# FACTORS INFLUENCING MANAGEMENT OF PROCUREMENT RECORDS IN TANZANIA: A SURVEY OF SELECTED PROCURING ENTITIES

# FACTORS INFLUENCING MANAGEMENT OF PROCUREMENT RECORDS IN TANZANIA: A SURVEY OF SELECTED PROCURING ENTITIES

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**A Thesis Submitted in Fulfilment of the Requirements for Award of the Degree of Doctor of Philosophy of Mzumbe University**

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## CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a thesis entitled **Factors Influencing Management of Procurement Records in Tanzania: A Survey of Selected Procuring Entities** in fulfilment of the requirements for award of the degree of Doctor of Philosophy of Mzumbe University.

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Internal Examiner

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## DECLARATION AND COPYRIGHT

I, Bakari Maligwa Mohamed, declare that this thesis is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

**Signature__________________________________________**

**Date______________________________________________**

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## DEDICATION

This thesis is solemnly dedicated to my late mother, Amina bint Abdullah; to my late grandmother, Mtumwa bint Kibwana [*alias*, Bibi Mandengule]; to my late maternal grandfather, Abdullah bin Said [*alias*, Mzee Mandengule]; and to my adoredand lovely daughters, Latifa, Laylat and Maasooma.

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| APP | Annual Procurement Plan |
| AS | Australian Standards |
| CAG | Controller and Auditor General |
| Cap. 309 | Records and Archives Management Act |
| Cap. 410 | Public Procurement Act |
| cf. | compare with |
| CONS | Consultant |
| CPAR | Country Procurement Assessment Report |
| CPD | Continuous Professional Development |
| CPSP | Certified Procurement and Supplies Professional |
| CSP | Certified Supplies Professional |
| ESARBICA | East and Southern Africa Regional Branch of International Council on Archives |
| GN | Government Notice |
| gof | goodness-of-fit |
| GRN | Goods Receive Note |
| HIAU | Head of Internal Audit Unit |
| H-L | Hosmer-Lemeshow |
| HPMU | Head of Procurement Management Unit |
| ICA | International Council on Archives |
| ICT | information and communication technology |
| IRMT | International Records Management Trust |
| ISO | International Organisation of Standardisation |
| KMO | Keiser-Meyer-Olkin |
| LGA | Local Government Authority |
| MCIPS | Member of Chartered Institute of Purchasing and Supply (UK) |
| MDAs | Ministries, Departments, and Agencies |
| MLM | Maximum Likelihood Method |
| NAOT | National Audit Office of Tanzania |
| NIE | New Institutional Economics |

| | |
|---|---|
| No. | Number |
| NSSF | National Social Security Fund |
| OECD | Organisation for Economic Co-operation and Development |
| PA&OB | Public Authorities and Other Bodies |
| PCA | principal component analysis |
| PE | Procuring Entity |
| PEs | Procuring Entities |
| PhD | Doctor of Philosophy |
| PMU | Procurement Management Unit |
| PMUs | Procurement Management Units |
| PO-PSM | President's Office – Public Service Management |
| PPDA | Public Procurement and Disposal Authority (Uganda) |
| PPRA | Public Procurement Regulatory Authority |
| PSPF | Public Service Pension Fund |
| PSPTB | Procurement and Supply Professionals and Technicians Board |
| PSRP | Public Sector Reform Programme |
| QQS | Qualified, Quantified, and Specific |
| RAM | Records and Archives Management |
| RAMD | Records and Archives Management Department |
| RAMP | Records and Archives Management Programme |
| RAMS | Records and Archives Management System |
| RBT | Resource Based Theory |
| Reg. | Regulation |
| RIM | Records and Information Management |
| RoU | Republic of Uganda |
| S. | Section |
| SLAs | Service Level Agreements |
| SPSS | Statistical Package for Social Sciences |
| ss. | Sections |
| TOC | Theory of Constraints |
| TORs | Terms of References |

| | |
|---|---|
| TQM | Total Quality Management |
| TRA | Tanzania Revenue Authority |
| UNCAC | United Nations Convention against Corruption |
| UNCITRAL | United Nations Commission on International Trade and Law |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| URT | United Republic of Tanzania |

# ABSTRACT

This study is about factors influencing management of procurement records in the Tanzania procuring entities. The study assessed the factors influencing management of procurement records. Specifically, the study examined capacity of personnel involved in managing procurement records, determined storage space, equipment and facilities in managing procurement records, and examined security and safety measures in managing procurement records in Tanzania procuring entities. The study used mixed research design. In the first place, exploratory case study was conducted in Dar es Salaam whereby fifteen procuring entities were studied. In the survey study, data were collected through a questionnaire survey involving 108 procuring entities. Questionnaire response rate was 75 per cent. Being motivated by institutional theory, resource based theory and theory of constraints; qualitative data were analysed thematically by using themes and narratives. Quantitative data were analysed through a logistic regression model in which marginal effects were determined to enable assessment of the influencing factors. The findings indicate that management of procurement records in Tanzania is influenced by the capacity of personnel, storage space, equipment and facilities, and security and safety measures. The findings make the following key contributions to knowledge. First, the findings reveal that procurement records are managed by personnel who are incapable in terms of knowledge, skills, competences and professional ethics. When these institutional resource constraints are not addressed; recurrence of the weaknesses found in the Tanzania procurement recordkeeping systems may persist. Second, the findings unveil the inadequacy of storage space, equipment and facilities for procurement recordkeeping systems. That is, most of procuring entities in Tanzania are constrained by inadequate storage space, equipment and facilities that render procurement recordkeeping systems to poorly perform their obligations. Third, the study provides empirical findings that security and safety measures in managing procurement records is a critical factor in ensuring that procurement records are available, complete, and authentic as when required for procurement decision making, providing procurement business transactional evidences, and for audit purposes. Lastly, the findings have recorded and documented the applicability and limitations of previous studies to the management of procurement records in Tanzania procuring entities.

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# CHAPTER ONE
# PROBLEM SETTING

## 1.1 Introduction

This study was about assessing the factors influencing the management of procurement records in the Tanzania procuring entities (PEs). Therefore, this chapter presents the background information to the research problem on the management of procurement records. The chapter provides statement of the problem, research objectives, research questions, definitions of key terms and concepts, scope and significance of the study, and organisation of the thesis.

## 1.2 Background Information

Management of procurement records and archives has received international spotlight due to the need of legitimising procurement process and procedures thereto (Article 9 of United Nations Convention against Corruption [UNCAC]; Article 25 of United Nations Commission on International Trade and Law [UNCITRAL] Procurement Modal Law). Despite the developments on the management of procurement records and archives; the records and archives management (RAM) hadalready received international attention since 1980s (Ketelaar, 1985) and in 2010s (Biraud, 2013). In order to better meet the needs of the member states, particularly developing countries, in the specialised areas of the RAM, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Division of General Information Programme developed a coordinated long-term Records and Archives Management Programme (RAMP) in order to institutionalise and regulate the RAM (Ketelaar, 1985). The RAMP was aimed, inter alia, to promote the formulation of policies and plans and disseminate methods, norms and standards (Ketelaar, 1985). Internationally, the RAM has received a considered attention due to its significance in supporting business processes management, among others (Biraud, 2013).

In fostering the context of the RAM professionalism; various professional authorities, professional researchers and authors in this field have researched, written and provided thesis and anti-thesis within the professionalism frontiers. From

Schellenberg (1956) who pioneered the records life-cycle concept to those who had refined it and provided varied contextual interpretations on the RAM principles and models, and to others who shaped the RAM professional thinking in various academic spheres of records and information management (RIM); the RAM practices and standards have been discussed and debated considerably. In principle, the RAM has been studied and treatises written across Africa, East Africa and Tanzania in particular.

In Tanzania, a number of empirical studies have been conducted over the records management practices on either successes or failures. In one investigative case study at the ministry responsible for education and culture, the management of current records in the ministry was found to be constrained by resource and policy-related problems including lack of funding, untrained personnel, inadequate space for keeping the records, lack of comprehensive records management policy, negligence of personnel and non-availability of essential working tools and equipment (Kitalu, 2001). Similar findings were also found atthe National Social Security Fund (NSSF) headquarters in Dar es Salaam (Ndibalema, 2001), at the ministries of finance, agriculture and food security, President's Office – Public Service Management (PO-PSM), and at the Public Service Pension Fund (PSPF) (Lyaruu, 2005). Similarly, findings of the same nature were also foundat some selected government ministries in Tanzania (Ndenje-Sichalwe, 2010), at the Tanzania Revenue Authorities (TRA) in Dar es Salaam and Dodoma regional offices (Ndemanyisho, 2014), and at the Temeke Municipal Council in Dar es Salaam (Marwa, 2015).

In Kenya, a number of studies were conducted to study the management of procurement records. Assessment of records management in the Kenya PEs identified poor procurement recordkeeping as one of the major impediments to procurement process efficiency (Rembe, 2010). The tendering process in Nyeri County in Kenya was found to be affected by poor recordkeeping due to inadequacy of staff (Ayoti, 2012). Challenges affecting the management of procurement records were studied at the Kenya National Treasury where the entity was found to be constrained by lack of effective records training programme, lack of records management training for staff working in the procurement department, failure to enforce maintenance and keeping of procurement records, and lack of use of current technology in storing procurement records (Lusuli & Rotich, 2014). Poorly managed procurement records were also found at the Nairobi City Council (Shiundu & Rotich, 2014).Principally, the nature of records and the relationships among records and between them and the activities from which they result are subjects of continuing debate (Yeo, 2007, 2008). The debate on the context of the management of procurement records is a continuing phenomenon in East Africa (see Chimwani, Iravo, & Tirimba, 2014; Nyaboke-Marendi, 2015; Kendo & Getuno, 2016; Namukasa, 2017).

The management of procurement records had been vital for the functioning of the procurement function. Fundamentally, procurement as business function is based on the legitimacy of procedures (United Nations, 2013). For the legitimate procurement procedures and adequate public records, Article 9 of the UNCAC requires, inter alia, soundness of procurement records. The UNCITRAL Procurement Modal Law 1994 established the soundness of procurement records under Article 25. In principle, the UNCITRAL Procurement Modal Law requires that, procuring entities (PEs) shall maintain records of the procurement proceedings (United Nations, 2014). In responding to this UNCITRAL requirement on procurement, Tanzania in corporate a provision on maintaining and archiving procurement records in to the public procurement legislation (Cap. 410, Public Procurement Act No. 3 of 2001). Essentially, proper records management controls, managing who can access and modify key documents and records have been identified as an integral part of achieving compliance (Alfresco, 2009).

Despite of the essence and vitality of records in the organisation-wide management and administration, many African countries have been characterized by records management crisis (International Records Management Trust [IRMT], 1999a; World Bank & IRMT, 2000).Many developing countries lack a systematic approach to managing records (Thurston, 2005).Empirically, records and archives management in many developing countries has been culminated by regulatory and institutional resource challenges.In Kenya, for example, records of procurement transactions in many cases were found to be either inaccurate or incomplete whilst in some cases they were absent altogether (Bukhala, 2003). This is an indication of utterly improper management of procurement records in the Kenya procurement recordkeeping systems.

Not only in Kenya, but also improper management of procurement records has been recorded and documented in Uganda (Republic of Uganda [RoU], 2008; RoU, 2009; RoU, 2010; Tumuhairwe & Ahimbisibwe, 2016; Namukasa, 2017). Tanzania has also recorded and documented improper management of procurement records (World Bank, 1996, 2003; United Republic of Tanzania [URT], 2007; Stephano, 2014; Naluyaga, 2014; URT, 2014a; URT, 2015a; URT, 2016a; URT, 2017a; URT, 2014b; URT, 2015b; URT, 2016b; URT, 2017b).

## 1.3 Statement of the Problem

Tanzania has considered several initiatives to revitalise the management of procurement records in the public offices. The foremost initiative was to enact the public procurement legislation (Cap. 410) in 2001that adopted a regulatory provision that mandates Tanzania PEs to maintain and archive procurement records. In 2002, the national RAM legislation (Cap. 309, Act No. 3 of 2002) was enacted to establish the Records and Archives Management Department (RAMD) in order to provide for the proper administration and management of public records and archives throughout their records life-cycle. Furthermore, in 2011 the President’s Office (Public Sector Management) initiated the National Records and Archives Management Policy in the urge to foster efficient management of records and archives in Tanzania. However, the policy was preceded by the enactment of RAM legislation. Due to this precedence, the existing national RAM legislation is not broad enough to cover and guide the management of both public and private records (URT, 2011).

It is more than a decade of implementation of records management initiatives in the management of procurement records in the Tanzania procurement recordkeeping systems. However, there are observed weaknesses in the procurement recordkeeping systems. These weaknesses inter alia are observed on the availability of complete procurement records and on the proper arrangements of procurement records in the Tanzania procurement recordkeeping systems (URT, 2016a; 2017a; URT, 2016b; URT, 2017b). Most of the audited Tanzania PEs have been recorded and documented with improper procurement recordkeeping on the completeness and arrangements of the available procurement records (URT, 2007; URT, 2016a; URT, 2017a; URT, 2016b; URT, 2017b).

Despite of the weaknesses found in the Tanzania procurement recordkeeping systems; yet, procurement is a functional process that needs a great deal of records in the business transactions in order to legitimize the processes and activities thereto. In-so-much, an efficient recordkeeping system is a necessary evil. Therefore, to study management of procurement records practices is vital. However, few empirical studies on management of procurement records were carried out in Tanzania. For instance, a study was conducted in one case institution in Dar es Salaam where poor procurement recordkeeping was recorded and documented due to inadequate staffing in the procurement management unit (PMU) as functional unit (Stephano, 2014). In another instance, challenges facing recordkeeping were studied at Kisarawe District Council in the Coast Region. The study recorded and documented a very poor score of 20 per cent in recordkeeping (Naluyaga, 2014). Individual studies to assess the efficiency of the national procurement and supply systems were conducted by the World Bank in 1996 and 2003 respectively. Both studies had recorded and documented weak procurement recordkeeping systems in the Tanzania national procurement system (World Bank, 1996, 2003).

Empirical evidences support that, there is: inadequate staffing of personnel for the management of records in the Tanzania public offices (Stephano, 2014; Marwa, 2015), inadequate records storage space, equipment and facilities (Ndenje-Sichalwe, 2010; Marwa, 2015), and insufficient security and safety measures in managing records (Ndenje-Sichalwe, 2010). Based on these empirical evidences; the general impression is that,little has been done with respect to efficient RAM practices in Tanzania (Ndenje-Sichalwe, 2010; Lufunyo, 2013; Marwa, 2015).Empirically, it is evident that Tanzania public offices are being faced by acute regulatory and institutional resource challenges including lack of skilled personnel, inadequacy of recordkeeping space, and lack of informed records security and safety policy for the general public records and archives management. However, little is known on the factors influencing the management of procurement records in the Tanzania procurement recordkeeping systems. Therefore, this study intended to assess the factors influencing the management of procurement records in the Tanzania PEs.

## 1.4 Research Objectives

This study had general and specific objectives culminating the envisaged research. Therefore, the subsections hereunder provide for the general and specific research objectives respectively.

### 1.4.1 General Research Objective

The general objective of this study was to assess the factors influencing the management of procurement records in the Tanzania PEs.

### 1.4.2 Specific Objectives

The underlying objectives inherent to the general objective were to:

1. Examine the capacity of personnel involved in managing procurement records in the Tanzania PEs.
2. Determine the extent of storage space to facilitate procurement recordkeeping in the Tanzania PEs.
3. Determine the extent of equipment and facilities in facilitating procurement recordkeeping in the Tanzania PEs.

4. Examine the security and safety measures in managing procurement records in the Tanzania PEs.

## 1.5 Research Questions

In attempting the envisioned research objectives, this study had general and specific research questions. Therefore, the subsections hereunder provide for the research questions.

### 1.5.1 General Research Question

The general research question for this study was stated as: What are the factors influencing the management of procurement records in the Tanzania PEs?

### 1.5.2 Specific Research Questions

In order to deal with the general research question, the following were derived specific research questions:

1. What is the capacity of personnel involved in managing procurement records in the Tanzania PEs?
2. What is extent of storage space in facilitating procurement recordkeeping in the Tanzania PEs?
3. What is the extent of equipment and facilities in facilitating procurement recordkeeping in the Tanzania PEs?
4. What is the extent of security and safety measures in managing procurement records in the Tanzania PEs?

## 1.6 Definitions of Key Terms and Concepts

Defining terms and concepts is crucial to better understanding, both for those who are new to the subject and for those who are already familiar with the field (Yusof & Chell, 1998). Defining terms also adds precision to a scientific study. Without reference to some larger field of meaning, scientific propositions make no sense (Firestone, 1987). The words of everyday language are rich in multiple meanings.

Like other symbols, their power comes from the combination of meaning in a specific setting (Firestone, 1987). Therefore, there is an essence of defining key terms and concepts to provide understanding and familiarity for the readers of this thesis. The key terms and concepts defined in this section provide the context in which they are frequently used. The terms and concepts used in this study include but not limited to records, recordkeeping, records management, procurement, and procuring entities (PEs).

*Records* is information created, received and maintained as evidence and as an asset by an organisation or person, in pursuit of legal obligations or in the business transaction (ISO 15489:1, 2016). However, to avoid confusion between readers; *record* and *document* are differentiated. *Document*, in its contextual meaning, is a unit of recorded information (IRMT, 1999a).

*Recordkeeping* is the process of creating, capturing, organising and maintaining the records of an individual or agency (Millar, 2003). Recordkeeping includes, inter alia: the creation of records in the course of business activity and the means to ensure the creation of adequate records; the design, establishment and operation of recordkeeping systems; and the management of records used in business and as archives (State Records of New South Wales, 2003). Generally, *recordkeeping* is a subset (component) of *records management*.

*Records management* is a field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records (ISO 15489:1, 2016).

*Procurement* is a process of buying, purchasing, renting, leasing or otherwise acquiring any goods, works or services by a procuring entity and includes all functions that pertain to the obtaining of any goods, works or services, including description of requirements, selection and invitation of tenderers, preparation and award of contracts(vide S. 3 of Act No. 7, 2011 as amended). Simply, *procurement* is the process of acquisition.

*Procuring entities* (PEs) are public bodies and any other bodies, or units established and mandated by the government to carry out public functions (vide S. 3 of Act No. 7, 2011 as amended).*Procuring entities* (PEs) are public institutions established by the regulatory and institutional frameworks within the Tanzania public sector management that use public funds in the acquisition of goods, works, or services for the public service delivery in the public value chains. By virtue of public procurement, all public offices are PEs.

## 1.7 Scope and Significance of the Study

In doing any scholarly study towards writing an academic thesis, the scope and significance are the bases for limiting the study to avoid unnecessary and unjustified breadth. Therefore, sections 1.6.1 and 1.6.2 hereunder provide for the respective scope and delimitation and significance of this study.

### 1.7.1 Scope and Delimitation of the Study

Scope and delimitation of the study is sought to build a fence around the research findings that are additional to the limitations and key assumptions alienated by the definition of terms (Perry, 2002). This study is on assessment of the factors influencing the management of procurement records in the Tanzania PEs. Therefore, the study specifically was limited to the examination of the capacity of personnel involved in managing procurement records, to the determination of the extent of storage space in facilitating procurement recordkeeping, to the determination of the extent of equipment and facilities in facilitating procurement recordkeeping, and to the examination of the extent of security and safety measures in managing procurement records in the Tanzania PEs. The study was largely confined within the limits of qualitative analytical assessment of the factors influencing the management of procurement records. Quantitatively, however, the study determined the factors and their significance in influencing the management of procurement records in the Tanzania PEs. Therefore, the study suffices for generalisation of the findings to such scope, extent and context but not otherwise.

### 1.7.2 Significance of the Study

Management of procurement records is vital for the functioning of the procurement business function based on the legitimacy of procedures (United Nations, 2013). In order to legitimise procurement procedures, it is required; inter alia, to have soundness of procurement records (United Nations, 2014). Therefore, to study management of procurement records is very vital. Despite, very few empirical studies on the management of procurement records were carried out in Tanzania. Out of the very few empirical studies reviewed, they were limitedly focussed in scope, extent and context. Therefore, it was envisaged to undertake this study in the urge to extend and expand the focus and impetus on scope, extent and context to cover broad perspectives of the factors influencing management of procurement records in the Tanzania PEs. Therefore, this study has empirical, methodological, institutional and policy significances on the envisaged scope, extent and context.

## 1.8 Organisation of the Thesis

This thesis is organised into six chapters. *Chapter One* primarily is focussed on the problem setting. It provides the background information, statement of the problem, research objectives, the research questions, scope and delimitation, and significance of the study. *Chapter Two* dwells with literature review. The reviewed literature was focused on the theoretical and empirical perspectives on the RAM practices and the management and care of procurement records and the related issues therein. Theoretical reviews, empirical reviews on the construct variables, and conceptualisations of the study were made. The general analytical framework and conceptual framework were also provided. The reviewed literature was criticised and research gaps identified and analysed respectively.

*Chapter Three* covers research philosophy and approaches that were used to provide answers to the study questions and deal with the study objectives. The chapter provides an overview of the research design, study area, study population, sampling and sample size, and methods for data collection, data processing, and data analysis. Lastly, the chapter discusses validity and reliability issues, and the research ethics. *Chapter Four* presents the findings of the study based on the research objectives. The chapter presents qualitative and quantitative data evolved from the specific research questions. *Chapter Five* deals with discussion of the findings based on the research objectives and tried to link the findings with the reviewed literature.

Finally, *Chapter Six* has been set for summary, conclusion, and policy implications. The thesis focused on concluding the assessment of the factors influencing the management of procurement records in the Tanzania PEs by revisiting the statement of the problem, general and specific research objectives, and research questions respectively. Contributions of the study and policy implications are hereby presented. The chapter also provides for the limitations of the study and how the limitations were managed. Lastly, the chapter provides for the areas sought for further research.

## 1.9 Chapter Summary

In this chapter, the motivation for doing this research and therefore writing this doctoral thesis is introduced and the research problem identified. The general research question was then introduced. This question laid the foundation for the specific research questions that sought to assess the factors influencing the management of procurement records in the Tanzania PEs. The scope and delimitations and significance of the study were then described. The chapter concludes with an organisation of this thesis.

# CHAPTER TWO
# LITERATURE REVIEW

## 2.1 Introduction

This chapter presents the review of theoretical and empirical literature relevant to the subject matter of the records and archives management (RAM) and other related issues over the envisaged topic of this doctoral study. The chapter provides interpretive contextualisation of records, records and archives management, criteria and characteristics of records, and principles and models of the RAM. Theoretical underpinning anchored on the institutional theory and the resource based theory (RBT) integrating key elements of the theory of constraints (TOC)have been described and discussed in line with the specific research objectives. The chapter looks into the linkages in addition to establishing the existing relationship amongst specific research variables. Empirical studies related to the RAM have been reviewed in order to lay down the basis of the chosen specific research variables which are found in the conceptual framework (Figure 2.4). The chapter had justified the study in addition to reinforcing and underpinning the envisioned conceptualisation of the study. Furthermore, the general analytical framework (Figure 2.3) and conceptual framework (Figure 2.4) have been modelled and critically explained.

## 2.2 Contextualisation of Records Management

In understanding records management, in its contextual comprehensive cognitive spectra, there is a need to construe the meaning of records. The contextual meanings of records and therefore records management are provided. Both interpretations have considered the regional and international recognised professional and authoritative meanings and interpretations and provided meanings derived by professional authorities in the RAM professional fields.

### 2.2.1 Contextual Definition of Records

Generally, the term record has no universally accepted definition. The varied definitions of the term have led to confusion which affects the formulation of theory to underpin the discipline (Yusof & Chell, 1998).According to Yusof and Chell (1998), the definition of the term record evolved from an archives perspective through management perspective to an information technology perspective and these paradigm shifts led to changes in the status of records. Record is defined as recorded information produced or received in the initiation, conduct or completion of an institutional or individual activity and that comprises content, context and structure sufficient to provide evidence of the activity (International Council on Archives [ICA], 1997). On the other hand, International Organisation of Standardisation (ISO) 15489:1 (2001) defined records as information created, received and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business.

However, the updated version of ISO 15489:1 (2016) defines records as information created, received and maintained as evidence and as an asset by an organisation or person, in pursuit of legal obligations or in the transaction of business. Records are recognised as assets of an organisation (ISO 15489:1, 2016). According to Shepherd (2006) a record is recorded evidence of an activity that is of an action undertaken by an individual or a work group in the course of their business, which results in a definable outcome. Records can exist in any medium and in many forms. Most organisations have hybrid record systems, with some records in paper and some in digital form (Shepherd & Yeo, 2003).

### 2.2.2 Essence of Records Management Activities

Records management is a field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records, including processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records (ISO 15489:1, 2001, 2016). Records management is considered as the management of any information captured in reproducible form that is required for conducting business (Penn, Pennix,& Coulson, 1994). These definitions of records management directly suggest that records are valuable sources of evidence and have role in accountability and transparent governance (Mutula & Wamukoya, 2009). In capturing this essence of records management in the new public sector management, that is why there was a need to regulate management of procurement records as enshrined in the public procurement legislation since 2001 and in the national RAM legislation of 2002 (vide S. 30 of Act No. 3, 2001; cf. S. 56 of Act No. 21, 2004; cf. S. 61 of Act No. 7, 2011 as amended; cf. S. 9 of Act No. 3, 2002).

Records are vital to virtually every aspect of the governance process (Victorian Auditor General, 2008). Badly managed records adversely affect the broad scope of public service reforms. Development projects are often difficult to implement and sustain effectively in the absence of well managed records (World Bank & IRMT, 2000). Records management is a corporate function in a similar way to human resources, finance and estates management. It should be recognised as a specific corporate programme within an organisation and it should receive the necessary levels of organisational support to ensure effectiveness (Smith, 2007). According to Smith (2007), the records management function needs to bring together responsibilities for records in all formats from their creation to their ultimate disposal. Despite the known fact that all organisations produce records; however, many do not have a designated records manager with prime responsibility for ensuring an effective and efficient approach to managing records and information across the organisation (Smith, 2007).

Records are indispensable for the efficient management of organisations but are often undervalued, ignored or misunderstood (Williams, 2006). The Public Sector Reform Programme (PSRP) introduced in many African countries including Tanzania has consistently emphasized the importance of improving the quality of records management as a basis for decision making, more timely service delivery and financial savings (World Bank & IRMT, 2005; IRMT, 2009; Manyambula, 2009). However, the management of public records in many African countries has been characterized as an area of crisis (IRMT, 2004; World Bank & IRMT, 2005).

### 2.2.3 Context of Procurement Records

The term record is generic in nature due to creation, receipt, use, maintaining, archive or disposition. However, despite of this fact, records differ on how they are created and their intended purposes (IRMT, 1999a). Records, according to IRMT (1999a), include all the documents that institutions or individuals create or receive in the course of administrative and executive transactions. Principally, public procurement processes and activities therein generate a considerable amount of records in the course of their business transactions. The records, according to IRMT (1999a), themselves form a part of or provide evidence of such transactions. As evidence, they are subsequently maintained by or on behalf of those responsible for the transactions, who keep the records for their own future use or for the use of their successors or others with a legitimate interest in the records (IRMT, 1999a). Therefore, a general synthetic definition adapted to define procurement records throughout this doctoral thesis should be construed as:

> Procurement records are documents; regardless of form or medium created, received, maintained and used by a procuring entity or an individual staff in pursuance of legal procurement management obligations or in the procurement transactions of the procuring entity, of which it forms a part or provides evidence within the context of public procurement management in compliance with the public procurement policy, legislation, regulations, and guidelines.

Procurement records as envisaged in the public procurement business transactional processes and activities therein should be all documents that are generated, maintained and used within and across the Tanzania PEs. According to Section 3 of Act No. 7 of 2011 (as amended), procurement process is the successive stages in the procurement cycle, inter alia: planning, choice of procedures, measures to solicit offers from tenderers, examination and evaluation of those offers, award of contract and contract management (S. 3 on *interpretation*). Therefore, documents containing information (as provided under Reg. 15(1) of GN No. 446 of 2013 as amended) which are generated within the six named procurement stages and their associated cyclical activities are considered as procurement records. However, the question should be: *What could be conserved*? The Organisation for Economic Co-operation and Development [OECD](2009) provides a clear answer, that: *Everything that could* *affect the course of procurement proceedings*. There is no single list, but the following items may be cited as examples: pre-tendering records; tendering records; and post award records (OECD, 2009).

### 2.2.4 Records in the Procurement Cycle

Procurement cycle is a series of cyclical activities aligned into stages. In the context of public procurement, the procurement cycle involves the stages of the acquisition process. There are at least six main procurement cyclical successive stages and associated cyclical activities therein (according to interpretations given in S. 3 of Act No. 7, 2011 as amended). If we consider the simplified list as adopted by OECD (2009), the list of procurement proceedings could be taken as pre-tendering, tendering, and post-award. Since public procurement is a business process (Wittig, 1999; OECD-DAC, 2006; Wittig, 2007), in the course of doing its business transactional activities generate a great deal of documents that contain valuable recorded information. The information contained in the recorded and documented procurement record files are valuable for decision making, accountability, administration and governance of the procurement functional activities. Procurement records provide evidences of the envisioned functional activities as they were executed. Table 2.1 provides, but not limited to, the sets of detailed procurement records which are generated within and across the designated stages of the procurement business processes within the Tanzania PEs.

Table 2.1: Records in the procurement stages

| Stage | Procurement activities | Associated procurement records |
|---|---|---|
| **1** | *Need identification and planning* | - Needs requirement forms<br>- Requests to initiate procurement proceedings<br>- Departmental procurement plans<br>- Terms of references (TORs)<br>- Scope of works (SOW)<br>- Statement of requirements (SORs)<br>- Specifications reports<br>- Drawings and/or designs reports<br>- Requisitions<br>- Request for proposal (RFPs)<br>- Expression of interests (EOIs)<br>- Annual procurement plans (APPs)<br>- Management approvals on the APPs<br>- General Procurement Notices (GPNs)<br>- Specific Procurement Notices (SPNs)<br>- Newspaper extracts on the GPNs and SPNs |
| **2** | *Choice of methods and procedures* | - Proposals on choice of methods and procedures<br>- Tender board minutes on deliberations<br>- Tender board minutes on approvals<br>- Records of chosen methods and procedures<br>- Purchase orders (*Local Purchase Orders* = LPOs)<br>- Quotations<br>- Circulars |
| **3** | *Solicitation of offers* (tenders or bids) | - Procurement opportunities approvals<br>- Tender adverts<br>- Tender adverts approvals<br>- Tender documents<br>- Tender document approvals<br>- Bid receipts records<br>- Bid opening records<br>- Certificate of availability of funds<br>- Clarifications records<br>- Complaints and their decisions reports |
| **4** | *Examination and evaluation of offers* | - Letters of appointments (Evaluation Committee)<br>- Covenant forms<br>- Evaluation reports |
| **5** | *Negotiations and contracts award* | - Letters of appointments (Tender Board)<br>- Letters of appointment (Negotiation Team)<br>- Negotiation reports<br>- Letters of intention to award<br>- Approvals<br>- Letters of "*No Objection*"<br>- Acceptance letters<br>- Tender award decisions<br>- Award letters |
| **6** | *Contracts management and administration* | - Letters of appointment (Contract Management Team or Works Supervisors)<br>- Contract documents (*including tender files*)<br>- Contract management documents<br>- Contract amendment records<br>- Contract variation records<br>- Change orders records<br>- Site visit records |

| Stage | Procurement activities | Associated procurement records |
|---|---|---|
| | | - Inspection reports<br>- Acceptance reports<br>- Goods Receive Notes (GRNs)<br>- Payment vouchers (copies)<br>- Payment certification records (copies) |

**Source:** Modelled by author based on the procurement cyclical stages, 2017

For generality, these (Table 2.1) are procurement records that are directly linked to the procurement processes and activities to be found within and across the procurement cyclical stages. However, the records are not limited to the procurement business processes and activities. There are also corporate governance, management and administrative records such as letters of establishing the tender boards and the PMUs in compliance with procurement legislation (S. 36(1) (a) and (c) of Act No. 7 of 2011 as amended) and other official communiqués within and across the Tanzania PEs. Oftentimes, as the matter may always be, some of the recorded and documented records found throughout stages one to five (see Table 2.1) could also be found in stage six under contracts management and administration. This study, however, has been devoted to the management of pre-tendering records, tendering records, and post award records. These, according to Table 2.1 are stages 3, 4, 5, and 6 which are considered as crucial in the procurement cyclical activities that require transparency, accountability, integrity, fairness, and audit ability. That in principle, they require effective and efficient management. That is the essence of effective procurement recordkeeping (OECD, 2009).

### 2.2.5 Criteria and Characteristics of Records

In theory and practice of RAM, records are considered physical or virtual, have a content, a structure or form, are created in a context (Bearman, 1994; Hofman, 1998; McKemmish, 2005), and are process bound information (Thomassen, 2001). But these features do not make records unique in relation to other forms or sorts of information. A record, according to Thomassen (2001), has several criteria, which makes the record unique in relation to other types of information. These criteria, inter alia, are: records are evidence of actions and transactions; records should support accountability, which is tightly connected to evidence but which allows accountability to be traced; records are related to processes, that is information that is generated by and linked to work processes; records must be preserved, some for very short time and some permanently (Thomassen, 2001). These four characteristics of records make them different from other types of information. In an organisation, records are part of the organisational memory and are used to support organisational management. The evidential value of a record can only exist if the content, context and structure are preserved (Cox, 2001).

The context is the link between different records that belong together, and also to the process where the record was created. The criteria according to Thomassen (2001) are defining what a record must achieve, but the criteria do not explain and exemplify what characteristics are needed in order for records to be formalised in an information system (Öberg & Borglund, 2006). Characteristics of records have been empirically described and verified based on a study of empirical data and archival theory by Öberg and Borglund (2006). These characteristics, according to Öberg and Borglund (2006), are presented as: cause of records; context of records; type of content; frequency of use; organising records; retrieval of records; structure of records; and version and copy. These characteristics of records have empirical descriptions and verifications based on the archival theory (Öberg & Borglund, 2006). The characteristics, according to Öberg and Borglund (2006), inter alia are listed and described as summarised in Table 2.2.

Table 2.2: Characteristics of records

| No. | Characteristics | Descriptions |
|---|---|---|
| **1** | *Causes of Records* | Different reasons as to why records are preserved have been identified. This is sometimes explicit but often implicit. The identified causes are not mutually exclusive, and they are: *legislative needs*; *business needs*; *cultural needs*; and *historical needs*. Above all, records preserved in public organisations are preserved because of *legal demands*. |
| **2** | *Context of Records* | Context arises from the connection and coherence between the record and its creation, as well as connecting transaction to other related records. |
| **3** | *Type of Content* | This potential characteristic is about the type of the content in records. The records have a variety of content types. Three values of *type of content* have been found namely: *original* (raw); *ordered*; and *analysed*. *Original* (raw) is when the information is saved as it appeared when it was created. Examples are test results from an analysis of chemicals or a hearing. In some cases the organisation has *ordered* the information for example an alphabetically ordered list of employees. There were examples of *analysed* information such as statistical analysis presented as tables and graphs but with no connection to the original data. In the cases where the records are in raw form the connection to a transaction often is clear. A record with *original* content is a record that is derived from a business transaction and the information has not been refined in any way. |
| **4** | *Frequency of Use* | This potential characteristic consists of the following values: *never used*; *annually used*; *used often*; *used daily*; and *used very often*. This equals the *records cycle concept model* where there *active, semi active*, and *inactive* records respectively (IRMT, 1999a). In many organisations it is more or less a standard procedure that paper records created during the current year are kept within easy access. Records that are not used so often are separated from one information system and kept in another information system (for example an e-archive). There will always be example of records that won't be used again. When looking at similar types of records their usage may differ. |
| **5** | *Organising Records* | The organising (that is, *intellectual control*) of records has been a central concept for archival science. Here, *organising* is how records are organised in preservation both in the short term, medium term, and long term. The reason for this is that organising has been the key to accessibility. Organising records has the following sub characteristics: *by cause*; *by types*; *by content*; *personal*; and *multilevel*. |
| **6** | *Retrieval of Records* | This characteristic consists of following values: no search retrieval (no search retrieval criteria); low search retrieval (few search criteria); good search retrieval (several search retrieval criteria); group-based search retrieval; indirect search retrieval. This characteristic is dependent on the *computer-based information systems*, either as an indexing system for paper based records, or as the system managing the e-records. Records are usually organised in groups. An example is that all minutes of meetings from a certain year are grouped together, sometimes with no possibility to search for a specific minutes of meetings. |
| **7** | *Structure of Records* | Within this characteristic two extreme values have been found: *full flexibility* and *standardized structure*. Structure is seen as the level of formalisation, and is about the structure of the records themselves, not of the |

| No. | Characteristics | Descriptions |
|---|---|---|
| | | system managing the records. |
| **8** | *Version and Copy* | Some records are copied (they should be labelled copies). Copies of records were for example found when one record served as the basis for decision. Added to the newly created record about the decision taken, a copy was laid, to increase the understanding of the decision. Normally this is a conscious action, for example when the organisation wants to distribute multiple copies of a record. Creation of multiple copies is not necessary when the record is electronic. It is possible to access the original record from many places, and limitations are only dependent on the information system. But if the system is to meet recordkeeping requirements, the system design must ensure that contextual connections are clearly maintained. Regarding version control, there were identified three different values namely: complete traceability of version; partial traceability of version; non-traceability of version. Complete traceability includes all versions of records, even if there are records that are not correct. |

**Source:** Slightly adapted from Öberg and Borglund (2006)

In principle, records, either public institutional records or private enterprise records need to comply with these characteristics (Table 2.2). Every record must have its implicit cause, context and content respectively. A record must show its frequency of use: never used; annually used; used often; used daily; and used very often (IRMT, 1999a). The frequency of use generally could be used to categorise records such as current records, semi current records, or non-current records. Records must be organised to facilitate accessibility and retrieval. Records need to be structured to show the level of formalisation. Lastly, some records are copied for traceability of versions of records. This is the essence of efficient RAM and effective RAMS.

