceptible to damage by water and should therefore receive priority in the event of flooding or other water damage.

All five surveyed museums indicated that there was nothing regarding the protection of records against floods. One respondent said that he had worked at the museum for so many years and no such disaster had ever happened. However, the study was informed that in early January 2013, water resulting from heavy rains entered the Museum of Transport and Antiquities in Mutare through the back door. The floods were severe but fortunately alert staff averted a major disaster. Part of the storage area was affected with a few objects placed directly on the floor being soaked. The incident served as a warning that museums in Zimbabwe are not immune from natural disasters.

The Museum and Galleries Commission (1992:33) noted that museums can protect their collections and records against thievery and vandalism with physically defended windows and doors that prevents an intruder from entering or delaying entry long enough for help to arrive. To do this, ARMS (2008:5) noted that walls should be at least nine inch thick cement or brick and the number of outside doors to the main entrance and emergency exits should be reduced. In cases where a museum has a central storage facility for records, the Government of South Australia (2007:9) urged that there has to be a strict key policy where members of staff sign for keys whenever they want to have access to the repository. It was added that no temporary staff, volunteers, or interns should have access to the repository unless if they are

accompanied by permanent staff. This study sought to find out how the National Museums in Zimbabwe protected their records from any form of damage or loss including thievery and deliberate destruction.

The observed poor records storage facilities in Zimbabwe's National Museums imply that the nation's documentary heritage is at risk of being lost. Failure by museums to protect museum records from agents of deterioration means that the future of museums as information centres is threatened. Every department that exists within the museum setup requires previous documentation, especially in conservation, to make informed decisions and to ensure successes are continued while failures are avoided. Above all, the objects that museum practitioners consider as invaluable may be a mere heap of bones and stones if there is no documentation to give life to the objects. From that view point, the study feels that that the poor records storage facilities in which Zimbabwe's museum records are stored defeats the purpose in life of museums as research centres.

4.8 The preservation of photographic records

Bacon (2010:53) observed that photographs are very susceptible to damage by careless handling. To that effect Roper and Millar (1999:32) suggested that it will be preferable to make copies available to researchers rather than originals. For the use of original photographic material, users are advised to wear clean cotton gloves, but if this is not possible photographic material handlers should always work with clean hands. The State of Florida (1996:3) encouraged the use of two hands to hold a photograph. If it is brittle, Bacon (2010) indicated that it has to be supported with a piece of stiff card. Adhesive tapes, staples, pins, paper clips or rubber bands should never be used on photographic material (Bacon

2010; Roper and Millar 1999). The agents of deterioration to photographic material include physical, chemical and biological damage (Bacon 2010:56). These forms of damages can be caused by high temperature, high RH, air pollutants, residual processing chemicals, direct contact with harmful material, light exposure, insects and physical mishandling (Bacon 2010; Short 1982:213). If a museum fails to protect its records from any of the identified agents of deterioration, the signs of deterioration will begin to show. These indicators of instability include fading, stains, image distortion, tears, abrasions, fingerprints, and paperclip impressions (King 1985:47 and Schrock 1995:1).

This study appreciated that photographic records are different from basic conventional paper records and might therefore require different treatment. In this respect, the entire section three in Appendix B was devoted to gathering information pertaining the preservation of the photographic record (See items 28-48 in Appendix B and items 19 and 20 Appendix C). Out of the 21 questionnaires that were returned, 12 (57%) of the respondents indicated that they neither created nor kept photographic records while the remaining 9(43%) said that photographic records were sometimes generated in the course of their business. Across the five surveyed regional museums the archaeology and education departments created most of the photographic records. Those that do photographic documentation indicated that they include the date when the photograph was captured, the photographer's name, name of the captured object, image file number and an indication of whether the photograph was taken before or after treatment of an object. In an attempt to establish if the museum's photographic records were appropriately managed, the study enquired if there were policies that govern the creation, maintenance and use of such records. The informants indicated that there were no guidelines or policies governing the preservation of photographic records. This implies that photographic records in Zimbabwe's National Museums were prone to deterioration as there

were no guidelines on how to appropriately care for such records. The loss of museum photographic records would be a blow to museums as information centres as these records have been attested to be invaluable to researchers because they offer a more clearer, neutral and objective depiction than a written record (Bacon 2010).

The nine respondents that indicated the existence of photographic material in their departments highlighted regular monitoring of photographs for signs of deterioration, maintaining good housekeeping practices and the prohibition of drawing pins on photographs as some of the strategies that were in place to ensure the photographic records do not deteriorate. The nine respondents further indicated the prohibition of staples, money clips, rubber bands and adhesive tapes on photographs as some of the measures that were also in place to ensure the physical stability of photographic material is not disturbed. Of the nine responses that had indicated the existence of photographic records in their departments, four informed the study that backup copies in the form of film negatives were available in case the printed material is damaged. However, the strategy was not apt as the purported backup copies were stored not only in the same building but in the same room with the printed material. This implies that if a disaster strikes, it will destroy both the backup and original copies. Two of the nine departments that had indicated the existence of photographic material in their departments cited cleaning and handling photographs by their edges as some of the measures that were in place to ensure the life of the photographic record is prolonged. A soft cloth or very soft brushes were used as a cleaning mechanisms for the photographic records. The reported cleaning methods are acceptable. A single department highlighted handling slides by their mounts as a mechanism in place to ensure that the slides are not damaged.

The responses obtained on the means by which photographic records are preserved in Zimbabwe's museums displayed to the study that museum practitioners value the photographic material as a powerful research tool and were therefore determined to ensure it survives for long.

4.9 Threats to museum's photographic records

In an effort to establish the preservation needs of the photographic material that is kept in Zimbabwe's National Museums, the study asked the nine who had indicated the existence of photographs in their departments if their photographic records ever suffered from any damages and they all indicated yes to the question. The nine Head of Departments who had indicated the existence of photographic records in their respective departments revealed that fading (100%), tears (89%), abrasions (78%) and finger prints (67%) were the most experienced forms of damage on photographic records. Image distortion (44%), stains (33%) and paper clip impressions (22%) recorded the least responses.

Two out of the five interviewed Regional Directors cited thievery as a major threat not only to photographic records but to the whole spectrum of museum records. The study was informed that photographs and notebooks disappear from the museum without trace. The respondents of the study also lamented the unprofessional behaviour of researchers who took the research documents they produced with them when they leave NMMZ. In an attempt to establish a starting point for introducing better records preservation mechanisms within the museum environment, the study asked the nine departments that had cited the existence of photographic records to indicate if their photographic records were damaged or showing any signs of deterioration and to identify factors that could have caused the deterioration of the

museum's photographic records. All the nine respondents indicated poor quality storage, poor handling and exposure to light as agents of deterioration that disturbed the physical stability of records in their custody. Other agents of deterioration that were cited included high temperatures (44%), in-appropriate mounting techniques(33%), insect attacks (33%) and damp conditions (22%).

As highlighted earlier, the storage material in which photographic records are kept has a strong influence on the longevity of the records. As such, the study sought to establish the storage equipment that is used to keep photographic records in Zimbabwe's National Museums. The nine respondents that had indicated the existence of photographic records in their departments all indicated steel cabinets, wooden closed shelves and open shelves as the form of storage equipment available for storing photographic records. The obtained responses were in harmony with what the study observed as depicted in Figure 3a, b and c.



3a



3b



3c

Figure 3. a-Steel cabinets, b-Wooden closed files and c-Open shelves.

Apart from the Archaeological Survey Unit (Figure 3a), photographic records in Zimbabwe's National Museums are stored in environments that do not protect them from the agents of deterioration identified in the above section.

4.10 Disaster management planning and the preservation of museum records

Aitchson (2004) indicated that there is need for museum practitioners to discuss and prepare on how to handle a disaster. The Museums and Galleries Commission in the United Kingdom (1992:55) communicated that to adequately prepare for a disaster, institutions need to have a disaster management plan that provides procedures to protect and recover documents in the event of natural and human induced disasters. All staff members and volunteers should know the basic contents of the plan and must receive training so that they can implement it when necessary (Sullivan and Childs 2003:68).