## 2.3 Principles and Models in Records and Archives Management

Records and archives management, particularly within the context of the public sector management, is governed by four important principles or theories (IRMT, 1999a). These principles or theories inter aliaare: (1) that records must be kept together according to the agency responsible for their creation or accumulation, in the original order established at the time of their creation; (2) that records follow a life-cycle; (3) that the care of records should follow a continuum; and (4) that records can be organised according to hierarchical levels in order to reflect the nature of their creation (IRMT, 1999a).

The records life-cycle and records continuum are the dominant models in the records and archival management (Chachage & Ngulube, 2006). However, the International Records Management Trust (IRMT) has postulated an integrated approach to records management, in which the life-cycle and continuum models were blended in an integrated records and archives management system (IRMT, 1999a). Despite a number of models and theoretical perspectives in records and archive management; in this study, the discussion of institutional theory and resource based theory (RBT) integrating the key elements of the theory of constraints (TOC) have been separately discussed in order to give their paramount importance in content, context and structure based on their relevance on the given specific study objectives.

### 2.3.1 Records Life-Cycle

The records life-cycle has been regarded as a theory which provides a framework for the operation of a records management programme (Penn *et al.*, 1994; IRMT, 1999a). The records life-cycle concept dates from the 1930s and is attributed to Schellenberg (1956) of the National Archives of the United States (Yusof & Chell, 2000; Shepherd & Yeo, 2003). The concept was developed in response to the ever increasing volume of records produced by organisations (Yusof & Chell, 2000). This theory is sought to be the primary theory of the RAM fields. The life-cycle concept is based on the fact that recorded information has a life similar to that of a biological organism in that it is born (creation phase), it lives (maintenance phase) and dies (disposition phase) (Penn *et al.*, 1994; IRMT, 1999a; Williams, 2006; Shepherd, 2010). Since the 1950s many variants on the records life-cycle concept have been modelled and developed in the RAM. However, most of the models are aimed at showing a progression of actions taken at different times in the life-cycle of a record, typically, its creation, capture, storage, use and disposal.

Some writers showed the life of records as a linear progression while others describe a loop or a circle (Shepherd & Yeo, 2003). For instance, Stephens (1996) observed that in the United Kingdom the records or information life-cycle is usually considered to be composed of at least three stages. The three stages of the life-cycle were also shared by Charman (1984) who stated that the life-cycle (Figure 2.1) of a record is in its progression from creation to final disposition. Records life-cycle progression (Figure 2.1) includes: current records – records that are required regularly for the current business of an agency or organisation and continue to be maintained in their place of origin or receipt, records in this stage are sometimes called active records; semi-current records – records that are required so infrequently for current business that they should be transferred to a records centre pending their ultimate disposal; and non-current or inactive records – records which are no longer required for current business and should be either destroyed or transferred to an archival repository (Charman, 1984). This is a considered progression of records!

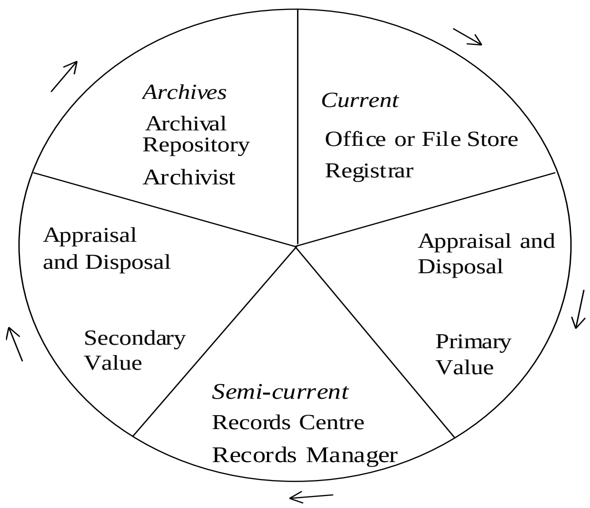


Figure 2.1:The records life-cycle

**Source:** IRMT (1999a)

In furthering the refinements of the records life-cycle concept, the cycle was divided into five major phases, namely: creation; distribution; use; maintenance; and disposal or archival (Penn *et al*., 1994). Goodman (1994) had listed ten stages of the records life-cycle concept, namely: design and creation of records, identification, authorization, verification, validation and auditing, circulation, access, loan and use, backup procedures and disaster recovery plans, and retention schedules and destruction. Different interpretations concerning the number of stages in the life-cycle of records have been continued by Robek, Brown, and Stephens (1995). The essential characteristic of records is its value (Robek *et al*., 1995). Like other organisational assets, their value for business purposes tends to decline as the time passes and at some point, they become useless and may be discarded.

Therefore, Robek *et al*. (1995) have had identified five major stages in their life-cycle. They outlined the creation stage, the distribution and use stage, storage and maintenance stage, the retention and disposition stage and archival preservation stage (Robek *et al*., 1995). Accordingly, the modified records life-cycle model is useful because it enables archivists and records managers to track, in a sequential process, the progress of a record and to ensure that the right processes are undertaken at each phase of its life (Williams, 2006). Basically, at whatever stage; records are essential only when they have the intended value. In principle, the essence of record is its value within and across the stages be it three, four, or ten in their life-cycle.

### 2.3.2 Records Continuum

The records continuum was originated in Canada. However, it was developed and adopted for use in Australia. The early uses of the term continuum can be traced to Ian Maclean (Upward, 1994; McKemmish & Piggott, 1994). It was not until the Canadian archivist Jay Atherton presented his move to the adoption of this approach in the mid-1980s that the word continuum began to be widely used as a way of describing the Maclean approach in Australia (Upward, 2000a). Atherton (1985) presented the four stages of the records continuum: creation or receipt of the record; classification; establishment of retention (disposal) schedules and their subsequent implementation; and maintenance and use in the creating office, inactive storage or archives.

Table 2.3:Four actions of records care

| S/N | Process | Records management actions | Archives management actions |
|---|---|---|---|
| 1 | Identification and acquisition | Creation of receipt | Selection or acquisition |
| 2 | Intellectual control | Classification within a logical system | Arrangement and description |
| 3 | Access | Maintenance and use | Reference and use |
| 4 | Physical control | Disposal by destruction or transfer as archives | Preservation |

**Source:**IRMT (1999a)

It was noted that, all four stages are interrelated, forming a continuum in which both records managers and archivists are involved to varying degrees in the on-going management of recorded information (Atherton, 1985; Table 2.3). The records life-cycle recognises that records are created, used, maintained then disposed, either by destruction as obsolete or by preservation as archives for their on-going value if any. The continuum concept suggests that four actions continue or recur throughout the life of a record: identification of records; intellectual control of them; provision of access to them; and physical control of them. According to the continuum concept, the distinction between records management and archives management need not be rigidly maintained. From this principle, as adopted from IRMT (1999a), a unified model was developed. The model reflects a continuum. Four actions continue or recur throughout the life of a record. These actions inter alia are: creation or acquisition of the records; placement within a logical, documented system that governs its arrangement and facilitates its retrieval throughout its life; appraisal for continuing value; and its maintenance and use (IRMT, 1999a).

| **Phase** | *Current* | *Semi-current* | *Archives* |
|---|---|---|---|
| **Operations** | | | |
| *Analysis* | Business Systems Analysis | | |
| *Creation* | Creation or Receipt | Receipt into Records Centre | Accession to Archival Repository |
| *Control* | Classification Filing Documentation | Maintain Arrangements and Documentation | Arrangement and Description |
| *Appraisal* | Schedule [Primary and Secondary Values] | Review [Secondary Value] | |
| *Maintenance and Use* | Office/File Store | Safekeeping in Records Centre | Preservation and Conservation |
| | Official Access | Official Access | Public Access/ Outreach |
| *Disposal* | Transfer to Records Centre or Destroy | Transfer to Archival Repository or Destroy | |
| **Responsibility** | *Action Officer*<br>*Records Manager*<br>*Archivist* | *Records Manager*<br>*Archivist* | *Archivist* |

Figure 2.2:The continuum approach to managing records

**Source:** IRMT (1999a)

Comparing the traditional records life-cycle (Figure 2.1) and the records continuum (Figure 2.2) it may be concluded that the latter is more suitable and practical to deal with records in an electronic environment (Isa, 2009). The reason is: the records continuum advocates that the requirements for a record keeping system must be identified ahead of the system designing stage (Isa, 2009). This is to allow the requirements to be embedded into the system, which subsequently facilitate later record keeping activities such as assigning retention periods, control of access and appraisal before disposal (Isa, 2009). This claim had been supported by Upward (2000b) who stated that records continuum encompasses the concept of managing a record from the point of design of a recordkeeping system, that is, before records are even created, through to disposal and the continuing use of records as archives.

## 2.4 Theoretical Literature Review

This study is anchored onto institutional theory and resource based theory (RBT) by integrating the key elements of the theory of constraints (TOC) in attempting to assess the factors influencing the management of procurement records in the Tanzania PEs. The adoption of these theories has been considered due to the need of capturing the requirements of the given study objectives, the general analytical framework (Figure 2.3), and the conceptual framework (Figure 2.4).Due to the nature of the given study objectives, this study could have not been studied by a single theory. In principle, there is a need of theoretical triangulation to justify the use of more than one theory in to a conglomerate of theoretical framework.

Theoretical framework is a conceptual model of how one theorizes or makes logical sense of the relationships among the several factors that have been identified as important to the problem (Sekaran, 2003). The purpose of the provided theoretical framework was considered to make research findings meaningful (Sekaran, 2003). Theoretical framework helped to stimulate research and the extension of knowledge by providing both direction and impetus of the study (Polit & Beck, 2004). Principally, the theoretical underpinning discusses the interrelationships among the variables that are deemed to be integral to the specific study objectives on assessment of the factors influencing the management of procurement records in the Tanzania PEs (Figure 2.3; Figure 2.4). The adopted theories underpinning this study are described and discussed in the following sub sections.

### 2.4.1 Institutional Theory

Institutional theory emanated from sociology. Therefore, institutional theory adopts a sociological perspective to explain organisational structures and behaviour (Dunn & Jones, 2010). Institutional theory draws attention to the social and cultural factors that influence organisational decision-making and in particular how rationalized activities are adopted by organisations (Scott, 2004). Institutional theory identifies three pillars of institutions. These pillars are normative, regulative, and cultural-cognitive (Scott, 2004). The regulatory pillar emphasizes on the use of rules, laws and sanctions as enforcement mechanism, with expedience as basis for compliance. The normative pillar refers to the norms and values with social obligation as the basis of compliance. The cultural-cognitive pillar rests on shared understanding on common beliefs, symbols, and shared understanding (Scott, 2004).

Institutional theory (March & Olsen, 1989; Scott, 1994; Scott, 2004, 2008) is the traditional approach used to examine elements of public procurement (Obanda, 2010; Tukamuhabwa, 2012). Therefore, the relevance of this theory is sought here. That is; the Tanzania PEs, as public offices, are institutions that are compelled to comply with the regulatory and institutional frameworks provided in the public procurement and the national RAM legislations in the management and care of procurement records and archives. Here, the normative pillar rests on the norms and values with social obligation as the basis of compliance. The cultural cognitive pillar rests on the shared understanding (common values and beliefs) based on the essence of procurement recordkeeping. From this theory, as adopted in the public procurement management, all procuring entities cum public offices are therefore needed to comply with the pillars of institutions in the management of procurement business transaction processes and activities including the management of procurement records. The Tanzania procuring entities, according to the procurement regulatory and institutional frameworks, are institutions that need to be highly regulated. That is, they are administratively mandated to comply with regulatory and institutional pillars.

The functional mandates of the Tanzania PEs are established by the public procurement legislation (Cap. 410, Public Procurement Act). With that respect, procuring entities have institutional obligation to comply with the basis of institutional theory. In principle, all Tanzania PEs are compelled to comply with the normative, regulative, and cultural-cognitive pillars. Therefore, in every endeavour to study the management of procurement records; institutional theory is one of the basic theories to be considered. Principally, procurement RAM and RAMS should comply with the pillars of institutions for efficient RAM best practices and RAMS standards within and across the Tanzania procurement recordkeeping systems.

Principally, institutions are managed by personnel. The personnel who are managing the PEs are actors within the institutional limits. They are institutional actors defined by the institutional limits. The [institutional] actors may be rule makers, but take existing rules as a starting point for defining their own identities and interests. Conversely, the [institutional] actors may also be rule takers, but nonetheless modify or even overturn those rules from time to time (Jackson, 2010; with annotations). In the parlances of management and care of procurement records; people or institutional actors have to comply with the existing rules of the game as they are provided in Act No. 7, 2011 as amended and Act No. 3, 2002 respectively. This is the essence of the basis of compliance and expedience as enshrined in the institutional theory.

### 2.4.2 Resource Based Theory

The advent of the resource based theory (RBT) was wholly embraced by scholars. The RBT deals directly with the firm's central interest, the internal capabilities of the firm. Firm resources are its assets and strengths such as information or organisational processes that are controlled by a firm enabling it to plan and implement strategies that improve its organisational efficiency (Barney, 1991).

Literature suggests that defining resource is a daunting task because resource is defined in different ways by different interested groups (Ruiz-Carrillo & Fernandez-Ortiz, 2005; Galbreath, 2005; Sweeney, 2006). Resources are the productive assets of the firms through which activities are accomplished (Mathews, 2002). Galbreath (2005) sees resources as firm factors that have potential to contribute economically for the benefit of the firm whilst Henry (2008) conceive resources as inputs that enable an organisation to carry out its business activities. According to Hunger and Wheelen (2011), firm's resources are viewed as everything internal to the firm. For Ruiz-Carrillo and Fernandez-Ortiz (2005), resources are the set of differential knowledge, abilities and skills stemming from the process of collective learning of the organisation and determining the aptitude and the way in which the enterprise deploys its resources, setting the foundations to create and support its competitive advantage. Resources is a list of all assets, capabilities, organisational processes, firm attributes, information, knowledge, records and so on (see Hunger and Wheelen, 2011).

Patari (2009) describe a firm's resource base as comprising assets, capabilities, activities, attributes, information and knowledge, whether tangible, intangible or human in nature, that enable it to generate rents. The tangibility or intangibility of resources is also supported by Ferreira, Azevedo, and Fernandez (2011) who suggest that tangible assets include capital, access to capital and location. Whereas intangible resources are goods of immaterial nature including: the science of knowing what to do, relations with the clients, operative processes and capacities, abilities and innovations of the firm.

Records, as organisational assets – are valuable resources, they are tangible physical assets that an organisation possesses (Henry, 2008; Kasim, 2011). Records contain intangible resources that are information (Kasim, 2011) for decision making, accountability, and governance for organisational performance. With respect to this professional phenomenon, Kasim (2011) writes:

> The role that information plays into the *operating* and *transaction of business activities* is necessary so as to develop a *cohesive records plan for the quality arena*. Being the *strategic resources*, *information resources* reflect some sense of good evident and have strong relationships to the *resource-based view* of the firm in the strategic management perspectives. Organisation must understand that the information is necessary in their day-to-day operation. So as not to be marched down the wrong road, information that has been translated into the format of records and other form of media transaction helps organisation satisfies their records requirements of the standards(Kasim, 2011; with emphasis added).

Records are created, used, maintained, archived or disposed by institutional actors. Institutional actors need intangible resources – valuable tacit information and knowledge build up through their culture and processes (Henry, 2008). In records management as a profession, science and practice; records are valuable assets to the organisation and requires organisation's physical and human capabilities to manage.

An organisational capability is its capacity to deploy resources for a desired end result (Grant, 2008). Organisational capabilities are assets and accumulated knowledge, exercised trough organisational processes. Resources are valuable when they enable the business to formulate and implement strategies that improve efficiency and effectiveness (Barney, 1991; Henry, 2008). Fundamentally, resources are valuable when they create value (Penrose, 1959). That is, information contained in records (as organisational resources) has been observed to add value into the organisations' operational equations. Information facilitates decision making in the organisation-wide operations. The envisioned value of records is the information contained in the recorded and documented records.

The RBT indicates that intangible resources, or intangibles, underlie value creation (Penrose, 1959). A paradox of RBT is that these very resources that underlie value creation elude examination (Barney, 2001). Indeed, since intangibles are immaterial, scholars cannot easily isolate, observe, or measure them (Lev, 2007). Resources are the tangible and intangible assets that a firm owns or accesses to conceive and implement strategies (Barney, 1991). Intangibles have three intriguing features that distinguish them from tangible resources (tangibles). First, intangibles do not deplete or deteriorate with use (Cohen, 2005). For example, a person's skills may improve with use (Chadwick & Dabu, 2009). Hence, intangibles are expected to confer benefits for an undefined time frame as opposed to tangible resources, which have expected depreciation (Cohen, 2005). Second, multiple managers can simultaneously use intangibles (Marr & Roos, 2005).

For example, the use of a brand does not make that brand less available to other managers (that is, intangibles are what economists call non rivalry goods; Hall, 1993). Finally, intangibles are immaterial (inaccessible to the senses). Immateriality makes intangibles difficult to exchange, as they often cannot be separated from their owner (Marr & Roos, 2005). The RBT is viewed through a number of views which highlights few confusing issues and its variety of definitions (Bontis, 1999). Despite of the varied views on the RBT, the organisational performance depends on its capabilities (Zhuang & Lederer, 2005; Grant, 2008).

The RBT is about the strategic use of the firm's assets, skills, abilities and knowledge and this theory puts emphasis on the internal resources of the firm (Coates & McDermott, 2002). Zhuang and Lederer (2005) affirm that the RBT assumes that a firm's performance is founded on its capabilities. In records management, organisations need tangible resources (human resources, physical resources, and financial resources) and intangible resources (education, knowledge, skills, competences, culture, policy, commitment, institutional awareness) for proper records management. These are organisational capabilities (Grant, 2008). From this stand point it is argued that the RBT can be used to study records management in the procurement as business process focusing on the use of internal resources and capabilities for organisational success in ensuring proper management of procurement records in the procurement business transactional processes and activities. Resources to be considered in this particular study are inter alia: the institutional actors' knowledge, skills and competences; physical resources (storage space, equipment and facilities); and the information on the norms, laws and rules that facilitates decision making in the procurement RAM in the context of RAMS.

In an attempt to use the RBT, the phenomenon of resources in the RAM practices and RAMS standards incorporate the people, equipment and supplies, space, procedures and information (Read & Ginn, 2007, 2011); and due to the nature and complexities of these resources, they are limited in supply – scarcity phenomenon in terms of economic demand and supply. Therefore, the TOC has been integrated into the RBT to try to explain the phenomenology of limiting the procurement RAMS in accomplishing its legal obligations in creating value of records in the Tanzania PEs.

Records management, by its nature, is a system (Read & Ginn, 2007, 2011). Hence, as a system, like many other systems in the operations of organisations in accomplishing its tasked goals is faced by constraints in making things happen as per their institutionalised legal obligations and mandates. The owner of a system is assumed to establish its goal. The fundamental goal of most records management systems is to ensure that records are created, received, maintained, used, and disposed in an efficient way (see ISO 14589:1). Thus, there is an inevitable essence of applicability of elements of the TOC in studying procurement RAM practices in the procurement recordkeeping system standards.

The TOC, in management perspectives, is a system-management philosophy (Goldratt, 1990). The fundamental thesis of the TOC is that constraints establish the limits of performance in any system. The TOC suggest that managers in organisations should focus on managing capacity and capability to improve the performance of their organisations (Ruhl, 1996). In principle, capacity and capability in any PEs are internal resources. Therefore, the TOC is geared to help organisations continually achieve their goals by implementing breakthrough improvement through focusing on a constraint that prevents a system from achieving a higher level of performance (Goldratt, 1984, 1990). Essentially, the paradigm of the TOC states that every firm must have at least one constraint (Goldratt, 1984, 1990). Goldratt and Cox (1992) define a constraint as any element or factor that limits the system from doing more of what it was designed to accomplish (that is, achieving its goal). The TOC challenges managers to rethink some of their performance assumptions about how to achieve the goal of their organisations. The TOC brings about optimisation of the total system resources (Ruhl, 1997). Therefore, the RBT could be easily integrated with the elements of the TOC in a way to explain the optimisation of resources in the procurement recordkeeping systems.

Since the TOC is explaining the relationships of organisational factors (constraints) that limits the system form doing its best; it is, therefore, either challenge or opportunity to the systemic performance. Procurement records management in the Tanzania PEs is the system. Therefore, as other systems do; the procurement RAMS is influenced by scarcity of the resources in ensuring effective and efficient procurement records management in the Tanzania PEs. It is the regulatory and institutional jurisdictional tasked functions and powers of the envisaged institutional actors within the PEs to capitalise on using the internal capacities and capabilities of the PEs in ensuring that procurement recordkeeping systems are efficient and performs to the desired institutional goals. That is the essence of integrating the RBT with the key elements of the TOC in studying the procurement records and archives management system (RAMS) in the context of Tanzania PEs.

## 2.5 Empirical Literature Review

This section presents review of analytical, methodological and philosophical empirical studies conducted before this doctoral study. This review revolves around the RAM and RAMS in the public sector management as well as private business enterprises. In order to enrich this study with the phenomenology of realism over the construct variables of analysis, past studies on the RAM matters and related issues have been reviewed, discussed and criticised. The critique on the reviewed literature has permitted limitations that characterise previous study and therefore establish gaps in the study focus, methodology, and theoretical contributions. Principally, empirical literature is reviewed to shade light on the essence of studies conducted on the RAM and RAMS matters and their associated issues related to this study.

The empirical review on the construct variables was aimed at expounding the essence of the construct variables as derived from the specific research objectives. Hereby, the review of empirical evidences for the proposed specific construct variables have had been geared on the: capacity of personnel involved in managing procurement records, storage space for procurement recordkeeping, equipment and facilities for procurement recordkeeping, and security and safety measures in managing procurement records. These specific variables have been considered as the bases for modelling and structuring the general analytical framework and the conceptual model and are the ingredients of the same (Figure 2.3; Figure 2.4).

### 2.5.1 Capacity of Personnel Involved in Managing Procurement Records

Records management is a professional and technical function within organisations. Therefore, it requires specialised knowledge, skills, competencies, shared values, and professional ethics on the RAM requirements and practices, particularly on creating records during their work, capturing those records into and managing them in designated recordkeeping systems (Read & Ginn, 2007, 2011; Government Records Service, 2011). The quality of any records [and archives] management (RAM) programme is directly related to the quality of the staff that operates it. Records work must be seen as a worthwhile career for those who are well *educated*, *intelligent* and *industrious*, not as the posting of last resort for those who are *unqualified*, *incompetent* and *idle* (IRMT, 1999a; with emphasis).

Through general literature review and desk research based on professional consultation and experiences within the East and Southern Africa region, Wamukoya and Mutula (2005) examined capacity building requirements for electronic records (e-records) management. The findings of this examination indicated that there is a dearth of management skills and inadequate capacity in the East and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) member countries. Either, Sabokrooh (1989) had identified the same when conducted a study on the fields of RAM in the Iranian medical teaching hospitals.

The purpose of the study by Sabokrooh (1989) was to find out the important problems of management of the medical record departments. The study used a survey research design where questionnaires were administered to medical departmental managers and hospital administrators. The findings of Sabokrooh (1989) revealed that: (1) medical records departmental managers were not sufficiently executing their managerial responsibilities and (2) medical departmental managers had had inadequate knowledge and skills in managing medical records in those departments.

Nengomasha (2009), using qualitative approach, explored that Namibia was faced by lack of understanding on records officers of what records are and the importance of records management, inadequate legal and regulatory environment, failure to follow laid down procedures and standards, absence of a records management disaster plan including digital preservation strategy, and inadequate resources – includes lack of staff and skills to manage records. In principle, as established by Sabokrooh (1989), Wamukoya and Mutula (2005) and Nengomasha (2009) it is evident that efficient RAM needs adequate and sufficient human resource. That, the capacity of personnel involved in managing records needs to be adequate and sufficiency in terms of (1) level of staffing, (2) knowledge, (3) skills, and (4) competences for efficient RAMS activities.

### 2.5.2 Storage Space for Procurement Recordkeeping

Procurement records, like any other records in the organisation, need specialised and designated storage spaces. In essence, procurement records need a well-furnished and efficiently maintained storage space. Storage is essential for managing records because it ensures that records are secure, intact and accessible for as long as users need them (Shepherd & Yeo, 2003). Storage refers to physical space. Records require storage conditions and handling processes that take into account their physical and chemical properties (vide Section 9.6 of ISO 15489:1, 2001, 2016). Records, irrespective of their formats, require high quality storage and handling. Organisations should also store records in media that ensure their usability, reliability, authenticity and preservation for as long as users need them.

In a survey study conducted in Botswana, it was revealed that storage and preservation of records were weak. The studied institutions had no recordkeeping management units. Due to weak storage and preservation of records, it was established that the institutions needed rationalisation of their storage requirements and improve the accessibility of semi-current records that were bundled together with current files on shelves (Kalusopa & Ngulube, 2012). The results of this study Kalusopa and Ngulube (2012) conducted in Botswana on storage of public records has some similarities with the studies conducted in Tanzania (Ndenje-Sichalwe, 2010; Ndemanyisho, 2014; Marwa, 2015).

In Ghana, Akotia (1996) identified that, there was no systematic recordkeeping existed for the management of accounting records. Further, the study revealed that storage conditions were ill-suited for records storage (Akotia, 1996). In practice, records need proper organisation, keeping, and securing. Essentially, storage space that is adequate and sufficient for the well organised and secured recordkeeping system is the requirement of proper management of procurement records as envisaged for other public records.

Within the records and archives management system (RAMS); on a daily basis, records will be searched for and retrieved, viewed, and used, as needed. Ultimately, the life of the record comes to an end and it is routed through its final disposition step (Alfresco, 2009). Records disposition refer to the actions that are associated with implementing decisions about the retention or destruction of records. It also includes migration and transfer of records to new storage locations, custodians or owners (AS 4390:1, 1996). This requires adequate and sufficient storage space to accommodate.

In a study conducted by the IRMT (2003) it was observed that, amongst other challenges facing ESARBICA region, there were no records retention and disposal policies. A study by Ngulube and Tafor (2006) confirmed this trend in Kenya, Namibia, South Africa, Tanzania and Zimbabwe. Studies by Mutiti (2001), Ngulube (2004), Wamukoya and Mutula (2005), and Wato (2006) conducted in the ESARBICA; Kemoni (2007) conducted in Kenya; and Nengomasha (2009) conducted in Namibia; all these empirical studies confirm the absence of records retention and disposal policies in most of the studied cases.

These empirical studies clearly indicate that, retention and disposition of records is not given its due weight as observed in the study by Kalusopa and Ngulube (2012). Due to absence of retention and disposal policies, it is a clear manifestation that semi-current and non-current records do pile up in storage or kept randomly in any area available within and across the public offices. Therefore, the available space for current records is compromised by the undisposed non-current records that have not yet been appraised for either retention into archives or disposition altogether.

### 2.5.3 Equipment and Facilities for Procurement Recordkeeping

In recordkeeping, the storage needs specialised and designated equipment and facilities (Read & Ginn, 2007, 2011; Government Records Service, 2011). Keeping records, irrespective of their formats, require high quality storage and handling equipment and facilities (vide Section 9.6 of ISO 15489:1, 2001, 2016) to ensure proper organisation, well secured, and well-kept records. For organisations, they should store records in media that ensure their usability, reliability, authenticity and preservation for as long as they are needed by the intended users.Therefore, records require adequate equipment and facilities that suffice for their recordkeeping.

With respect to the adequacy of the equipment and facilities for recordkeeping, the studied institutions by Kalusopa and Ngulupe (2012) revealed that 32 (71.1%) of the 45 reported that they used equipment that did not sufficiently cater for records storage whilst only 13 (28.9%) indicated that it was sufficient. Some of these findings concur with that of Kemoni (2007), who found that the most common storage equipment in the public sector in Kenya was steel cabinets and that there were problems, with the inadequacy of storage equipment and facilities. Other studies, like that of Wamukoya and Mutula (2005) in the ESARBICA and Nengomasha (2009) in Namibia, confirm the same pattern on the inadequacy of recordkeeping equipment and facilities in the ESARBICA region.

### 2.5.4 Security and Safety Measures in Managing Procurement Records

Records need to be secured and kept in safe custody. Records need to be classified (vide Section 9.5 of ISO 15489:1, 2001, 2016), well organised, well-kept, and well secured for completeness and readily availability. In managing current records, completeness and availability of records is a vital management operating phenomenon (IRMT, 1999a: vide *Records Continuum Model*; British Columbia

Institute of Technology, 2011). Records [and archives] management (RAM) must ensure the [completeness] and availability of records (Isa, 2009; with annotations).

Records provide a reliable, legally verifiable source of evidence of decisions and actions. Therefore, they must document compliance or non-compliance with laws, rules, and procedures (IRMT, 1999a). The integrity of a record refers to its being complete and unaltered (Lewellen, 2015). It is necessary for any record to be protected, well-kept and well secured against unauthorized alteration. Therefore, records management policies and procedures should specify what additions or annotations may be made to a record after it is created, under what circumstances additions or annotations may be authorized, and who is authorized to make them. Any authorized annotation, addition or deletion to a record should be explicitly indicated and traceable (ISO 15489:1, 2001, 2016).

Good records management practice means identifying vital records and information and then developing a records security policy (Kalusopa & Ngulupe, 2012). Records need proper classification and arrangement for securing them. Kalusopa and Ngulupe (2012) recommended to the studied institutions in Botswana to develop policies and standards to support the protection and security of records throughout their life-cycles until they can safely destroy or delete them. This was an indication that, the studied institutions in Botswana have had no policies and standards for protection and security of records throughout the records continuum model. As advocated by Smith (2007), one should not contemplate transferring records to a records centre if it is not completely secure. Records, either active or inactive, need a high level maintenance of security both externally and internally at all times (Smith, 2007).
ISO 15489:1 (2016) emphasizes the need for systematic management policies and procedures to guard against alteration and fraud (Alfresco, 2009; Lewellen, 2015). This illustrates the need to capture a complete and auditable record of a record's provenance as an important indicator of that record's integrity (Lewellen, 2015). Therefore, the availability and completeness is very vital for what records are supposed to offer to the governance of the organisation. Generally, transparency is

established by the availability of reliable records about how the institution conducts its business (Chinyemba, 2002, 2011). Indeed, records are an indispensable element of transparency, both within the organisation and externally. Whether it is regulators or auditors, shareholders or citizens, the first step in accountability of the organisation is transparency of processes (Ngoepe, 2012).

Records classification systems should reflect the business activities of organisations. Organisations need to determine the degree of classification control they require for their business purposes (vide Section 9.5 of ISO 15489:1, 2001, 2016). Records classification is a primary activity in the records management process (IRMT, 1999a). Records classification is the process of organising records within a consistent system designed to ensure that the records are effectively preserved and retrieved when needed (IRMT, 1999b). In practical records management, records classification has significance value in retrieval, disposal (preservation or destruction) and for security purposes (IRMT, 1999a, 1999b).

A study conducted by Ramokate and Moatlhodi (2010) found that Botswana is faced by poor or lack of records classification systems, lack of retention and disposal schedules. It was further revealed that, with regard to public administration there were many incidents of misfiling leading to low appreciation of records service work by action officers (Ramokate & Moatlhodi, 2010). Focusing on the public sector, studies by Kemoni (2007) in Kenya and Nengomasha (2009) in Namibia revealed the lack of updated classification systems. Nengomasha (2009) found that two of the eleven studied institutions (18%) did not have classification systems.

However, even when they did have classification systems, most were out-dated or not in use. Kemoni (2007) found that, despite the claim of written classifications, findings indicated the contrary. The study revealed that in the majority of the ministries, the classification schemes available were handwritten and some were in a state of deterioration, that is, they were faded, worn out and torn.

### 2.6 Conceptualisation of the Study

This study is informed and anchored by two theories, inter alia, the institutional theory and resource based theory (RBT) by combining and embracing the commonly known key elements of the theory of constraints (TOC). Due to the qualitative and quantitative nature of the study, it has been proposed to have a generalised conceptual framework and a conceptual framework to dwell on integrating the theories in studying the phenomenon under consideration; that is, assessment of the factors influencing the management of procurement records in the Tanzania PEs. This study conceptualises the procurement RAM as a field that consists of the set of fundamental regulatory, normative, and cultural-cognitive pillars of institutions coupled with the required institutional resources and informed regulatory and institutional mechanisms that establish the basis for compliance and expedience with the procurement recordkeeping system best practices and standards in the management of procurement records in the Tanzania PEs (Figure 2.3).

#### 2.6.1 General Analytical Framework

The essence of generalised conceptual framework is to deal with qualitative specific objectives of the study that had been interrelated into a unified single and conglomerated plane of qualitative analytical framework (Figure 2.3).

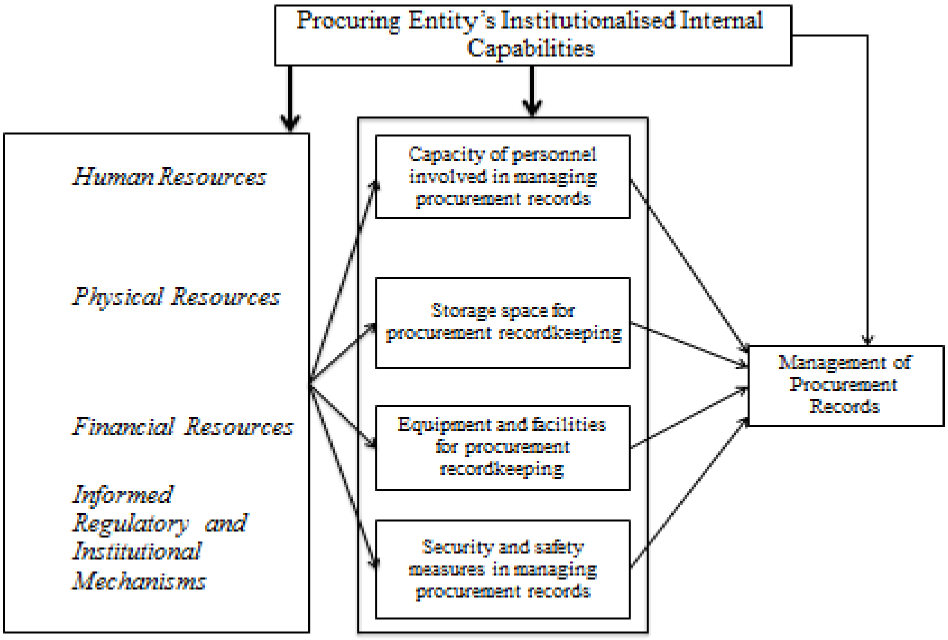


Figure 2.3: General analytical framework

**Source:** Researcher's modelling (2017/2018).

In this framework (Figure 2.3), such that, within and across the public procurement records management system in the Tanzania PEs, the institutional theory is used to examine and assess the essence of the institutionalised regulatory and institutional frameworks on the PEs' resources that are used in managing procurement records. Whereas, the RBT integrating the key elements of the TOC were used in determining, examining, and explaining the institutional resources that are needed to influence the management of procurement records in the Tanzania PEs (Figure 2.3).Figure 2.3 presents the general analytical framework derived from the foregoing discussion based on the theories and interrelationships with the study phenomena.