The current study acknowledges that the ability to handle a disaster is essential towards the successful preservation of records. The informants of the study indicated that NMMZ had just completed drafting the disaster management plan and it was in circulation for further inputs and comments awaiting adoption. To that effect, the researcher was denied access to the document for the reason that the document was not yet open for public consumption. The study was informed that the disaster management plan was the first one and it was going to serve all the regional museums. This implied that Zimbabwe's National Museums had all along been operating without a disaster management plan. Such realisations implied that museums holdings, both records and collections were at risk of being destroyed as there was no written and defined plan of how to handle a disaster when it occurs.

4.11 Records surveys, appraisals, retention and disposal scheduling

A records audit is a comprehensive and systematic gathering of information about records created, used and maintained in an organisation (Chaterera *et al* 2013). Such information permits the appraisal of an institution's records which is a process of determining the value of records. As a result, it becomes possible for museum practitioners to know which records to prioritise in terms of providing resources for preservation, which records to retain, for how long and which records to destroy and how? Keeping the necessary records helps offices to save space and it improves retrieval while enabling efficiency and effectiveness in the conduct of business.

The information collected through records audits is vital towards introducing working records preservation mechanisms in an institution. The exercise involves gathering information about the records that are created by an institution and such information will be useful for

performing records appraisals as well as creating records retention and disposal schedules (Roper and Millar 1999).

The study was informed that Zimbabwe's National Museums neither conducted records audits nor performed records appraisals and as such, they did not have records retention and disposal schedules. This means that records management in Zimbabwe's National Museums is nonexistent.

4.12 The working relationship between the National Archives of Zimbabwe (NAZ) and NMMZ

In terms of the National Archives of Zimbabwe's Act of 1986, Chapter 309 Section 6 and 7, records centres have the legal responsibility to visit public institutions, inspect their records storage facilities, examine their records management practices and provide recommendations accordingly. In light of the 1986 NAZ Act, the study sought to find out if NAZ ever performed records surveys at Zimbabwe's National Museums. The surveyed regional museums indicated that NAZ had neither visited museums to offer records management guidance nor had NMMZ took the initiative to seek for records management advice. In a discussion held with Dr. Paul Mupira during a preliminary presentation of this thesis, it was revealed that NAZ once visited ZMM for a records survey and they actually produced a report. However, owing to a high rate of staff turnover and poor record keeping practices, informants from ZMM did not know of the existence of such a report and efforts to look for the report were fruitless as there was entropy in possible areas where the record could be located.

The study visited NAZ -Gweru Records Centres to find out if records surveys are done to museums. The Provincial Archivist and the Records Management Assistant indicated that in adherence to the NAZ Act, museums should also be covered in records surveys but since they joined the station in 2010 and 2008 respectively, records surveys had not been done to ZMM. Incredibly, the file for communication between ZMM and NAZ could also not be located at Gweru Records Centre. The interviewed Regional Directors indicated that they have a very close working relationship with NAZ but it has never been anything to do with records management. This implied that Zimbabwe's National Museums lack the professional guidance on records management which NAZ should provide to all public offices. The lack of professional records management guidance compromises the upkeep of museum records. This may result in the loss, damage or misplacement of records, hence placing the position of the museum as information centres at risk.

4.13 Records preservation through digitisation

The State of Victoria (2009:3) observed that digitisation can be a way of protecting records by reducing ongoing handling. Jephcott (1998:40), The Commonwealth of Australia (2011:4) and Rey (2009:13) noted that the immediate access to documents irrespective of location is one of the benefits offered by digitisation to museum records users as well as the museum personnel. Spencer (2011:5) observed that digitising museum records enables information to be shared in a more flexible manner rather than relying on one or a certain few individuals to supply information. That makes museum business processes more efficient because moving from a paper based system to an electronic system removes unnecessary time and effort spent when administering a hardcopy. Spencer (2011) noted that managing physical records is time consuming and costly for storage and retrieval. The current study examined the status quo in

Zimbabwe's National Museums regarding the digitisation of their records (See items 49-52 in Appendix B and items 21 and 22 Appendix C).

The State of Victoria (2009) observed that when museum professionals talk about digitisation, they will either be referring to a process where they record in electronic format descriptive data about their collections or a process where they produce some type of digital representation or image of each object. These two activities are often easily confused. The forms of digitisation which was addressed by the current study is the one in which museums migrate paper records to digital formats and the process where museums record in electronic format descriptive data about their collections not the digital representation on objects.

Out of the 21 questionnaires that were returned from the 35 that were dispatched, 16(76%) indicated an attempt of records digitisation while the remaining 5(24%) responded that no digitisation attempts were ever made. The 16(67%) who highlighted digitisation attempts were distributed across the five surveyed National Museums. The responses obtained from the Regional Directors indicated that digitisation efforts were made by departments that are directly associated with the management of sites, monuments and museum objects. In these departments, the respondents informed the study that Microsoft access and excel were the mostly used packages.

The respondents who had indicated that digitisation of records was never attempted cited reluctance by museum staff, budgetary constraints, lack of expertise and absence of tailored software as the major challenges hindering digitisation of records. On the other hand, the informants who had responded that records digitisation efforts were made highlighted that some of the benefits they realised include the integration of object related information,

improved internal and external access to museum records, enhanced records protection, and increased security of records. The saving of space which is usually amongst the benefits of digitising records was not indicated because respondents said that they would retain the hardcopies after digitising for back up purposes and because some documents are original as well as of enduring value and could therefore not be disposed of. However, the retention of digitised hardcopies as backups was not appropriately done as these were kept in the same location with the digital record. This implies that when a disaster strikes, both the electronic copies and hardcopies will be destroyed.

Informal discussions held with the Head of Departments revealed that records digitisation was a challenge in museums. At the Natural History Museum, one of the respondents indicated that the system in which the museum was trying feed its records crashed four times due to viruses and there were no backup copies. The respondent revealed that they were into their fifth attempt of trying to capture information from the manual accessions register. At the Museum of Transport and Antiquities, the study was informed by one of the departments that digitisation work was in progress and it was going on very well. However, despite the steady progress, the study was informed that the museum once suffered when it hired an external programmer to install database software which failed to work as was expected and the internal staff could not follow the system because they had not participated in building the system. To that effect, the respondents highlighted the lack of internal expertise and the threats of hiring as some of the contributing factors hindering digitisation projects.

While digitisation efforts were reported in each of the five surveyed National Museums, the study gathered that such efforts were only for object related records. All the departments that do not have a direct responsibility over records informed the study that they had not

attempted to digitise any records. This continues to demonstrate that objects are indeed the *raison detre* of museums and they are given attention at the expense of other equally important activities.

4.14 Summary of the Chapter

Guided by the research objectives and the responses provided by the informants of the study, it was found out that the future of museums as information centres is threatened. This was evidenced by the lack of basic records management requirements such as a records management policy, records procedures manual, records surveys and records appraisals. Additionally, the study found that the storage facilities in which museum records are stored are not ideal for the physical stability of records and museum practitioners are not trained in records management. The surveyed museums displayed an alarming level of indifference towards records management issues. Of importance in the study was also the records management working relationship between NAZ and NMMZ which hardly exists. More so, key to the preservation of records is the ability to handle a disaster when it strikes and this requires a disaster management plan which at the time of writing had just been finalised and still to be implemented. The overall implication for the lack of basic record keeping requirements and the lack of records management appreciation by museum practitioners implies that the role of museums as information centres is compromised. The Chapter that follows provides an interpretation and discussion of the results that have been presented in this Chapter.

CHAPTER V

DATA INTERPRETATION AND DISCUSSION

5.0 Introduction

This Chapter provides the broader meaning and implications of the research findings. Leedy and Omrod (2005:275) indicate that data interpretation in qualitative research points to the process where the study ascribes meanings and implications to the research findings. It is only through interpretation that the study can expose relations and processes that underlie the findings (Kothari 2004:344). The interpretation and discussion of data presented in this Chapter consistently moved between research questions, research problem and objectives of the study as recommended by O'Leary (2004:185). In view of the significant findings of the study, the theoretical underpinnings adopted and related previous researches, this Chapter provides a discussion on the preservation status of museum records and the implication of such findings to the future of museums as information centres.