### 2.6.2 Conceptual Framework

The conceptual framework is a network or a "plane" of linked concepts which have been adopted for use in a particular study (Jabareen, 2009).This study needed a conceptual framework to deal with the independent explanatory variables and the explained dependent variable. Based on the empirical reviews, the conceptual framework (Figure 2.4) for this study indicates the independent explanatory variables which are sought to have direct independent influences on the management of procurement records and their relationships. The construct variables and relationships between research variables are illustrated in Figure 2.4.

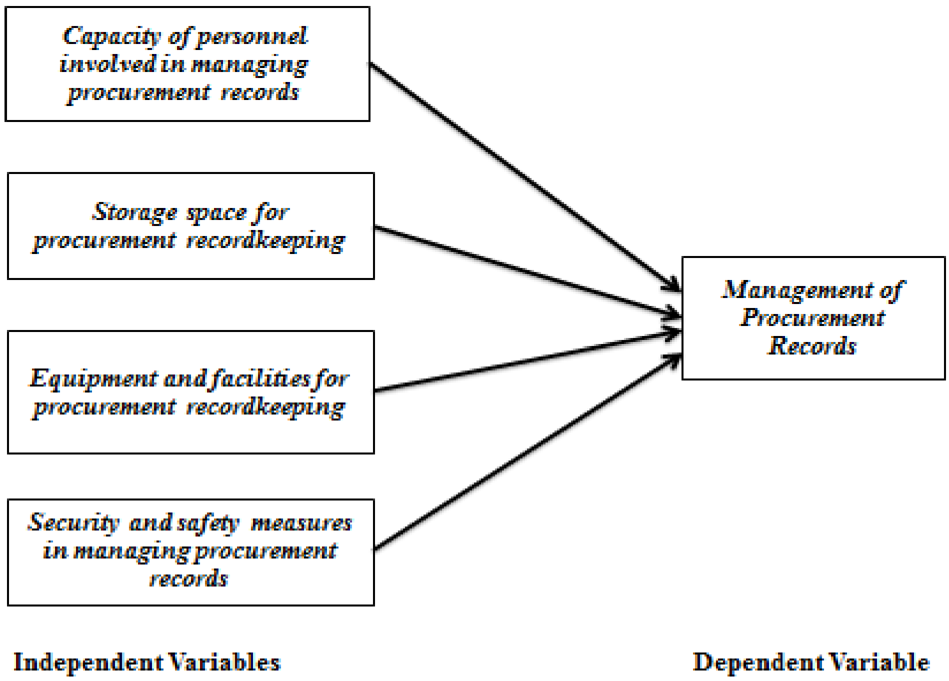


Figure 2.4: Conceptual framework

**Source:** Author's modelling (2017/2018).

The significance of the presented conceptual framework (Figure 2.4) is its focus on the explanatory relationships between the management of procurement records and the four sets of construct variables, inter alia: capacity of personnel involved in managing procurement records, storage space for procurement recordkeeping, equipment and facilities for procurement recordkeeping, and security and safety in managing procurement records. Here, the independent explanatory variables (in Figure 2.4) have been proposed to have independent explanatory effects on the dependent variable. Essentially, Figure 2.4 has avoided the combined effect of the independent explanatory variables on the dependent variable due to the essence and nature of the specific variables.

### 2.6.3 Linkages of Conceptual Framework

Each of the independent explanatory variables is assumed to influence dependent variable depending upon either having positive or negative marginal effects. The following subsections provide for the linkages between the independent explanatory variables and the explained dependent variable.

#### 2.6.3.1 Capacity of Personnel in Managing Procurement Records

Personnel are people who are employed and staffed to manage procurement activities within the PEs. The link between capacity of personnel and management of procurement records is found in ensuring that the procurement records management activities are fostered in an effective and efficient way. Generally, efficient procurement records management depends on well trained, industrious, skilled and competent personnel (IRMT, 1999a; Read & Ginn, 2007, 2011).

#### 2.6.3.2 Storage Space for Procurement Recordkeeping

Efficient procurement records management requires, inter alia, adequate storage space for procurement recordkeeping (see IRMT, 1999a; Read & Ginn, 2007, 2011; ISO 15489:1, 2016). Therefore, efficient procurement records management requires adequate physical storage space for keeping and preservation of records according to their nature and characteristics. Essentially, management of procurement records is dependent on the availability of adequate of records storage space.

#### 2.6.3.3 Equipment and Facilities for Procurement Recordkeeping

Like storage space for procurement recordkeeping, equipment and facilities for procurement recordkeeping are required for efficient procurement records management (see IRMT, 1999a; Read & Ginn, 2007, 2011; ISO 15489:1, 2016). Therefore, procurement records management is dependent on the availability and adequacy of equipment and facilities for procurement recordkeeping.

### 2.6.3.4 Security and Safety Measures in Managing Procurement Records

In the management of records, completeness and availability of records is a vital management operating phenomenon (IRMT, 1999a; British Columbia Institute of Technology, 2011).Records need to be classified, well organised, well-kept, and well secured for completeness and readily availability (ISO 15489:1, 2001, 2016). Therefore, the need for security and safety measures to ensure completeness and availability of records is vital. In principle, the management of procurement records will therefore solely dependent on the existence and sufficiency of security and safety measures in managing procurement records.

### 2.6.4 Context of Dependent Variable

The context of the dependent variable presented in the conceptual framework (see Figure 2.4) is focused on the explanatory relationships between the management of procurement records and the four sets of the given construct variables, inter alia: capacity of personnel involved in managing procurement records, storage space for procurement recordkeeping, equipment and facilities for procurement recordkeeping, and security and safety in managing procurement records. The explanations provided under sections 2.6.3.1 to 2.6.3.4 of this thesis explain the context of the management of procurement records in relation to the given factors influencing the management of procurement records in the Tanzania procuring entities which have been described in the conceptual framework.

## 2.7 Critique of Reviewed Literature

Despite of the reviewed and critically discussed empirical evidences; however, all such reviewed empirical studies had completely failed to either critically examine or assess the factors influencing the management of procurement records. Empirical reviews had also revealed that there were neither specific related studies on the examination of capacity of personnel in the management and care of procurement records in the Tanzania PEs, determination of the extent of storage space and equipment and facilities to facilitate procurement recordkeeping in the Tanzania PEs, nor examination of the extent of security and safety measures in managing procurement records in the Tanzania PEs. Finally, the reviewed studies have largely failed to significantly examine the adequacy of storage space, equipment and facilities, and sufficiency of security and safety measures in the management of procurement records for the Tanzania procurement recordkeeping systems.

The empirical literature reviewed demonstrates that there are a number of empirical studies conducted on the public records management and few on the procurement records management perspectives. However, there is no single comprehensive study that specifically addresses the central issue and related matters of the factors influencing the management of procurement records in the context of Tanzania PEs. Generally speaking, there is no single study that specifically studied management and care of procurement records in an attempt to either assess or determine the successes or failures of the procurement records and archives management practices within the context of the Tanzania procurement recordkeeping systems.

For instance, Ndenje-Sichalwe (2010) studied the extent of records management in fostering accountability in Tanzania; whereas, Ndemanyisho (2014) had studied practices of records management in the revenue collection in Tanzania. These studies were not specific on the procurement records management practices despite of depicting the reality of the situation on the RAM practices in the Tanzania public sector management systems. Studies by Stephano (2014) and Naluyaga (2014) were specific case studies toward assessing the compliance with the effective recordkeeping. Being qualitative case studies conducted in the Tanzania PEs, the Office of the Registrar of Political Parties and Kisarawe District Council; thesecase studies were specific on assessing regulatory compliance with the given parameters as provided in the procurement audits according to the requirements of the public procurement legislation and the attendant regulations on the four procurement recordkeeping parameters. In principle, the studies had empirical gaps therein.

The reviewed empirical literature demonstrate that analytical construct variables for factors influencing the management of procurement records in Tanzania PEs were not adequately identified, established and determined as the reviewed studies have been focused on either successes or failures of the general RAM practices. Mostly, the reviewed empirical literature before this study have revealed that the dominance of records life-cycle and records continuum models have left a theoretical gap to be filled. Likewise, reviewed studies have indicated a predominance use of case study designs. Hence, there are clearly identified gaps in theory, study designs, and methodological approaches and strategies therein that need specialised inquiries to explore their use and applicability.

Indeed, as a known realism phenomenon, very little research has been conducted on the specific topics of procurement records management in the Tanzania public procurement system. Little is also know on the effectiveness of the Tanzania PEs in implementing efficient procurement records and archives management systems. This scenario has left pertinent research gaps that this doctoral study was sought to address by doing an assessment of the factors influencing the management of procurement records in the Tanzania PEs by using both qualitative and quantitative methods through the phenomenology of realism. This study has therefore used institutional theory and resource based theory (RBT) by integrating the key elements of the theory of constraints (TOC)in the *new institutional economics*(NIE) dimensions instead of the dominant RAM and RAMS models, principles, and philosophies.

## 2.9 Chapter Summary

The literature review was focused on providing the theoretical and empirical foundation for this study. The related theories have been identified and triangulated with respect to the specific research objectives. The theories were used to set the research within the perimeters of theoretical and conceptual frameworks. The review has explored the existing literature to ascertain what has been studied, written or otherwise published on the management of procurement records, as public records. This was made in order to wholly understand and comprehended the procurement recordkeeping practices and the associated issues with respect to management of procurement records. This was entirely made in trying to link them with the available national, regional (ESARBICA) and international (AS, ICA, IRMT, ISO, UNCAC, and UNESCO) literature on the subject matter of this study. In this literature review, critical information analysis was conducted. The review has provided scholarly, academic, and professional critical analysis and comparisons. In agreement with Krishnaswamy, Sivakumar, and Mathirajan (2009); the scholarly, academic and professional reviews made in this chapter have been made part of this doctoral thesis in an attempt to further the understanding of the all-round conceptualisation of the study in assessing the factors influencing the management of procurement records in the Tanzania PEs.

## CHAPTER THREE
## RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter describes the research methodology in attempting to answer research questions and address research objectives. The chapter begins with an overview of research philosophy that explains philosophical paradigm, and ontology and epistemology of realism. The chapter provides the detailed descriptions of research design, approaches and strategies for data collection, whilst explaining the rationale behind the choices made in the approaches and strategies. The descriptions of the study area, population, and sampling and sample size have been herein provided. The chapter provides for the issues of data collection and analysis, validity and reliability, and research ethical issues.

### 3.2 Research Philosophy

This study has adopted and used the philosophical perspectives of institutional theory (March & Olsen, 1989; Scott, 1994; Scott, 2004; Scott, 2008) and resource based theory (Penrose, 1959; Barney, 1991; Bontis, 1999; Barney, 2001; Zhuang &Lederer, 2005; Grant, 2008) by integrating key elements of the theory of constraints (Goldratt, 1984; Goldratt, 1990; Goldratt & Cox, 1992; Ruhl, 1996; Ruhl, 1997). The study used institutional theory in assessing the regulatory and institutional frameworks with respect to management of procurement records in the Tanzania PEs. Whereas, resource based theory integrated with the key elements of the theory of constraints was applied in examining the institutional resources and constraints that play significant role in influencing the management of procurement records in the Tanzania PEs. Philosophically, the study adopted the ontology and epistemology of realism as research paradigm.

#### 3.2.1 Ontology and Epistemology of Realism

In practice, realism philosophy provides a world view in which an actual social phenomenon can be ascertained even though it is imperfect and probabilistically comprehendible (Merriam, 1988; Tsoukas, 1989; Guba & Lincoln, 1994; Perry, Alizadeh, & Riege, 1997). Practically, for realists the means to determine [and examine] the reality of a social phenomenon is through the triangulation of cognition processes (Christie, Rowe, Perry, & Chamard, 2000; with annotation). Indeed, as generally accepted, a perception for realists is a window on to the reality from which a picture of reality can be triangulated with other perceptions (Perry *et al*., 1997).

Table 3.1: Ontological assumptions of realism

| Real Domain | Actual Domain | Empirical Domain |
|---|---|---|
| ***Mechanisms*** | ***Events*** | ***Experiences*** |
| **Policy, regulatory and institutional frameworks on management of procurement records** | Components of management of procurement records | Extent of either proper or otherwise in management of procurement records in the PEs |

**Source:** Slightly adapted from Bhaskar (1997) and modelled by the author for the pursuit of this study.

Table 3.1 shows the domains of ontology of realism. First, the real domain that consists of the mechanisms that produce events, in which generative mechanisms or causal powers exist independently with a tendency to produce patterns of observable events under contingent conditions. Second, is the actual domain, in which patterns of events occur, whether they are observed or not. Third, the empirical domain, in which experiences can be observed (Bhaskar, 1997; Outhwaite, 1983; Tsoukas, 1989). In this study, the empirical domain is the management of procurement records in the Tanzania PEs which is explained by the actual domain.

### 3.2.2 Thrust of Reality on Ontological Perspective

The thrust of this assessment, as in Outhwaite (1987), was and still is the development of idiographic knowledge affixed to the procurement records management practices so as to comprehend the policy, regulatory and institutional frameworks and institutional resource requirements and the meanings of the internal and external management of procurement records in the Tanzania PEs. Ontology is the essential assumptions that are made regarding the basic elements of reality

(Parkhe, 1993) and deals with the nature of reality whilst epistemology deals with the questions about how and what is possible to know (Chia, 2002).That is, the configuration and character of reality (Guba & Lincoln, 1994).

Ontology deals with reality whereas epistemology examines the character and basis of knowledge (Parkhe, 1993). Methodology therefore should be, as accepted by Parkhe (1993) and Guba and Lincoln (1994), the procedure to be carried out by the researcher to dig into the reality. Ontological assumptions are thus concerned with what we believe constitute social reality and epistemology refers to valid ways of gaining insights into the social reality within a particular ontological perspective (Blaikie, 2010). The reality of significant role of the factors influencing the management of procurement records in the Tanzania PEs was determined, examined and realised. The influencing factors were identified, established and their marginal effects determined and assessed respectively. This was the essence of the envisaged philosophy of realism ontology in assessing the factors influencing the management of procurement records in the Tanzania PEs.

## 3.3 Research Design

This study adopted a mixed research design. There were exploratory case study and survey study methods used sequentially. Principally, exploratory case study was sought to be qualitative whilst survey study was considered quantitative. The study sought for a mixed research design inan attempt to integrate qualitative and quantitative research and data (Creswell, 2014). The study commenced with an exploratory case study in which the procurement records management and related issues in the context of the Tanzania PEs were explored. The exploratory case study was aimed at defining and aligning the structured questionnaire for the subsequent study (in this case, survey study). After exploratory case study, a survey of PEs in the five deliberately designated regions was conducted. The adoption of a combined exploratory case study and a survey study was also adopted and used by Tundui (2012). Also, such a method in a mixed research design was successfully used by Mwasalwiba (n.d). A mixed methods approach includes the use of induction (or discovery of patterns), deduction (testing of hypotheses), and abduction (uncovering of and relying on best set of explanations for understanding one's results) (Johnson & Onwuegbuzie, 2004). This design allowed the study to make use of a variety of sources of information, hence increasing reliability (Mwasalwiba, n.d). Principally, when used in combination; qualitative and quantitative methods complemented each other and allowed for a more robust analysis (Miles & Huberman, 1994; Creswell, 2014).This study needed much of the robust analysis. Therefore, the adoption of a mixed research design was an inevitable option.

### 3.3.1 Exploratory Case Study

The exploratory case study was conducted in Dar es Salaam. Fifteen PEs were selected to meet the following criteria: fully established PMUs; having functional internal audit units; having user departments that were actively involved in managing procurement related activities of which management and care of procurement records were envisaged; had been generating multitude of procurement records in the course of procurement business processes and their related activities; and had been audited between 2012 and 2016 respectively. Under explorative case method, where qualitative data were sought; the study used in-depth interviewing method for data collection with the help of in-depth interview protocol with an interview guide. Here, the in-depth comprehension of the procurement RAM and RAMS perspectives were envisaged rather that the breadth of the two perspectives. This study used exploratory case study research, which was aimed at refining and defining the questions and statements of the questionnaire for the subsequent survey study. As suggested by Yin (2003), exploratory case study was considered sufficient to determine the feasibility to the desired procedure. In an attempt to understand an inside out of the factors for proper management of procurement records in the Tanzania procuring entities exploratory case study was considered whereby 15 procuring entities were sought for study and analysis thereafter.

### 3.3.2 Survey Study

After the exploratory case study, the structured questionnaire was developed, tested and piloted. Thereafter, survey study was conducted to administer the structured questionnaire. The survey study was conducted in five regions of Tanzania mainland. The designated regions were inter alia Dar es Salaam, Dodoma, Morogoro, Coast Region, and Tanga. The procuring entities (PEs) to be studied were identified and selected for the survey. To each PE it was sought to have at least one respondent to be administered with the structured questionnaire. The envisaged respondents were the heads of PMUs and heads of user departments who are directly involved in the management of procurement records due to their jurisdictional functions in the management of procurement business transactions.

### 3.3.3 Rationale of Using Mixed Research Design

This study needed both qualitative and quantitative data. Due to its nature therefore, a mixed research design was an inevitable adoption. Most quantitative methods do not deal with a rich description of data; hence, they cannot come out with explanations and interpretations of the phenomenon understudy (Ivankova, Creswell, & Stick, 2006). That is, in order to fully and completely attempt the envisioned specific research objectives for this study it was obliged to adopt mixed research methods. Essentially, qualitative methods in this study were alternated with the quantitative methods so as to triangulate the methods and data respectively. Triangulation was required to raise the researcher above personal bias that stems from using single method. This was the essence of integrating qualitative and quantitative research data into a single study (Creswell, 2014).

The credibility of the data gathered in research is enhanced if it can be confirmed from several sources (Guba, 1981). By triangulating data collected from several sources, the researcher was able to assess how procurement records were created, received, used, maintained, archived, disposed or otherwise managed and cared in the designated Tanzania PEs in the context of the study scope and objectives thereto. Since triangulation of data was required, it was envisioned to triangulate methods and data sources respectively (see Miles & Huberman, 1996; Mason, 1996; Creswell, 2014).

### 3.4 Study Area

This study was conducted in the PEs found in the Tanzania mainland. Tanzania (mainland and isles) has got at least 26 administrative regions. To conduct a survey of PEs for many regions would have been ideal. But, it would have not been possible to survey all PEs within and across the entire Tanzania administrative regions due to the size of the country, research logistics, financial limitations, and time constraints. Therefore, the study was confined to PEs found within and across five conveniently selected regions. These regions were designated to be Dar es Salaam, Dodoma, Morogoro, Coast Region and Tanga. The Dar es Salaam city was deliberately considered to be the focal point of this particular study. Dar es Salaam, as a focus, had been considered due to its metropolis nature. Despite Dodoma being the government administrative city, Dar es Salaam remains to be the business capital whereby at least 193 (approx. 41%) of the Tanzania PEs are found therein. Whereas Dodoma, Morogoro, Coast Region, and Tanga regions were considered due to the fact that they had PEs that have been audited between 2012 and 2017 and they were found to have weaknesses in the procurement recordkeeping.

### 3.5 Target Population

Geographical, time, human and financial constraints always made it unpractical to study the entire population for any intended study. Therefore, researchers do study a representative subsection of a precisely defined population in order to make inferences about the whole population (Silverman, 2000; Silverman & Marvasti, 2008). It was impossible to study the whole population of PEs that have been scattered throughout Tanzania. Therefore, considering a portion of the population as a representative sample was necessary and sufficient condition for this study.

The target population for this study comprised of all PEs in Tanzania (mainland). Moreover, the study targeted all PEs that had been audited by the PPRA between

2012 and 2016 because they were recorded and documented with recurring weaknesses in the components of procurement recordkeeping (URT, 2014a, 2015a, 2016a, 2017a). However, during literature review it was identified that problems in recordkeeping within the Tanzania PEs have been observed since procurement audits were commissioned in 2007 (first PPRA Audit, 2007). Therefore, PEs that had been audited between 2007 and 2011 were considered for analysis in order to meet the minimum sample size requirements for the study depending on the number of parameters under the study (Kline, 1994; Kline, 2005).

### 3.6 Units of Analysis

The units of analysis for this study are the Tanzania PEs. Procuring entities (PEs) are public institutions established by the regulatory and institutional frameworks within the Tanzania public sector management spectrum. Through the PMUs and the user departments within and across Tanzania; the PEs are required to maintain and archive records of the procurement business processes and the related activities. The units of inquiry in this study are the heads of PMUs, heads of departments and auditors that were limitedly found within and across the PEsthat are involved in the management of procurement business processes and activities therein.

Elements and units of analysis are often the same in a study, but they can also be different (Babbie, 2004). Element of a study is that unit of which a population is comprised and which is selected in a sample, distinguished from units of analysis, which are used in data analysis (Babbie, 2004). The key issue in selecting and making decisions about the appropriate unit of analysis is to decide what it is you want to be able to say something about at the end of the study (Patton, 2002). In this study, the researcher wanted to assess the factors influencing the management of procurement records in the Tanzania PEs. Therefore, the units of analysis are the Tanzania PEs. Where else, the intended units of inquiry are the heads of PMUs, heads of departments and auditors within and across the studied Tanzania PEs.

## 3.7 Sampling and Sample Size

This section the subsequent subsections describe the sampling technique and the sample size for this doctoral study.

### 3.7.1 Sampling Technique

This study wanted to study and say something on the Tanzania PEs. However, due to lack of a comprehensive sampling frame, regulatory and institutional challenges culminating the PEs selection; the study had decided to adopt the no probability sampling technique. The sample elements (PEs) for this study were therefore judgementally selected. These were inter alia the ministries, independent departments, and executive agencies (MDAs), regional secretariats, local government authorities (LGAs), and public authorities and other bodies (PA&OB).The units of inquiry were selected by considering professional knowledge, technical skills, and inherent institutional values to provide the intended requirements of the questions and the envisioned responses that required sense of unquestionable professionalism. It was a sampling based on the specialisation and expertise of the respondents on the subject matter of the research in question. Judgemental selection was the best choice.

### 3.7.2 Sample Size

Despite the fact that, nonprobability sampling may produce a sample that is not representative (O’Leary, 2004); however, in this study, the selected sample elements (PEs) were established institutions that are mandated to be compliant with the same regulatory and institutional frameworks. Therefore, whether the study selected sample elements (PEs) judgementally or otherwise, the selected PEs shall always be the representative of the entire set of PEs in terms of regulatory and institutional compliance with the public procurement legislation (Cap. 410) and the RAM legislation (Cap. 309). Therefore, for the qualitative in-depth interviews it was initially proposed and decided to interview fifteen key informants in the fifteen procuring entities found in Dar es Salaam (Table 3.2).

Table 3.2: Purposive sample for key informants

| No. | Procuring Entity Categories | PEs | Informants |
|---|---|---|---|
| 1 | Ministries, Independent Departments and Executive Agencies (MDAs) | 5 | 5 |
| 2 | Regional Secretariats (RS) | 2 | 2 |
| 3 | Local Government Authorities (LGAs) | 4 | 4 |
| 4 | Public Authorities and Other Bodies (PA&OB) | 4 | 4 |
| | **TOTAL** | **15** | **15** |

**Source:** Field data, 2017

Selection of key informants was based on the assumption that they were envisioned to provide rich data and information on the specific interview questions in the in-depth interview guide. The deliberately selected fifteen key informants, by default, were sought to be internal auditors who by virtue of the public procurement legislation are supposed to provide independent opinion on the compliance of the PEs with the procurement legislation. Procurement records management is one of the indicators Tanzania PEs need to comply with. However, this study had encountered more than 15 key informants due to the dire need of expertise and experiences from individuals who: (1) deal with multitude of procurement records; and (2) those who are [were] doing procurement audit on behalf of the PPRA.

This study sought to use factor analysis. Therefore, the sample size for the survey study was conveniently set at 200 PEs which is almost 42.2% of the total estimated PEs in Tanzania (mainland). This sample size has considered the requirement of the minimum sample for undertaking factor analysis (Kline, 1994; Bryman & Cramer, 1997; Kline, 2005, Foster, Barkus, & Yavorsky, 2006). The sample elements were judgementally selected since none of them had a guarantee of being included into the sample due to the fact that PEs to be included were supposed to qualified for the selection criteria. Judgemental selection was used to select the elements of this sample. Simple random sampling would have been ideal to ensure representativeness to avoid bias. However, the nature of the population of Tanzania PEs and the study area could have not guaranteed such a sampling technique whatsoever.

Probabilistic sample has some statistical properties that allow the researcher to make inferences about the population based on the results obtained from the sample

(Orodho, 2005). However, no inferences were sought out of this study. This study did not include sample proportion for each category of PEs as contrary to Zikmund (2010). In this study, the sample elements were judgementally sampled from the list of PEs found in the five designated regions. Ultimately, the units of analysis were obtained by using judgemental sampling. Like the units of analysis, the units of inquiry were obtained by the same technique. That is, each unit of analysis had at least one unit of inquiry. The survey study was expected to have an initial optimal sample size of at least 200 PEs for the survey in which at least 200 respondents were sought for the questionnaire administration.

The sampled procuring entities were judgementally and arbitrarily clustered into the designated five regions (Table 3.3). It was arbitrarily decided that Dar es Salaam should have 130 PEs (65.00%) as most of the PEs are almost clustered around the city centre. The selected PEs had been judgementally considered. These arrangements had enabled the researcher an easy access and therefore less time and cost for the in-depth interviewing and questionnaire survey administration.

Table 3.3: Sample PEs by regions

| No. | Regions | Targeted PEs | % | Actual PEs | % |
|---|---|---|---|---|---|
| **1** | Dar | 130 | 65.00 | 75 | 35.50 |
| **2** | Dodoma | 35 | 17.50 | 13 | 6.50 |
| **3** | Morogoro | 23 | 11.50 | 12 | 6.00 |
| **4** | Coast Region | 5 | 2.50 | 3 | 1.50 |
| **5** | Tanga | 7 | 3.50 | 5 | 2.50 |
| **TOTAL** | | **200** | **100.00** | **108** | **52.00** |

**Source:** Field data, November to December 2017

Table 3.3 is evident that actual number of sample elements (PEs) encountered in the designated regions was108 (52.00%).

## 3.8 Type and Sources of Data

This section of the thesis and subsections thereto describes types and sources of data particular to this study.

### 3.8.1 Types of Data

This study needed both primary and secondary data respectively.

### 3.8.2 Sources of Data

Primary data were directly obtained from respondents through the use of in-depth interviews and structured questionnaires. Secondary data were obtained from existing documents to the known sources that were identified during literature review (Table 3.4). The approach adopted in the data collection for the management of procurement records followed a standardised assessment routine as adopted by the PPRA. First, the PEs had to be identified. Second, assessments of the PEs regulatory and institutional arrangements on procurement records management and care were done. Third, examination of the procurement recordkeeping systems in place was conducted. In-depth interview protocol (Appendix 1), interview guide (Appendix 1A) and structured questionnaire (Appendix 2) were designed, developed, piloted and used for the assessment of the attributes of the procurement recordkeeping practices in compliant with the regulatory and institutional requirements.

## 3.9 Data Collection Methods

This section discusses data collection methods and the instruments used for this study. Data collection methods used comprised of the in-depth interviews (through the interview guide), structured questionnaire, and documentary reviews and analysis. The use of multi-methods or triangulation is encouraged in empirical studies (Creswell, 1994; Patton, 2002; Yin, 2003; Denzin, 2009). By using a variety of sources and resources, the researcher built on the strengths of each type of data collection, whilst minimising the weaknesses of any single approach (Patton, 2002).

### 3.9.1 In-depth Interviews

In-depth interviews were conducted with the heads of internal audit units, heads of PMUs, and consultants. In-depth interviews involve talks with key respondents who have enough expertise (Cauvery, Nayak, Girija, & Meenakshi, 2010; Davidson, 2013). In-depth interviews are excellent tools in deeply exploring the respondent’s feelings and perspectives on a subject (Guion, Diehl, &McDonald, 2011).In this particular study, in-depth interviews were conducted with individuals who were either experienced in the procurement management business activities or are doing regulatory procurement audits as required by the procurement legislation.

In-depth interviews were conducted by the help of the in-depth interviewing protocol (Appendix 1) through interview guide (Appendix 1A). This technique is a widely used and accepted method for gathering data from respondents within their domain of expertise (Hsu & Sandford, 2007). The technique is designed as a group communication process which aims to achieve a convergence of opinion on a specific real-world issue. The in-depth interview process has been used in various fields of study such as programme planning, needs assessment, policy determination, and resource utilisation to develop a full range of alternatives, explore or expose underlying assumptions, as well as correlate judgments on a topic spanning a wide range of disciplines (Hsu & Sandford, 2007; Cauvery *et al.*, 2010). Generally, this study explored some policy issues on procurement recordkeeping perspectives.

In-depth interviews with [professional and/or technical] experts have been used with great success as an alternative to questionnaires (Gordon, 2008; with annotations). In this study, key informants were first identified, invited to participate, and assured of their anonymity and confidentiality. Appointments were made at the convenience of the interviewees and the interviewer. The in-depth interviewing protocol (Appendix 1) was specifically applied to elicit judgments. This study had used a single-round interview (as agreed by Gordon, 2008). This exercise has not been designed to be statistically significant but rather to elicit ideas that could be important to subsequent analyses. Therefore, there was no need to presenting feedback information to key informants about the emerging consensus that was derived from the interviews. The in-depth interviews were excellent means of obtaining such ideas. Feedback could have only been introduced if two rounds of interviews were employed (Gordon, 2008).

In-depth interviews encourage a lot of qualitative, descriptive and analytical narratives. Narratives are oral accounts of personal experiences told by the respondents to the researcher, which revealed some themes, which are explored in this research (Hoyle, Harris,& Judd, 2002).In this study, in-depth interviews had had a good number of qualitative, descriptive and analytical narratives. However, interviews have shortcomings which include distortions due to a number of factors such as bias, emotional state of the interviewees at the time of the interviews and lack of awareness (see Patton, 2002). In this study, the researcher had managed these shortcomings by making sure that the interviews were done when the time and settings were convenient to both the interviewer and the interviewees.

The interview environmental settings were conveniently made to facilitate swift questioning and responses thereto. Factors that would have distorted smooth interviewing were identified and eliminated altogether. These inter alia included the sense of interview phobia due to interviewees' anonymity and the respective confidentiality on the recorded and documented procurement record files. However, the researcher assured the interviewees that the study was not proposed to deal with the contents of the records; but, on how they were kept, managed and cared. On the matters and related to issues of anonymity, interviewees were strictly assured that they shall always be treated as anonymous during, after, and beyond the study.

#### 3.9.1.1 In-depth Interview Protocol

The in-depth interview questions were specifically designed, structured and developed by the interviewer to address the general research objective and therefore meet specific research questions. To enable the researcher to effectively and efficiently conduct the in-depth interview questioning, the in-depth interview protocol was developed and consistently used throughout the interviewing phase. The in-depth interview questions were divided into three parts, namely: Part 1; Part 2 with sub parts (Part 2a; Part 2b; Part 2c; Part 2d); and Part 3 respectively (Appendix 1; Appendix 1A). Each part represented specific research questions derived from specific research objectives.

#### 3.9.1.2 Coding of In-depth Interview Respondents

The interviewed respondents for this study were deliberately and arbitrarily coded. Codes were used to give the respondents their identities envisaged by the interviewer. Code is an abbreviation – a number or an alphabet (or *alphanumeric*) – which is assigned by the researcher to every schedule item and response category (see Cauvery *et al.*, 2010). A code in qualitative analysis is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldana, 2012). The researcher in this case has used *alphanumeric* codes to refer to the various interviewees used during the in-depth interviews and reporting. The following codes were used to signify the encountered interviewees:

1. Interviewees from the list of selected heads of Internal Audit Units were coded as HIAU (with subscripts 1 to 15)
2. Interviewees from the list of selected heads of Procurement Management Units were coded as HPMU (with subscripts 1 to 3)
3. Interviewees from the list of selected consultants (the PPRA procurement auditors) were coded as CONS (with subscripts 1 to 2)

In case, within the text where direct verbatim transcripts were needed, the codes were used as the sources of either data or information. The codes were and still are written as: $HIAU_i$ where $i$ = 1, 2, 3…15 representing fifteen heads of internal audit units; $HPMU_i$ where $i$ = 1, 2, and 3 representing three heads of PMUs; and $CONS_i$ where $i$ = 1, 2 representing two PPRA consultants (procurement auditors).

#### 3.9.1.3 Conduct of In-depth Interviews

This study needed a complete understanding of the realism of the records [and archives] management (RAM) practices in the context of procurement records management within and across the Tanzania PEs. The needed comprehensive understanding required deep exploration (Guion *et al.*, 2011). In order, therefore, to explore the phenomenon under this study; it was decided to effectively use the deep (in-depth) probing interviews. The envisioned in-depth interviewing protocol [with slight modifications] adapted the Kvale (1996) stages of conducting the in-depth interviews. Table 3.4 describes the protocol in conducting the in-depth interviews through thematic analysis as adopted by this study.

Table 3.4:Protocol in conducting in-depth interviews

| Protocol stage | Protocol | Protocol descriptions |
|---|---|---|
| **Stage 1** | Thematizing | 1. The purpose of the in-depth interviews was clarified.<br>2. It was purposively decided to use it to assess the management of procurement records in the Tanzania PEs institutional arrangements.<br>3. The in-depth interviews were required to interview internal auditors within the PEs, heads of PMUs, and consultants who are doing procurement audits.<br>4. Themes were identified and prioritised before going to the field. |
| **Stage 2** | Designing | 1. The way to elicit data and information was designed.<br>2. The in-depth [Delphi] interviewing protocol and the in-depth interview guide were developed, piloted and tested.<br>3. Key topics and questions were formalized in a plan for data and information.<br>4. The interview guide focused on topics that were important to explore, maintain consistency across interviews with different respondents, and staying on track during the interviewing process. |
| **Stage 3** | Interviewing | 1. Before the beginning of the actual interviews, it was important to make introductions, explain the purpose of the study, and put the respondent at ease.<br>2. The respondents' permissions were sought to audio tape [record] the interview sessions and take a great deal of notes.<br>3. The interviewer [PhD candidate] carefully listened and observed as he guided the respondents through the conversations until all of the key topical issues on the interview guide were explored and exhausted. |
| **Stage 4** | Transcribing | 1. The recorded interviews [audio and written texts] were transcribed by creating verbatim texts for each interview against each question.<br>2. The interviewer's side notes were also included in the transcription, and properly labelled as annotations and/or emphasis within the summarised snapshots. |
| **Stage 5** | Analysing | 1. The interview transcripts were analysed by reading the interview transcripts to identify the captured themes.<br>2. The interview transcripts were aligned with the |

| Protocol stage | Protocol | Protocol descriptions |
|---|---|---|
| | | identified themes.<br>3. The preliminary analysis was conducted in the field whilst the interviewing was on-going in order to avoid missing peculiar findings on the pre-identified themes.<br>4. The final analysis was organised based on the specific study objectives and questions.<br>5. If the interviews raised more questions than the interview answers, more probing questions were initiated to carefully examine the issues at hand. |
| **Stage 6** | Verifying | 1. The credibility of data and information was verified by cross checking and cross examining the data and information gathered. Triangulation of data sources was used for this purpose.<br>2. Triangulation involved using multiple perspectives in interpreting a single set of data and information. Here data and information were triangulated between HIAUs, 15 HPMUs from the studied PEs, $HPMU_1$,$HPMU_2$, $HPMU_3$, $CONS_1$, and $CONS_2$. When these participants said the same thing in the interviews, then the findings were considered valid. |
| **Stage 7** | Reporting | 1. This study was not proposed to report back the in-depth interview findings to the interviewees (as agreed by Gordon, 2008).<br>2. The findings of the in-depth interviews were required for the assessment of the factors influencing the management of procurement records in the Tanzania PEs. Therefore, the findings [results] of the in-depth interviews were used to provide verifiable verbatim transcripts which are found in the identified themes throughout Chapter Four (Presentation of Findings) in this thesis. |

**Source:** Slightly adapted from Kvale (1996) modified and modelled by the author (2017/2018) for the pursuit of this study

The interview arrangements were sought as the nature and setting of the in-depth interview questions were professionally topical and typical that required professional knowhow, skills, competence and inherent wisdom to attempt. In principle, the in-depth questions required comprehensive understanding of the procurement records management practices happening in the Tanzania procurement recordkeeping systems. The answering of the in-depth questions also required the respondents to have the basic knowhow, skills and competences on the management of procurement transactional processes and activities or matters and related issues.

### 3.9.2 Structured Questionnaire

This study used structured questionnaire. Questionnaires are data collection instruments that are envisaged for survey research method. There was structured questionnaire that was specifically designed, developed, tested and piloted to collect opinions from the respondents. In this study, the questionnaire had five sections (parts), namely A, B, C, D, and E (Appendix 2). The questionnaire was administered to at least 200 selected respondents working within and across the PMUs and user departments of the sampled Tanzania PEs.

### 3.9.3 Documentary Search and Reviews

This study had used secondary data from various documentary evidences. Documents comprise written material and other documents from the institutions under investigation (Patton, 2002). Documentary search and reviews have given the researcher insights into the procurement records and archives management systems and their associated activities within the procurement business processes and activities. Unlike the respondents, who are aware of being studied, documents have the advantage of unobtrusive and non-reactive measures (Hoyle *et al*., 2002). Documentary search and reviews, due to its dual purpose, provided a complete overview of the RAM regulatory and institutional arrangements, records management programmes and their components (see Crockett and Foster, 2004). The documents that were reviewed and analysed included but not limited to those found in Table 3.5.

Table 3.5:Reviewed and analysed documents

| No. | Document title(s) | Year(s) | Reviewed data/information |
|---|---|---|---|
| **1** | IRMT Tanzania Case Reports | 1980s to 2000s | Assessment of records and archives management practices in Tanzania |
| **2** | The Public Procurement Act No. 3 of 2001 and attendant regulations | 2001 | Requirement for procuring entities to maintain a record of procurement proceedings |
| **3** | The Records and Archives Management Act No. 3 of 2002 and attendant regulations | 2002, 2007 | Provisions on records management process and activities from creation, use and maintenance to their ultimate life-cycle |
| **4** | The Public Procurement Act No. 21 of 2004 and attendant regulations | 2004 | Requirement for procuring entities to maintain a record of procurement proceedings |
| **5** | Tanzania Country Procurement Assessment Review – CPAR | 1996 to 2007 | The state of affairs of management of procurement records after the CPAR 1996 and 2007 |
| **6** | The PPRA procurement compliance and performance audit reports | 2007 to 2016 | Management of procurement records compliance levels and weaknesses therein |
| **7** | The Controller and Auditor General(CAG) annual general reports | 2007 to 2017 | Audit opinion on management of procurement records for the Tanzania procuring entities |
| **8** | The National Records and Archives Management Policy of 2011 | 2011 | Records and archives management policy issues |
| **9** | The Public Procurement Act No. 7 of 2011 as amended (Act No. 5, 2016) and attendant regulations, 2013 (as amended in 2016) | 2011, 2016 | Requirement for procuring entities to maintain a record of procurement proceedings |
| **10** | The National Archives of Tanzania Fifty Years After Wright's Report | 2015 | The development of the national records and archives department and the associated challenges |

**Source:** Adopted and slightly adapted from reviewed documents (2018/2019).

By using these documents (Table 3.5); the researcher searched, reviewed and analysed key issues, contents and themes that are categorical and topical with respect to the specific objectives of this study. The established themes (sections) and subthemes (subsections) through content and thematic analyses were mapped onto the envisaged construct variables of the specific objectives of this study to be found in Chapter Four and throughout this thesis where discussions are provided therein.

### 3.10 Data Analysis Methods

The study needed both qualitative and quantitative data analyses due to the nature of the given specific study objectives. However, qualitative data analysis methods prevailed over the quantitative data analysis due to the nature and complexity of the regulatory and institutional frameworks over the RAM and RAMS being qualitative and analytical in nature. Therefore, this is the essence of the adopted ontology and epistemology of realism paradigm (Table 3.1).

### 3.10.1 Qualitative Data Analysis

In this study, categorical themes and subthemes were pre-determined and used to describe and explain research construct variables found in the study objectives. This involved establishing the chronology of major procurement records management issues with respect to the assessment of the factors influencing the management of procurement records in the Tanzania PEs. Qualitative data analysis was done by using mixed analysis methods. These were, inter alia, thematic analysis, qualitative descriptive analysis, policy analysis, and content analysis in an exploratory case analysis for qualitative data. Primary data analyses for the in-depth interviews were done by thematic analysis, qualitative descriptive analysis, and policy analysis. For the secondary data from documentary search and reviews, qualitative content analysis was applied. However, the basic problem of content analysis was a conscious or unconscious process of observing and reporting only facts that fit some preconceived idea/ideas (Jahoda, Deutsch, & Cok, 1958). In qualitative content analysis, it involved a process of condensing raw data into categories or themes based on the valid inference and interpretation (Ritchie & Lewis, 2003).

#### 3.10.1.1 Organising Qualitative Data

Qualitative data analysis is usually dependent on interpretation (Alhojailan, 2012). Therefore, there is no distinction between data collection and its analysis in qualitative research (Cassell & Symon, 1994). Fundamentally, this thesis is a product of qualitative and quantitative studies respectively. In terms of qualitative data analysis there are three principles for qualitative data analysis that were followed in order to result in more efficient outcomes (Denscombe, 2007). These principles are: compacting *extensive* and *diverse* raw data into a *succinct* structure that was achieved by organising oral and written data into tables for *clarity* and *simplicity* which provided the researcher the opportunity to *identify*, *compare* and *determine* the data upon which to focus; making [establishing] the *relationship* between the *research objectives* and the *summary* clear that mostly fit when the objectives of any qualitative study considered the clear drivers responsible for its research and analytical methodologies; and concluding, by *improving* the *conceptual basis* of the research (Denscombe, 2007; with emphasis and annotations).

This study, due to its nature, has large amounts of collected qualitative evidences (both data and information) on the research questions. Therefore, there is no distinction between data collection and its analysis (Cassell & Symon, 1994) whilst presenting analysis and interpretations of the findings on the specific research questions. Thus, as supported by Cohen, Manion, and Morrison (2007, 2011), data analysis in qualitative research is distinguished by merging of analysis and interpretation. Therefore, there is an overlap of analysis and interpretation to reach a conclusion (Alhojailan, 2012). Themes and subthemes were identified and analysis and interpretation of qualitative data were based upon the pre-established themes (Boyatzis, 1998). In this study, diverse qualitative data were compacted into snapshots extracts and structures (such as tables) for clarity, relationships between research objectives and data summaries were made clear, and conclusions were derived depending on the conceptual basis of the study.

#### 3.10.1.2 Organising Qualitative Thematic Findings

The organisation of the qualitative findings involved the identification of themes that were pre-established and aligned with specific study objectives. Thematic analysis, as used in the current study, allowed the researcher to identify the relevant and related themes, manifested subthemes, and the emergent issues that were aligned with the responses of the interviewees. In this study, specific study objectives were aligned and designated into themes. In thematic analysis, themes could be obtained from literature, or prior studies…, developed in advance (as key thematic ideas), or amended during analysis (Boyatzis, 1998). Particularly, in this particular study themes were developed in advance out of the specific study objectives. It was decided in advance to develop key thematic ideas out of the specific study objectives (Table 3.4; see Stage 1).

The views of the interviewees representing the transcribed verbatim snapshots of the responses for the envisaged in-depth interview questions were provided around the established themes and manifested subthemes thereto. These themes allowed the development of descriptions of qualitative analytical phenomena for the assessment of the factors influencing the management of procurement records in the Tanzania PEs. The themes and their subsequent subthemes derived there from cover four broad categories. Themes were arbitrarily coded as $Th_1$, $Th_2$, $Th_3$, and $Th_4$. The themes are inter alia:

1. $Th_1$: Capacity of personnel in managing procurement records;
2. $Th_2$: Storage space for procurement recordkeeping;
3. $Th_3$: Equipment and facilities for procurement recordkeeping; and
4. $Th_4$: Security and safety measures in managing procurement records.

The four themes ($Th_1$, $Th_2$, *Th3*, and $Th_4$) itemised here-in-above sufficed to directly reflect the specific study objectives. Essentially, all four themes have been expounded to capture the interviewees' responses on the needed qualitative data. The generality of these themes and subthemes derived thereto is to attempt presenting the findings based on the qualitative analysis over the envisaged attempt toward the given specific study objectives and therefore attempting to answer specific research questions and thereafter attempt to answer the general research question.

### 3.10.2 Quantitative Data Analysis

The questionnaire survey method yielded data that were amenable for quantitative analysis. Therefore analysis began with data coding and data entry into the Statistical Package for Social Sciences (SPSS). The SPSS data file was created and saved for further use. The SPSS was considered appropriate since it allowed the researcher to follow clear set of quantitative data analytical procedures that lead to the increased data validity and reliability and demonstrated the relationship between the research construct variables and their associated attributes. The SPSS assisted in producing frequency tables for descriptive analysis. Data were also cleaned for accuracy and consistence. The data were later on exported to the STATA computer software whereby the STATA data file was created and saved for the logistic regression analysis and finally determination of marginal effects thereto.

#### 3.10.2.1 Logistic Regression Model

It is an established phenomenon in statistics that, logistic regression analysis studies the association between a categorical dependent variable and a set of independent (explanatory) variables. The name logistic regression is used when the dependent variable has only two values, such as "0 and 1" or "Yes and No". This study, has adopted logistics regression analysis due to the dichotomous dependent variable. Before logistic regression analysis, factor analysis was conducted to reduce the bulky of attributes. Finally, marginal effects were determined and interpreted. The proposed logistic regression model for this study was adopted to be of the form:

$$\ln(Y') = \text{logit}\left[p(x)\right] = \ln\frac{p(x)}{1-p(x)}$$

$$\text{logit}\left[p(x)\right] = \ln\frac{p(x)}{1-p(x)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

$Y$ = Management of procurement records

$\beta_0$ = Constant of regression (when $X_i = 0$).

$X_1$ = Capacity of personnel involved in managing procurement records

$X_2$ = Storage space for procurement recordkeeping

$X_3$ = Equipment and facilities for procurement recordkeeping

$X_4$ = Security and safety measures in managing procurement records

$\varepsilon$ = error term

Whereby, logit ($p$) is the log (to base $e$) of the odds or likelihood ratio that the dependent variable is 1 and is defined as logit ($p$) = $\log_e p/(1 - p)$. In the above model, the dependent variable is the natural logarithm of the probability of management of procurement records $p$ divide by the probability of otherwise management of procurement records ($1 - p$). The model has used the Maximum Likelihood Method (MLM)in maximizing the probability of getting the observed results given the fitted regression coefficients (O'Connell, 2006; Ferrell, 2015).

#### 3.10.2.2 Operationalization of Variables

The operationalization of variables found in the given logistic regression model is given in Table 3.6. Whereas, $Y$ is measured by nominal scales and $X$ is measured by perception indices using categorical scales (O'Connell, 2006; Ferrell, 2015). That is, dependent variable (Y) is dichotomous nominal (that is, 1 = YES or 0 = NO); whereas, independent variables ($X_1$, $X_2$, $X_3$, and $X_4$) were measured at 5-point Likert scales (1 = strongly disagree, 2 = agree, 3 = neutral, 4 = agree, 5 = strongly agree).

Table 3.6:Operationalization of variables

| | Construct variables | Indicators | Operational indicators | Measurement |
|---|---|---|---|---|
| $X_1$ | Capacity of personnel involved in managing procurement records | Specialised professional knowledge and skills | Number of personnel with specialise professional knowledge and skills in procurement records management | 5-point Likert |
| | | Competence and on-the-job RAM trainings | Number of personnel with specialised on-the-job RAM trainings | 5-point Likert |
| $X_2$ | Adequacy of storage space for procurement recordkeeping | Availability of records storage space | Existence of storage space for keeping procurement records | 5-point Likert |
| | | Adequacy of records storage space | Adequacy of storage space for keeping all kinds of procurement records | 5-point Likert |
| $X_3$ | Adequacy of equipment and facilities for procurement recordkeeping | Availability of equipment and facilities | Existence of equipment and facilities for keeping procurement records | 5-point Likert |
| | | Adequacy of equipment and facilities | Adequacy of equipment and facilities for keeping all kinds of procurement records | 5-point Likert |
| $X_4$ | Security and safety measures in managing procurement records | Availability of security and safety measures | Existence of security and safety measures in managing procurement records | 5-point Likert |

| | Construct variables | Indicators | Operational indicators | Measurement |
|---|---|---|---|---|
| | | Sufficiency of security and safety measures | Number of recorded and documented procurement record files under safe and secured custody | 5-point Likert |
| *Y* | Management of procurement records | - Properly managed<br>- Improperly managed | Management of procurement records is proper or otherwise | Dichotomous nominal (1 = Yes, 0 = No) |

**Source:** Researcher's modelling based on the conceptual model (Figure 2.4)

The capacity of personnel involved in managing procurement records was one of the independent explanatory variables that was measured by the extent of which PEs have available number of personnel in managing procurement records with specialised professional knowledge, skills, competence, and on-the-job trainings on the RAM perspectives. Whereas, the storage space for procurement recordkeeping was measured on the availability and adequacy of procurement records storage space. Likely, equipment and facilities for procurement recordkeeping was measured based on the existence and adequacy of storage equipment and facilities for keeping all kinds of procurement records. The security and safety measures in managing procurement records was operationalized based on the existence and sufficiency of security and safety measures for the recorded and documented procurement records under safe and secured custody. Measurements were done by 5-point Likert scales.

The dependent variable, *Y*, was binary dichotomous outcome. Due to this binary stylish outcome, it was measured as a dichotomous dependent variable with either management of procurement records is proper or otherwise, improper. Therefore, logistic regression model was considered due to the assumptions that: response ($Y$) is binary representing management of procurement records is proper or otherwise; and; $p(x)$ = Prob. ($Y_i = 1$).

#### 3.10.2.3 Considerations for Using Logistic Regression Model

In this sub section, the discussion is on the relevance of the choice of variables to be used in modelling the management of procurement records with the envisaged influencing factors. Management of procurement records is considered as a binary outcome. Either properly managed procurement records or otherwise (that is, improperly managed). The dichotomous outcome suffices the use of logistic regression model. Logistic regression analysis predicts the value on one dependent variable from one or more independent (predicting) variables when the dependent variable is dichotomous (Foster *et al*., 2006). In this study, the dependent variable ($Y$) has two outcomes (Yes or No) and there are four independent variables ($X_i$) with a number of attributes. Here, the logistic regression model has been considered rather than other models due to the dichotomous nature of the dependent variable (Foster *et al.*, 2006).

## 3.11 Triangulation

Triangulation was adopted in this study to use different methods that corroborate each other to seek confirmation of apparent findings. Triangulation means using different types of measures, or data collection techniques to examine the same variable (Onyango, 2002). Validation of views from the respondents was done through triangulation of sources to corroborate each other to get a clear picture of how procurement records were managed and cared. Judgementally selected fifteen internal auditors, three selected heads of PMUs, and two procurement auditors (consultants) for the PPRA were interviewed in order to gather a variety of perspectives on the research problem and obtain an independent opinion on the envisaged procurement records management and care in the context of Tanzania PEs.

## 3.12 Validity and Reliability

This study was proposed to be both qualitative and quantitative. Therefore, the study needed both qualitative and quantitative validity and reliability tests. However, qualitative validity will override the quantitative validity and reliability. Generally speaking, the essence of quantitative validity and reliability in this study should not be overemphasised.

### 3.12.1 Qualitative Validity and Reliability

Qualitative data can be collected through in-depth interviews, direct on-site structured observations, and written documents (Trochim, 2006). This study apart from in-depth interviews had used the structured questionnaire survey, and document search, reviews and analysis. Therefore, as advocated by Trochim (2006), qualitative validity cannot be established with the same rules that apply to validity of quantitative data. Hence, qualitative data for this particular study is judged by four criteria as proposed by Guba and Lincoln (1994), namely credibility, transferability, dependability, and authenticity. The researcher to this particular study prays, inter alia, that the respondents for the envisioned study were credible during data collection and therefore the credibility of data was ascertained and assured.

Data collected for this study were and still are sought to be transferable and dependable in all aspects of applied research. Generally, the collected data and the associated information and facts therein are authentic and are sought to remain so for the entire study period until this thesis is written there from. The authenticity of data or information with qualitative nature had been assured by the characteristics of the key informants. Key informants who were interviewed had been those who are specialists with professional knowledge, professional skills, and competence and were working with the procurement business processes in either day-to-day (routine) execution, or internal audits, or consultants who conduct procurement audits.

As envisaged out of this particular study if need arise, through either explorative case study analysis or otherwise, replication of findings might be possible. To enable this, a correct codification of the idea/ideas, themes and subthemes should be carefully done. Communication from all fields should be treated as social relations data. Materials should be organised in many ways based on the structure of the envisaged ideas. Organisations of the structured ideas should be done with considerable amount of objectivism. The focus should be objectivity of the study and not the subjective nature of the researcher or the units of inquiry whatsoever.

### 3.12.2 Quantitative Reliability

In this study, the reliability of the structured questionnaire was tested by determining the Cronbach's alpha ($\alpha$) reliability coefficient (Cronbach, 1951). It was determined through the SPSS computer program that for the envisaged questionnaire (Appendix 2), the general impression of the Cronbach $\alpha$ was established at 0.896. Since Cronbach $\alpha > 0.8$; it is an indication that the structured questionnaire (Appendix 2) that was used for data collection in this study was good (Nunnally, 1978; Nunnally & Bernstein, 1994; George & Mallery, 2003). Therefore, data collected through such a structured questionnaire could results into good results if repeated on the same setting again and again. This is a justification that the structured questionnaire used for this study was good. Therefore, and the data that were collected through it are genuine and authentic for the intended objectives of this particular study.

## 3.13 Ethical Issues

This is an academic study. Therefore, sources of data and information were and still are treated with the highest degree of confidentiality and anonymity of PEs and respondents respectively. Generally, permissions were sought from relevant authorities or public offices before the researcher got into the inquiry. All individual respondents who were sampled and included in this study were deliberately selected with anonymity consents. Therefore, the respondents shall remain to be anonymous in whatever the cases may be. All documents that were used in this study in one way or the other are open to the public and have not been put into the restricted list. This was endured in the urge to justify the academic purpose of the study. Data, information and evidence sources used in this study are for academic research purposes and not otherwise. The sampled PEs and respondents that participated in this study shall continue to be anonymous. Neither the names of the studied PEs nor individual respondents shall be disclosed during and after the completion of the study and even during the dissemination of findings through presentations, professional or academic papers to be published thereafter.

## 3.14 Chapter Summary

This chapter has described the research methodology and methodological approaches and strategies adopted in the attempt to answer research questions and addressing the research objectives. This research on the assessment of factors influencing the management of procurement records in the Tanzania PEs has adopted a mixed research design. Therefore mixed data analysis and their associated strategies were sought and used accordingly. The essence of ethics in research has been discussed whereas confidentiality and anonymity of the studied PEs and respondents have been affirmed and shall be highly maintained throughout the research and upon writing and publication of this thesis through either academic or professional papers.

# CHAPTER FOUR
# PRESENTATION OF FINDINGS

## 4.1 Introduction

This chapter presents findings of the research. The thrust of the chapter is to display, depict and describe the qualitative analytical and quantitative statistical oriented findings. The findings are based on the assessment of the factors influencing the management of procurement records in the Tanzania PEs. This presentation of findings begins with the qualitative data from the in-depth interviews. Finally, the quantitative data from questionnaire survey are also presented.

## 4.2 Presentation of Qualitative Analytical Data

The specific study objectives have been made into themes. The themes have been made to present and explain qualitative data obtained from in-depth interview responses. The objective-wise presentation of qualitative data is dependent on the analytical orientation of the given specific study objectives. The themes and subthemes thereto allowed the researcher to write and present qualitative analytical and descriptive responses from the in-depth interviews. Interpretations, annotations and emphasis have been provided therein to substantiate the transcribed qualitative data and information from the responses. The transcribed verbatim responses against each in-depth interview specific question are written under the themes and subthemes with interpretations, comments, annotations and emphasis thereupon. In providing augmented arguments through induction; synthetic analysis, emphasis and annotations from the secondary data on the public procurement and RAM regulatory and institutional frameworks were formed part of the presentation.

### 4.2.1 Capacity of Personnel in Managing Procurement Records

The personnel are institutional actors staffed and positioned within the PEs. The personnel are dealing with the day-to-day or routine procurement transactional business processes and activities. The personnel are employed, as human resources. They are positioned within the PEs in order to perform specific tasked functions. In the context of exploring the capacity of personnel in managing procurement records in the Tanzania PEs; it was envisioned to explore and provide understanding on: *Who are they*? *What management activities are they doing in managing procurement records*? *How do they manage procurement records*? Thereafter, due to the nature of the envisioned procurement RAM activities within the PEs; it was necessary to further explore, the capacity of personnel in terms of number, extent of staffing levels, and the RAM professional or technical knowledge, skills, and competences.

The findings from the interviews have indicated that personnel who are directly involved in managing procurement records are mandated by the public procurement legislation, Cap. 410. There were two supplementary sub-questions, inter alia, that required interviewees (1) to provide regulatory frameworks that establish the institutional mandates for the personnel and (2) to state the activities in the management of procurement records. The interviewees have had the following to provide on the probed issues related to involvement of personnel:

> *Procurement records management and care within the PEs are fostered by personnel* [***actors***]. *The* ***personnel are actors who have been employed and tasked to either do procurement functional or related activities****. The personnel are mandated by regulatory and institutional frameworks provided in the public procurement legislation* (source: summarised snapshots from $HPMU_1$, $HPMU_2$, and $HPMU_3$; with emphasis added).

> *There are* ***regulatory*** *and* ***institutional*** *frameworks in place. The regulatory framework facilitates for the existence of institutional frameworks that administer, govern and manage the execution of RAM activities within the PEs* (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis added).

> *Managing procurement records is vested on the heads of the PMUs within the PEs. However, sometimes in our audit work* ***we have to ask for documented and recorded procurement record files from the finance and accounts departments*** (source: summarised snapshots from $HIAU_3$, $HIAU_8$, $HIAU_{10}$, and $HIAU_{13}$; with emphasis).

> *... Actors* [*personnel*] *who are institutionalised within the PEs internal arrangements do* ***create****,* ***receive****,* ***use****,* ***maintain****,* ***archive****, or* ***dispose*** *procurement records dependent on their jurisdictional functions within the context of procurement management functional activities* (source:

> summarised snapshots from $HPMU_1$, $HPMU_2$, $HPMU_3$, $CONS_1$, and $CONS_2$; with annotation and emphasis added).

Based on the responses gathered from the interviewees; personnel who are directly involved in the management of procurement records are individuals who are dealing with procurement business transactional processes within and across the PEs(source: HPMUs; CONS). These are inter alia: the personnel in the budget approving authority, the accounting officer, the tender board, the Procurement Management Unit (PMU), user department, evaluation committee, goods inspection and acceptance committee, works supervisors, internal audit unit, legal office (unit), and finance department (section). However, fifteen of the interviewed auditors in the studied PEs had the view that actors are those who are firmly found in the tender boards, the PMUs, and the user departments. These, by default, are the tender board members, the heads of the PMU, and the heads of user departments respectively.

However, the focuses of the auditors' responses were hinged on the requirements of maintaining and archiving records within the PEs (S. 38 (l) and S. 39(1) (i) of Act No. 7 of 2011 as amended). The discussions, off the records, between the interviewer and fifteen respondents (the internal auditors) have indicated that, they were unaware of the procurement records management activities or else they were completely unlettered on the RAM activities. Here is what they said:

> *What we always see, in our audit work, is management of recorded and documented procurement record files being* ***taken care*** *by the HPMUs and* [*…sometimes…*] *by the heads of user departments within the PEs. To us, this shows that management of procurement records is done by the HPMUs* [*… of the designated PMUs within the PEs…*]. *What is mostly known* [*… to us* (*as internal auditors*)*…*] *is, management of procurement records is just the keeping of record s*(source: summarised snapshots from 15 HIAUs; with emphasis and annotations added).

In principle, the complete sets of actors in the PEs were critically provided by three interviewed HPMUs (source: $HPMU_1$; $HPMU_2$; $HPMU_3$) and two interviewed consultants (source: $CONS_1$; $CONS_2$). The interviewed HPMUs and consultants have exhaustively listed all the institutional actors within and across the PEs that are directly involved in creating, receiving, using, maintaining, archiving, or disposing records within the procurement business transactional processes– from initiation of the need up to contract administration (within the six stages in the procurement cycle and associated activities; Table 2.1).

> *Oftentimes,* ***most of the required*** *recorded and documented procurement record files are* ***found within the PMUs****. However,* ***some few*** *recorded and documented information are preserved by the envisaged users* [*departments, units or sections*] *for the said procurements which are committed by the users on behalf of the PEs*(source: summarised snapshots from $HPMU_2$, $HPMU_3$ and $CONS_1$; with emphasis and annotations added).

The mandates for each personnel within and across the PEs for the matters and issues related to the management of procurement records, as public records, are enshrined in the Records and Archives Management Act No. 3 of 2002, the Public Procurement Act No. 7 of 2011 as amended and their attendant regulations. For specific purpose of showing, depicting, and describing the regulatory and institutional frameworks for the institutional mandates and how procurement records are managed in the studied PEs; Appendix 3 provides a detailed summary of institutional mandates on the activities of managing procurement records in the Tanzania PEs.

In the administrative spectrum, management of procurement records in the context of the Tanzania procurement recordkeeping systems encompass six core activities, inter alia: *creation*; *receipt*; *use*; *maintaining*; *archiving*; and *disposition* (source: $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$; $CONS_2$). Generally, the procurement recordkeeping activities in the PEs must foster and be compliant with creation, receipt, maintenance, use, [archive], and disposition, including the process of capturing and maintaining evidence about the procurement business activities and transactions (ISO 15489:1, 2001, 2016; with annotations). These six activities must be carried out within the RAMS framework which involves the people (personnel or actors), records storage equipment and supplies, [records storage] space, records management procedures [guidelines], and information for decision making within the context of efficient RAM (Read & Ginn, 2007, 2011; with annotations added).

#### 4.2.1.1 Managing Creation of Procurement Records

Primarily, the creation of procurement records in the Tanzania PEs commence during procurement planning phase, or initiation of the procurement needs. Evidence is provided by HPMUs and CONS who said that:

> *Users* [*departments*] *are* ***directly involved in preparing their departmental requirements*** *that are aggregated in terms of goods, works* [*if any*], *or services that are required to meeting the institutional obligations of the departmental needs* (source: summarised snapshots from $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$ and $CONS_2$; with annotation and emphasis added).

In principle, whilst preparing the departmental procurement plans, the user departments are creating procurement records in terms of the preparation of the annual procurement plans (APPs) during the planning and budgeting process. This is a requirement of the regulatory and institutional frameworks that compel the users to liaise with the PMUs in the preparation of the APPs during budgeting (S. 39(1) (l) of Act No. 7, 2011 as amended). In support of this regulatory requirement, the interviewed HPMUs had the following to provide:

> *Usually, users* [*user departments*] *have to bring their departmental procurement requirements* [*…for the year in plan…*] *as a* ***budgeting requirement****. We, in the PMUs, do aggregate the requirements of the whole PEs and* ***create*** *the*[*draft*] *APPs. The* [*drafted*]*APPs are thereafter tabled before the management meeting for discussions, deliberations and approval. However, most of the time users either* ***delay to prepare*** *their departmental requirements or* ***bring their proposed procurement requirements that are not authentic with poor documentation of recorded estimates and inadequate descriptions of the proposed needs****. In our capacity, as functional units and secretariats to the* [*envisioned*]*tender boards; we do our best to ensure that the APPs and other procurement records related to the procurement planning process are tabled before the Budget Approving Authority for review and approval* (source: summarised snapshots fromHPMU$_1$; $HPMU_2$ and $HPMU_3$; with annotations and emphasis added).

Practically however, the creation of procurement records (the APPs) at this stage is being faced by either delays or unauthentic recorded and documented estimates with inefficient documentation. Here, the role of the PMUs is seen to overall manage the creation of the APPs through coordination (source: $HPMU_1$; $HPMU_2$). Principally, in [any] PE institutional capacity, the budget approving authority is the governing organ. Therefore, it oversees management activities of the organisation. For the matters and issues related to the management of procurement in the public sector, the budget approving authority creates procurement records out of the review and approval(source: $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$; $CONS_2$).

There is a number of institutional actors in the Tanzania PEs who are creating procurement records (source: $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$; $CONS_2$). However, to ensure efficient creation of authentic and properly recorded and documented procurement record files, the PMUs are always making sure that all necessary supporting documents (units of records) needed are filed and presented for checking before final submission. It is evidenced that:

> [*The*] ***created*** [*procurement*] *records from users* [*user departments*] *and other* [*institutional*] *actors within and across the PEs are* ***cross checked*** *or* ***cross examined*** *to verify their* ***authenticity*** *and* ***accuracy*** *to ensure they display and represent accurate information for* ***decision making*** *at the hierarchical managerial levels* (source: summarised snapshots from $HPMU_1$; $HPMU_2$; and $HPMU_3$; with annotations and emphasis added).
>
> *During evaluation of bids* [*tenders*], *we usually* ***issue*** *recorded and documented bidders' records to the Evaluation Committees.* [*The*] *Evaluation Committees, apart from the* ***process to be confidential***, *they are obliged to* ***maintain*** *the recorded and documented records and submit them with the evaluation report to the PMUs after the completion of the evaluation process* (source: summarised snapshots from 15 HPMUs of the studied PEs; $HPMU_1$; $HPMU_2$ and $HPMU_3$; with annotations and emphasis added).

Here, it is evident that personnel within the evaluation committees do also create procurement records in terms of evaluation reports. It is indicating the critical matter of, *process to be confidential*, in creating procurement records. However, some recorded and documented procurement record files have been observed to be mishandled by either the creators or internal users. This scenario is supported by the interviewed internal auditors who said that:

> *During the* ***movement*** *of* [*the*] *recorded and documented procurement files where the users are scattered within the PEs'*[*institutional*] *premises; there have been observed some* ***unauthorised people peeping into the documents***. *This is contrary to the* ***process to be confidential*** *in most of the cases when dealing with recorded and documented procurement record files that are not*

> *yet kept for the open registry* [*if any*] (source: summarised snapshots from the 15 HIAUs; with emphasis and annotation added).

The question of the process to be confidential is very vital in managing the creation of procurement records within and across the PEs' institutional organs (vide S. 46 (2) of Act No. 7, 2011 as amended; Reg. 306, see also Reg. 337(7) (d), Reg. 376(1) of GN No. 446, 2013 as amended).

#### 4.2.1.2 Managing Receipt of Procurement Records

Receipt of procurement records, in any PE, follows a progressive pattern. The procurement records usually follow the *creation-to-disposition* pattern in the records life-cycle. Administratively, receipt of procurement records is hierarchical in nature. It is either bottom-up or top-down or across-within in a horizontal layered institutional setting. That is, procurement records are progressing from the creator (*principle of respect des fonds*) or user of the records to the receiver who has interest on them in the execution of the procurement business transactions. Here, the HPMUs provide the justification to support this scenario:

> *We, in the course of our jurisdiction in the management of procurement functional activities, do* ***receive*** *procurement recorded information form the* ***users***[*user departments*] *and other* [*institutional*]***actors*** *within the PEs. Normally, we* ***receive*** *recorded and documented procurement record files for either* ***maintenance*** *or* ***archive*** *or* ***forwarding*** *them to the tender boards or to the accounting officers* (source: summarised snapshots from $HPMU_1$; $HPMU_2$; and $HPMU_3$; with emphasis and annotations added).
>
> *We do* ***receive*** *recorded and documented procurement record files for forwarding them to either the tender board or accounting officers. Oftentimes, once we have* ***floated bids****; we do* ***receive*** *recorded and documented bid documents* [*…containing bidders' data and information…*] *from the* ***prospective bidders*** *who had submitted their offers and forward them to the* ***Evaluation Committees*** *for examination and evaluation of the bids. Once the jurisdictional mandate of the Evaluation Committee is finished we* ***receive*** *back the documents and the* ***created*** *evaluation reports* (source: summarised snapshots of the 15 HPMUs from the studied PEs; with emphasis and annotation added).

It is evident that, evaluation committees – *as ad hoc institutional actors during the evaluation of bids* – do receive recorded and documented procurement record files in the form of bidders' data and information contained therein. In practice, the recorded and documented procurement record files frequently move to and fro the PMUs, the user department, administration and finance, and other users of the procurement records within and across. Here always, the procurement recordkeeping systems are challenged by *wear* and *tear* and sometimes displacement or extractions of important recorded documents. Interviewed auditors have the following to reveal:

> *Recorded and documented procurement record files are very important in our audit work. However, in some instance* [*…as always is…*], *procurement record files are seen to be* ***torn*** *and* ***worn out*** *sometimes beyond repair. Our audit observations have revealed that the* ***frequency of wear and tear is due to high frequency of changing hands between creators and users*** *of the records within the hierarchical spectra in the PEs. There is* ***poor records preservation*** *so to speak. Also, the* ***wear*** *and* ***tear*** *would be due to* ***manual handling*** *in* ***tracking*** *and* ***retrieving*** *the procurement record files*(source: summarised snapshots from the 15 HIAUs; $CONS_1$; $CONS_2$; with annotation and emphasis added).

The *wear* and *tear* for the recorded and documented procurement record files is constant. Especially, this phenomenon is rampant for the current and semi-current procurement records. The handling of recorded and documented procurement record files has a lot of challenges due to poor recordkeeping systems.

#### 4.2.1.3 Managing Use of Procurement Records

Procurement records and archives are used for the institutional legal obligations and organisational functioning. Records are information created, received and maintained in pursuit of institutional legal obligations or in the transaction of business (ISO 15489:1, 2016). Therefore, the use of recorded and documented procurement record files pursuit the same legal obligation during their use in facilitating procurement business transactions in the Tanzania PEs. Users of the recorded and documented procurement record files within the Tanzania PEs are provided within the regulatory and institutional frameworks (vide Cap. 309; Cap. 410). The interviewed HPMUs have the following to say:

> *There are* ***many users*** [*… both internal and external users respectively…*] *of the recorded and documented procurement records. However, in the PEs the* [*frequently*]***users*** *of procurement record files are: the budget approving*

*authorities, accounting officers, evaluation committees, legal units, accounting and finance, and the* ***tender boards****. The tender boards, due to their jurisdictional mandated functions and powers are using a great deal of* ***current*** *and* ***semi-current*** *recorded and documented procurement files. The tender boards' members need* ***timely****,* ***authentic****,* ***consistent*** *and* ***complete*** *recorded procurement information* (source: summarised snapshots from 15 HPMUs of the studied PEs; $HPMU_1$; $HPMU_2$ and $HPMU_3$; with emphasis and annotations added).

In line with the tender boards, users of the recorded and documented procurement recorded information are the evaluation committees. Evaluation committees are ad hoc [institutional organs] that need recorded and documented procurement records on the bidders' data and information to facilitate the evaluation process and activities thereto. The interviewed HPMUs had the following to substantiate this:

[*The*] *evaluation committees, despite of reporting directly to the*[*… heads of*?] *PMUs in the course of doing their envisioned institutional mandate in evaluating bids they use basic* [*…* ***primary information****…*] *to* ***create*** *information that could be used by the tender boards in decision making on who should be awarded* [*offered*] *the tender* [*procurement contracts*](source: summarised snapshots from $HPMU_1$, $HPMU_2$, and $HPMU_3$; with annotations and emphasis added).

In principle, the tender board members usually use recorded and documented procurement record files that contain analysed and ordered content of procurement information. This is compliant with Öberg and Borglund (2006) that, information captured in the units of records must have content, context, and structure.

#### 4.2.1.4 Managing Maintaining of Procurement Records

Maintaining procurement records is a mandatory RAM activity provided in (UNCITRAL) Procurement Modal Law 1994 as amended. This regulatory requirement states that, *procuring entities* (PEs) *shall maintain records of the procurement proceedings* (United Nations, 2014; with emphasis). This institutionalised regulatory obligation for maintaining procurement records has been wholly adapted in the Tanzania procurement legislation. It provides that:

A procuring entity [PE] *shall maintain a record of its procurement proceedings in which it is involved*, including *decisions taken* and *the reasons* for it and *such record shall be kept for a period of not less than five years*

> *from the date of completion of the contract* and be *made available when required*… (S. 61(1) of Act No. 7, 2011 as amended; with annotation and emphasis added).