The key issues central to the discussion include the importance of preserving museum records, the need for a records management policy, manual, records surveys and records appraisals within the museum environment. Equally important issues discussed in this Chapter are disaster management planning, the preservation of photographic records, museum records storage facilities and the digitisation of museum's records as a preservation means. These issues were are the key factors to successful preservation of museum records.

5.1 The importance of museum records

Museum records ensure that museum collections are physically and intellectually available for collections management, interpretation, exhibition and research. They give museum personnel accountability for their collection. The lack of sound records management programme that initiates acceptable records preservation strategies places the future of museums as information centres in danger. It must always be remembered that a museum collection without supporting information is lifeless, meaningless and may not contribute to scholarship.

The main focus of the museum is to care for objects, interpret them and disseminate information to the members of the public. A look into the identified types of records (in Chapter Four) shows that museums in Zimbabwe are dominated by collections documentation records. This explains why the museums are dominated by object related records that are given a high status compared to administrative records. The high status of object related records is not a new practice (Brunskill and Demb 2012:25). Object related records have long been considered important because they are mission critical and necessary for running the museum institution. The presence of such mission critical records in museums underscores the need for an established records management programme and clearly defined preservation strategies. For that reason, it is crucial to for National Museums in Zimbabwe to have a records management policy, which is a key document for developing acceptable practices for effective records preservation.

The idea by some respondents that records management is not a core function of a museum is misplaced and means that the memory of the society is at risk of being lost or damaged. Good

record keeping in museums improves operational efficiency and access to information allowing for more rapid response to issues.

5.2 Records management policy and procedures

The successful preservation of the museum records identified in this study largely depends on a well crafted records management policy. In a research done by the State of Florida (2009) it was emphasised that developing and adhering to a formal, written records management policy is the best way to ensure that records management requirements are met in a consistent, effective, and efficient manner. The lack of a records management policy in NMMZ implies that museums do not have a systematic approach, corporate standards and requirements for the management of their records. In essence, National Museums in Zimbabwe have no framework for the creation, maintenance, use and storage of records. For instance, for a museum to make informed decisions regarding the conservation or general management of a site there has to be proper documentation regarding the history of the site. Similarly, for a museum exhibition to be successful, there has to be recorded information about the objects to be used so that the development of a story line becomes meaningful. The creation and keeping of records regarding museum operations provides a sound decision making platform, feedback tool and permits learning from past successes and failures.

From these view points, the lack of a records management policy in Zimbabwe's National Museums indicates that the museum personnel were not appropriately managing the museum's records as they had no binding and guiding document that defines how to create, use and maintain their records. Additionally, the absence of a records management policy implies an increase in the level of risks associated with poor recordkeeping practices such as

misplacement, permanent loss and or damage of records (Public Record Office Victoria: 2009).

The absence of a records management policy also suggests that museums are not receiving the necessary support from senior management who are responsible for ensuring that their units have all the necessary polices required for improved operations. This research showed that there is lack of awareness on the importance of proper records management as a result the issues is not given priority by senior management. Therefore, even if the professional staff is to take the initiative of introducing appropriate records management practices, their efforts may not receive the financial and moral backing required. Usually, for projects and initiatives to be successful in any organisation, it has to have the support from the top management. This projects a bleak future for museums as information centres because records management issues were treated as a distant and an almost irrelevant practice.

The records procedures manual is also an important guide to the proper and systematic management of records (MacKenzie 2003). Mnjama (1996) indicated that a records procedures manual is distinct from a records management policy in that the former is a detailed document that supports the policy while the latter is a concise document that identifies responsibilities and rules. The records procedures manual is crucial to the implementation of sound records management practices which form the basis for appropriate records preservation. The absence of this manual in Zimbabwe's National Museums implies that museum's records are managed without some form of accepted guide and are therefore prone to deterioration through un-informed management.

The lack of records management policies and records procedures manual is contrary to the prevailing situation in most museums in Europe. The Natural History Museum in the United Kingdom has a records management policy that sets out the principal objective of the museum's archives and records management as *“to enable the Museum to manage effectively its records, including paper, electronic and other media, so as to ensure the selection and retention of items to be retained as permanent record of its activities and to enable the efficient identification and destruction of records with no long term administrative, legal or historical value.”*(Parry 2010:2). The Natural History Museum's records management policy is aimed at extracting and expanding on the records management roles and responsibilities within the museum. The policy sets out the regulatory framework that staff operate in and embeds good records management practice at the heart of all museum activities (Parry 2010:1). In the Natural History Museum's records management policy, it is acknowledged that good record keeping is essential as it improves operational efficiency, access to information and supports and provides evidence of museum activity (Parry 2010). Further, the Natural History Museum in the United Kingdom attests that an unmanaged records system can make the performance of duties more difficult, costs time, money, resources and makes the museum vulnerable to security breaches and litigation. In America, the Arizona State Museum has a procedures manual that covers records management and repository requirements and the use of the Arizona State Museum Archaeological Record Office (Pearson and Karl 2009). The existence of such a records management policy which has the objective of promoting and facilitating efficient records management within creating departments is a clear indication that records management in this museum is perceived significant.

5.3 Museum records management training

The preservation of museum records is essential for effective collections management and for making museum's programmes and activities a success (Simmons 2010). Appropriate formal training in records management is a very crucial component that contributes to the overall success of records preservation within the museum environment. A study on managing public sector records done in Ghana revealed that both staff and users of public records and archives in Ghana lack awareness of and training on the importance of preservation issues (Akussah 2005; Amehame-Addo 1993). The study indicated that it is evident that the lack of, or inadequate, preservation training, education and awareness raising among both staff and users are some of the key causes of document deterioration in Ghana. It was found out that 77.3% of the registries staff had only some instruction in preservation and no formal training. In addition, 61.4% of the registries reported having observed damage to documents resulting from use of documents.

It is therefore crucial that museum practitioners be awarded the necessary training that helps them to improve the preservation of museum records. According to Piggot (1987) any institution plagued with deficiencies in preservation training and awareness may not be able to discharge its responsibility towards safeguarding its documentary heritage.

In sub-Saharan Africa, Mazikana (1998:81) found that records management as a separate and distinct profession and occupation was only beginning to emerge. Mazikana (1998:77) established that while it is known and accepted that every organisation creates, uses and relies on records, it has taken a long time to make provision for the proper management of the records with specifically designated records managers. Mazikana (1998:82) observed a lack

of appreciation by the top management in Sub-Saharan's public institutions resulting in the profile of the records management function being accorded low priority in the allocation of resources. Similarly, Ngulube (2001) and Mnjama (1996:31) established that most African countries have paid little attention to the training of records management personnel.

Currently, no one was specifically trained to care for records generated as a result of museum businesses in NMMZ. The Midlands State University (MSU) offers modules in records management in the Department of Archaeology Cultural Heritage and Museum Studies. There is therefore an opportunity for NMMZ to employ qualified records managers. Four of the National Museum in Zimbabwe, employ at least one former MSU student and take all museums take students on work related learning. However, these products seem to have failed to make a change with regards to records management in Zimbabwe's National Museums. This was evidenced by the absence of basic requirements of records management practices. Such a situation is largely a result of the low priority given to records management and the focus on documentation of museum objects.

The absence of museum practitioners who are specifically assigned and trained to manage museum records implies that records that are generated within the National Museums in Zimbabwe are not properly managed. Such a situation was actually confirmed when the author of the current study was looking for the 2003 Matobo Hills World Heritage Landscape nomination dossier. The efforts to get the document from all of the five regional museums were unsuccessful as the museum personnel could not locate the document. A scanned copy of the dossier was however obtained from the Natural History Museum Website yet the personnel from that museum did not even know about the availability of the document on their own Website. The practitioners from the other four regional museums who participated

in crafting the document also failed to locate the document which they confidently thought they had. That experience suggests an urgent need for museum records management training as the National Museums in Zimbabwe risk losing its important documents.

In addition to professional skills personnel responsible for record keeping also need guidance to look after an institution's records. Advice from NAZ, an institution that has the legal mandate and expertise to oversee the creation, use, maintenance and disposition of public records could strengthen basic records management within Zimbabwe's National Museums.

Contrary to the Zimbabwean situation, museums in Europe consider records management training for museum practitioners as a top priority. This is evidenced by such initiatives as that of the London Museums Hub which launched an Information Policy Toolkit and a Records Management Toolkit, both of which are now freely available on the Collections Link website (Teuteberg 2012). The toolkits were developed by the London Museums Hub Information and Records Management Project and are designed to raise museum staff awareness and increase capacity for information and records management across the London region museums and beyond. Such efforts demonstrate the appreciation by other countries on the need to ensure effective museum records management practices prevail.

5.4 Records storage facilities and the threats to museum's photographic records

Preservation of both photographic material and conventional paper records need storage facilities that provide an environment that provides records with protection against all possible agents of deterioration. The absence of records management units and centralised storage facilities for keeping records in National Museums meant that there was no

uniformity on how the museum records were created, used and maintained. The use of departmental offices as records storage areas in Zimbabwe's National Museums implied that museum records were not being kept in appropriate records storage environments and that threatens the survival of those records into the future. The obtained results also revealed that records generated in Zimbabwe's National Museums are highly prone to deterioration as these are not provided with decent storage that promotes their survival. Figure 4 depicts what the study perceived as the worst scenario in some of the offices which museum records are kept. With reference to the depicted situation in Figure 4, this study recommends museum practitioners to find a separate storage room to keep those various bottles of medicines. The water tap and the sink seem to be built-in and may therefore not be removed. To that effect, the study urges the office bearers to be highly responsible and make sure they monitor and report water leakages and they should always be careful not to leave the tape open. In Zimbabwe, water shortage has become a common challenge and chances of people leaving the tape open when there is no water may not be ruled out. If funds permit, it is advisable for the museum to install some water leakage detection system. This way, the probability of the museum's records being damaged by water will be reduced.



Figure 4: An inappropriate environment for storing records.

In the office where those photographs were taken are records stored in open shelves and cabinets. From such findings, this study claims that museum practitioners in Zimbabwe's National Museums do not prioritise the preservation of records especially those that are not directly linked to museum objects. Museum practitioners in Zimbabwe do not appreciate that every record generated within the museum has a unique and important purpose in the institution and therefore deserves appropriate storage. Failure by museum practitioners to provide the appropriate storage environment might lead to the misplacement or damage of records. That certainly compromises some functions of a museum that rely on those records. The uncontrolled and unmanaged environment observed in Zimbabwe's National Museums' records storage places is contrary to the requirements of ISO 15489-1 (2001:18), which stated that records must be stored in appropriate storage conditions that ensure they are protected and can be easily retrieved.

Roper (1999:30) emphasised that the control of environmental conditions is vital to records preservation. The control of temperature, relative humidity and light is critical in the preservation of records (Ogden 2002). Such practices were lacking in the five surveyed National Museums. Records that are created and kept in Zimbabwe's National Museums are in danger of deterioration due to uncontrolled and unmonitored environments. The lack of ideal records storage environments in Zimbabwe's National Museums means that the physical security and long-term survival of records within the museum environment is not assured. If museum records of enduring value fail to make it into the future because of poor preservation strategies, it would mean that the ability of museums to function as information centres may be in vain.

The study appreciates that controlling of temperature and humidity may be a challenge in Zimbabwe's museums considering that the mechanisms usually employed are scientific and would require financial backing which happens to be a challenge at the moment. However, the study established that the lack of appropriate records management practices in Zimbabwe's National Museums may not be absolutely attributed to financial challenges, but to the lack of awareness and appreciation of the discipline. That was evidenced in the failure by museums to implement some preservation strategies like ensuring that records are strategically placed in their offices so that they are protected from direct sunlight. Where records were protected by curtains or blinds from direct sunlight, it was by default and not by design. The failure by museums in Zimbabwe to protect records from agents of deterioration compromises their longevity.

Museums in Africa seem to be facing similar challenges regarding record keeping. Maulden (2008) revealed that the Egyptian Museum had no centralised department to maintain records and that compromised the retrieval and use of records. However, Egypt seem to have gone a step ahead of Zimbabwe in as far as embracing museum records management is concerned. With the help of the American Research Center, Egypt launched the Museum Registrar training project in 2007. The project was aimed at enabling museum practitioners to provide accurate information to researchers and to successfully track objects as they move from museum to museum within Egypt and around the world (Maulden 2008). This was an indication that Egypt is now prepared to take museum records management to better levels.

5.5 Disaster management planning and vital records management programmes

Museum records are vulnerable to a variety of disasters and preparedness is the best defence against these disasters (Ngulube *et al* 2011:243; Aitchinson 2004; Museums and Galleries Commission 1992; Sullivan and Childs 2003; Public Record Office 2007). The ability to handle disasters is critical to the survival of museums as information centres. It is the responsibility of museum practitioners to protect both museum objects and their records from human and natural calamities. Museum practitioners' efforts to keep the nation's cultural heritage may come to naught if the records they have are lost. Disaster preparedness is thus a key component of records preservation. As shown in the previous Chapter NMMZ has operated without a disaster management plan all along. Why such a crucial document took so long to be crafted is not clear, but it shows that perhaps Zimbabwe's museum professionals had not prioritized disaster preparedness. The absence of a disaster management plan implied that for a long time National Museums in Zimbabwe did not have the best insurance and protection for both their objects and their records. The current study could not evaluate whether the intended disaster management plan had provisions for the protection of records as the draft was not yet available to the public. Foot (2006:35) noted that disasters can strike an organization at anytime, but if an institution takes time to plan ahead, the damage may be reduced or even avoided. However, this study gladly acknowledge that just as the study was about to be completed, NMMZ had adopted the disaster management plan. The plan is now in place what remains is commitment to implement it as well as monitoring of its implementation.

A similar situation was observed in the study conducted in South Africa by Ngulube *et al* (2011), that revealed that disaster management planning did not feature prominently in public

organizations. Most South African public institutions did not have disaster plans and are therefore unable to preserve the South African heritage and guard against collective cultural amnesia (Ngulube *et al* 2011). To that effect, Ngulube *et al* (2011) recommended that South African archivists should ensure that the national documentary heritage is preserved through initiating disaster management activities nationwide. A similar recommendation is made to Zimbabwean National Museums in the next Chapter.

5.6 The preservation of photographic records at Zimbabwe's National Museums

The photographic record, whether a century-old plate or modern microfilm, is indispensable to research institutions such as museums (Hendriks 1977:93). Similar to traditional manuscript material, photographic records can be consulted for information and fully exploited by researchers. Clark (1990:42) notes that negatives are best stored in neutral paper enclosures and within acid free boxes which provide a useful barrier against a chemically hostile environment. The current study looked into the future of museums as information centres and examined how photographic records were being preserved in Zimbabwe's National Museums. The film negatives at Zimbabwe's National Museums are highly prone to deterioration as these were stored in plastics placed in envelopes whose pH levels were not even known by the personnel responsible for the material. Bacon (2010) notes that storage materials for photographic records must pass the Photographic Activity Test (PAT) and the paper enclosures in which photographs are kept must be acid-free and lignin-free with a pH7 level.

Bacon (2010) indicates that taking care when handling any collection item is one of the most effective, cost-efficient, and easily achieved photographic preservation measures. Clark

(1990) also notes that photographs should not be marked even on the backside. The bulk of photographic records found in Zimbabwe's National Museums were marked on their back side and that threatens their physical stability. Museum practitioners in Zimbabwe's National Museums seem not to be aware of some of the basic requirements needed to preserve the photographic records from deteriorating. The starting point to correct this situation might to launch in-house training for museum practitioners on how to ensure the life of the photographic record is not compromised. The National Archives of Zimbabwe which has the legal obligation to ensure records created in public institutions are well looked after can be asked to provide resource persons for such programmes.