Section 61(1) of Act No. 7 of 2011 (as amended) provides the justification as to why maintaining recorded and documented procurement record files is vital and mandatory for every PE in the Tanzania procurement recordkeeping system. The accounting officers for all Tanzania PEs have the overall responsibility to ensure this regulatory obligation is complied with. This study has recorded and documented that:

> [*The*] *accounting officers of the PEs are the custodians and the* ***seals*** *of the organisations. Therefore, the transactions and their supporting documentations plus any documented and recorded information in the procurement record files must be kept on their behalf. As records are created they are also maintained. However, some records are in shoddy and disorganised completely* (source: snapshots from $CONS_1$ and $CONS_2$).

The accounting officers, in their jurisdictional capacity, shall have the overall responsibility for the execution of the procurement process in the PEs (S. 36(1) of Act No. 7, 2011 as amended). Impliedly, the accounting officers are responsible for the management of procurement records as far as the procurement business processes are concerned. Significantly, this role is provided under the following RAM regulatory provision that categorically states:

> Heads of public offices [the accounting officers of the given PEs] *shall be responsible for creating and maintaining adequate documentation of the functions and activities of their respective public offices* [PEs] through the establishment of good recordkeeping practices (S. 9 of Records and Archives Management Act No. 3 of 2002; with annotations and emphasis added).

In ensuring this mandatory requirement as given in Section 9 of Act No. 3 of 2002, the accounting officers have to ensure that the management of recorded and documented procurement record files is effective and efficient in compliant with the RAM best practices and RAMS standards as enshrined in the regulatory and institutional frameworks. Principally, the management of maintenance of procurement records is executed on behalf of the accounting officers. Here, the internal auditors had the following to say in support of this claim:

*Accounting officers* [*or chief executive officers*] *of the PEs have the* ***sole role to play in the efficient procurement records management****. Therefore, all procurement business transactions and their supporting documentations plus any documented and recorded information in the procurement record files must be kept on their behalf. However,* ***most of the time*** *they abdicate this role* (source: snapshots from 15 HIAU; with annotations and emphasis).

Though, not directly involved in the management and care of the recorded and documented procurement records files; the accounting officers are supposed to ensure that the maintaining and archiving of procurement records is in accordance with the RAM legislation and RAMS standards as given under ISO 15489:1 (2016).

#### 4.2.1.5 Managing Procurement Archives

Management of archived in the procurement recordkeeping system is the basis of evidence that enables audit trail to track the transaction through recorded and documented procurement archives. Procurement archives are the sources of audit evidences for procurement audits. Tanzania PEs had been archiving recorded and documented procurement record files that are either semi-current or non-current as required in S. 61(1) of Act No. 7 of 2011 as amended. The HPMUs have said the following to evidence that particularity on this regulatory requirement:

*We, as mandated by the regulatory and institutional mandates* [S. 38 (l) of Act No. 7, 2011 as amended], *have been* ***archiving*** *recorded and documented procurement record files, though internally informal. The motive behind this is to enable PEs to make* ***available*** *the documented semi-current and non-current records when required for procurement audits* (source: summarised snapshots from 15 HPMUs of the studied PEs; $HPMU_1$; $HPMU_2$ and $HPMU_3$; with annotations and emphasis added).

However, management problems associated with archiving recorded and documented procurement semi-current and non-current procurement records are hinged on how they are kept and cared for to ensure their availability and usability when required as provided in S. 61(1) of Act No. 7 of 2011 as amended. The interviewed procurement auditors (consultants) have the following to say:

*Some of the audited PEs had been observed with* ***poorly organised and kept procurement archives****. As an auditor, you may need a particular recorded and documented semi-current and non-current procurement record file(s) for*

> *audit purpose. Despite of providing the PE with a list of recorded and documented procurement records files required for the planned audit some considerable time prior to actual audit exercise, you may end up given poorly arranged and classified procurement record files. Further, apart from poor arrangements of the documented and recorded procurement record files in terms of documents* [*within the files*] *you may find yourself failing to obtain the authentic sequence of the recorded documents containing* [*... some ...*] *vital information for the planned audit* (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis and annotations added).

The issue of efficient management of procurement archives according to the RAM best practices and RAMS standards depend on the available and adequacy of storage space, records storage equipment and facilities, and security and safety ofthe procurement recorded archives. Responses from the HIAUs and consultants (CONS) substantiate some critical issues to be taken in this subtheme on management of procurement archives in the studied PEs.

> *Our organisations* [*PEs*]***do not have adequate spaces for archiving***[*…all kinds…*] *of the* ***procurement records****. What is the practice, in most of the time, is to bundle the recorded and documented semi-current and non-current procurement records and keep them whenever there is space within the PEs' premises* [*... even in corridors?*] *... of course,*[*sometimes* ***where there is no way!***]*. When time has passed and transactions have no value to the PEs, we usually see records being undervalued or treated as thrush. There are no evidences of direct contacts with the Records and Archives Management Department* [*… on matters and related issues…*] *on the management and care of semi-current and non-current records within the PEs*(source: summarised snapshots from 15 HIAUs; with annotations and emphasis added).
>
> *It is always* ***hard*** *to find a PE that has* ***adequate*** *storage space(s) for keeping procurement non-current records. Though, non-current procurement records are* [*seemingly*] *considered not having immediate* ***face value*** *usually on compliance and performance audits; however, they may be required for investigative audits. Therefore, the non-current procurement records* [*… if any…*] *should be preserved to maintain their usability when need arise during investigative audits* (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis and annotations added).

The inadequacy of procurement storage space, equipment and facilities culminating most of the studied Tanzania PEs has institutional capability challenges in keeping archives. This is not a sound indication in the management of procurement records in complying with the procurement recordkeeping system best practices and standards.

#### 4.2.1.6 Managing Disposition of Procurement Records

In the RAM, disposal is an important activity of records management. Properly done, it ensures that the organisation retains records for as long as they are needed and then, when they are no longer needed, destroys them in an appropriate manner or disposes them in some other way, for example by transfer to an archives service (The National Archives of United Kingdom, 2011). In this, the auditors had said that:

> *There were neither* ***overdue records****, existence of* ***records disposal certificates****, nor* ***retention schedules****. If these were observed it would have been opinionated that there were procurement records appraisal and retention scheduling. Existence of retention schedules, overdue records, and records disposal certificates would have signified that the PEs had been conducting appraisal and retention scheduling as indicators of procurement records disposition* (source: summarised snapshots from 15 HIAUs; $CONS_1$and $CONS_2$; with emphasis added).

In absence of the overdue records, records disposal certificates, and retention schedules; impliedly, assumption is that most of the studied PEs had not effectively doing the disposition of procurement records (source: 15 HIAUs; $CONS_1$; $CONS_2$). That could be the essence of accumulated non-current procurement records that hamper proper recordkeeping given inadequate storage space and inadequate equipment and facilities facing most of the Tanzania PEs.

#### 4.2.1.7 How Personnel Manage Procurement Records

In this subtheme, it was envisaged to explore on: (1) *how do actors manage procurement records in their organisations* and (2) *what are problems facing management of procurement records*. The preponderate response was immensely compliant with the focus of records and archives management (RAM) activities as enunciated under ISO 14589:1in creating, receiving, using, maintaining, archiving, and disposing. Most of the studied PEs do create, receive, use, maintain including the processes (and activities) for capturing and maintaining evidence of and information about procurement business transactional processes and the associated activities as sought in the ISO 14589:1 (2016).

The in-depth responses had revealed, affirmed and attested that, almost all fifteen studied PEs complied with the essence of creating, receiving, maintaining, and using procurement records for capturing and maintaining evidence and information about procurement transactions as required by the law. The studied PEs had been complying with this regulatory requirement. In principle, PEs are required to create, receive, maintain, use, dispose and capture records for evidence and information about the procurement transactions conducted or to be conducted.

Twenty interviewees [HIAUs = 15 (75%); HPMUs = 3 (15%); and CONS = 2 (10%)] had the following to support that scenario:

> *Personnel* [*institutional actors*] *in the studied PEs do* ***create***, ***receive***, ***maintain***, ***use***, *and* ***archive***[… ***dispose***?] *records whilst performing their institutional mandates.* [*…*] *However, the raised concern was on how the records and archives are* ***organised***, ***classified***, ***filed***, *and* ***kept*** [*stored or preserved*?] *for efficient retrieval and tracking, especially semi-current and non-current. There is* ***unstandardized*** *organisation of records* (source: summarised snapshots from N = 20; with annotations and emphasis added).

The extent of the management of procurement records was qualitatively determined. The interviewees were asked on the extent of procurement records management in the studied PEs. Perceptions of the interviewees on the procurement management scenarios were descriptively [and qualitatively] established (Table 4.1).

Table 4.1: Procurement records management scenarios (N = 20)

| Extent | Nominal Scale | Responses | Frequency |
|---|---|---|---|
| **Very Low** | 1 | - | 00 |
| **Low** | 2 | 11 | 11 |
| **Moderate** | 3 | 8 | 08 |
| **Large** | 4 | 1 | 01 |
| **Very Large** | 5 | - | 00 |
| **TOTAL** | | **20** | **20** |

**Source:** Field data and analysis, 2017

Table 4.1 is evident that the management of procurement records in the studied PEs is ranging between low and large. Whereby, eleven interviewees had recorded low extent, eight interviewees had recorded moderate extent, and one interviewee had recorded large extent. Impliedly, a conclusion can be deduced basing on the fifteen interviewees that the procurement records management is dwindling between low and moderate. On average, the qualitative extent of proper management of procurement records in the studied PEs is moderate.

It was therefore envisaged, after exploring how procurement records are managed in the studied Tanzania PEs, to determine the problems associated with the management of procurement records in the studied PEs. In an attempt to solicit interviewees' opinions on the problems facing the studied PEs in the management procurement records it sufficed to further probe by asking: *What problems does this organisation currently experience in keeping and maintaining procurement records*? The transcribed responses for this tactical and operational question had mixed factual regulatory and institutional resources challenges. However, a synthesis on the available responses has revealed a number of problems associated with maintaining and keeping procurement records. Table 4.2 display the snapshots of the findings and analysis therein. The findings presented in Table 4.2 are based on the qualitative analytical assessment.

Table 4.2: Problems associated with recordkeeping (N = 20)

| Identified problem or constraint | Respondents who provided experiences | Regulatory and institutional challenges |
|---|---|---|
| ***Lack of Procurement Recordkeeping Guidelines*** | 5 | - Noncompliance due to lack of guidelines to foster efficient procurement records management best practices. This is noncompliance with Reg. 88(4) of GN. No. 446, 2013 as amended under GN. No. 333, 2016<br>- Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 on the best recordkeeping practices |
| ***Inadequate professional knowledge on the RAM best practices*** | 18 | - Regulatory failure on the Director of the RAMD to comply with the requirements of S. 11 (b) and S. 11 (c) of Act No. 3, 2002<br>- Institutional failure to comply with the requirements of S. 37(2) of Act No. 7 of 2011 as amended to employ support and administrative staff with professional knowledge on the RAM |
| ***Inadequate professional skills and competences on the RAM best practices and activities therein*** | 15 | - Institutional failure to equip PEs institutional actors with skills and competences on the RAM practices |
| ***Insufficient records storage space*** | 20 | - Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 on the best recordkeeping practices |
| ***Inadequate records storage equipment and facilities*** | 20 | - Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 on the best recordkeeping practices |
| ***Ineffective retention and disposition scheduling*** | 20 | - Institutional failure to comply with the requirements of S. 11 (d), S. 11 (e), S. 11 (f), and S. 11 (g) of Act No. 3, 2002 on the best recordkeeping practices |
| ***Randomised recordkeeping*** | 13 | - Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 on the best recordkeeping practices |
| ***Out-dated recordkeeping equipment and facilities*** | 13 | - Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 on the best recordkeeping practices |
| ***Improper records organisation, classification, and filing*** | 13 | - Institutional failure to comply with the requirements of S. 9, S. 10, S. 11 (a), and S. 11 (b) of Act No. 3, 2002 on the best recordkeeping practices |
| ***Insufficient funding for the RAMS activities*** | 3 | - Institutional failure to comply with the standards of RAM practices as enshrined under Act No. 3, 2002 and attendant regulations therein<br>- Institutional failure to comply with the requirements of S. 9 of Act No. 3, 2002 and provisions requiring procurement records management provided under Act No. 7, 2011 as amended under Act No. 5, 2016 |

**Source:** Field data and analysis, 2017

The deduced experiences drawn out of twenty interviewees (N = 20) revealed that, problems associated with procurement recordkeeping in the studied PEs are inter alia: insufficient procurement records storage space, insufficient procurement recordkeeping equipment, and facilities, and lack of retention and disposition schedules. Whereas, eighteen interviewees had experienced inadequate professional knowledge on the RAM best practices. Fifteen interviewees had observed inadequate skills and competences on the RAM practices and activities as amongst the problems facing procurement recordkeeping in the studied PEs. Twenty respondents, essentially the HPMUs and consultants, have provided that: Tanzania lacks *procurement records guidelines*(source: 15 HPMUs of the studied PEs; $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$; $CONS_2$)that were required under Reg. 88(4) of GN No. 446 of 2013 (as amended). Here is what $HPMU_1$, $HPMU_2$, and $HPMU_3$ said:

> *Most of PEs in Tanzania* [… *as far as management and care of procurement records is concerned…*]***lack personnel*** *that have the* ***required professional*** *or* ***technical knowledge****,* ***skills****, and* ***competences*** *on effective records and archives management* (source: summarised snapshots from $HPMU_1$, $HPMU_2$, and $HPMU_3$; with annotations and emphasis added).

> *Tanzania PEs, currently, have no procurement records guidelines that are official. What most of the audited PEs use in* ***organising*** *and* ***classifying*** *their records is* ***business as usual****; recordkeeping practices are adopted from the main stream recordkeeping found within the institutional open registries that most of the time are not suited for proper procurement recordkeeping systems* (source: summarised snapshots from $CONS_1$; with emphasis added).

> [*…*] *most of the PEs that I came across to audit, in most of the audits,* ***had no guidelines for managing*** *procurement records* [*…recorded and documented procurement record files…*]*. They usually have* ***informal guidelines*** *that have been adopted within the PEs that qualify for the* ***internal*** *use only* (source: summarised snapshots from $CONS_2$; with annotations and emphasis added).

Lastly, findings on experiences provided by three HPMUs (source: $HPMU_1$; $HPMU_2$; $HPMU_3$) have revealed that, “Most of the procurement RAM activities within and across PEs in Tanzania are insufficiently funded.” Hereunder is the substantive evidence that been said in support of the above-provided claim:

> *Procurement records and archives management activities* [*…in most of Tanzania PEs…*] *are* ***insufficiently funded****. We sometimes fail to procure*

> *records equipment and facilities due to* ***lack of budgeted funds****. Generally, the budget allocated for the PMUs are not entitled for RAM activities within the PMUs or user departments but for the running of the PMUs' functional activities on the procurement management operations. Recordkeeping have* ***never been budgeted since sub votes were established for the PMUs*** (source: snapshots from 15 HPMUs of the studied PEs; $HPMU_1$, $HPMU_2$, and $HPMU_3$; with annotation and emphasis added).

Due to insufficient funding, it is a matter of fact that Tanzania PEs could not revamp the effective and efficient functioning of the procurement RAMS. Therefore, RAM activities in the RAMS within and across most of the Tanzania PEs shall continue to remain in crisis (as in World Bank, 2003; Thurston, 2005; Williams, 2006) unless sufficient funds are budgeted for the objective of enabling the PMUs and user department to enhance the management of procurement records.

#### 4.2.1.8 Sufficiency of Personnel in Managing Procurement Records

In this subtheme, the in-depth questions had been set to ask on (1) *the number of personnel in this organisation suffices for management of procurement records* and (2) *the extent of the staffing level*. The transcribed responses for these two specific issues were made into three subthemes, inter alia, sufficiency of personnel for management of procurement records, extent of staffing levels for management of procurement records, and extent of the PMU staffing levels.

Table 4.3: Sufficiency of personnel (N = 20)

| Sufficiency Level | Responses | Frequency |
|---|---|---|
| **Sufficient** | 2 | 02 |
| **Insufficient** | 16 | 16 |
| **Somehow/somewhat** | 2 | 02 |
| **TOTAL** | **20** | **20** |

**Source:** Field data and analysis, 2017

Table 4.3 is evident that out of twenty (N = 20) interviewees: two have opinion that personnel for management of procurement records is sufficient, whilst sixteen have opinion that it is insufficient; and two have opinion that sufficiency of personnel is somehow (somewhat) sufficient for management of procurement records in the Tanzania procurement recordkeeping systems. The interview responses on the extent of RAM staffing level are given under Table 4.4. Generally, the impression for the staffing of the procurement RAM personnel in the studied PEs is low.

Table 4.4: Extent of RAM staffing levels (N = 20)

| Extent | Scale | Responses | Frequency |
|---|---|---|---|
| **Very Low** | 1 | 1 | 01 |
| **Low** | 2 | 15 | 15 |
| **Moderate** | 3 | 2 | 02 |
| **Large** | 4 | 2 | 02 |
| **Very Large** | 5 | - | 00 |
| **TOTAL** | | **20** | **20** |

**Source:** Field data and analysis, 2017

Table 4.4 is evident that the extent of staffing level for management of procurement records as perceived indifferently by the interviewees. One interviewee has perceived very low procurement RAM staffing levels, fifteen interviewees have perceived low procurement RAM staffing, two interviewees have perceived moderate and large procurement RAM staffing respectively. There was no interviewee who had a perception that the extent of staffing for procurement RAM is very large.

Despite the recorded and documented phenomena (Table 4.4), all twenty (N = 20) interviewees had revealed that the PMUs were largely staffed to an appropriate level with the procurement specialists (Table 4.5). In principle, the PMUs in the studied PEs were not appropriately staffed with other technical specialists together with the necessary supporting and administrative staff as required in Section 37(2) of Act No. 7 of 2011 as amended. Here, out of fifteen studied PEs only two have employed the RAM personnel permanently staffed within the PMUs.

Table 4.5: Extent of the PMU staffing levels (N = 15)

| Extent | Scale | Responses | Frequency |
|---|---|---|---|
| **Very Low** | 1 | - | 00 |
| **Low** | 2 | - | 00 |
| **Moderate** | 3 | 01 | 01 |
| **Large** | 4 | 13 | 13 |
| **Very Large** | 5 | 01 | 01 |
| **TOTAL** | | **15** | **15** |

**Source:** Field data and analysis, 2017

Table 4.5 is evident that the extent of staffing the PMUs in the studied PEs is between moderate and very large. Here; one PMU is moderately staffed, thirteen PMUs are largely staffed, and one PMU is very largely staffed. The generality of the PMUs staffing level for the entire set of studied fifteen procuring entities is descriptively large.

#### 4.2.1.9 Extent of Professional Knowledge, Skills and Competences

In determining the capacity of personnel in the management and care of procurement records it was envisaged to ask: *Are the personnel involved in managing procurement records knowledgeable, skilled, and competent enough in records and archives management (RAM) practices*? This question was aimed at determining the professionalism traits in terms of the extent of knowledge, skills, and competences in line with management of procurement records as per the RAM best practices – as a profession that requires specialised training and continuous professional development (CPD) for efficient procurement recordkeeping.

Table 4.6: Extent of knowledge, skills, and competences (N = 15)

| **Institutional capacity** | **Extent** | **Scales** | **Responses** | **Frequency** |
|---|---|---|---|---|
| | *Very Low* | 1 | - | 00 |
| | *Low* | 2 | 10 | 10 |
| ***Knowledge*** | *Moderate* | 3 | 4 | 04 |
| | *Large* | 4 | 1 | 01 |
| | *Very Large* | 5 | - | 00 |
| | **TOTAL** | | **15** | **15** |
| | *Very Low* | 1 | - | 00 |
| | *Low* | 2 | - | 00 |
| ***Skills*** | *Moderate* | 3 | 13 | 13 |
| | *Large* | 4 | 2 | 02 |
| | *Very Large* | 5 | - | 00 |
| | **TOTAL** | | **15** | **15** |
| | *Very Low* | 1 | - | 00 |
| | *Low* | 2 | 2 | 02 |
| ***Competence*** | *Moderate* | 3 | 12 | 12 |
| | *Large* | 4 | 1 | 01 |
| | *Very Large* | 5 | - | 00 |
| | **TOTAL** | | **15** | **15** |

**Source:** Field data and analysis, 2017

Evidences depicted in Table 4.6 suffice to explain the extent of knowledge, skills, and competencies in the fifteen studied PEs. Here, only two studied PEs were identified to have personnel who are versed with the RAM professional and technical knowledge, skills, and competences. Thirteen studied PEs had no personnel who have been specialised in the RAM activities to manage procurement records management activities. The extent of knowledge is ranging between low and large inclusively (Table 4.6). However, ten of the studied PEs had low knowledge on the RAM practices, four have moderate extent of knowledge, and one has large extent of knowledge on the RAM practices. These revelations are substantiated by the interviewed HIAUs who said that:

> *We* [*... our PEs*] *do not have personnel* [*… permanently staffed*?] *with recorded and documented procurement record files registries, save for* [*except*] *the HPMUs and some users* [*… departments?*]. *Generally, the knowledge, skills and competences on the RAM* [*as a professional function*] *are* ***considerably low*** *within and across the personnel* [*institutional actors*](source: summarised snapshots from $HIAU_1$, $HIAU_2$, $HIAU_5$, $HIAU_{10}$, and $HIAU_{15}$; with annotations and emphasis added).

For the case of extent of skills, the range is between moderate and large. Thirteen of the studied PEs had moderate extent whilst two had large extent of skills on the RAM practices. On the extent of competence, the range is between low and large inclusively. Two of the studied PEs had low extent, twelve have moderate extent, and one has large extent on the RAM practices. It has been deduced that the extent of skills and competence depend upon on-the-job training received by the personnel on the RAM practices – especially in creating, receiving, maintaining, and use of procurement records but not on management and care as required by the records life-cycle and continuum models.

#### 4.2.1.10 Personnel Knowledge on RAM Regulatory Requirements

In determining capacity of the personnel involved with the management of procurement records; among other things, it was sought necessary to explore if they are conversant with the RAM regulatory requirements. The thrust of exploring the personnel knowledge on the RAM regulatory requirements for management of procurement records in the Tanzania procurement recordkeeping systems within the studied PEs emanated from the in-depth interview question that stemmed on: *How do RAM regulatory and institutional arrangements interface with respect to the management of procurement records*? The overriding focus of exploring this phenomenon was to consider and examine how RAM regulatory and institutional arrangements facilitate management of procurement records in Tanzania. The subtheme generated out here was on the personnel knowledge on the RAM regulatory requirements compliant with the procurement RAM best practices and procurement recordkeeping system standards.

The interviewees were also asked: *Do RAM regulatory and institutional arrangements fairly feature with the management of procurement records*? *How*? The focus herein was to obtain practical experiences and concerted opinion on (1) fairness of the RAM regulatory and institutional arrangements – the way they feature with management of procurement records, and (2) how often the studied PEs had contacts with the RAMD on matters and issues related to management of semi-current and non-current procurement records.

The responses from twenty interviewees (N = 20) were used to determine the fairness of the RAM regulatory and institutional frameworks. Here the focus was to derive how fair is the regulatory framework in ensuring compliance with the RAM best practices as aligned in the RAM legislation (Cap. 309, Act No. 3 of 2002) in tandem with the requirements of the public procurement legislation (Cap. 410, Act No. 7 of 2011 as amended). The summarised and compacted findings for clarity and simplicity are provided in Table 4.7.

Table 4.7: Fairness of RAM regulatory and institutional frameworks (N = 20)

| **Featuring** | **Respondents who provided experiences** | **%** |
|---|---|---|
| ***Fair*** | 03 | 15.00 |
| ***Moderately fair*** | 11 | 55.00 |
| ***Unfair*** | 06 | 30.00 |
| **TOTAL** | **20** | **100.00** |

**Source:** Field data and analysis, 2017

Table 4.7 is evident that the fairness of the RAM regulatory and institutional frameworks is moderate. Three respondents have said that the RAM regulatory and institutional arrangements are fairly featured with the management of procurement records. Eleven interviewees have said that the RAM regulatory and institutional frameworks are moderately fair whilst six interviewees have said they are unfairly featuring. The $HPMU_1$, $CONS_1$, and $CONS_2$ had the following to say:

> *The* […*compulsory*…] ***existence*** *of provision mandating PEs* [*in Tanzania*] *to* ***maintain*** *and* ***archive*** *procurement records is well articulated and institutionalised within the Tanzania PEs. However, the critical issue is on knowledge of the laws governing the conduct of how procurement records should be managed and cared in compliance with the best practices of recordkeeping* [RAM] *in the PEs recordkeeping system* [RAMS]. *Generally, the regulatory and institutional frameworks allow most of the actors within the PMUs and user department to maintain* [… *and archive*] *procurement records in complying with legal obligations* (source: summarised snapshots from $HPMU_1$; with annotations and emphasis added).

> *In most of our* ***procurement audits****, we found PEs* […*institutional*…] ***actors*** *who are dealing with management and care of* [*the*] *recorded and documented procurement records unaware of the* ***existence of dual legislations*** *in as far as public records management is concerned. Most of the* ***actors are aware of the existence of mandatory maintaining and archiving procurement records***. [*However*] *mostly, they are* ***not conversant with the requisites of the RAM legislation*** [RAM Act No. 3, 2002] *and attendant regulations* [GN No. 77, 2007] *therein* (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis and annotations added).

The differing views were on how the dual legislations coexist. The problem of knowledge on the dual existence and the requirements of the legislations (Act No. 3 of 2002 and Act No. 7 of 2011 as amended) had some issues to further probe into how they do coexist and what are the basic requirements of each in relation to specific public records management such as management of procurement records and archives. All twenty (N = 20) interviewees agreed that, the studied PEs are creating and maintaining documentation of the functions and activities of their respective public offices on matters relating to the procurement business transactional processes and activities (as provided in S. 9 [in part] of Act No. 3, 2002). Most of the studied

PEs had been found to comply with the creation and maintaining of records for their procurement business transactional processes and activities.

That, the requirement of Section 9 (in part) of Act No. 3, 2002 has been partly complied with S. 61(1) of Act No. 7 of 2011 and Reg. 10(1) of GN. No. 446 of 2013 as amended in the creation and maintaining procurement records for specific time period. However, the critical problem facing most of the studied PEs is the adequacy of records and the establishment of good recordkeeping practices as required in Section 9 (a), (b), (c), and (d) of Act No. 3 of 2002. However, on the matter and related issues of public offices (PEs) to directly contact the Records and Archives Management Department (RAMD) on semi-current and non-current procurement records; the consultants ($CONS_1$ and $CONS_2$) have the following to say:

> *We found essence on the RAM* ***regulatory requirement*** [S. 10 of Act No. 3, 2002]. *However, as records are* ***misunderstood*** *or sometimes* ***ignored****, we have been finding* ***negligence*** *on the party of responsible officers to contact with the RAMD on the matters that to them* [*responsible officers*] *were taken as* ***trivial*** (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis and annotations added).

The PEs, as public offices, are required to have direct contacts with the Records and Archives Management Department (RAMD) on matters and issues related to the management of public records – including procurement records. This is a requirement of S. 10 of Act No. 3 of 2002. In determining the direct contacts between studied PEs and the RAMD, this study specifically asked on: *Does this organisation have any contacts with the RAMD in specific matters related to procurement records*? *How*? The transcribed responses captured from 15 (HIAUs) interviewees are succinctly displayed in Table 4.8. The responses specifically display the compliance with either the direct contacts or no contacts.

Table 4.8: Contacts with the RAMD (N = 15)

| Contacts with the RAMD | Respondents who shared experiences | % |
|---|---|---|
| ***Direct contacts*** | 2 | 13.33 |
| ***Somehow contacts*** | 1 | 06.67 |
| ***No contacts*** | 12 | 80.00 |
| **TOTAL** | **15** | **100.00** |

**Source:** Field data and analysis, 2017

Table 4.8 is evident that twelve of the studied PEs had no contacts with the RAMD on matters and issues related to the management of procurement records. Only one of the studied PEs has somehow contacts with the RAMD whilst two had direct contacts with the RAMD. Generally speaking, these revelations are candid that only three (20%) of the studied PEs have some contacts with the RAMD whereas the rest (80%) of the studied PEs have had no contacts with this department prior to this study as required by the law (as in S. 10 of Act No. 3, 2002). Over this noncompliance for the Tanzania PEs to have contacts with the RAMD, the consultants ($CONS_1$ and $CONS_2$) had the following to say:

> *Of course, yes;* ***there is regulatory requirement that compel*** *PEs* [*public offices*] *to* ***contact*** *the RAMD on the matters of records* [*and archives*] *management best practices and on the management of semi-current and non-current records. However, the issue* […*which is seen always*…] *is* ***enforcement*** *to ensure that the Tanzania procuring entities comply with the said regulatory requirements. The RAMD has not been in a position to* ***enforce compliance*** *as the PPRA is doing on the same* (source: summarised snapshots from $CONS_1$ and $CONS_2$; with emphasis and annotations added).

For those studied PEs that have had direct contacts with the RAMD it was revealed that, the contacts have had helped the organisations to somehow efficiently manage and care for the current procurement records with appropriate records organisation and filing systems (as required in S. 9 (a) of Act No. 3, 2002). This is evidenced by $HPMU_1$ who said that:

> *I had been contacting the RAMD on matters and issues of* ***how to manage recorded and documented procurement record files*** *in all senses* [*lenses*?] *from* ***creation*** *to* ***disposal***. [*Indeed*], *the RAMD has helped me a lot to make sure that my procurement recordkeeping system is up-to-date and follows the* ***state-of-the-art*** *in RAM and RAMS. That is why; always this PE is compliant with the* ***requirements of proper recordkeeping***. *We have ensured that our records* [… *recorded and documented procurement record files*…] *are* ***available whenever required***, ***complete***, ***authentic***, *and provide the true* ***meaning*** *and* ***value*** *of records for* ***evidence*** *and* ***audit trails*** (source: snapshots from $HPMU_1$; with emphasis and annotations added).

Most of the studied PEs, as evidence by the *off-the-record* interviews with the 15 HPMUs, have failed to draft retention and disposal schedules relating to procurement records (contrary to S. 9 (b) of Act No. 3, 2002). Since there were no drafts of the retention and disposal schedules (as seconded by $CONS_1$ and $CONS_2$) there were no implementations of retention and disposal schedules as provided under S. 9 (d) of Act No. 3 of 2002.

### 4.2.2 Storage Space for Procurement Recordkeeping

To qualitatively determine the availability and adequacy of storage space for the procurement recordkeeping it was envisioned to ask on (1) *the availability of the storage space*, and (2) *the adequacy of the storage space*.

#### 4.2.2.1 Availability of Storage Space

The summary of the availability of storage space for current, semi-current, and non-current procurement recordkeeping is summarised in Table 4.9.

Table 4.9: Availability of storage space (N = 15)

| Type of Records | Availability | |
|---|---|---|
| | Yes | No |
| ***Current*** | 15 (100.00%) | 00 (00.00%) |
| ***Semi-current*** | 13 (86.67%) | 02 (13.33%) |
| ***Non-current*** | 13 (86.67%) | 02 (13.33%) |

**Source:** Field data and analysis, 2017

The determination of the availability and adequacy of records storage space for recordkeeping was qualitatively determined based on the type of procurement records. These were categorised inter alia into current procurement records, semi-current procurement records, and non-current procurement records (Table 4.9).

Responses derived from fifteen interviewees have indicated that there were available storage spaces for procurement recordkeeping. Categorically however, the current records had the assorted storage space due to their existing use in the procurement business transactional processes and activities therein. Whereby, fifteen of the studied PEs had the required optimum storage space for current procurement recordkeeping. Thirteen of the studied PEs had minimal requirements for the storage space for semi-current and non-current procurement records whilst two studied PEs had no storage space for the same. The contacted HPMUs of the studied PEs had the following to substantiate that:

> [*Operationally*], *our organisations are being faced by* ***acute*** *shortage of storage space for recordkeeping. What we* [*… as institution*] *have is the availability of space that facilitates the* ***maintaining and keeping current procurement records****. Most of the time* [*… as always is*]*, the current procurement records are found within the HPMUs' offices and other heads of departments within the PEs* (source: summarised snapshots from the contacted 13 HPMUs of the studied PEs; with annotations and emphasis added).

Most of the studied PEs had been found to be faced by acute shortage of storage space due to lack of specialised allocations for procurement recordkeeping. Only two of the studied PEs had storage space for semi-current and non-current procurement records respectively. Thirteen of the studied PEs had no storage space for semi-current and non-current procurement recordkeeping. These observed phenomena had resulted to the randomised procurement recordkeeping in most of the studied PEs.

#### 4.2.2.2 Adequacy of Storage Space

In this subtheme it was envisaged to qualitatively determine the adequacy of the storage space for procurement recordkeeping in the studied Tanzania PEs. The summary of the adequacy of the storage space for procurement recordkeeping in the studied Tanzania PEs is provided in Table 4.10. However, the determining factor for the adequacy of storage space is the type of the recorded and documented procurement record files; that is either current, semi-current, or non-current procurement records (Table 4.10).

Table 4.10: Adequacy of storage space (N = 15)

| **Type of Records** | **Adequacy** | |
|---|---|---|
| | Yes | No |
| ***Current*** | 15 (100.00%) | 00 (00.00%) |
| ***Semi-current*** | 02 (13.33%) | 13 (86.67%) |
| ***Non-current*** | 02 (13.33%) | 13 (86.67%) |

**Source:** Field data and analysis, 2017

Table 4.10 shows the summary of the responses on the adequacy of the storage space in the studied PEs. Responses derived from fifteen interviewees had indicated that there were mixed feelings on the adequacy of the storage spaces for keeping procurement records. Fundamentally however, the current records have the assorted adequate storage space due to their existing use in the procurement business transactional processes and activities therein. Fifteen of the studied PEs had the required optimum adequacy storage space for current procurement recordkeeping. Thirteen of the studied PEs had inadequate storage space for semi-current and non-current procurement records whilst two studied PEs had adequate storage space for the same. The HPMUs of the studied PEs had the following to support this:

> [*Administratively*], *our organisations are being faced by* ***inadequate*** *procurement records storage space for semi-current and non-current procurement records. What we* [*… as institution*] *have is the availability of* ***adequate*** *space for* ***maintaining and keeping current procurement records*** (source: summarised snapshots from 13 HPMUs of the studied PEs; with annotations and emphasis added).

The adequacy of storage space for all type of procurement records brings about an institutional resource challenge. The adequacy of the storage space is a critical challenge to most of the studied PEs due to lack of specialised allocations for procurement recordkeeping. Only two of the studied PEs had adequate storage space for semi-current and non-current procurement records respectively. Thirteen of the studied PEs had inadequate storage space for semi-current and non-current procurement records. Impliedly, this observed phenomenon has resulted to the randomised procurement records storage which has rendered poorly organised procurement recordkeeping in most of the studied PEs. Therefore, maintaining and archiving of procurement records are at high risk.

### 4.2.3 Equipment and Facilities for Procurement Recordkeeping

Contextually, this theme is almost similar to that which is found under section 4.2.2. Due to the nature of procurement recordkeeping, storage space and equipment and facilities go hand-in-hand with the preservation and handling of records. Therefore, to qualitatively determine the availability and adequacy of equipment and facilities for the procurement recordkeeping it was envisioned to ask on (1) *the availability of the equipment and facilities*, and (2) *the adequacy of the equipment and facilities* as it was conducted under section 4.2.2 of this thesis.

#### 4.2.3.1 Availability of Equipment and Facilities

Availability of equipment and facilities for procurement recordkeeping was qualitatively determined depending on the existence of equipment and facilities thereto. The summary of the availability of equipment and facilities for current, semi-current, and non-current procurement records is summarised in Table 4.11.The determination of the availability of equipment and facilities was qualitatively based on the envisaged procurement records. These were categorised inter alia into current procurement records, semi-current procurement records, and non-current procurement records (Table 4.11).