5.7 Records surveys and appraisals

The International Records Management Trust (1999) indicates that records surveys provide the necessary information needed to manage records created by an institution throughout their life-cycle. Carrying out records audits is therefore amongst the key steps that an institution may employ to introduce acceptable records preservation practices. A records audit provides information such as what records are being created, by whom, how are they used, shared and stored, where are they stored and how long are they retained and why (Graham 2003:2); Hare and McLeod 1997; Brunskill and Demb 2012:97). That kind of information provides museum practitioners with a solid foundation on which the museum can begin its records preservation strategies. It permits members of staff to find out what records exist, their location, and understanding how they are used. Consequently, it becomes possible for members of staff to identify the most appropriate preservation strategy for a record group. A research done in Zimbabwe's Government Ministries by Chaterera *et al* (2013) established that records surveys are in support of a framework for managing public sector records.

As seen in Chapter 4 National Museums in Zimbabwe were not conducting records audits or surveys in their institutions. As a result they were not in a position to identify and resolve recordkeeping problems and they could not draw up an action plan of how best they can preserve the various types of records under their custody. The lack of records audits in Zimbabwe's National Museums further implies that National Museums in Zimbabwe do not have both physical and intellectual control over their records. It also implies that museums in Zimbabwe do not have the capacity to develop sustainable records management programmes. It means that areas of recordkeeping weaknesses that require immediate attention are not identified and the preservation requirements of museum records is also not determined. As a result, the survival of museum records into the future is threatened. National Museums records are in danger of being lost to damage, deterioration and misplacement because of such improper records management practices.

The lack of fundamental records management practices in Zimbabwe's National Museums indicates that the need to manage records properly throughout their life cycle was nonexistent. This situation is contrary to best record keeping practices which other museums have managed to adopt. The Natural History Museum in the United Kingdom is committed to managing information and records throughout their life cycle, that is from creation to ultimate disposition. In the creation stage, the museum has policies and procedures that support the creation of records. These include an asset management and information asset register, protective marking and a records management handbook. In the second stage of a record which is maintenance and use, the museum also has policies and procedures that support the maintenance of information. These include a retention schedule, data protection, freedom of information and information asset management. In the final stage of a record which is disposal, the museum has legal and regulatory obligations to ensure records are only kept for

an agreed time. The policies and procedures in place that support the disposal and permanent retention of information include retention schedule, archives acquisition policy, destruction procedure and records management handbook (Parry 2010:5-6).

5.8 Retention scheduling and disposition

As highlighted in the previous section, through records audits, members of an organisation are enabled to obtain information that makes it possible to determine the value of a record and the appropriate preservation strategies required by specific record groups. The information gathered through records audits also makes it possible to develop retention and disposal schedules (Agere *et al* 1999:46). A records retention and disposal schedule prescribes requirements for the length of time a record must be retained and the appropriate means of disposal at the end of its lifecycle. Retention and disposal requirements may be driven by legislation, regulation, policy, legal precedent, best practice or agreement within the institution with the advice of relevant professionals and authorities. The schedule provides mandatory instructions for what to do with records that are no longer needed for current business.

The benefits of having a records schedule are that it ensures that the important records are organized and maintained in such a way as to be easily retrieved and identifiable as evidence of the programs activities. This will help conserve office space and equipment by using filing cabinets to house only active records. It also helps preserve those records that are valuable for historical and research purposes and it stabilizes the growth of records in offices through systematic disposition of unneeded records.

The absence of a retention and disposal schedule may mean that Zimbabwe's National Museums are keeping some of their records longer than necessary and this creates storage challenges. At the Museum of Transport and Antiquities and the Natural History Museum, the study observed steel filing cabinets with maps and boxes with records placed in a corridor. The current project well understood and appreciated that museums create and keep records of enduring value, records that may not be destroyed because of their scientific and research values. For instance, the records that are found in the Archaeological Survey Unit at ZMHS date back to as early as 1902 and these are never to be destroyed.

However, the identified types of records that are generated during the museum's various businesses shows that museums also produce records of ephemeral value such as receipts and financial statements amongst others. Such types of records are certainly important but are not worth preserving for posterity. They need to be destroyed at some point in time but the disposition does not have to be on an ad-hoc basis. Therefore, because of the absence of retention and disposal schedules, museums risk destroying critical records that are not supposed to be disposed of while unnecessarily retaining records of ephemeral value for longer periods than required.

Unlike the situation in Zimbabwe where records retention and disposal schedules are not available, museums in Europe have demonstrated that they value record keeping through the development of records retention and disposal schedules. The Baltimore Museum of Art has a records retention schedule which is based on legal guidelines, established museum practices, Society of American Archivists Code of Ethics, Society of American Archivists Standards for access to research materials in archival manuscripts repositories and the needs of the Baltimore Museum Staff and researchers (Baldwin *etal* 2013). The Cleveland Museum of

Art in the United Kingdom has a records retention and disposition schedule for the nature of records created in all its departments (The Cleveland Museum of Art 2013). The schedule clearly indicates the item number, the record title, the description of the record, the period a particular record is to be retained in office, the period a particular record is to be retained in the museum's archives and the justification for such periods. The Cleveland Art Museum (2013) went further to create a separate records retention and disposition schedule for vital records. Vital records are those records that are critical and key to the existence and operations of an institution. The availability of well defined records retention and disposal schedules in the Cleveland Museum of Art shows that records management within the museum is an appreciated and respected practice.

5.9 The digitisation of records

The findings positively reflected the appreciation by museum practitioners to ensure their records are easily accessible and preserved for posterity. However, as observed earlier digitisation efforts were only done for records that are directly associated with collections and sites while other museum records were overlooked. It should be appreciated that not only object related records are important. In fact, for these object related records to be usable in museum functions, they need to be supported by records generated from other museum activities. For instance, it may not be possible for a museum to plan for museum objects conservation if there are no financial statements that clearly shows the financial status of an institution. The same applies to monument inspection exercises and the designing and mounting of exhibitions; all require a clear financial statement of the museum to see if it is feasible to carry the task or not.

The study understood that departments that exist at a museum may have different roles but they are all united by one goal which is to make the museum a meaningful and worth institution to the society. It is therefore logical to ensure that every record is afforded treatment that retains its integrity for as long as it is still needed. The Commonwealth of Australia (2011) stated that a digitisation project helps an institution reduce physical storage needs. That was an inapplicable benefit to the museums engaged in this study as the informants indicated that hardcopies of the electronically captured information were retained.

5.10 Summary of the Chapter

The lack of basic records preservation practices in Zimbabwe's National Museums is in violation of the records management models which were discussed in Chapter Two. Records that are generated, used and kept in Zimbabwe's National Museums are not properly managed from the time they are created until their ultimate disposal and that is in direct violation of the records life cycle and the continuum model. Apart from strengthening their position as information centers, museums need information daily to solve problems and make informed decisions to guide their operations. What the museum accomplishes as an organization largely depends upon the information that it possesses and can be made available to it. The need to ensure the proper preservation of the entire museum records should therefore not be overemphasized. Okello-Obura (2011), noted that the degree of success enjoyed depends on how well the information resource is managed. Proper management of the information that museums create in the conduct of their business is indeed an asset and a resource of strategic importance. For museums to satisfactorily maintain their position as information centers, proper records preservation strategies should prevail.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

The degree of success enjoyed depends on how well the information resource is managed

(Okello-Obura 2011)

6.0 Introduction

Managing and preserving records is a practice which is only beginning to emerge within the museum environment. While it is common knowledge that museums create, use and rely on records, it has taken a long time to make provision for the proper management of the records. In this penultimate Chapter conclusions and recommendations on the future of museums as information businesses are given. It is emphasised that the position of museums as information centres should not be compromised due to the lack of proper records preservation strategies. The Chapter also highlights some of the perceived challenges that are likely to be encountered in attempting to introduce museum records management in Zimbabwe's museums. In addition, the Chapter suggests possible areas for further research.