Table 4.11: Availability of equipment and facilities (N = 15)

| **Type of Records** | **Availability** | |
|---|---|---|
| | Yes | No |
| ***Current*** | 15 (100.00%) | 00 (00.00%) |
| ***Semi-current*** | 13 (86.67%) | 02 (13.33%) |
| ***Non-current*** | 13 (86.67%) | 02 (13.33%) |

**Source:** Field data and analysis, 2017

Responses derived from fifteen interviewees have indicated that there were available equipment and facilities for procurement recordkeeping. Mostly however, the current records have the required equipment and facilities due to their existing use in the procurement business transactional processes and activities therein. Fifteen of the studied PEs had the required optimum equipment and facilities for current procurement records. Thirteen of the studied PEs had had availability for the equipment and facilities for semi-current and non-current procurement records whilst two of the studied PEs had no equipment and facilities for the same. The contacted HPMUs of the studied PEs had the following to substantiate that:

> [*Operationally*], *our organisations are being faced by* ***serious*** *shortage of equipment and facilities for keeping procurement records. What we* [… *as*

*institution*] *have is the minimum of the required number of equipment and facilities that facilitates the* ***keeping current procurement records****. Most of the time* [*… as always is*], *the current procurement records are found within the HPMUs' offices and other heads of departments within the PEs* (source: summarised snapshots from 13 HPMUs of the studied PEs; with annotations and emphasis added).

The availability of equipment and facilities for keeping all kinds of procurement records brings about an institutional resource challenge as for storage space for the procurement recordkeeping. The availability of the equipment and facilities is a critical challenge to most of the studied PEs due to lack of specialised allocations for procurement recordkeeping. This observed phenomenon has resulted to improper procurement recordkeeping in most of the studied PEs.

#### 4.2.3.2 Adequacy of Equipment and Facilities

In this subtheme it was envisaged to qualitatively determine the adequacy of the equipment and facilities in the studied Tanzania PEs as it was done for the storage space. The summary of the adequacy of the equipment and facilities for procurement recordkeeping in the studied Tanzania PEs is summarised in Table 4.12. However, the determining factor for the adequacy of the equipment and facilities is the kinds of the recorded and documented procurement record files. The determination of the adequacy of records storage space was qualitatively based on the kinds of procurement records. These were categorised inter alia into records that are frequently used and those that are not frequently used. Table 4.12 provides responses on the adequacy of equipment and facilities for procurement recordkeeping.

Table 4.12: Adequacy of equipment and facilities (N = 15)

| **Type of Records** | **Adequacy** | |
|---|---|---|
| | Yes | No |
| ***Current*** | 15 (100.00%) | 00 (00.00%) |
| ***Semi-current*** | 02 (13.33%) | 13 (86.67%) |
| ***Non-current*** | 02 (13.33%) | 13 (86.67%) |

**Source:** Field data and analysis, 2017

Responses derived from fifteen interviewees have indicated that there were mixed feelings on the adequacy of the equipment and facilities for procurement recordkeeping. The current procurement records have the required adequate equipment and facilities due to their existing use in the procurement business transactional processes and activities therein. Whilst fifteen of the studied PEs had the required optimum adequacy storage space for current procurement records, thirteen of the studied PEs had inadequate storage space for semi-current and non-current procurement records. However, two studied PEs had adequate storage space for the same. The HPMUs of the studied PEs had the following to support this:

> [*Administratively*], *our organisations are being faced by **inadequate** equipment and facilities for keeping procurement records. What we* [*… as institution*] *have is the equipment and facilities for **maintaining** and **keeping current procurement records** within the PEs. Usually, the equipment and facilities are found in the PMU offices and some user department offices* (source: summarised snapshots from 13contacted HPMUs of the studied PEs; with annotations and emphasis added).

The adequacy of equipment and facilities for keeping all kinds of procurement records brings about PEs' institutional resource challenges. Only two of the studied PEs had adequate equipment and facilities for keeping semi-current and non-current procurement records respectively. Thirteen of the studied PEs had no equipment and facilities for keeping semi-current and non-current procurement records. This observed phenomenon has resulted to the randomised procurement records storage which has rendered improper procurement recordkeeping in most of the studied PEs. Principally, procurement recordkeeping in most of the studied PEs is confronted with acute inadequacy of equipment and facilities due to inadequate funding of the procurement RAM activities.

### 4.2.4 Security and Safety Measures in Managing Procurement Records

In determining the extent of security and safety measures in managing procurement records it was envisioned to ask respondents on: *Who has or does not have access to the procurement records*? *Why*? After the responses of the interviewees on these topical in-depth interview specific questions, it was further probed that: *Does this* *organisation have any security and safety measures in managing procurement records*? *If yes, state them*. Here, the pre-determined manifested subthemes were deduced to be two. These were considered as (1) accessibility into the procurement records, and (2) availability and sufficiency of security and safety measures in managing procurement records. Responses considered here were solicited and obtained from fifteen interviewees in the studied PEs. The envisaged responses were in terms of: accessibility to records; and sufficiency of security and safety measures in managing procurement records in the studied PEs.

The accessibility to the procurement records refers to the situation whereby individuals within and across the PEs are allowed to access procurement records to where they are kept, stored, or maintain being either current records or semi-current records or non-current. In principle, the access to procurement records could be signified into either *free access* or *access with permission* or *strict access*. Generally, PEs may experience either one or a mixed of the records access modus operandi. Whatever the type and in whichever the situation, records (current, semi-current, or non-current) need control of access. The summary of the interviews have revealed that there are three accessibility modus operandi in most of the studied PEs, inter alia: free access (random access); access with permission; and strict access. Table 4.13 summarises the responses elicited from the interviewees (N = 15).

Table 4.13: Accessibility to the procurement records (N = 15)

| Modus operandi | Interviewees who provided experiences | Institutional or operational issues |
|---|---|---|
| ***Free access*** | 9 | - There is free entry into the records<br>- There is no records registry personnel who is accountable for the storage of records |
| ***Access with permission*** | 2 | - There is records registry personnel who authorises individuals who want access to the records for specific purposes<br>- Institutional users of the records need to be authorised to enter into the classified semi-current and non-current records (archives)<br>- Access to the records is sought for permission to be obtained from institutional actors who created the records (especially for records which are subject to process to be confidential) |
| ***Strict access*** | 4 | - Institutional access to records is strict to the registry personnel and only authorised individual within and across the PEs<br>- Issuance of procurement records and archived files is strict<br>- Entry to the procurement records and archives storage rooms is strictly prohibited for an unauthorised people |
| **TOTAL** | **15** | |

**Source:** Field data and analysis, 2017

Table 4.13 is evident that random access modus operandi is the dominant in the studied fifteen PEs. Nine of the interviewees had experienced random access into the procurement records storage where there are no procurement records registry personnel. Here, there is no strict entry into the procurement records where they are kept. Five interviewees had the following to support these findings:

> *Usually,* ***randomised*** *records storage allows access to anyone who wishes to enter to where the recorded and documented procurement record files are kept. This type of records storage system has some institutional challenges on the procurement recordkeeping. It is a matter of fact that once recorded and documented procurement record files or extracts therefrom are taken by* ***unauthorised individuals*** *there is* ***no accountability for the same****. Most of the time, procurement records are at* ***risk of being mishandled*** (source: summarised snapshots from $HPMU_1$; $HPMU_2$; $HPMU_3$; $CONS_1$; $CONS_2$; with emphasis added)

It is evident that personnel working within and across the accounting (and finance) and administration departments have had easy direct and free access to the procurement records and sometimes they extracted units of records (documents) without replacements from either recorded and documented procurement record or contract files (source: $HPMU_1$; $HPMU_2$; $HPMU_3$). Four interviewees had experienced strict access where institutional actors' access into the procurement records is strictly to the registry personnel and authorised individuals within and across the PEs. Two interviewees had opinion that procurement records registry personnel authorises individuals who want access to the records which are not subject to process to be confidential.

Procurement records need to be kept in safe and secured places for their security and safety in maintaining their existence and usability as organisational assets. Therefore, in determining the security and safety of procurement records in the studied PEs it was envisaged to ask on existence and sufficiency of security and safety measures. Table 4.14 provides the responses of the interviewees on security and safety of procurement records. The security and safety which is displayed in Table 4.14 represent the responses based on the semi-current and extinct procurement records. However, for the case of current procurement records the security and safety of these records is very reasonable as most of them are kept in the institutional actors' offices within filing cabinets, shelves, lockers, and records file cupboards. Mostly, the current procurement records are usually under lock with strict management and care.

Table 4.14:Security and safety measures (N = 15)

| | Responses | Frequencies |
|---|---|---|
| ***Security*** | YES | 03 |
| | NO | 12 |
| | | **15** |
| ***Safety*** | YES | 03 |
| | NO | 12 |
| | | **15** |

**Source:** Field data and analysis, 2017

Table 4.14 is evident that only three of the studied PEs had security and safety measures whilst twelve had no any security and safety measures for managing the recorded and documented procurement record files. For the three of the studied PEs that had security and safety measures in managing procurement records, they include but not limited to the following characteristics as provided by the $HPMU_1$, $HPMU_2$, and $HPMU_3$:

> [*For security measures*]*Procurement records are* ***highly secured under lock into specialised storage equipment and facilities*** *in the* [*institutional*] *actors' offices and/or into the specialised containerised rooms designated for records and archives keeping* [*… for preservation*] (source: summarised snapshots from $HPMU_1$; $HPMU_2$; with annotation and emphasis added).

> [*For safety measures*]*Procurement records are kept into the equipment and facilities within the* [*institutional*] *actors' offices and/or into the* ***specialised containerised recordkeeping compartments*** *that have* ***safety mechanisms*** *such as* ***fire monitoring systems***[*smoke detectors*], *water and dump proof, no leaking roofs, and* ***temperature monitoring instruments*** (source: summarised snapshots from $HPMU_3$; with annotations and emphasis added).

Interviews with the selected heads of PMUs, who were dealing with the multitudes of procurement records, had the following to substantiate on the procurement recordkeeping security and safety for their designated PEs:

> *This organisation has two designated containers. The containers have been refurbished to suit the standards of keeping procurement records in line with the security and safety measures required for the requirements of the RAM practices. The containers have two separate keeping locations – one for semi current procurement records and the second for extinct procurement records – both storage locations have been equipped with smoke detectors and two serviceable fire extinguishers on each container. The containers are water and dump proof with no leakages* (source: snapshots from $HPMU_1$).

> *This organisation has set aside* ***four containers*** *for storing (keeping) procurement records – especially semi-current and extinct. Two containers have been devoted for semi-current whilst the other two for extinct procurement records. The containers have been made to* ***comply with the needs of security and safety of records during storage and securing them to maintain their quality in terms of usability****. The containers are under lock and have been installed with smoke detectors, water proof mechanisms, two fire extinguishers have been mounted for each container, and specialised personnel has been employed to deal with these records storage under the PMU. The challenge here is the randomised storage due to multitude of semi-current and extinct records that are piling in a daily basis with no retention and disposition schedules* (source: summarised snapshots from $HPMU_2$; with emphasis added).

> *This organisation has* ***specialised rooms*** *for procurement records situated at the headquarters and zones and regions respectively. The rooms, despite of being auspice enough for storing procurement records at the headquarters, the organisation has recordkeeping rooms at the zones and regions where some procurement activities have been designated and are conducted thereat. The recordkeeping rooms at the headquarters, zones, and regions have been* ***designed to meet the standards of smoke detection****,* ***water and dump proof****,* ***no leakages****, and* ***secured under lock with 24/7 surveillance*** (source: summarised snapshots from $HPMU_3$; with emphasis added).

It is evident, according to $HPMU_1$ and $HPMU_2$, that their respective organisations (PEs) have specialised procurement records storage spaces (that is, specialised and designated containers). The containers have been made to comply with the needs of the RAM requirements essentially on security and safety of procurement records stored therein for efficient management and care of the recorded procurement files. For $HPMU_3$ the issue is somehow different. There are specialised rooms designated for procurement recordkeeping. For each record keeping room in the respective headquarters, zones, or regions; the security and safety measures have been installed within and across the procurement records storage places that are housed either within the headquarters, zone or in the regional offices.

## 4.3 Descriptive Analysis for Quantitative Data

This section presents descriptive statistical analysis for quantitative data. The section presents findings on response rate and reliability test. Other findings presented in this section are relative importance of construct attributes, factor analysis, logistic regression analysis and interpretation, goodness-of-fit test for the logistic regression model, and marginal effect results and interpretations.

### 4.3.1 Response Rate

The questionnaire survey was aimed at the respondents who were working in the PMUs and user departments. However, during questionnaire administration emphasis was on the heads of PMUs who were directly involved in the management of procurement records for the wholly procurement management processes. Despite this fact; however, some heads of user departments who were willing and readily available to be administered with the questionnaire were invited to participate in the questionnaire survey. A total of 200 questionnaires were administered.

Table 4.15:Respondents profile by work stations

| Work Station | Frequency | % |
|---|---|---|
| PMU | 120 | 80.0 |
| User Department | 30 | 20.0 |
| **TOTAL** | **150** | **100.0** |

**Source:** Field data and analysis, 2017

Table 4.15 is evident that 150 questionnaires were returned. This is a 75 per cent response rate. In this particular study, 120 (80%) respondents were working in the PMUs whereas 30 (20%) respondents were working within and across the user departments of the surveyed PEs (Table 4.15). These findings indicate that, the personnel working in the PMUs were key respondents for the questionnaire survey. The fact is that, heads of PMUs are institutionally mandated to maintain and archive procurement records of the entire procurement and disposal processes and activities therein (S. 38 (l) of Act No. 7, 2011 as amended). For detailed sample characteristics in terms of distribution by gender, education level, working experience and attendance of the RAM trainings the reader is advised to see Appendix 4.

### 4.3.2 Reliability Test on the Constructs

Reliability is the ability of a measurement instrument to produce the same result (answer) in the same circumstances, time after time (De Vaus, 2002). This means that if people attempted to answer the same question the same way on the repeated occasions, then the instrument can be said to be reliable. Reliability can be internal or external. In quantitative research, reliability deals with indicator's dependability, which means that the information provided by indicators does not vary as a result of the characteristics of the indicator, instrument or device itself (Gall, Gall, & Borg, 2007). Reliability analysis was used to test the internal consistency of the research instruments for the purposes of identifying those items in the questionnaire with low correlations in order to exclude them from further analysis. Cronbach's alpha a coefficient of reliability that gives unbiased estimate of data generalizability was used to test reliability of the used structured questionnaire.

The purpose of determining the reliability statistics was to test the reliability of the structured questionnaire that was used to collect data on constructs and their associated attributes. Reliability of the structured questionnaire refers to its ability to produce consistent and stable measurements. Reliability, as explained by Bagozzi (1994), can be seen from two angles, namely: reliability (the extent of accuracy) and unreliability (the extent of inaccuracy). The most common reliability coefficient is the Cronbach's alpha which estimates internal consistency by determining how all items on a test relate to all other items and to the total test, internal coherence of data. The reliability is expressed as a coefficient between 0 and 1 (Cronbach, 1951). Generally, the higher the coefficient, the more reliable is the test (Cronbach, 1951; Nunnally, 1978; Nunnally & Bernstein, 1994; see George & Mallery, 2003). To ensure the reliability of the instrument, Cronbach's alpha was used to test the reliability of the proposed constructs (Table 4.16).

Table 4.16:Reliability test on the constructs

| **Construct variables** | **Number of itemised attributes** | **Reliability Cronbach's α** | **Rule of thumb according to George and Mallery (2003)** | **Conclusion** |
|---|---|---|---|---|
| Capacity of personnel involved in managing procurement records | 4 | 0.497 | Unacceptable | Unreliable |
| Storage space for procurement recordkeeping | 4 | 0.806 | Good | Reliable |
| Equipment and facilities for procurement recordkeeping | 4 | 0.828 | Good | Reliable |
| Security and safety measures in managing procurement records | 4 | 0.803 | Good | Reliable |

**Source:** Field data and analysis, 2017

Table 4.16 shows the reliability of the construct variables. For study to be reliable, all construct variables should depict the value of Cronbach's α above the suggested value of 0.7 (Nunnally, 1978; Nunnally & Bernstein, 1994). In this study, on the basis of reliability test, it was supposed that the scales used in this study were reliable to capture the constructs. The capacity of personnel involved in managing procurement records had a reliability value of 0.497, storage space for procurement recordkeeping had a value of 0.806, equipment and facilities for procurement recordkeeping had a value of 0.828, and security and safety measures in managing procurement records had a value of 0.803. Despite a proposed construct variable named as "*capacity of personnel involved in managing procurement records*" having the Cronbach's $\alpha$ of 0.497 which is unacceptable (according to George & Mallery, 2003); it was retained due to the fact that the attributes therein have a *rotated component matrix*[a] greater than 0.7 (refer to Table 4.23).

### 4.3.3 Relative Importance of Construct Attributes

This sub section explains and discusses the matters and issues related to the relative importance of the studied construct attributes of the factors influencing the management of procurement records in the studied Tanzania PEs. The studied constructs were inter alia (1) capacity of personnel in managing procurement records, (2) storage space for procurement recordkeeping, (3) equipment and facilities for procurement recordkeeping, and (4) security and safety measures in managing procurement records. Despite the questionnaire (Appendix 2) having six proposed constructs with a total of 24 attributes, the relative importance of the attributes has been checked for 16 attributes that were amenable for factor analysis depending on the envisaged specific study objectives.

#### 4.3.2.1 Capacity of Personnel in Managing Procurement Records

Table 4.17 shows the relative importance of attributes on the capacity of personnel in managing procurement records. The ranked attributes were inter alia management of procurement records is done by personnel who have the specialised knowledge in the procurement functional activities, personnel who are managing procurement records do receive specialised on-the-job training on the records management practices, personnel who are managing procurement records have the required records management skills, and procurement records management is executed by personnel who have the required competences on records management.

Table 4.17:Capacity of personnel attributes ranked by relative importance

| Code | Capacity of Personnel Attributes | Rank | Mean | SD |
|---|---|---|---|---|
| C1 | Management of procurement records is done by personnel who have the specialised knowledge in the procurement functional activities | 1 | 4.29 | 0.638 |
| C4 | Personnel who are managing procurement records do receive specialized on-the-job training on records management practices | 2 | 3.33 | 1.052 |
| C2 | Personnel who are managing procurement records have the required records management skills | 3 | 2.97 | 0.859 |
| C3 | Procurement records management is executed by personnel who have the required competences on records management | 4 | 2.45 | 0.909 |
| **Grand Mean** | | | **3.26** | |

**Source:** Field data and analysis, 2017

Table 4.16 shows that the attributes had been ranked according to their relative importance based on the capacity of personnel as perceived by the respondents. The top ranked attribute with an average of 4.29 clearly indicates that functions of procurement records management (creation, receipt, use, maintaining, archiving and disposition) in the studied PEs are executed by personnel who have the specialised knowledge in the procurement functional activities. This is the requirement of staffing the PMUs with the procurement specialists (vide S. 37(1) and S. 37(2) in part, of Act No. 7, 2011 as amended).

The findings (Table 4.17) show that personnel who were managing procurement records did receive specialised on-the-job training on the RAM practices. This attribute has received an average of 3.33 higher than the next below it. Whereas, the personnel who were managing procurement records with the required records management skills had ranked third with an average score of 2.97 lower than as compared to the top two attributes. On the required competences on records management, the personnel were ranked the lowest with an average of 2.45. This is an indication that the personnel in the studied PEs had less of the required competencies in managing procurement records.

#### 4.3.2.2 Storage Space for Procurement Recordkeeping

Table 4.18 reveals the relative importance of attributes on the storage space for the procurement recordkeeping. The ranked attributes were inter alia storage space for keeping procurement records, storage space for keeping all kinds of procurement records, adequate storage space for keeping procurement records; and adequate storage space for keeping all kinds of procurement records.

Table 4.18:Storage space attributes ranked by relative importance

| Code | Storage Space Attributes | Rank | Mean | SD |
|---|---|---|---|---|
| C1Aspace | There is storage space for keeping procurement records | 1 | 3.50 | 1.028 |
| C3Aspace | There is storage space for keeping all kinds of procurement records | 2 | 3.39 | 1.140 |
| C2Aspace | There is adequate storage space for keeping procurement records | 3 | 1.77 | 0.789 |
| C4Aspace | There is adequate storage space for keeping all kinds of procurement records | 4 | 1.73 | 0.808 |
| **Grand Mean** | | | **2.60** | |

**Source:** Field data and analysis, 2017

Table 4.18 shows that the attributes had been ranked according to their relative importance based on the adequacy of storage space for procurement recordkeeping. The top ranked attribute with an average of 3.50 was on the availability of the storage space for procurement recordkeeping. This indicates that the studied PEs had storage space for procurement recordkeeping. However, the question would have been: *to what extent the available storage space is adequacy to accommodate procurement records in the studied Tanzania PEs*? This could be explained by the third ranked attribute with an average of 1.77. Impliedly, the adequacy of the storage space for procurement recordkeeping is low as compared to other attributes in this construct.

Storage space for keeping all kinds of procurement records ranked the second with an average of 3.39. Impliedly, this is an indication that there was an availability of storage space for keeping all kinds (that is, current, semi-current, and non-current) of procurement records. The question however would be: *to what extent is the available space adequate for all kinds of procurement records*? This could be explained by the fourth ranked attribute with a mean of 1.73 that shows the adequacy of the storage space for keeping all kinds of procurement records is low.

#### 4.3.2.3 Equipment and Facilities for Procurement Recordkeeping

Table 4.19 reveals the relative importance of attributes on the equipment and facilities for the procurement recordkeeping. The ranked attributes were inter alia availability of equipment for keeping procurement records, availability of facilities for keeping procurement records, adequacy of facilities for keeping procurement records, and adequate of equipment for keeping all kinds of procurement records.

Table 4.19: Equipment and facilities attributes ranked by relative importance

| Code | Equipment and Facilities Attributes | Rank | Mean | SD |
|---|---|---|---|---|
| C1Adeq | There is equipment for keeping procurement records | 1 | 3.49 | 1.128 |
| C3Adeq | There are facilities for keeping procurement records | 2 | 3.49 | 1.163 |
| C2Adeq | There are adequate facilities for keeping procurement records | 3 | 1.74 | 0.781 |
| C4Adeq | There is adequate equipment for keeping all kinds of procurement records | 4 | 1.68 | 0.772 |
| **Grand Mean** | | | **2.60** | |

**Source:** Field data and analysis, 2017

Table 4.19 shows that the attributes had been ranked according to their relative importance based on the availability and adequacy of equipment and facilities for procurement recordkeeping. The top ranked attribute with an average of 3.49 was on the availability of the equipment for procurement recordkeeping. This indicates that the studied PEs had equipment for procurement recordkeeping. The question however would be: *to what extent is the available equipment adequate for all kinds of procurement records*? This could be explained by the fourth ranked attribute with a mean of 1.68 that shows the adequacy of equipment for keeping all kinds of procurement records is low. Impliedly, the adequacy of the equipment for keeping all kinds of procurement records is low as compared to other attributes in this construct.

#### 4.3.2.4 Security and Safety Measures in Managing Procurement Records

Table 4.20 depicts the relative importance of security and safety measures in managing procurement records. The ranked attributes were inter alia availability of security measures in managing procurement records, availability of safety measures in managing procurement records, sufficiency of the security measures in managing procurement records, and sufficiency of the safety measures in managing procurement records.

Table 4.20: Security and safety attributes ranked by relative importance

| **Code** | **Security Measures Attributes** | **Rank** | **Mean** | **SD** |
|---|---|---|---|---|
| C1Sss | There are security measures in managing procurement records | 1 | 3.30 | 1.197 |
| C3Sss | There are safety measures in managing procurement records | 2 | 3.28 | 1.254 |
| C2Sss | There are sufficient security measures in managing procurement records | 3 | 1.62 | 0.757 |
| C4Sss | There are sufficient safety measures in managing procurement records | 4 | 1.58 | 0.780 |
| **Grand Mean** | | | **2.445** | |

**Source:** Field data and analysis, 2017

Findings (Table 4.20) reveal that the attributes had been ranked according to their relative importance based on the availability and sufficiency of security and safety measures in managing procurement records in the studied PEs. The top ranked attribute with an average of 3.30 was on the availability of security measures in managing procurement records. Whilst the second ranked attribute with the mean of 3.28 was on the availability of safety measures in managing procurement records. This indicates that the studied PEs had some characteristics of the availability of security and safety measures in managing procurement records in the studied PEs.

However, the question would have been: *What is the extent of sufficiency of the security and safety measures in the studied Tanzania PEs*? This could be explained by the third ranked attribute with an average of 1.62 that the sufficiency of the security measures in managing procurement records is low; whereas, the fourth ranked attribute with an average of 1.58 depicts that the sufficiency of safety measures in managing procurement records was very low. These empirical findings comply with Ndenje-Sichalwe (2010) on disaster preparedness and security control for records and archives where it did not form a significant part of the records management in the government ministries of Tanzania. These observations compliant with the findings of Mnjama and Wamukoya (2004) that observed poor security in relation to managing public records in the east and southern African countries.

## 4.4 Factor Analysis

Factor analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott,& Moustaki, 2011). These unobservable factors are not directly measured but are essentially hypothetical constructs that are used to represent variables (Cattell, 1973). Principal component analysis is extremely similar, and is often used as a preliminary stage to factor analysis itself (Foster *et al.*, 2006). In this study, factor analysis was conducted in the construct variables that emanated from the specific research objectives. Before this study could have ventured into logistic regression analysis, it was obliged to conduct factor analysis in order to reduce the data into manageable constructs that are amenable for further analysis.

In this study, factor analysis was sought rather than principal component analysis (PCA). In order to perform factor analysis it was required to analyse the correlation matrix in order to find the underlying constructs or latent variables which explain the pattern of correlations it contains and how far each is measured by the variable. To perform factor analysis, the data were supposed to meet certain requirements. In this particular study, data were scrutinised and found to meet the envisaged requirements inter alia: data has been measured on an interval scale – the construct attributes were measured by a Likert type of response using five-point scale; respondents varied in their scores in the variables (this is in agreement with Foster *et al*., 2006); the expected correlations in the correlation matrix is more than 0.30 (as agreed by Foster *et al*., 2006); and no statistical inference was used to determine the number of factors, the normal distribution was not assumed (Tabachnik & Fidell, 2001). The data were thoroughly checked if they were compliant with the named four requirements. By all means, it was satisfied that the data for this study were compliant with the factor analysis basic requirements.

### 4.4.1 How Much Data for Factor Analysis

Before embarking on the factor analysis one has to ask this question before hand: *How many respondents for how many independent variables*? There is no firm rule to say how many before factor analysis is firmly based (Foster *et al*., 2006). Essentially, the more data the study has the better (Foster *et al*., 2006). This study had 150 respondents that were supposed to respond to the designated four constructs having sixteen construct attributes for the purpose of analysis (vide Appendix 2). Kline (1994) believes samples of 100 are sufficient so long as there are at least as many respondents as variables. Bryman and Cramer (1997) recommend that at least 100 respondents at least five times as many respondents as variables so with 100 respondents one should have no more than 20 variables. This study complied with the suggestions and recommendations of Kline (1994), Bryman and Cramer (1997), and Foster *et al*. (2006) respectively. Therefore, factor analysis followed suit.

### 4.4.2 Factor Analysis for Constructs

Factor analysis was conducted for each construct. There were four named constructs as shown in the conceptual framework (Figure 2.4). The constructs were derived from the specific study objectives. The constructs were arbitrarily coded as: *Construct 1*, *Construct 2*, *Construct 3*, and *Construct 4* respectively. They are:

1. *Construct 1*:Capacity of personnel in managing procurement records;
2. *Construct 2*:Storage space for procurement recordkeeping;
3. *Construct 3*:Equipment and facilities for procurement recordkeeping; and
4. *Construct 4*: Security and safety measures in managing procurement records.

The results for factors analysis measures on the envisioned Kaiser-Meyer-Olkin (KMO) measures, Bartlett's test of sphericity, variance explained and aggregation of items for the given constructs are presented in the subsequent sub sections hereunder.

#### 4.4.2.1 Factor Analysis for Construct 1

The results for data set adequacy for *Construct 1* are presented in Table 4.21.

Table 4.21: KMO and Bartlett's test for Construct 1

| | | |
|---|---|---|
| Kaiser-Mayer-Olkin Measure of Sampling Adequacy | | .355 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 73.796 |
| | df | 6 |
| | Sig. | .000 |

**Source:** Analysis of field data, 2017

From the results in Table 4.21, the KMO value is less than 0.5 and that of the Bartlett's Test of Sphericity is significant ($p < 0.05$). Furthermore, as per convergent validity analysis phenomenon, only items that loaded at least 0.3 are considered for total aggregation.

Table 4.22:Total variance explained for Construct 1

| Comp. | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % |
| 1 | 1.618 | 40.452 | 40.452 | 1.618 | 40.452 | 40.452 | 1.360 | 34.012 | 34.012 |
| 2 | 1.098 | 27.450 | 67.902 | 1.098 | 27.450 | 67.902 | 1.356 | 33.890 | 67.902 |
| 3 | .910 | 22.739 | 90.641 | | | | | | |
| 4 | .374 | 9.359 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

**Source:** Analysis of field data, 2017

From the results in Table 4.22, two components have eigenvalues greater than one and explained 67.902% (which is above 50%) of the variance; however, all items are loaded above 0.7 (Table 4.23) and they are loaded as two components of *Construct 1*. Since the initial conditions for undertaking factor analysis are met, then the factor analysis was done to sum items of *Construct 1* into smaller components as indicated in Table 4.23. Therefore, the first construct (*Construct 1*) which is about capacity of personnel involved in managing procurement records (Cs) has retained two factors. It is evident that C1 and C2 are more loaded in component 1 and forms FAC1_2 and also C3 and C4 load more altogether and forms FAC2_2 in the data file. It is hereby necessary to establish arbitrary names for FAC1_2 and FAC2_2 which are combinations of (C1, C2) and (C3, C4) respectively.

Table 4.23: Rotated component matrix[a] for Construct 1

| | Component | |
|---|---|---|
| | 1 | 2 |
| C1: Management of procurement records is done by personnel who have the specialized knowledge in the procurement functional activities | .843 | |
| C2: Personnel who are managing procurement records have the required records management skills | .793 | |
| C3: Procurement records management is executed by personnel who have the required competences on records management | | .838 |
| C4: Personnel who are managing procurement records do receive specialized on-the-job training on records management practices | | .801 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

**Source:** Analysis of field data, 2017

For *Construct 1*, the proposed and adopted arbitrary names are given as:

1. FAC1_2: Specialised knowledge and skills on procurement records management
2. FAC2_2: Competence and on-the-job training on procurement records management

### 4.4.2.2 Factor Analysis for Construct 2

It was envisaged to determine the adequacy of data set as it was done for *Construct 1*. The results for data set adequacy for *Construct 2* are presented in Table 4.24.

Table 4.24: KMO and Bartlett's test for Construct 2

| Kaiser-Mayer-Olkin Measure of Sampling Adequacy | | .571 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 472.326 |
| | df | 6 |
| | Sig. | .000 |

**Source:** Analysis of field data, 2017

From the results in Table 4.24, the KMO value is greater than 0.5 and that of the Bartlett's Test of Sphericity is significant ($p < 0.05$). Furthermore, as per convergent validity analysis phenomenon, only items that loaded at least 0.3 are considered for total aggregation.

Table 4.25:Total variance explained for Construct 2

| Comp. | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % |
| 1 | 2.581 | 64.529 | 64.529 | 2.581 | 64.529 | 64.529 | 1.920 | 48.002 | 48.002 |
| 2 | 1.167 | 29.181 | 93.710 | 1.167 | 29.181 | 93.710 | 1.828 | 45.708 | 93.710 |
| 3 | .176 | 4.401 | 98.110 | | | | | | |
| 4 | .076 | 1.890 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

**Source:** Analysis of field data, 2017

From the results in Table 4.25, two components have eigenvalues greater than one and explained 93.710 % (which is above 50%) of the variance; all items are loaded above 0.9 (Table 4.26) and they are loaded as two components of *Construct 2*. Since the initial conditions for undertaking factor analysis were met, then the factor analysis was done to sum items of *Construct 2* into smaller components as indicated in Table 4.26. The second construct (*Construct 2*) has retained two factors. It is evident that C4Aspace and C2Aspace are loaded more in component 1 and forms FAC1_3 and also C1Aspace and C3Aspace loads more altogether and forms FAC2_3 in the data file. It is hereby necessary to establish arbitrary names for FAC1_3 and FAC2_3 which is a combination of (C4Aspace, C2Aspace) and (C1Aspace, C3Aspace) respectively.

Table 4.26: Rotated component matrix[a] for Construct 2

| | Component 1 | Component 2 |
|---|---|---|
| C4Aspace: There is adequate storage space for keeping all kinds of procurement records | .965 | |
| C2Aspace: There is adequate storage space for keeping procurement records | .959 | |
| C1Aspace: There is storage space for keeping procurement records | | .943 |
| C3Aspace: There is storage space for keeping all kinds of procurement records | | .931 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

**Source:** Analysis of field data, 2017

For *Construct 2*, the proposed and adopted arbitrary names are given as:

1. FAC1_3: Availability of storage space for keeping all kinds of procurement records
2. FAC2_3: Adequacy of storage space for keeping all kinds of procurement records

#### 4.4.2.3 Factor Analysis for Construct 3

The results for data set adequacy for *Construct 3* are presented in Table 4.27.

Table 4.27: KMO and Bartlett's test for Construct 3

| | | |
|---|---|---|
| Kaiser-Mayer-Olkin Measure of Sampling Adequacy | | .576 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 583.420 |
| | df | 6 |
| | Sig. | .000 |

**Source:** Analysis of field data

From the results in Table 4.27, the KMO value is greater than 0.5 and that of the Bartlett's Test of Sphericity was significant ($p < 0.05$). Furthermore, as per convergent validity analysis phenomenon, only items that loaded at least 0.3 are considered for total aggregation.

Table 4.28:Total variance explained for Construct 3

| Comp. | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % |
| 1 | 2.683 | 67.075 | 67.075 | 2.683 | 67.075 | 67.075 | 1.941 | 48.534 | 48.534 |
| 2 | 1.157 | 28.914 | 95.989 | 1.157 | 28.914 | 95.989 | 1.898 | 47.455 | 95.989 |
| 3 | .103 | 2.584 | 98.573 | | | | | | |
| 4 | .057 | 1.427 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

**Source:** Analysis of field data, 2017

From the results in Table 4.28, two components have eigenvalue greater than one and explained 95.989% (which is above 50%) of the variance; all items are loaded above 0.9 (Table 4.29) and they are loaded as two components of *Construct 3*. Since the initial conditions for undertaking factor analysis were met, then the factor analysis was done to sum items of *Construct 3* into smaller components as indicated in Table 4.29.

The third construct (*Construct 3*) is about the equipment and facilities for procurement recordkeeping. This construct retained two factors. It is evident that C1Adeq and C3Adeq are loaded more in component 1 and forms FAC1_4 and also C4Adeq and C2Adeq load more altogether and forms FAC2_4 in the data file. It is hereby necessary to establish arbitrary names for FAC1_4 and FAC2_4 which is a combination of (C1Adeq, C3Adeq) and (C4Adeq, C2Adeq) respectively.

Table 4.29: Rotated component matrix[a] for Construct 3

| | Component | |
|---|---|---|
| | 1 | 2 |
| C1Adeq: There is equipment for keeping procurement records | .967 | |
| C3Adeq: There are facilities for keeping procurement records | .963 | |
| C4Adeq: There are adequate facilities for keeping all kinds of procurement records | | .959 |
| C2Adeq: There is adequate equipment for keeping for keeping all kinds of procurement records | | .948 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

**Source:** Analysis of field data

For *Construct 3*, the proposed and adopted arbitrary names for the explanatory variables are given as:

1. FAC1_4: Availability of equipment and facilities for keeping procurement records
2. FAC2_4: Adequacy of equipment and facilities for keeping all kinds of procurement records

#### 4.4.2.3 Factor Analysis for Construct 4

Construct 4 on the sufficiency of security and safety measures in managing procurement records was the last to be subjected to the factor analysis. The results for data set adequacy for *Construct 4* are presented in Table 4.30.

Table 4.30:KMO and Bartlett's test for Construct 4

| | | |
|---|---|---|
| Kaiser-Mayer-Olkin Measure of Sampling Adequacy | | .470 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 472.326 |
| | df | 6 |
| | Sig. | .000 |

**Source:** Analysis of field data, 2017

From the results in Table 4.30, the KMO value is approximately equals to 0.5 and that of the Bartlett's Test of Sphericity is significant ($p < 0.05$). Furthermore, as per convergent validity analysis phenomenon, only items that loaded at least 0.3 are considered for total aggregation.