6.1 The importance of records

Young *et al* (2006) noted that sound record keeping is an important management tool that gives an institution control over its records so that they are protected from loss, damage, or destruction. A museum's past successes are a drawing card in attracting interest, commitment, and contributions, whether in the form of civic and political support, volunteers or even financial donations (Young *et al* 2006). The Curtin University (2011:3) indicates that

acceptable records management is vital because records help an institution to demonstrate accountability, provide evidence of actions and decisions and help to build organizational knowledge. Young *et al* (2006) observed that past records contribute to the organization's sense of pride and improves morale among employees and members of the public. Using its past records, a museum is able to illustrate its history of programmes and activities. That stimulates enthusiasm and may even encourage members to maintain the museum's standards and promote its future. It helps motivate the membership and creates a climate of strength and conviction. If a museum has records of successful programs developed and implemented five, ten or twenty years ago, it demonstrates the organization's credibility, strength, and longevity. Museum practitioners are therefore encouraged to treat every record as a valuable asset to the museum and the community at large.

Good recordkeeping practices in the museum lead to greater productivity as less time is taken to locate information. Keeping well organized information results in better decisions based on complete information, smarter and smoother work practices, consistent and collaborative workgroup practices, better resource management, support for research and development (The Curtin University 2011 and Obura 2011). According to the Association of Commonwealth Archivists and Records Managers (2007), the effective management and preservation of records throughout their life cycle is a key component of national development. Unorganized and poorly managed records mean that a museum does not have ready access to authoritative sources of administrative, financial and legal information to support sound decision making or the delivery of programmes and services to members of the public. If records are not well organized during the earlier stages of their life cycle, those of enduring value will not be readily identified and safeguarded as part of the national archival heritage (Okello-Obura 2011). The Public Record Office of Northern Ireland (2006) indicated

that records are the archival heritage of a nation, an irreplaceable part of a nation's history. This means that records of public institutions such as museums must be handled with the utmost care to guard against damage or loss. Preventive measures should be immediately adopted to ensure that, as far as practicable, museum records can be accessed by present and future generations. This study encourages museum practitioners in Zimbabwe to change their attitude towards records preservation and consider preserving museum records as vital to the success of museums.

6.2 The future of museums as information businesses

Zimbabwe's National Museums were functioning without a records management policy, an important basis for developing effective records preservation strategies. The records life cycle principle was not being followed hence National Museums had no established intellectual control over the creation, use, maintenance and disposal of records.

NAZ and NMMZ had good working relationships although they had never met to discuss on museum records management issues. NMMZ is urged to capitalise on its good relations with NAZ and seek advice on how to develop a records management policy. A records management policy leads to sound records management practices which facilitate proper records preservation (Watson 2010). If museums manage to create and implement records management policies, they would strongly enhance their position in the future as information businesses.

The study established that with the exception of a few products of MSU, museum practitioners in Zimbabwe had not yet received any formal training in records management.

In that light, the study concludes that museum practitioners lack the basic knowledge on the significance of good record keeping within the museum environment. Musembi (2004:12) stated that staff ought to take measures to substantially increase their knowledge in records management, so that they are able to preserve their records into the future. This study therefore encourages museum practitioners to obtain the relevant training that helps them to preserve museum records for as long as they are needed. For Zimbabwe's National Museums, the most convenient starting point may be to organise a series of workshops, seminars and conferences on museum records management. These should be attended by every museum employee as all staff is involved with museum records in one way or another.

Brunskill and Demb (2012) indicated that objects in a museum are given life and meaning by the information that accompanies them. For the management and preservation of museum collections to be complete, meaningful and successful, the same care given to objects must be extended to the museum administrative records and the records that carry the information about the object(s). That way, museum documentation becomes an accomplished task and a complete process. The management of museum collections supports the purpose in life of a museum and for that noble obligation to be fulfilled, there has to be museum practitioners who are professionally trained in managing museum records throughout their life cycle.

With regards to disaster preparedness, the study was informed that Zimbabwe's National Museums had now adopted a living document that helps them to protect their records, collections and their entire holdings in the event of a disaster. In light of such positive developments, the current study urges museum practitioners to always bear in mind that as guardians of the national heritage, they owe it to the future generations that the documentary

heritage is preserved. It is therefore crucial for museum practitioners to be dedicated towards the implementation, monitoring and review of the disaster management plan.

Sullivan and Childs (2003:79), highlighted that the long-term management of records should not just be the job of the curator, but a key responsibility of every department that exists within the museum. Every department at the museum may not function properly if there are no records to support their work. It is therefore recommended that museums should adopt a collective approach towards the preservation of museum records.

Practitioners in Zimbabwe's National Museums were not aware of how photographic records should be kept. For instance, the Head of Departments in which photographic records were kept did not know the pH levels of cases that housed the photographs. An examination of the Archaeological Survey Unit at ZMHS which had the largest number of photographic material showed that the repository did not have environmental control mechanisms to ensure a conducive environment is given to the records.

Museum departments should provide clean air with good circulation, control light levels, stop biological infestations, maintain good housekeeping measures, employ security measures and protect records from disasters Ritzenhaler (2010:251). Due to financial constraints in NMMZ introducing scientific methods of controlling the environment may take long to attain. Emphasis should therefore be placed on proper handling, housekeeping and storage to prolong the life of a photograph (Bacon 2010:33). Photographic items must be stored and handled in a manner which protects them from damage and does not expose them to chemical risks (The Museums and Galleries Commission 2004). Other simple and inexpensive steps which museums may adopt include wearing gloves when handling photographic media,

ensuring forms, field notes, site survey forms and other documents are on acid-free paper, monitoring signs of damage and contamination, limiting the use of fragile records, controlling light levels, stopping biological infestations, maintaining good housekeeping measures and controlling access (Bacon 2010:35; Bachmann and Rushfield 1992:5; Bennett 1998:231; Blackmar 2002; Hester 1997; Kenworthy 1985:80; Sullivan and Childs 2003:69; Ritzenthaler 1993:51; Sutton and Arkush 1996:32; Trimble and Marino 2003:105).

Objects are the *raison d'être* of museums and this renders object records as mission critical, to the extent that museums cannot function without them. The bulk of the records that are created within the museum environment have a continuing value and if they are preserved, these records become an archive reflecting the values, activities, and goals of the organization. For instance, in order to conduct everyday business, a museum must have access to records concerning the acquisition, location, conservation, loan and so on of the items in its collection. These records are essential for museum personnel in all departments to do their jobs. The value of records related to other museum functions or those that document wider administrative and business activities was largely overlooked. These records include documentation concerning building maintenance, development, finance, staff, exhibitions and projects. Little consideration has been given to the management of such records and it is recommended that this position be reconsidered so that these records are immediately considered for preservation.

The availability of not only object related records but of other administrative museum records is useful in strategic planning, advertising, promotion and public relations. Young, Bicknese and Hendry (2006) observed that the existence of past records in an organization gives a real boost to strategic planning. Museums can look back at the museum's history to learn which

efforts were successful or unsuccessful in the past, and why. Knowledge and understanding of previous errors, as well as previous successes, can determine future strategy. The availability of past museum records reveals in black and white which activities were advantageous to the organization and the public.

The current study established there no proper institutional structures for managing museum records in NMMZ. Therefore records that museums create and rely on risk being lost or damaged because of lack of attention and improper management. The absence of personnel specifically designated for records management means that the profiles of the records management function and activity are low, even in the allocation of resources (Mazikana 1998:83).

With the exception of the ASU, Zimbabwe's National Museums did not have a designated records store. The study appreciates that Zimbabwe's National Museums are operating under shoe string budgets. If it is not financially feasible for Zimbabwe's National Museums to establish a designated records store, it is advisable to determine which staff will be responsible for managing each record series throughout the life cycle stages. Brunskill and Demb (2012:164) advised that complex systems are not required to manage the intellectual custody of records. Creating the retention schedules, records management policy and records procedure's manual is adequate for a good start towards establishing sound records management practices.

6.3 Challenges of introducing records management in Zimbabwe's National Museums

The challenges and criticisms faced in the study when trying to gather records management information from museums led to the realisation that introducing the phenomenon may not be an easy task. Therefore, the study deemed it necessary to highlight possible challenges that may be encountered in trying to introduce established records management practices within the museum environment. Based on what the author experienced, the likely arguments to be encountered are as follows;

- Our museums have been managing perfectly well without records management. Why now?
- There is no space to introduce records management, the personnel is overstretched.
- The budgets are tight, some key functions are currently compromised and introducing new exercises is not feasible.
- How will records management save the organisation's money?
- It is just paper or data: why does it matter?

It is recommended that further studies be conducted to establish the reasons for a negative attitude towards records management issues within Zimbabwe's museums when the practice seem to have been embraced very well in other public institutions in Zimbabwe as well as other museums in Africa. The starting point for introducing museum records management in Zimbabwe's National Museums is through creating a positive environment that makes museum practitioners appreciate the need for the practice otherwise efforts to introduce records management will be in vain. The appreciation of professional records management in other countries is evidenced by the presence of the Museum Records Manager or Museum

Archivist posts in museums such as the British Museum. The current study appeals for records management awareness campaign programmes to be launched specifically for museum practitioners. The responsibility to conscientise museum practitioners on the need to fully engage records management as part of their core duties rests with NAZ. In terms of Chapter 309 Section Six and Seven of the National Archives of Zimbabwe's Act of 1986, NAZ is obliged to provide records management guidance to public institutions. It is the responsibility of NAZ to ensure that all the public institutions, local authorities and parastatals properly manage their records throughout the life cycle. From that perspective, this study is of the opinion that NAZ is partly to blame on the negative perception that some museum practitioners have on records management issues. In that regard, this study urges NAZ to assume its legal mandate of ensuring proper records management practices prevail in Zimbabwe's National Museums.

6.4 Conclusion

Overall, the study realised that the nature of museum documentation available to museum practitioners mainly concentrate on how and why museum collections should be documented. Very little has been put forward regarding museum records preservation issues. This study challenges the museum documentation scholarship to broaden the horizon and go beyond providing collections documentation guidelines and look into how data formats produced as a result of museum activities may be better preserved. Museum staff should perceive the records they create in the course of their duties as a corporate information asset, otherwise their future as information centres would be compromised.

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Appendix A. List of pre-testing participants

Name of Participant	Occupation
Dr. P. Dewah	Post-Doctoral Student –University of KwaZulu-Natal
Dr. VZ. Nyawo	Senior Lecturer-Midlands State University, Department of History and Faculty of Arts Research Board Representative
Mr. D. Maboreke	Deputy Director (Archivist) National Archives of Zimbabwe
Ms. F. Kutsakatika	Archivist-National Archives of Zimbabwe
Ms. C. Ndlovu	Curator-Zimbabwe Military Museum

Appendix B

**THE FUTURE OF MUSEUMS AS INFORMATION CENTRES: PRESERVING THE
MUSEOLOGICAL AND PHOTOGRAPHIC RECORD.**

Questionnaire for Head of Departments in Zimbabwe's National Museums

The Head of Department

.....
.....
.....

Dear Respondent

I am a student at Midlands State University undertaking a Masters Programme in Museum Studies in the Department of Archaeology, Cultural Heritage and Museum Studies. This research project examines the current preservation status of conventional and photographic records in Zimbabwe's National Museums. The intention of the study is to establish a starting point for the implementation of a sound records management programme as well as to initiate a records digitisation programme. The ultimate goal of the research is to enhance public service delivery. You are kindly informed that participation is essential and not mandatory. A

publication is envisaged from this study and the literature will help museums better manage the nation's documentary heritage.

I would be greatly thankful if you could assist by completing this questionnaire. Your responses will only be used for the purpose of completing this study and will therefore be treated privately and confidentially.

Yours Faithfully

Forget Chaterera

For more details, queries and urgency, feel free to contact me on:

[Tel:0773625956](tel:0773625956) or 054 222 146 Email 47703261@mylife.unisa.ac.za

Instructions for completing the questionnaire

- a) Kindly provide responses on questions asked in the spaces provided
- b) Insert a tick [] in the brackets to indicate your response to the question
- c) May you attempt to answer all questions

I Background Information

- 1. Name of the museum.....
- 2. Name of the department.....
- 3. Designation of respondent.....

II Preservation of the Museological Record

- 4. What types of records are generated as a result of your museum's activities?

	Yes	No
--	------------	-----------

Personnel records		
Photographs		
Catalogue cards		
Accessions registers		
Minutes of meetings		
Financial statements		
Receipts		
Monuments inspection reports		
Locations register		
Object movement register		
File movement register		
Other		

.....

5. Which records formats are found in your museum?

	Yes	No
Conventional paper records		
Photographs		
Video		
Microfilm		
Electronic		
Other.....		

6. Do you have a records management policy?

Yes [] No, skip question 7, []

7. Which of the following describes why your museum had to create a records management policy?

	Yes	No
To ensure the creation of authentic records		
To ensure the creation of reliable records		
To ensure the creation of complete records		
To ensure the creation of trustworthy records		
To reduce the time and effort spend to locate documents needed for museum operations		

8. Does your museum have a central storage place (repository) for museum records?

Yes [] No, skip questions 9, 10 and 11 []

9. Is there a person or people specifically tasked to look after the records in the repository?

Yes [] No, skip questions 10 and 11 []

10. Is the person or people responsible for managing the museum's central records formally trained in records management?

Yes [] No, skip question 11 []

11. Which of the following form of training did they receive?

	Yes	No
Formal		
In-house		
Workshops		
Seminars		
Other		

12. Do you conduct records audits?

Yes [] **No** []

13. Do you carryout records appraisals?

Yes [] **No** []

14. Does your museum have a records retention and disposal schedule?

Yes [] No []

15. Do you have a records disposal policy?

Yes [] No []

16. How do you dispose of records that are no longer required by the museum?

	Yes	No
Burning		
Shredding		
Transfer to the National Archives of Zimbabwe's Records Centre		
Through National Waste Paper Collection		
Other.....		

17. Have you ever failed to locate records that were assumed to be in place?

Yes [] No []

18. Do you have a records procedures manual?

Yes [] No, skip question 19 []

19. Which of the following activities are covered by your records procedures manual? (If possible, kindly attach a copy)

	Yes	No
Records accessibility responsibilities towards users		
How to handle photographic records		
How to protect records from agents of deterioration		
Filing procedures		
How to create a file		
How to records the existence of anew file		
File movement control		

File closure instructions		
File storage methods		
Records security		
Good housekeeping procedures		
Other.....		

20. Have you ever sought or received advice from the National Archive of Zimbabwe on how records should be preserved?

Yes [] No []

21. Do you have a disaster management plan?

Yes [] No, skip questions 22, 23, 24 and 25 []

22. Do you review your disaster management plan?

Yes [] No []

23. Are all museum staff members familiar with the basic contents of the plan?

Yes [] No []

24. Did museum staff members receive training on how to implement the disaster plan in the event of a disaster?

Yes [] No []

25. Does the plan lay out procedures to follow on how to protect documents in the event of a disaster?

Yes [] No []

26. Is there a vital records management programme at your museum?

Yes [] No []

27. Does your museum have an offsite backup records storage facility?

Yes [] No []

III PRESERVATION OF THE PHOTOGRAPHIC RECORD

28. Does your museum generate photographic records?

Yes [] No, skip section III and go to question 50 []

29. Which type of camera do you use?

	Yes	No
Film camera		
Digital camera		
Other.....		

30. If answer to question 29 is film camera, what is the nature of photographs do you produce?

	Yes	No
Black and white photographs		
Colour photographs		

31. Do you keep negatives?

Yes [] No []

32. If answer to 29 is digital camera, have you ever moved your images to newer software and hardware?

Yes [] No []

33. What type of information accompanies your photographic documentation?

	Yes	No
Date when the photograph was captured		
Photographer's name		
Name of the captured object		
Image file number		
Indication of whether the photograph was taken before or after treatment of an object		
Other.....		

.....

34. In what format do you keep your photographic records in?

	Yes	No
Printed form		
Electronic form		
Other.....		

35. Does the museum have a policy that governs the creation of photographic records?

Yes [] No []

36. Are your photographic records readily available to users?

Yes [] No []

37. Are there measures in place to ensure photographic records are well managed?

Yes [] No, skip questions 38, 39, 40 and 41 []

38. Which of the following describes the measures that are in place?

	Yes	No
Wear gloves		
Use of acid free paper to keep photographs		
Regular monitoring of photographs for signs of deterioration		
Cleaning		
Polyester encapsulation		
Slides are handles by their mounts		
Photographs are handles by their edges		
Back-up copies are in place		
Maintaining good housekeeping practices		
Use of drawing pins on photographs is prohibited		

Use of staples on photographs is not allowed		
Use of money clips is not allowed		
Use of rubber bands is not allowed		
No use of adhesive tapes		
Consumption of food and beverages in photographic records storage areas is prohibited		
Other.....		