Table 4.31:Total variance explained for Construct 4

| Comp. | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % | Total | % of Var. | Cum. % |
| 1 | 2.572 | 64.304 | 64.304 | 2.572 | 64.304 | 64.304 | 1.917 | 47.931 | 47.931 |
| 2 | 1.212 | 30.300 | 94.604 | 1.212 | 30.300 | 94.604 | 1.867 | 46.674 | 94.604 |
| 3 | .161 | 4.026 | 98.630 | | | | | | |
| 4 | .055 | 1.370 | 100.000 | | | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | | | |

**Source:** Analysis of field data, 2017

From the results in Table 4.31, two components have eigenvalue greater than one and explained 94.604% (which is above 50%) of the variance; all items are loaded above 0.9 (Table 4.32) and they are loaded as two components of *Construct 4*. Since the initial conditions for undertaking factor analysis were met, then factor analysis was conducted to sum items of *Construct 4* into smaller components as indicated in Table 4.32. The fourth construct (*Construct 4*) is about security and safety measures. The construct has retained two factors. It is evident that C1Sss and C3Sss are more loaded in component 1 and forms FAC1_5 and also C4Sss and C4Sss are loaded more altogether in component 2 and forms FAC2_5 in the data file. It is hereby necessary to establish arbitrary names for FAC1_5 and FAC2_5 which is a combination of (C1Sss, C3Sss) and (C4Sss, C2Sss) respectively.

Table 4.32: Rotated component matrix[a] for Construct 4

| | Component 1 | Component 2 |
|---|---|---|
| C1Sss: There are security measures in managing procurement records | .967 | |
| C3Sss: There are safety measures in managing procurement records | .963 | |
| C4Sss: There are sufficient safety measures in managing procurement records | | .959 |
| C2Sss: There are sufficient security measures in managing procurement records | | .964 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

**Source:** Analysis of field data, 2017

For *Construct 4*, the proposed and adopted arbitrary names for the explanatory variables are given as:

1. FAC1_5: Availability of security and safety measures in managing procurement records
2. FAC2_5: Sufficiency of security and safety measures in managing procurement records

Principally, deciding what a factor is measuring, what should it be named is a subjective process (Bartholomew *et al*., 2006). In this factors analysis, the naming of the factors has considered the essence of the constructs and what they have measured in the designated logistic regression model. However, it was a subjective process.

## 4.5 Logistic Regression Estimation Results and Interpretations

### 4.5.1 Frequency of the Dependent Variable

Fundamentally, the logistic regression model has been designated with the D (*Procurement records are properly managed*) as the dependent variable. For depicting and indicating the dichotomous responses for the dependent variable D, the results are depicted as tabulated in Table 4.33.

Table 4.33: Frequency for dependent variable

| D: Procurement records are properly managed | Freq. | % | Cum. % |
|---|---|---|---|
| No | 132 | 88.00 | 88.00 |
| Yes | 18 | 12.00 | 100.00 |
| **Total** | **150** | **100.00** | |

**Source:** Analysis of field data, 2017

Table 4.33 is evident that the dependent variable (*D = Procurement records are properly managed*) has received 132 (88.00%) "No" responses whilst "Yes" responses were 18 (12.00%). Impliedly, this is an indication that procurement records in the studied Tanzania PEs have been perceived to be improperly managed by majority of the questionnaire respondents.

### 4.5.2 Logistic Regression Model Estimation Results

The primary interest of this study was envisaged to assess the factors influencing the management of procurement records in the Tanzania PEs. The logistic regression model was adopted which had independent explanatory variables that were sought to explain the dependent variable (D = *Procurement records are properly managed*). This dependent variable was explained by FAC1_2, FAC2_2, FAC1_3, FAC2_3, FAC1_4, FAC2_4, FAC1_5 and FAC2_5 (Table 4.33). The logistic regression model estimation results were obtained through STATA computer program. The logistic regression model estimation results are tabulated in Table 4.34.

Table 4.34: Logistic regression model estimation results

| D | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| FAC1_2 | .5393005 | .4568003 | 1.18 | 0.238 | -.3560117 | 1.434613 |
| FAC2_2 | .37222 | .5163662 | 0.72 | 0.471 | -.6398393 | 1.384279 |
| FAC1_3 | 2.020273 | .7916683 | 2.55 | 0.011 | .4686315 | 3.571914 |
| FAC2_3 | 2.746539 | 1.112698 | 2.47 | 0.014 | .5656905 | 4.927387 |
| FAC1_4 | -1.13302 | .781622 | -1.45 | 0.147 | -2.664972 | .3989305 |
| FAC2_4 | -1.737418 | .7760048 | -2.24 | 0.025 | -3.25836 | -.2164768 |
| FAC1_5 | -.595208 | .595813 | -1.00 | 0.318 | -1.76298 | .572564 |
| FAC2_5 | 1.818524 | .716059 | 2.54 | 0.011 | .4150746 | 3.221974 |
| _cons | -3.694547 | .7178675 | -5.15 | 0.000 | -5.101541 | -2.287553 |

LR chi2 (8) = 58.10 Prob > chi2 = 0.0000
Log likelihood = -25.860374 Pseudo R2 = 0.5290

**Source:** Field data and analysis, 2017

Table 4.34 shows the logistic regression model estimation results. The results (Table 4.34) are basically indicating the independent explanatory variables for the dependent variable (D = *Procurement records are properly managed*), the model coefficients, the standard errors, the *z* values and the associated *p*-values, and the 95% confidence interval used to decide upon which independent explanatory variables are significant and which are not at 5% significance level.

Table 4.34 indicates the logistic regression model estimation results, ceteris paribus. The estimated results show the effects of the independent explanatory variables on the dependent variable (*D = Procurement records are properly managed*). The independent explanatory variables FAC1_3, FAC2_3 and FAC2_5 are statistically significant associated with the management of procurement records at 5% significance level, ceteris paribus. Here, *p*-value < 0.05 and their coefficients have positive signs (Table 4.34). Despite of FAC2_4 having *p*-value < 0.05 it has negative coefficient (Table 4.34). Therefore, it is not significant. This implies that, FAC2_4 has no significant influence on the management of procurement records due to being non-significant. Whereby, variables FAC1_2, FAC2_2, FAC1_4 and FAC1_5 are not statistically significant associated with management of procurement records at 5% level of significance. Here, there is no *p*-value < 0.05 (Table 4.34).

The remaining significant variables have positive coefficients that imply they have significant influence on the management of procurement records. Here, availability of storage space for keeping all kinds of procurement records, adequacy of storage space for keeping all kinds of procurement records, and sufficiency of security and safety measures have significant influence as they have *p*-value < 0.05 and positive coefficients respectively (Table 4.34).

### 4.5.3 Goodness-of-fit Test for the Logistic Regression Model

Having used the logistic regression model, it is advised to check how good it is (Hosmer & Lemeshow, 1980, 1989). Therefore, to test goodness-of-fit (gof) for the logistic regression model the study has adopted the Hosmer-Lemeshow (H-L) test.

The Hosmer-Lemeshow test (Hosmer & Lemeshow, 1980, 1989) was implemented in STATA computer program using the `estat gof`. In this test, the data were regrouped by ordering on the predicted probabilities and then forming 10 nearly equal-sized groups (Hosmer, Lemeshow, & Sturdivant, 2013). Therefore, `estat gof` with the `group(10)` option did this:

```
estat gof, group(10)
Logistic model for D, goodness-of-fit test
  (Table collapsed on quantiles of estimated probabilities)
       number of observations =       149
             number of groups =        10
      Hosmer-Lemeshow chi2(8) =         5.60
                  Prob > chi2 =         0.6921
```

Since a $\chi^2$[`chi2`] value of 5.60 on 8 degree of freedom is not large: $p = 0.6921$. So the logistic regression model fits the data well. Therefore, the logistic regression model used in this study is good as the data are well fitted into it.

### 4.5.4 Marginal Effect Results and Interpretations

Marginal effects are commonly used in practice to quantify the effect of variables on an outcome of interest. They are known as average treatment effects, average partial effects, and average structural functions in different contexts (Wooldridge, 2002; Blundell & Powell, 2003). In panel data, for example, marginal effects average over unobserved individual heterogeneity. Important results on identification of marginal effects in nonlinear panel data using control variable are given in Chamberlain (1984).

The marginal effect analysis gives useful information to determine an increase or decrease of the probability of occurrence of the dependent variable given a unit change of the independent variable. This study gives identification and estimation results for marginal effects of explanatory independent variables on the dependent dichotomous variable. It is sometimes thought that marginal effects can be estimated using linear fixed effects, as shown by Hahn (2001) in an example and Wooldridge (2002) under strong independence conditions. It turns out that the situation is more complicated. The marginal effect may not be identified (Chernozhukov, Fernández-Val, Hahn, & Newey, 2009). In this study, with a binary dependent variable (Y = D), the logistic regression had used the independent variables ($X_i$). The study has demonstrated the marginal effects of the independent explanatory variables ($X_i$) on the dichotomous dependent variable (Y = D). The focus here was to quantify the marginal effects of the independent explanatory variables on the dependent variable and state their significant role in the management of procurement records in the Tanzania PEs.

The focus of the logistic regression model was to determine the factors influencing the management of procurement records in the Tanzania PEs. In line with the determination of the significant factors at 5% significance level, marginal effects were to be determined and interpreted respectively. The determination was made on the significant contribution of the independent explanatory variables on the dependent variable. Therefore, it was envisaged to determine the marginal effects and interpretations for each independent variable on the dependent variable in order to establish if they are significant or not,and to what extent.

Table 4.35: Marginal effect results

| | dy/dx | Delta-method Std. Err. | z | P>\|z\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| FAC1_2 | .0264376 | .0223853 | 1.18 | 0.238 | -.0174369 | .070312 |
| FAC2_2 | .0182469 | .0254317 | 0.72 | 0.473 | -.0315982 | .0680921 |
| FAC1_3 | .0990377 | .0376182 | 2.63 | 0.008 | .0253074 | .172768 |
| FAC2_3 | .1346407 | .0551638 | 2.44 | 0.015 | .0265215 | .2427598 |
| FAC1_4 | -.0555429 | .0383911 | -1.45 | 0.148 | -.130788 | .0197023 |
| FAC2_4 | -.0851716 | .0369604 | -2.30 | 0.021 | -.1576127 | -.0127306 |
| FAC1_5 | -.0291783 | .0289517 | -1.01 | 0.314 | -.0859225 | .0275659 |
| FAC2_5 | .0891476 | .034529 | 2.58 | 0.010 | .021472 | .1568232 |

**Source:** Field data and analysis, 2017

Table 4.35 shows the marginal effect results. The results are given as they were determined through the delta-method. The columns for the results (Table 4.35) stand for `dy/dx` (the marginal), standard errors, *z* values, *p*-values, and 95% confidence intervals. The results shall be used to interpret the significance of the marginal effect, ceteris paribus. Table 4.35 is evident that five independent explanatory variables

(FAC1_2, FAC2_2, FAC1_3, FAC2_3 and FAC2_5) possess positive marginal effects whereas three independent explanatory variables (FAC1_4, FAC2_4 and FAC1_5) possess negative marginal effects (Table 4.35; see the column for`dy/dx`). Despite the fact of positive marginal effects for the independent explanatory variablesFAC1_2, FAC2_2, FAC1_3, FAC2_3 and FAC2_5; threeindependent explanatory variables,FAC1_3, FAC2_3, and FAC2_5 are significant.

For independent explanatory variable to be significant, among other things, it must have *p*-value < 0.05 at 5% significance level and must have positive coefficient at 95% confidence interval. Therefore, FAC1_3, FAC2_3, and FAC2_5 with marginal effects of 9.90% (p = 0.008), 13.46% (p = 0.015), and 8.91% (p = 0.010) are significant due to the fact that they have*p*-value< 0.05 and positive coefficient at 95% confidence interval (Table 4.34: see column P > |z|, for significance at 5% *p*-values should be < 0.05; see also column 95% confidence interval). The independent explanatory variables FAC1_2, FAC2_2, FAC1_4, FAC2_4 and FAC1_5 are non-significant as they have *p*-values > 0.05 and have negative coefficients at 95% confidence interval.

#### 4.5.5.1 Interpreting Positive Marginal Effect

Interpretively, by considering Table 4.35, for the marginal effects it could be deduced that any unit change on the explanatory variable either increase or decrease the probability of occurrence in the dependent variable by the percentage of the coefficient in the column of the marginal (Table 4.35; see column for `dy/dx`). Thus, if consideration is taken for all marginal effects regardless of their significance, the interpretations could be sought for each dependent on how they influence the dependent variable. Let us start with positive marginal effects.

Explanatory dependent variable **FAC1_2** arbitrarily named as *specialised knowledge and skills on procurement records management* has positive marginal effect. Therefore, it is interpreted that: Tanzania PEs where procurement records are managed by personnel who are knowledgeable and skilled are 2.64% more likely to properly manage their procurement records than PEs with the unknowledgeable and unskilled personnel, ceteris paribus.

Explanatory dependent variable**FAC2_2** arbitrarily named as *competence and on-the-job training on procurement records management* has positive marginal effect. Interpretively therefore that: Tanzania PEs where procurement records are managed by competent personnel and who receive the on-the-job training on records management are 1.82% more likely to properly manage their procurement records than PEs with personnel who are incompetent and have no on-the-job training, ceteris paribus.

Explanatory independent variable **FAC1_3** arbitrarily named as *availability of storage space for keeping all kinds of procurement records* has positive marginal effect. Interpretively, this implies that: Tanzania PEs with available storage space for keeping all kinds of procurement records improves management of procurement records by 9.90%, ceteris paribus.

Explanatory independent variable **FAC2_3** arbitrarily named as *adequacy of storage space for keeping all kinds of procurement records* has positive marginal effect. Essentially, this implies that: Tanzania PEs with adequate storage space for keeping all kinds of procurement records improves management of procurement records by 13.46%, ceteris paribus. Whereas, for explanatory independent variable **FAC2_5** arbitrarily named as *sufficiency of security and safety measures in managing procurement records* has a positive marginal effect. Interpretively, this implies that: Tanzania PEs with sufficient security and safety measures in managing procurement records improves management of procurement records by 8.91%, ceteris paribus.

#### 4.5.5.2 Interpreting Negative Marginal Effect

Table 4.35 indicates both positive and negative marginal effects for the envisaged explanatory independent variables. If consideration is sought for the negative marginal effects for the explanatory variables (FAC1_4, FAC2_4 and FAC1_5), as it was commissioned and done for the positive marginal effects; the interpretations shall have to follow suit. For independent explanatory variable **FAC1_4** which is arbitrarily named as *availability of equipment and facilities for keeping procurement records* could be interpreted that: Tanzania PEs that have no equipment and facilities for procurement recordkeeping are 5.55% less likely to have a proper management of procurement records compared to PEs with available equipment and facilities for procurement recordkeeping, ceteris paribus.

Explanatory independent variable **FAC2_4** arbitrarily named as *adequacy of equipment and facilities for keeping procurement records* has negative marginal effect. Interpretively, this implies that: Tanzania PEs that have limited equipment and facilities for procurement recordkeeping are 8.52% less likely to have a proper management of procurement records compared to PEs with adequate equipment and facilities, ceteris paribus. Whereas, for explanatory variable **FAC1_5** that is arbitrarily named as *availability of security and safety measures in managing procurement records* which has negative marginal could be interpreted that: Tanzania PEs that have no security and safety measures in managing procurement records are 2.91% less likely to have proper management of procurement records compared to PEs that have security and safety measures, ceteris paribus.

#### 4.5.5.3 Interpreting Significant Marginal Effect

There are three explanatory independent variables (FAC1_3, FAC2_3, and FAC2_5) which are significant (Table 4.35). In principle, the explanatory variable **FAC2_3** arbitrarily named as *adequacy of storage space for keeping all kinds of procurement records* has a higher positive marginal effect by 13.46% in improving management of procurement records in the Tanzania PEs. If we consider other positive marginal effects by taking into account their significance, the independent explanatory variable (**FAC2_3**)will be followed by the explanatory independent variable **FAC1_3** arbitrarily named as *availability of storage space for keeping all kinds of procurement records* with 9.90% marginal effect, and the independent explanatory variable FAC2_5 arbitrarily named as *sufficiency of security and safety measures in* *managing procurement records* with 8.91% marginal effect at 95% confidence interval in improving management of procurement records in the Tanzania PEs, ceteris paribus.

## 4.6 Chapter Summary

This chapter presented the qualitative and quantitative findings of the study. The qualitative findings of the in-depth interviews have been presented and described with annotated discussion on the pre-determined themes and related subthemes derived out of the specific study objectives. The presentation were displayed on the phenomena of (1) capacity of personnel involved in managing procurement records, (2) storage space for procurement recordkeeping, (3)equipment and facilities for procurement recordkeeping, and (4) security and safety measures in managing procurement records. Descriptive statistical analysis for the questionnaires data were also presented on the same. The presented quantitative findings displayed and depicted the descriptive statistics for the quantitative data, factor analysis, logistic regression model estimation results, and marginal effects and their interpretations.

The presented descriptive analysis were inter alia response rate, reliability test, relative importance of the attributes through means (averages) and standard deviations that were established by the SPSS software and used to rank the attributes. The reliability test was conducted by using the Cronbach's α. The KMO measure of sampling adequacy was conducted and it was established that the sample was adequate (KMO $\geq 0.50$) and the Bartlett's Test of Sphericity yielded significant $p$-value $< 0.05$ at 5% significance level. Factor analysis was conducted to reduce the bulky of attributes before logistic regression analysis. After a careful factor analysis, eight independent explanatory variables were established and arbitrarily named. The factors were inter alia FAC1_2, FAC2_2, FAC1_3, FAC2_3, FAC1_4, FAC2_4, FAC1_5 and FAC2_5. It was further identified that out of the eight factors, four (FAC1_3, FAC2_3, FAC2_4 and FAC2_5) were statistically significant whilst the other four (FAC1_2, FAC2_2, FAC1_4 and FAC1_5) were not. Logistic regression model estimation results were presented and interpreted respectively. Lastly, marginal effects for the independent explanatory variables on the dependent variable were presented and interpreted accordingly.

# CHAPTER FIVE
# DISCUSSION OF FINDINGS

## 5.1 Introduction

The aim of this chapter is to discuss research findings. The findings to be discussed were presented in Chapter Four of this thesis. This chapter specifically discusses the factors influencing the management of procurement records. In principle, the discussion is envisioned at answering the general research question that provides, "*What are the factors influencing the management of procurement records in the Tanzania PEs*?" The discussion is centred at discussing specific factors, inter alia,the capacity of personnel involved in managing procurement records, the storage space for procurement recordkeeping, the equipment and facilities for procurement recordkeeping, and the security and safety measures in managing procurement records. The findings are hereby discussed in tandem with the rationale of analysis thereto. The discussion is based on the theoretical underpinning, previous studies, and on matters and issues related to the procurement records and archives (RAM) management best practices, records and archives management system (RAMS) standards, regulatory requirements, and institutional frameworks.

## 5.2 Structure and Organisation of the Discussion

This discussion is basically structured and organised onto the qualitative and quantitative findings based on the specific study objectives. Therefore, the discussion has been hinged on the specific findings. During the discussion, the linkages between the findings and related matters and issues mentioned across the reviewed literature have been made. The two are interlinked to provide scholarly debate on the factors influencing the management of procurement records. Despite this fact; however, literature not reviewed in this study were also used if sufficient to provide theoretical and empirical evidence to justify and substantiate matters and issues related to the procurement recordkeeping best practices and procurement recordkeeping system standards that are relevant and related to the specific objectives of the study. Lastly, the discussion have identify study-specific findings that may not have been identified in the literature but have novel and unique characteristics to the scope, extent and context of this study.

## 5.3 Essence of Resources in Management of Procurement Records

Like other organisation-wide functional activities, records and archives management (RAM) in the procurement management spectrum needs resources for effective implementation of the RAMS programmes and activities therein. These resources are needed in order to ensure that the RAMS programmes are executed in compliance with the need of creating the envisaged value of records within and across the PEs. The required key resources are, inter alia, human resources, physical resources, and financial resources. These resources, according to the RBT and the TOC are scarce and limited in supply. Therefore, for most of the time they constrain the accomplishment of the PEs' institutional goals achievement in procurement recordkeeping systems.

The programmes for managing records usually achieve their goals through the operation of an organisation's RAMS. In this sense, the RAMS is a group of interrelated resources. Essentially, here reference is made to the RBT that combines the key elements of the TOC. In order to accomplish PEs' institutional goals, resources are inevitably needed. However, due to scarcity phenomenon, PEs' institutional resources cannot be made easily available for each RAM activities within the RAMS. Whenever institutional resources are available within the PEs' internal capability, they are usually constrained by inadequacy. Therefore, institutional resources need effective planning and prioritising in order to accomplish the desired PEs' institutional obligations on the efficient RAM in facilitating efficient management of procurement records in the Tanzania procurement recordkeeping systems. Efficient recordkeeping needs a great deal of institutional resources.

### 5.3.1 Capacity of Personnel in Managing Procurement Records

Managing procurement records requires personnel or institutional actors that are capable and have the capacity to act on the tasked responsibilities over the procurement records management activities within and across the procurement recordkeeping systems. The capacity of the personnel should be in terms of knowledge, skills, competencies and professional ethics. These are vital institutional intangible resources for efficient procurement recordkeeping systems. Therefore, the Tanzania PEs must have institutionalised internal capabilities to facilitate the functioning of effective procurement recordkeeping systems. Procurement records management, like public or private business records, require specialised knowhow, skills, and competencies on creating, capturing and managing records into the designated recordkeeping systems.

Therefore, as agreed by IRMT (1999a), records management activities within the procurement recordkeeping systems need personnel who are well trained, have intelligent behaviour, and industrious. Generally speaking, the RAM activities need adequate and sufficient human resource for better institutional results (Sabokrooh, 1989; Wamukoya & Mutula, 2005; Nengomasha, 2009). Not only the adequate number of required personnel; but also, the envisioned personnel must have the required level of knowledge, skills, and competencies for efficient management of procurement records and archives in the records life-cycle.

In Tanzania, the procuring entities are compelled to be functioning within the highly regulated and institutionalised regulatory frameworks. Therefore, within the context of management of procurement records in the designated procurement recordkeeping systems it is mandatory for Tanzania PEs to create, receive, use, maintain, archive and dispose procurement records. Essentially therefore, the procurement records management activities within the procurement recordkeeping systems must be effectively and efficiently executed by capable personnel tasked for the sake of management of records within the defined PEs' institutional framework. Mostly, all the personnel who are found within and across the Tanzania PEs are employed, staffed and tasked with jurisdictional mandates according to their envisaged roles and job descriptions. In principle, apart from the fact that all personnel in the institutional organs within the Tanzania PEs should be involved in the management of procurement records in the procurement recordkeeping systems; personnel in two institutional organs – the PMUs and user departments – are mandated to maintain, keep, preserve, and archive procurement records on behalf of the PEs.

The procurement records management tasked jobs for the envisaged personnel are inter alia the activities of creating, receiving, using, maintaining, archiving and disposing records within the procurement recordkeeping systems. In principle, these tasked jobs require professionalism (knowledge, skills, and ethics), technical competence, and inherent institutional values. People that are participating in management activities within an organisation do not act solely in accordance with their assigned roles (Thoenig, 2011).Rather, according to Thoenig (2011), there must be formalised structures whereby the tasked personnel must be influenced, transformed and completed by informal structures. This is true for the personnel that are participating in management of procurement of records in the Tanzania procurement recordkeeping systems. Principally, that is the essence of institutional theory (Scott, 2004) that requires Tanzania PEs, as institutions, to be formalised through enshrined normative, regulative and cultural-cognitive pillars. Supposedly, Tanzania PEs had to comply with regulatory, normative and cultural-cognitive perspectives whilst dealing with management of procurement records in the formalised and institutionalised procurement recordkeeping systems. This is a mandatory requirement for effective and efficient performance of the PEs obligatory goals in tandem with the essence of value of records as institutional assets.

The personnel who are involved in the management of procurement records must acquire the institutionalised procurement records management values that should go beyond professional and technical requirements in managing procurement records within and across the procurement recordkeeping systems. To institutionalise is to infuse with values beyond the technical requirements of the task at hand (Selznick, 1957). Therefore, no organisation is completely free of values (Thoenig, 2011). Hence, the Tanzania PEs need to inculcate and infuse procurement records management values in ensuring effective and efficient procurement recordkeeping systems. Thick institutionalisation is achieved when some rules or procedures are sanctified (Thoenig, 2011). This is the essence of procedures on procurement records management. However, until this thesis was being written there were no procurement records management guidelines to provide for the procurement recordkeeping procedures in regulating the procurement records management activities in the Tanzania PEs. The responsible institution in the mezzo level of the Tanzania public procurement system has not yet issued the guidelines for use. This is an institutionalised regulatory gap within the Tanzania public procurement system.

Findings have revealed that personnel that are directly involved in management of the procurement records in the Tanzania procurement recordkeeping systems do receive their mandates under the provisions of the public procurement legislation (Cap. 410) and records management legislation (Cap. 309). However, in trying to synchronise the matters and issues related to the procurement records management practices and the procurement recordkeeping system standards there was a need to establish the knowledge of personnel on the existence of the regulatory requirements that establish the rationale of regulatory coexistence in ensuring effective and efficient procurement recordkeeping systems.

Unfortunately however, majority of the respondents who were anticipated to provide their understanding on the personnel knowledge on the RAM regulatory requirements had differing views and failed to exhaustively point out the coexistence of the dual RAM regulatory frameworks in as far as procurement records management is concerned. The differing views were on how the dual regulatory frameworks (Cap. 410 and Cap. 309) coexist in line with management of procurement records in the Tanzania procurement recordkeeping systems. Despite, majority of respondents had had basic knowledge on the requirements of creating, maintaining and archiving procurement records. The findings indicated that most of the personnel in the studied PEs have no specialised knowledge on the establishment of good procurement recordkeeping systems as required by RAM regulatory framework (vide S. 9 (a), (b), (c), and (d) of RAM Act No. 3, 2002). Due to the lack of knowledge on the RAM regulatory requirements, even the requirement of the Tanzania PEs, as public offices, to contact RAMD on the matters and issues of management of semi-current and non-current procurement records have not been made accordingly. This is an indication that personnel are utterly unaware and poorly informed on the existence of the RAM legislation and coexistence of the procurement records management regulatory requirements.

Despite of lack of complete knowledge on the RAM regulatory requirements, most of the personnel who are staffed and positioned in the PMUs are aware of the activities involved in creating, receiving, using, maintaining, archiving, or disposing procurement records within the procurement business transactional processes and activities therein. The subsequent sections shall be discussing involvement of personnel in the two designated PEs' institutional organs that are vested with maintaining and archiving of procurement records. The discussion shall try to show how personnel in these institutional organs are dealing with the management of procurement records in terms of creation, use, receiving, maintaining, or disposing (if any) as provided by the study findings in line with the related regulatory and institutional frameworks thereto. Also, the discussion shall also try to rationalise the sufficiency of personnel involved in managing procurement records and synchronise the issue of personnel knowledge on the RAM regulatory requirements in tandem with their capacity in the procurement records management activities in the Tanzania procurement recordkeeping systems.

#### 5.3.1.1 Personnel in Procurement Management Units

The PMUs are organs within the PEs that are solely tasked for maintaining and archiving procurement records. The PMUs are functional units; except for the adjudication and award of procurement contracts. Administratively, the PMUs manage all procurement and disposal by tender processes and activities (S. 38 (a) of Act No. 7, 2011 as amended).The PMUs are by institutional framework secretariats to the tender boards. Principally, the organisation of the PMUs depends upon the size of the envisaged PEs organograms. For institutional performance of the PMUs, it was sought that the heads of PMUs (HPMUs) should directly report to the accounting officers (S. 37(4) of Act No. 7 of 2011 as amended).Administratively; the PMUs are manned by personnel.

Due to the institutional positioning and arrangements thereof, the personnel in the PMUs do inter alia create, receive, use, maintain, archive, or dispose a variety of recorded and documented procurement records in the course of doing procurement business transactions. The PMUs' jurisdictional functions are tasked and delineated by the regulatory and institutional pillars within the context of the public procurement legislation (Cap. 410, Act No. 7, 2011 as amended).Institutionally, whilst managing procurement and disposal by tender activities, the PMUs use variety of the recorded and documented procurement records (Table 2.1). The PMUs use records in implementing the tender board decisions (S. 38 (c) of Act No. 7 of 2011 as amended). In the context of annual procurement planning process and preparation of the Annual Procurement Plans (APPs); the PMUs are playing key role as coordinating units. They are mandated to directly liaise with the user departments (S. 39(1) (l) of Act No. 7 of 2011 as amended) to obtain the recorded and documented departmental procurement requirements in terms of goods, works, or services (consultancy and non-consultancy) to be aggregated in the APPs.

Fundamentally, the PMUs amalgamate the departmental procurement requirements into the APPs (S. 38 (e) of Act No. 7 of 2011 as amended). Herein, the PMUs are using the recorded and documented procurement information from the user departments to create the APPs (containing recorded and documented information from user departments). The formulated APPs containing recorded and documented information from the user departments are taken and tabled before the budget approving authority for approval. The approved APPs become outputs (recorded and documented records for information and evidence). This is a regulatory compliance and means of expediency in line with the value of records with the procurement RAM in the procurement RAMS in creating the APPs.

Whilst preparing tendering documents, advertisement of tender opportunities, and contract documents (S. 38 (h), (i), and (j) of Act No. 7 of 2011 as amended) the PMUs use recorded and documented information contained in the envisaged drafts of the envisioned recorded documents and thereafter create the proposed tendering documents, tender opportunities adverts, and contract documents. Thereafter, the PMUs table the drafted tendering and contract documents before the tender boards for approval (S. 33(1) (c) of Act No. 7 of 2011 as amended). Once the documents are approved, they become recorded and documented records of the PEs under the custodian of the PMUs. In principle, this is an institutional compliance on preserving procurement records in the context of records life-cycle.

The general function of preserving, maintaining, and archiving records of the procurement and disposal process as provided in Section 38 (l) of Act No. 7 of 2011 (as amended) is vested upon the PMUs. The generality of archiving semi-current and non-current procurement records could be the focus of how archived non-current records should be and currently treated by the Tanzania PEs. In line with this revelation, examination on the studied PEs was made if they directly liaised with the RAMD for the effective and efficient maintenance of the archived procurement recorded and documented procurement record files (especially semi-current and non-current procurement records). In archiving of recorded and documented procurement record files, the PMUs are obliged to maintain a list or register of all contracts awarded as provided in Section 38 (m) of Act No. 7 of 2011 as amended. However, the findings have revealed poor liaise with the RAMD in line with management of semi-current and non-current procurement records.

The PMUs, amongst other functional activities discussed here-in-above, are obliged to coordinate the procurement and disposal activities of all user departments within and across the PEs (S. 38 (p) of Act No. 7 of 2011 as amended). For effective coordination, the PMUs must efficiently manage and care for the received, recorded and documented information from the user departments and other functional units of the PEs. Proper maintaining of recorded and documented procurement information from various user departments within and across the PEs usually enables swift coordination and therefore good governance of the envisioned procurement business transactions and activities. This is the essence of efficient procurement RAM and effective procurement RAMS. Most of the PMUs in Tanzania are trying to ensure they are performing their basic jurisdictional functions on ensuring that recorded and documented procurement record files are available when required as a means of regulatory and institutional compliance. However, compliance audits conducted in most of the Tanzania PEs have recorded and documented poor recordkeeping (URT, 2016a; URT, 2016b). This is an indication that personnel in the designated PMUs are either being faced by the un-informed regulatory frameworks or institutional resources challenges in managing procurement records.

In fostering reporting and informing the management and other users of procurement records within and across the PEs or even the outside stakeholders, the PMUs are obliged to prepare reports. Practically, the PMUs are institutionally tasked to prepare monthly reports for the tender boards (S. 38 (n) of Act No. 7 of 2011 as amended), to prepare and submit quarterly reports on the implementation of the annual procurement plan (APP) to the management meetings (S. 38 (o) of Act No. 7 of 2011 as amended), and to prepare other reports as may be required (S. 38 (q) of Act No. 7 of 2011 as amended). In preparing the aforementioned reports, the PMUs use a number of recorded and documented procurement information from the procurement record files. It is here, where the PMUs personnel are required to display the highest degree of integrity and confidentiality (S. 46 of Act No. 7 of 2011 as amended) as far as management of procurement records is concerned.

Due to the nature and complexity of jurisdictional functions given to the PMUs (vide S. 38 of Act No. 7, 2011 as amended) it is sought that the units should be appropriately staffed (S. 37(1) of Act No. 7, 2011 as amended). That, personnel within the PMUs are required to possess sound academic and professional qualification as given in sections 37(2) and 37(3) of Act No. 7 of 2011 as amended that provide:

> The Procurement Management Unit *shall consist of procurement and other technical specialists* together with the *necessary supporting and administrative staff* (S. 37(2) of Act No. 7, 2011 as amended; with emphasis added).
>
> The Procurement Management Unit *shall be headed by a person with appropriate academic* and *professional qualifications* and *experience* in procurement functions registered by the Procurement Professional Body (S. 37(3) of Act No. 7, 2011 as amended; with emphasis added).

Not only possessing appropriate academic and professional qualifications with the required experience in procurement management functions, but also the heads of PMUs are supposed and compelled to be registered by the PSPTB (S. 37(3) of Act No. 7, 2011 as amended; cf. S. 13(1) of Act No. 23, 2007).

#### 5.3.1.2 Personnel in User Departments

Like the PMUs, the user departments are institutional organs manned by personnel employed and staffed for the departmental tasked functions. User departments, or simply users, of PEs are functional organs that perform institutional tasks for the accomplishment of the PEs' legal obligations. Impliedly therefore, user departments are elements of the TOC in accomplishing the PEs institutional goals. This is the essence of integrating the RBT with the elements of the TOC theoretical framework in using internalised institutional capabilities including institutional actors and other PEs tangible and intangible resources to fulfil PEs' legal obligations. It is a regulatory requirement that the user departments are institutionally tasked to liaise with and assist the PMUs throughout the procurement or disposal by tender process to the point of contract placement (S. 39(1) (a) of Act No. 7, 2011 as amended). Principally, the user departments are managed by employed personnel staffed and positioned to perform specific tasked functions as per job descriptions. Administratively, the personnel in the user departments do create, use, maintain, archive or dispose procurement records whilst performing their envisioned institutional obligations as enshrined in Section 39(1) of Act No. 7 of 2011 as amended.

Whilst initiating procurement and disposal requirements and forward them to the designated PMUs within the PEs (S. 39(1) (b) of Act No. 7 of 2011 as amended), the personnel in the user departments use variety of recorded and documented procurement information such as identification and specification of needs that facilitate the preparation of statement of requirements or scope of works (S. 39(2) of Act No. 7 of 2011 as amended). Here the personnel in the user departments do propose and prepare technical specifications and inputs to statements of requirements (or scope of works) or terms of reference (TORs) for procurement requirement to the PMUs (S. 39(1) (c) and (d) of Act No. 7 of 2011 as amended) where the latter consolidate the envisaged information into the recorded and documented PEs' procurement requirements into the APPs. This is the essence of liaison with these two institutional organs in line with creating, receiving, using, maintaining and archiving procurement records. Functionally, their tasked activities in as far as procurement records management is concerned are closely related to each other.

For ensuring effectiveness, whenever it comes to the point of paying the suppliers, contractors or service providers (for consultancy or non-consultancy services) on the delivered goods or completion of works or delivery (or completion) of service contracts; the personnel in the user departments have to certify payments to suppliers, contractors or consultants (S. 39(1) (f) of Act No. 7, 2011 as amended). The task of certification for payments requires genuine and authentic information that have been recorded and documented prior to the payment. Therefore, the personnel in the user departments are obliged to effectively and efficiently receive, use, and maintain recorded and documented information over goods delivered (through delivery notes), goods inspected (through inspection reports), goods received (through GRNs), and goods accepted (through goods acceptance or rejection reports) or works inspected (through works inspection reports and certificate of works) or service level agreements (SLAs).