39. If one of your answers for question 38 is cleaning, which of the following materials do you use?

	Yes	No
Soft cloth		
Crumbs		

Vinyl eraser		
Archivist's cleaning pad		
Soft brushes		
Other.....		

40. Is there a filtration system for the museum's photographic media?

Yes [] No, go to question []

41. Which of the following components describes your filtration system?

	Yes	No
Charcoal filters		
Air washers		
Non-combustible fibre glass		

Cellulose filters		
-------------------	--	--

42. Have your museum photographic records suffered from any damages?

Yes [] No, skip question 43, 44 and 45 []

43. Which of the following describes the physical damage?

	Yes	No
Fading		
Stains		
Image distortion		
Tears		
Abrasions		
Finger prints		
Paper clip impressions		

Other.....
.....

44. Which of the following factors could have caused the deterioration of the museum's photographic records?

	Yes	No
High temperatures		
Exposure to light		
Damp conditions		
Very dry conditions		
Poor quality storage		
In-appropriate mounting techniques		
Insect attacks		
Handling causes		

Other.....

45. If one of your answers to 44 is insect attacks, which of the following insects attacked your records?

	Yes	No
Silverfish		
Woodworm		
Book-lice/worm		
Carpet beetle		
Other.....		

46. Which of the following storage materials do you use for your photographic records?

	Yes	No
In steel cabinets		
In wooden cabinets		
In open shelves		
Other.....		

47. If one of your answer(s) to question **46** is steel cabinets, are the steel cabinets baked with enamel coating?

Yes [] No []

48. Which of the following best describes the conditions under which your photographic records are kept?

	Yes	No
Dark		

Dry		
Cool		
Controlled environment that avoids fluctuations in temperature and relative humidity		
Other.....		

IV DIGITISATION

49. Has your museum digitised its paper records?

Yes, skip question 50 [] No, skip question 51 and 52 []

50. Which of the following reasons explain why the museum is sticking to conventional records management systems?

	Yes	No
Internal resistance by museum staff		

Budget constraints		
Lack of expertise		
Absence of tailored software		
Other.....		

51. Did you retain your records after digitising them?

Yes [] No []

52. Which of the following benefits did your museum realise after you digitised your records?

	Yes	No
Space was saved		
Wear and tear was reduced		
The museum's information system was integrated		

Access to records was improved		
Records protection was enhanced		
Museum business became more efficient		
Security of records was increased		
Other.....		

Thank you for your time and support!

Appendix C

THE FUTURE OF MUSEUMS AS INFORMATION CENTRES: PRESERVING THE MUSEOLOGICAL AND PHOTOGRAPHIC RECORD.

Interview guide for Regional Directors

The Regional Director

.....

.....

.....

Dear Respondent

I am a student at Midlands State University undertaking a Masters Programme in Museum Studies in the Department of Archaeology, Cultural Heritage and Museum Studies. This research project examines the current preservation status of conventional and photographic records in Zimbabwe's National Museums. The intention of the study is to establish a starting point for the implementation of a sound records management programme as well as to initiate a records digitisation programme. The ultimate goal of the research is to enhance public service delivery. You are kindly informed that participation is essential and not mandatory. A

publication is envisaged from this study and the literature will help museums better manage the nation's documentary heritage.

I would be greatly thankful if you could assist by completing this questionnaire. Your responses will only be used for the purpose of completing this study and will therefore be treated privately and confidentially.

Yours Faithfully

Forget Chaterera

For more details, queries and urgency, feel free to contact me on:

[Tel:0773625956](tel:0773625956) or 054 222 146 Email 47703261@mylife.unisa.ac.za

1. Do you have a records management policy?
2. What does your policy cover?
3. Does your museum have a central storage place (repository) for museum records?
4. Is there a person or people specifically tasked to look after the records in the repository?
5. Is the person or people responsible for managing the museum's central records formally trained in records management?
6. Does your museum conduct records audits?
7. Do you carry out records appraisals?
8. Does your museum have a records retention and disposal schedule?
9. How do you dispose of records that are no longer required by the museum?
10. Has the museum ever sought or received advice from the National Archive of Zimbabwe on how records should be preserved?
11. Do you have a disaster management plan?
12. For how long has it been there?

- 13.** Was it reviewed or subject to review?

- 14.** Do your entire museum staff members know how to implement the disaster plan in the event of a disaster?

- 15.** Does the plan lay out procedures to follow on how to protect documents in the event of a disaster?

- 16.** Do you conduct building inspections to ensure adequate protection for records?

- 17.** Is there a vital records management programme at your museum?

- 18.** Does your museum have an offsite backup records storage facility?

- 19.** What measures are in place to ensure the museum's photographic records are well preserved?

- 20.** Have your museum photographic records suffered from any damages?

- 21.** Has your museum digitised its paper records?

- 22.** Did you realise any benefits after you digitised your records?

- 23.** Do you think it is necessary for a museum to employ a museum archivist or records manager?

24. Is there anything you may want to inform the study regarding the management of records in Zimbabwe's National Museums?

25. **Nb* Relevant issues which may be brought to light by informants during the course of the interview will be discussed accordingly. Face to face interviews will be conducted in the six provincial records centres.**

THANK YOU FOR YOUR TIME AND SUPPORT!

Appendix D

THE FUTURE OF MUSEUMS AS INFORMATION CENTRES: PRESERVING THE MUSEOLOGICAL AND PHOTOGRAPHIC RECORD.

Observation Guide for Records Storage Areas

INSTRUCTION FOR USING THE GUIDE;

Put a tick in front an aspect that applies to the museum and an X where the aspect does not apply.

1. How is light controlled in records storage areas?

- a) Use of blinds?
- b) Use of Curtains?
- c) Shutters?
- d) Windows are draped with a heavy/dark fabric?
- e) Windows are covered with UV film?
- f) There is a light meter?
- g) UV light monitors?
- h) Other.....

.....

2. What is the condition of floors in records storage areas?

- a) Carpeted
- b) Wooden tiles
- c) Ceramic tiles
- d) Cemented

3. Does the floor show evidence of regular cleaning?

- a) Yes []
- b) No []

4. How are records protected against vandalism and thievery?

- a) Lockable cabinets?
- b) Physically defended windows?
- c) Well secured doors?
- d) CCTV?
- e) Alarms?
- f) Pitched roof?
- g) Anti climb paint?
- h) Access prohibited to unauthorised access?

5. How are records protected against fire?

- a) Fire extinguishers?
- b) Fire proof cabinets?
- c) Sand jugs?
- d) Other.....
.....

6. Protection of records against water.

- a) Water proof boxes?

- b) Documents are placed at least six inches off the floor?
- c) Records are stored away from walls?
- d) Other.....
.....

7. The control of RH in records storage areas?

- a) HVAC System?
- b) Humidifiers?
- c) De-humidifiers?
- d) Silica gel desiccants?
- e) Hygro-thermograph?
- f) RH Indicator cards?
- g) Hygrometers?
- h) Psychrometers?

8. Protection of records from biological agents of deterioration

- a) Documents are kept in metal boxes?
- b) No food or beverages is allowed in records storage areas?
- c) There are no shrubs, flowers and organic mulch near the entrance?
- d) There is evidence of pesticide use?

9. How are photographs kept?

- a) Photographs are layed flat?
- b) Placed in envelopes made of conventional paper?
- c) Placed in transparent plastics?
- d) Evidence of dust?
- e) Any metal material used on photographs?
- f) What about rubber bands?

- g) Evidence of finger prints?
- h) Are they black and white or colour photographs?
- i) Are slides vertically hanged?
- j) Are photographs marked? (**Check their back**).

10. Are files mounted on their spine? (**Check their thickness**).

Nb* every aspect to be observed which is of relevance to the study will be recorded even if it was overlooked by the observation guide.