In terms of value for money procurement philosophy, the personnel in the user departments, on behalf of the PEs, are the ultimate recipients of value in the PEs' value chains. Therefore, the personnel in the user departments are by law tasked to oversee contract implementation including reviewing and approving technical reports, design or any outputs as per contract (S. 39(1) (k) of Act No. 7 of 2011 as amended). In reporting any departure from the terms and conditions of awarded contracts to the PMUs as in Section 39(1) (g) of Act No. 7 of 2011 (as amended) the user departments need to furnish recorded and documented reports with substantive information and evidences thereto. That, forwarding details of any required contract amendments to the PMUs (S.39(1) (h) of Act No. 7, 2011 as amended) requires a substantial amount of efforts in ensuring the support of the recorded and documented procurement information on the matters and issues related to the procurement contracts being implemented.

Unlike the personnel in the PMUs (S. 38 (l) of Act No. 7 of 2011 as amended) that are institutionally tasked to maintain and archive records of the procurement and disposal process (Table 2.1; see the procurement process); the personnel in the user departments are functionally tasked to maintain and archive records of contracts management and administration (S. 39(1) (i) of Act No. 7 of 2011 as amended). Here, the personnel in the user departments have the obligation to keep, manage and care for current, semi-current and non-current records on the contract (implementation) management (Table 2.1; see stage 6 of the procurement stages). Like the personnel in the PMUs, the personnel in the user departments are also obliged to prepare reports (S. 39(1) (j) of Act No. 7 of 2011 as amended) that are required for submission to the PMU, tender board or the accounting officer as the case may be.

Like personnel in the PMUs, personnel working within and across the user departments need specialised knowledge, skills and professional ethics to accomplish institutional legal obligations. Despite this fact, Cap 410 is silent on the professionalism requirements for the personnel dealing with procurement related activities within the user departments. Impliedly however; since user departments are obliged to meet institutional legal obligations, as far as public procurement management is concerned, the personnel in the user departments need to have the required knowledge, skills, competences and professional ethics to foster the procurement management activities within the PEs. Impliedly therefore, personnel in the user departments need much of the procurement RAM knowledge, skills, competences and professional ethics in order to ensure efficient procurement recordkeeping.

#### 5.3.1.3 Rationalising Sufficiency of Personnel in Managing Records

Every Tanzania PE needs personnel to manage procurement records management activities within and across the procurement recordkeeping system for efficient procurement records management in the records life-cycle and records continuum. The necessary and critical questions that would establish the human resource capacity in terms of availability and adequacy is based on the quantity and quality of the personnel. The interviewees were required to provide their understanding on the sufficiency of personnel in managing procurement records in the studied PEs in terms of the number of personnel sufficient for efficient procurement recordkeeping within the studied PEs. Logically, this was a very perplexing issue to many of the respondents. However, it was required so as to determine the optimal number of personnel that is sufficient for ensuring procurement records are effectively and efficiently kept, managed and cared to support the functioning of the PEs by abiding with the public procurement legislation and the RAM regulatory requirements.

Empirical findings from this study indicate that, the number of personnel who were versed with the RAM knowledge, skills, competencies, and professional ethics in most of the studied Tanzania PEs is insufficient. Despite this empirical evidence, it has been found that the staffing level for the procurement specialists is adequate to say the least. Mostly, the Tanzania PEs had been found to be appropriately staffed with procurement specialists but not appropriately and adequately staffed with the RAM specialists or technicians as support or administrative staff. Essentially, this is a vivid staffing gap.

Generally speaking, the extent of the PMU staffing levels in terms of procurement specialists for most of the studied PEs is very good. These findings comply with the PPRA procurement audit findings (URT, 2014a; URT, 2015a; URT, 2015c; URT, 2016a; URT, 2017a). Generally, the PMUs in the wholly of the Tanzania public procurement system are staffed with qualified personnel to the requirements of the staffing levels (S. 37(1) of Act No. 7 of 2011 as amended). However, the regulatory and institutional resource challenge is still on complying with Section 37(2) of Act No. 7 of 2011 (as amended). The crux of the matter is on ensuring that the PMUs within and across the Tanzania PEs are appropriately and adequately staffed with the required number of personnel who are professionally or technically knowledgeable, skilled and competent with the RAM professionalism.

Human resources are essential as they utilise other resources in order to plan for the execution of the RAM practices and RAMS operations (Read & Ginn, 2007, 2011). Since records are valuable resource of an organisation (Smith, 2007; Read & Ginn, 2007, 2011); therefore, they require qualified and skilled human resources to ensure efficient management and care of records and archives in their entire life-cycle and records continuum. Therefore, procurement records due to their institutional resource value need personnel with specialised knowledge to manage. The institutional task for the PEs is vested on the capacity of personnel and PEs' internal capabilities to deploy institutional resources for the desired end result, for the accomplishment of the institutional goal. Therefore, the Tanzania PEs are obliged to use the accumulated knowledge, skills, experiences, professional ethics, values and inherent wisdom of the available human resources over the RAM professionalism and technicalities and the PEs' resource capabilities to ensure that procurement records are effectively and efficiently managed within the Tanzania procurement recordkeeping systems.

Records and archives management (RAM) in any organisation requires staffing with qualified, skilled, competent and professionally ethical individuals. These describe the characteristics and nature of personnel who are needed to be dealing with the management of procurement records in the Tanzania procurement recordkeeping systems. Therefore, as advocated by Smith (2007); at least all levels of RAM staffing are required. Such levels must include but not limited to: senior managers – those responsible for corporate strategy and policy; operational staff – including line managers; and records liaison staff. Operationally, senior staff in organisations needs to be aware of the developments in the records and information system (RIM) without being burdened with the detail of procedures and practices (Smith, 2007).Generally speaking, Tanzania procurement recordkeeping systems need such staffing levels of personnel.

Due to nature, essence, necessity and complexity of the RAM as professional function; it requires specialised professional training on knowledge, practical skills, and professional ethics on the RAM sciences. In order for the RAM personnel to deliver their functional duties, responsibilities and tasks they need to be well equipped with the required knowhow, skills, professional ethics, and competences of recordkeeping (Picot, 2001). However, for records liaison staff; Smith (2007) proposes three kinds of training, inter alia: introduction to RAM in the organisation aimed at new staff; training on either specialised or tailor-made training on the particular RIM specific key issues; and attending annual RAM professional conference events. For efficient management of procurement records as required by the ISO 14589:1, this observation should be realised by most of personnel in the Tanzania procurement recordkeeping systems.

Key personnel staffed and tasked in managing procurement records within and across the Tanzania procurement recordkeeping systems should be characterised by adequate and sufficient knowhow, skills, competences, and professional ethics. The personnel must ensure that the functions and responsibilities of management and care of records are nurtured as required by the theories and practices underlying efficient procurement recordkeeping systems. It is therefore an inevitable requisite that the Tanzania public offices (PEs) need qualified staff to deal with procurement records management activities in order to create the envisaged value of procurement records.

However, as a known global phenomenon, staffing for most of the public and private enterprises had been culminated by low level of RAM professionalism (Thurston, 2005). Despite this fact, the quality of any RAMS is directly related to the quality of the personnel staffed and tasked that operate the system. It is not the posting of last resort for those who are unqualified, incompetent or idle (IRMT, 1999c). Here, the essence of staffing the RAMS in the public procurement systems should not be underrated by anyhow. From this study; however, findings reveal that very few studied PEs were identified to have personnel who are well-versed with the RAM professionalism or technical perspectives.

In most of the studied Tanzania PEs, the deduction on the extent of knowledge, skills and competence depended solely upon the on-the-job training received by the personnel on the RAM practices – that is matters and issues related to creating, receiving, maintaining, using, and disposition of records. Less of management and care matters and issues related to efficient procurement records management were exhaustively given. Majority of the studied PEs had revealed that there were some deliberate initiatives to provide some basic on-the-job training on the RAM activities as suggested by Smith (2007). Essentially, as advocated by Ndenje-Sichalwe (2010), newly recruited staff who are positioned and tasked to perform some designated functional tasks related to management of records are introduced to RAM activities according to the records life-cycle and continuum models which are the basic models currently is use in Tanzania. Supposedly, this could be true for the newly recruited staff in the Tanzania procurement recordkeeping systems.

#### 5.3.1.4 Personnel Knowledge on RAM Regulatory Requirements

This discussion has emanated out of the exploration of the personnel knowledge on the RAM regulatory requirements. Therefore, for every RAM regulatory requirements there must be institutional framework requirements thereto. Records and archive management (RAM) function is a highly regulated functional activity. That is why the RAM practices are institutionalised onto the regulative, normative and cultural-cognitive pillars of institutional theory. According to Smith (2007), the basis of all records management authority is comprehensive and up-to-date legislation. Generally, records legislation must ensure complete protection for all public sector records, in whatever format, and provide the governing organisation (be it the national archives or other body) with comprehensive authority for securing and protecting records (Smith, 2007).

The overriding thrust of exploring the personnel knowledge on the RAM regulatory requirements for management of procurement records in the Tanzania PEs was anchored on how personnel understand the regulatory requirements in efficiently maintaining and archiving procurement records. The understanding was needed on how the RAM regulatory and institutional arrangements feature with the management of procurement records. The focus herein was to find out if personnel working with procurement business processes and activities therein have the basic knowledge on: fairness of the RAM regulatory and institutional arrangements – the way they feature with efficient procurement recordkeeping; and how often the studied PEs had contacts with the RAMD on matters and issues related to management of semi-current and non-current procurement records.

The responses from the interviews showed varied cognitive knowledge on the procurement RAM regulatory and institutional frameworks. Most of the personnel in the studied PEs have the basic knowledge on the requirement of maintaining and archiving procurement records. It has been found that, the personnel working within the PMUs and user departments are conversant with this regulatory requirement. However, most of the personnel are unaware and not conversant with the applicability of the RAM legislation and attendant regulations in line with the public procurement legislation and attendant regulations in management and care of procurement records in the Tanzania procurement recordkeeping systems. The critical challenge is on the knowledge of the laws governing the conduct of how procurement records management are compliant with the efficient procurement recordkeeping.

Most of the personnel have no basic knowledge on how the dual legislations (Cap. 309 and Cap. 410) coexist in ensuring efficient recordkeeping systems in order to foster efficient procurement records management thereto. As this research was limited due to its scope and context, the problem of knowledge on the dual existence and the requirements of the legislations (Act No. 3 of 2002 and Act No. 7 of 2011 as amended) needed a specialised probe of its kind into how they do coexist and what are the basic requirements for each with respect to creating, maintaining and archiving procurement records. The essence would be on how they do facilitate the procurement records management activities. Objectively, most of the studied PEs had been found to comply with the maintaining and archiving of records for their procurement business transactional processes and activities. However, what remains to be crux of the matter is on how they are obliged by the RAM regulatory framework to manage and care for the current, semi-current and non-current procurement records.

Despite the existence of RAM regulatory requirements that Tanzania PEs, as public offices, are required to establish good recordkeeping systems and practices (see S.9 (a), (b), (c), and (d) of Act No. 3 of 2002); lack of cognitive knowledge on this regulatory requirement has made most of the studied PEs to partly comply with S. 61(1) of Act No. 7 of 2011 and Reg. 10(1) of GN. No. 446 of 2013 as amended in the maintaining and archiving procurement records for the specific time period. However, how records are kept in most of the Tanzania PEs' procurement recordkeeping systems continues to be regulatory and institutional challenge for most of the personnel whatsoever.

Due to lack of cognitive knowledge on the existence of the dual legislation on two different perspectives of procurement RAM, most of the studied Tanzania PEs had failed to have direct contacts with the Records and Archives Management Department (RAMD) on matters and issues related to the management of procurement records (contrary to S. 10 of Act No. 3 of 2002). It was also evidenced that most of the studied PEs had failed to draft retention and disposal schedules relating to procurement records (contrary to S. 9 (b) of Act No. 3, 2002). Since there were no drafts of the retention and disposal schedules there were no implementations of retention and disposal schedules as provided under S. 9 (d) of Act No. 3 of 2002. These observations depict utter noncompliance with the said RAM regulatory requirement. Impliedly, this is an indication that the personnel would have not acted contrary to the requirements of the law if they had cognitive knowledge on the how the RAM regulatory requirements want them to comply with respect to efficient management of procurement records in the Tanzania procurement recordkeeping systems.

#### 5.3.1.5 Problems Associated with Management of Procurement Records

In any system, due to the nature of systemic inputs and process thereat; problems associated with the operations of the system are inevitable due to the nature and characteristics of the constraining factors. Constraints are elements or factors that limits the system from doing more of what it was designed to accomplish (Goldratt & Cox, 1992). The experiences drawn from the findings of this particular study had revealed that problems associated with keeping and maintaining procurement records in the studied PEs are inter alia: inadequate storage space for procurement recordkeeping, inadequate equipment and facilities for procurement recordkeeping, and insufficiency of security and safety measures in managing procurement records. Impliedly, this is an indication of inadequacy of institutional resources on the procurement records management. The management of procurement records in most of the Tanzania PEs had been recorded and documented to be constrained by institutional resource challenges. Basically, the dwindling compliance level on the proper procurement recordkeeping was on the components of procurement recordkeeping that require Tanzania PEs to have enough institutional resources. The targeted compliance level for the proper recordkeeping was set at more than 70 per cent (URT, 2016a). However, this pre-set target was never met to date!

Most of the studied PEs in Tanzania had been observed to have inadequate skills and competences on the RAM practices. This institutional challenge could have been attributed to the fact that recordkeeping in the studied PEs is mostly taken for granted. Generally speaking, as agreed by IRMT (1999c); it is a function that people are posted as last resort for those who are unqualified, incompetent or idle. Another critical challenge in terms of regulatory and institution framework is the fragmentation of the regulatory framework into two; one, dealing with the requirement of keeping and maintaining procurement records for the PEs proceedings; and two, concerning the management and care of the procurement records in the entire records life-cycle. This disharmonised regulatory framework is coupled with inexistence of the procurement records management guidelines.

The disharmonised regulatory framework is brought about by fragmentation of the legislations (Cap. 410, Act No. 7, 2011 as amended; Cap. 309, RAM Act No. 3, 2002). The RAM Act No. 3 of 2002 is categorical on governing and regulating the management and care of all public records in the public offices within and across the Tanzania public and private sectors. On the contrary, the Public Procurement Act No. 7 of 2011 as amended (cf. Act No. 3 of 2001; cf. Act No. 21 of 2004 respectively) does provide that:

> A procuring entity *shall maintain a record of its procurement proceedings in which it is involved*, including decisions taken and the reasons for it and *such record shall be kept for a period of not less than five years from the date of completion of the contract and be made available when required* to the Minister and the Controller and Auditor General (S. 30(1) of Act No. 3, 2001 cf. S. 56(1) of Act No. 21, 2004 cf. S. 61(1) of Act No. 7, 2011 as amended; with emphasis)

This regulatory requirement is specifically on maintaining procurement records. How recorded and documented procurement records are managed and cared throughout the records life-cycle has not been provided therein. The generality of the provided requirements to be found in the public procurement legislation (Cap. 410) is specifically on the maintaining, keeping, and making availability of the procurement records when required. How procurement records and archives should be managed and cared is not provided whatsoever in the legislation. It is provided in the Records and Archives Management Act No. 3 of 2002 (ss. 9 and 10) whereby elaborative guidance on how records shall be managed and cared is provided in the Records and Archives Management Guidelines (GN No. 77, 2007). Together with these requirements; however, the Public Procurement Regulatory Authority (PPRA) is obliged to prepare procurement record guidelines in order for the PEs to keep their records in a proper manner (Reg. 88(4) of Public Procurement Regulations, GN No. 446, 2013 as emended). Despite this fact whatsoever, the PPRA has not yet prepared such guidelines. There are still some operational gaps to be found in most of the Tanzania PEs on how to manage and care procurement records due to inexistence of the envisaged guidelines.

However, in Kenya things are different. Kenya was a country that experienced the same problems in matters and issues related to management of procurement records. Kenya was far behind Tanzania in enacting public procurement legislation. Essentially, Kenya had moved very fast in establishing procurement recordkeeping guidelines. Kenya has gone far by repealing their public procurement legislation (the Public Procurement and Disposal Act, Cap. 412C of 2005). The revisions of 2010 and 2015 respectively have paved the way for the empowerment of the accounting officers in the Kenya procuring entities in managing procurement records. According to Section 44(2) of the Kenya Public Procurement and Asset Disposal Act No. 33 of 2015, it is provided that:

> *In the performance of responsibility under Section 44(1), an accounting officer shall ensure proper documentation of procurement proceedings and safe custody of all procurement records in accordance with Act No. 33 of 2015.*

This provision is categorically stipulating the responsibility of the accounting officers for the Kenya PEs in the management of procurement records. That provision (reference to S. 44(2) of Act No, 33, 2015) is equivalent to the requirements of Section 9 of the Tanzania RAM Act No. 3 of 2002. Section 44(2) coupled with Section 68(1) of the Kenya Public Procurement and Asset Disposal Act No. 33 of 2015 categorically provides that:

> *… an accounting officer of a procuring entity shall keep records for each procurement for at least six years after the resulting contract has been completed or,*

> *if no contract resulted, after the procurement proceedings were terminated* (S. 68(1) of Kenya Public Procurement and Asset Disposal Act No. 33 of 2015).

Together with such a specific provision on procurement records management responsibilities being vested on the accounting officers of the Kenya PEs, there was promulgated and launched the Procurement Records Management Procedures Manual in 2008. This procurement records management procedures manual was sought to address the gaps and challenges that have undermined effective and efficient management of procurement records in the Kenya public procurement system (Rembe, 2010; Ayoti, 2012; Lusuli & Rotich, 2014; Shiundu & Rotich, 2014; Kendo & Getuno, 2016). The procedures manual did also identify the office responsible for control, co-ordination, maintenance and the disposal of procurement records.

Lastly, most of the Tanzania procuring entities are inadequately funded for the procurement records management activities. The inadequacy funding in most of the Tanzania PEs had led to inadequate acquisition of storage space, equipment and facilities, and non-implementation of the procurement records management training programmes. Great emphasis is mostly given to the procurement and supply chain management cadres and not for records and archives management cadre within and across the PMUs, users departments, and other functional departments that directly deal with the management of procurement records. In most of the Tanzania PEs, the procurement records management activities and the procurement recordkeeping matters and issues therein are generally underfunded or else unbudgeted altogether.

### 5.3.2 Storage Space for Procurement Recordkeeping

Practically, procurement records require carefully preservation. That is the essence of records storage space for procurement recordkeeping. Records storage space is a physical space where records of all types are kept and preserved. Good recordkeeping is even more essential in the public sector (IRMT, 1999a) as well as for the private sector enterprises (Chachage & Ngulube, 2006). For effective recordkeeping, the RAM personnel must ensure that the four actions cum decisions of records management and care as are provided in the records management continuum concept are adhered and executed in compliance with the policy, laws, regulations and guidelines therein (IRMT, 1999a).

Therefore, it is the essence of adequate and sufficient records storage space, in ensuring that the four actions of the RAM continuum model (Table 2.3) are efficiently executed within such perimeters of adequate storage space for efficient recordkeeping system. Findings on the adequacy of storage space for semi-current and non-current procurement records had manifested utter inadequacy. This is a manifestation of improper procurement recordkeeping in most of the studied Tanzania PEs. These empirical findings are similar with that of: Akotia (1996) who observed ill-suited records conditions in Ghana; Mnjama (2003) that observed ineffective recordkeeping in Kenya; Ndenje-Sichalwe (2010) that observed weaknesses in records preservation in the studied ministries in Tanzania; and Kalusopa and Ngulube (2012) that observed weak preservation of records in Botswana. The observed weaknesses in recordkeeping as per Akotia (1996), Mnjama (2003), Ndenje-Sichalwe (2010), and Kalusopa and Ngulube (2012) respectively were inter alia due to inadequacy and insufficiency of designated records storage spaces.

Despite of inadequacy of storage space for semi-current and non-current procurement records as observed in most of the Tanzania PEs; the availability of storage space for current procurement records was observed to be pleasing. The motive behind the availability of storage space for current (and some of the semi-current) procurement records is based on the fact that the envisaged records are used for the day-to-day procurement business transactions. Most of the PEs' institutional actors have been observed to keep almost all of the recorded and documented current and some of semi-current procurement record files within their offices. This modus operandi had given the personnel who are dealing with the management of recorded and documented procurement record files a constant eye on the current records as compared to some of semi-current and most of the non-current procurement records which are shoddily kept.

The storage space for keeping all kinds of procurement records for most of the studied Tanzania PEs has a number of institutional resource challenges. The adequacy of the storage space is a critical due to lack of specialised procurement recordkeeping spaces. Less than 20 per cent of the studied PEs had adequate storage space for semi-current and extinct procurement records. In the other extreme, more than 80 per cent of the studied PEs had inadequate storage space for semi-current and non-current procurement records. The findings of this nature were also observed in Ghana (Akotia, 1996) and in Botswana (Kalusopa & Ngulube, 2012) respectively.

The observed phenomenon had resulted into randomised procurement records storage which had rendered improper procurement recordkeeping in most of the studied PEs. The randomness storage of the recorded and documented procurement record files had facilitated the random access to the records storage area by unauthorised people. Efficient records management and care (in terms of controls, as in Alfresco, 2009), managing who can access and modify key documents and recorded procurement record files need to be identified and made as an integral part in achieving compliance with the requirements of the RAM best practices and RAMS standards. It was recorded and documented that in some of the studied Tanzania PEs, some unauthorised people from other departments not directly related to the procurement recordkeeping were having an authorised access to the records storage areas. This is an indication that for most of the studied Tanzania PEs that had free access to where procurement records are kept, the recorded and documented procurement record files were at high risk.

### 5.3.3 Equipment and Facilities for Procurement Recordkeeping

Procurement records, of any type and kinds, need to be efficiently handled and preserved in specialised equipment and facilities. Fundamentally, procurement records need adequate equipment and facilities for good preservation. Essentially, as procurement records require storage space; operationally and administratively, they also do need specialised recordkeeping equipment and facilities. Recordkeeping equipment and facilities are physical resources where records of all types could be kept and preserved for security and safety purposes.In efficient recordkeeping, records require storage conditions and handling processes that take into account their physical and chemical properties (vide ISO 15489:1) so do they require specialised equipment and facilities. Procurement records, as other records do, require specialised equipment and facilities in maintaining and preserving their use value.

Therefore, adequate equipment and facilities for recordkeeping are highly needed in ensuring that the four actions of the RAM continuum model (Table 2.3) are effectively executed and efficiently met. The determination of the availability and adequacy of the equipment and facilities for procurement recordkeeping, as it was for the storage spaces was qualitatively based on the type of procurement records. Findings revealed that, equipment and facilities thereto for semi-current and non-current procurement records were inadequate. This has manifested improper management of procurement records in most of the studied Tanzania PEs. These empirical evidences are similar with the empirical evidences observed in Ghana (Akotia, 1996), in Kenya (Mnjama, 2003), and in Botswana (Kalusopa & Ngulube, 2012).In these evidences; it was empirically found that, there were inadequate or unavailability of or out-dated recordkeeping equipment and facilities in Ghana, Kenya, and Botswana respectively.

Despite the revelations of inadequacy of recordkeeping equipment and facilities for the semi-current and non-current procurement records as observed in most of the studied Tanzania PEs; the availability of equipment and facilities for recordkeeping for the current procurement records was observed to be good. The motive behind these empirical revelations for the current procurement records is based on the fact that the current procurement records are being frequently used in the day-to-day procurement business transactions. In principle, current and some of the semi-current procurement records are given more weight due to existing use. Most of the studied

Tanzania PEs had optimal requirements of the available equipment and facilities for keeping the recorded and documented current procurement record files. This observation is similar for the availability of the storage space for keeping current procurement records. Impliedly, this indicates that most of the Tanzania PEs maintain and archive procurement records (S. 61(1) of Act No. 7, 2011 as amended).

Despite existence of equipment and facilities for keeping current procurement records, more than 85 per cent of the studied Tanzania PEs had no specialised equipment and facilities for the semi-current and non-current procurement records. Conversely, less than 15 per cent of the studied PEs had specialised equipment and facilities for keeping semi-current and non-current procurement records. These manifestations are similar with that of Akotia (1996), Mnjama (2003), Ndenje-Sichalwe (2010), and Kalusopa and Ngulube (2012); that, there were observed weak storage and preservation of records in Ghana, Kenya, Tanzania, and Botswana respectively. The observed weaknesses were due to inadequacy of the equipment and facilities for recordkeeping. Despite of the availability for the recordkeeping equipment and facilities for current procurement records; there is inadequate of the recordkeeping equipment and facilities for semi-current and non-current procurement records in most of the studied Tanzania PEs.

Like the inadequacy of the storage space for procurement recordkeeping, inadequacy of the equipment and facilities for procurement recordkeeping has a number of institutional resource challenges. The inadequacy of the equipment and facilities is a critical institutional resource challenge for most of the Tanzania PEs. Less than 20 per cent of the studied Tanzania PEs had adequate equipment and facilities for semi-current and non-current procurement records. In other words, more than 80 per cent of the studied Tanzania PEs had inadequate equipment and facilities for semi-current and non-current procurement records. The findings of this nature were also found in Ghana (Akotia, 1996), in Kenya (Mnjama, 2003), and in Botswana (Kalusopa & Ngulube, 2012) respectively.

The observed phenomena have resulted into the randomised procurement recordkeeping which has rendered improper procurement recordkeeping in most of the studied Tanzania PEs. The randomness storage had made the recoded and documented procurement record files to be kept haphazardly even on corridors and wherever space is available. Impliedly, this is an indication that for most of the studied Tanzania PEs that had free access to the procurement records, the recorded and documented procurement record files were observed to be at uncontrolled risk. This is a non-compliance with the requirements of the Alfresco (2009) that require records to be kept in specialised equipment and facilities to preserve their use value.

### 5.3.4 Security and Safety Measures in Managing Procurement Records

Records need to be well-kept and well secured (ISO 15489:1, 2001, 2016). Well-kept and well secured procurement records need to be observed on the perspectives of (1) accessibility to the procurement records and (2) why records should be accessible. This discussion will therefore consider two perspectives derived thereon, namely: accessibility into the procurement records; and availability of security and safety measures for the procurement records.

The notion of accessibility to the procurement records refers to the situation whereby individuals have access into the recorded and documented procurement record files. The accessibility to the recorded and documented procurement record files could be signified by either *free access* or *access with permission* or *strict access*. Generally, PEs may experience either one or a mixed of the records accessibility modus operandi but not business as usual. Principally, records have got usability value and therefore need great care and attention as other institutional resources do. Whatever the type and in whichever the situation, procurement records (current, semi-current, or non-current) need control of access (see Alfresco, 2009). This study has revealed that there are three accessibility modus operandi in most of the studied Tanzania PEs; inter alia, free access (random access), access with permission, and strict access.

The study findings manifested that, the accessibility of procurement records has been dominated by the free access storage. Most of the studied Tanzania PEs had been adopting the free access due to the fact that there are no specialised storage spaces for the semi-current and non-current records. At most 60 per cent of the respondents have experienced free access into the recorded and documented procurement record files. Findings revealed that for most of the studied Tanzania PEs had limited number of specialised procurement registries with limited procurement records registry personnel. Due to these revelations, there were observed no strict entry into the semi-current and non-current recorded and documented procurement record files. In principle, the personnel who were working within the accounting (and finance) and administration have had direct and unrestricted access to some of the current, most of the semi-current and all of the non-current procurement records. Oftentimes, the unauthorised personnel into the procurement records storage areas had been extracting recorded and documented procurement units of recorded procurement information (documents) without replacements. This was happening despite the fact that procurement records need to be protected against unauthorized access to inhibit leakage of information and comply with the process to be confidential. In principle, it is administratively required that some classified records need a higher degree of protection (URT, 2016c). These include but not limited to recorded and documented procurement record files.

Despite of the free access, there were some experiences of strict access at less than 30 per cent where institutional access into the recorded and documented procurement record files was strictly to the registry personnel and authorised individuals within and across the PEs. Whenever there were procurement records registry personnel, accessibility to the kept, stored or maintained recorded and documented procurement record files were sought from the registry personnel. Most of the time, procurement registry personnel were seen to authorise individuals who wanted access to the recorded and documented procurement record files that were not subject to process to be confidential. This was the essence of complying with the practice of controls in recordkeeping(as in Alfresco, 2009) and process to be confidential (S. 46 (2) of Act

No. 7, 2011 as amended; Reg. 306, see also Reg. 337(7) (d), Reg. 376(1) of GN No. 446, 2013 as amended). The control of entry to the procurement records registry had ensured the authenticity and reliability of recorded and documented procurement record files as the possibilities of extracting and/or altering information provided in the records are strictly controlled.

Records need to be well kept and secured for availability and completeness (ISO 15489:1, 2001, 2016). Well secured records, as Lewellen (2015) pointed; must ensure that recorded and documented procurement record files are complete and unaltered. Therefore, according to Kalusopa and Ngulube (2012), there must be records security policy. The security policy must ensure that security issues are identified and strategies developed and implemented thereto. Procurement records should be protected at all times form all the threats (URT, 2016c). Impliedly, this is the essence of having a unified and harmonised public procurement records management policy which is inexistence whatsoever.

Procurement records need safe and secure keeping. That is, there must be security and safety measures in place whilst maintaining their existence and usability as organisation assets. The determined security and safety of the procurement records in the studied Tanzania PEs was based on the type and kinds of procurement records. The security and safety cases for current procurement records for most of the studied Tanzania PEs were very reasonable. This was due to the fact that, most of current procurement records were kept under lock in the PMUs, user department or accounting officers' offices and preserved within the filing cabinets, shelves, lockers, and records file cupboards. Mostly, the recorded and documented procurement record files for current records are usually kept and maintained with great care and strict management through efficient applicability of records life-cycle and records continuum concepts.

However, evidenced findings from the studied Tanzania PEs revealed that 20 per cent have security and safety measures whilst 80 per cent had none of the security and safety measures for the recorded and documented procurement record files. This is an indication of poor preparedness for the studied Tanzania PEs on records recovery. For the studied Tanzania PEs that had the security and safety measures, the measures included but not limited to some useful characteristics that ensure records are well-kept and highly secured. For security measures, procurement records were highly secured into the specialised storage space, equipment and facilities in the institutionalised offices or registries and/or into the specialised containerised rooms designated for records and archives keeping in the procurement recordkeeping systems.

In most of the studied Tanzania PEs, the current and some of the semi-current procurement records were always under lock except where and when they were needed for use. In regards to the safety measures, procurement records were kept into the records storage space, equipment and facilities that have safety mechanisms such as fire monitoring (smoke detectors), water and dump proof, no leaking roofs, and temperature monitoring instruments. However, if the findings on the availability and adequacy of security and security measures obtained from the studied Tanzania PEs would be interpolated to other PEs within and across the Tanzania public procurement system, conclusion would be:

> Disaster preparedness and security control for records and archives did not form a significant part of the records management activities in the government ministries of Tanzania (Ndenje-Sichalwe, 2010).

Generally, there were no vital records programmes in most of the studied Tanzania PEs. This is contrary to Reg. 4(1) of the National Records and Archives Management Regulations of 2007, which categorically states that:

> A public office shall, in *keeping* and *maintaining* records under Reg. 3 *identify* and *separate vital records* to ensure *they are properly kept in a safe place* (Reg. 4(1) of GN No. 77 of 2007; with emphasis).

Despite the absence of vital records programmes, findings from the studied Tanzania PEs recorded and documented some minute vital procurement records that were kept and secured under the confidential registries. Whilst other recorded and documented procurement record files were both firmly kept and secured within the accounting officers' strong rooms or in the cabinets kept by the heads of the PMUs and user departments.

The major threat to the safety and preservation of official records is the risk of disaster (Government of South Australia, 2007). Disaster is an unexpected occurrence inflicting widespread destruction and distress and having long-term adverse effects on the conduct of normal activities (Przybyla & Huth, 2004). Disaster usually may, inter alia, drastically destroy the information infrastructure and render documentary materials inaccessible to users (Ngulube & Magazi, 2006). Therefore, security and safety of records is an integral part of records disaster management (Ngulube & Magazi, 2006). Security control is an important aspect of disaster planning (Matthews, 2003; Government of South Australia, 2007). That is the essence of organisations to have vital records recovery programmes. However, most of Tanzania public offices do not have vital records recovery programmes whatsoever (Ndenje-Sichalwe, 2010).

Disaster planning and security control are vital to the preservation and protection of records and archives. Disaster planning is the major component of any disaster preparedness strategy because it prepares institutions to respond quickly to emergencies (Ngulube & Magazi, 2006; Ndenje-Sichalwe, 2010). Security control protects items against theft, deliberate or unintentional damage and destruction. Security control refers to all the measures adopted within an organisation to safeguard assets, ensure the accuracy and reliability of records, and encourage operational efficiency and adherence to prescribed procedures (Wold & Shriver, 1997). Security and protection of records includes actions that are undertaken to discourage crime and to prevent or minimize damage to holdings (Ngulube, 2005). One of the most important aspects of any security control is the clear identification of what is most at risk, and of what truly merits fully protection. Some security considerations that must be addressed in an information management environment include building security, equipment and personal security (Penn *et al*., 1994).

## 5.4 Chapter Summary

The study assessed the factors influencing the management of procurement records in the Tanzania PEs. This was done by examining the capacity of personnel involved in managing procurement records, determining the adequacy of storage space in procurement recordkeeping, determining adequacy of equipment and facilities in procurement recordkeeping, and finally examining the sufficiency of security and safety measures in managing procurement records in the Tanzania PEs. Principally, the discussion was focused on assessing the factors influencing the management of procurement records. This was conducted in line with the RAM best practices, RAMS standards, regulatory requirements, institutional frameworks, and the national, regional and international regulations and standards.

# CHAPTER SIX
# SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

## 6.1 Introduction

This chapter presents the summary of the study, conclusion, and policy implications based on the findings. The chapter is divided into seven main sections. The chapter starts with a section for summary of the findings. The summary is followed by the conclusion reached based on the statement of the problem, theories underpinned, empirical literature reviewed, methodology, studied population, the general and specific research objectives, and the revisiting of the research questions. The contributions to knowledge and policy implications are also presented. The chapter presents the limitations of the study and how they were dealt to ensure validity and reliability of the study findings. Finally, the chapter presents recommendations for potential areas for further research.

## 6.2 Summary of the Study

The general objective of this study was to assess the factors influencing the management of procurement records in the Tanzania PEs. The specific objectives derived therein were centred on (1) examining the capacity of personnel involved in managing procurement records,(2) determining the extent of storage space for procurement recordkeeping, (3) determining the extent of equipment and facilities for procurement recordkeeping, and (4) examining the security and safety measures in managing procurement records in the Tanzania PEs. In principle, the study has tried to bridge theoretical, empirical, and methodological gaps on the existing body of knowledge through institutional theory and the RBT that integrated key elements of the TOC in studying the management of procurement records in the Tanzania PEs on the scope, extent and context of the given study objectives.

### 6.2.1 Capacity of Personnel in Managing Procurement Records

The first specific objective of the study was to examine the capacity of personnel involved in managing procurement records. Qualitatively, it was envisioned to provide value opinion on: who are the personnel involved in the management of procurement records, what management activities they are doing, and how they do manage procurement records. It was also envisioned to assess the sufficiency of personnel in terms of number, extent of professional and technical knowledge, skills and competences, and knowledge of the personnel on the RAM regulatory requirements in managing procurement records.

The findings indicated that the personnel who are involved in the management of procurement records in the studied Tanzania PEs are inter alia the individuals who are either staffed and positioned in the budget approving authority, the accounting officers' offices, the tender boards, the Procurement Management Units (PMUs), user departments, evaluation committees, goods inspection and acceptance committees, works supervisors, internal audit units, legal offices (units),finance and administration departments. Depending on the nature of the institutional jurisdictional functions or powers or both; the personnel have been mandated with the given institutional tasked activities to create, receive, use, maintain, archive or dispose procurement records within the Tanzania PEs.

The given jurisdictional mandates, according to the regulatory and institutional frameworks establishing the Tanzania PEs, are being executed in compliant with the given PEs institutional obligations. Through the regulatory and institutional frameworks; the personnel who are employed, staffed and tasked with institutional responsibilities in managing procurement business process transactional activities are supposed to be complaint with the requirements of the procurement recordkeeping best practices, procurement recordkeeping system standards, regulatory and institutional frameworks in the management of procurement records in the course of exercising their mandated and tasked functions. This, essentially, is the basic element of institutional theory in terms of normative, regulative, and cultural-cognitive in ensuring that Tanzania PEs are aligned with the shared values as means of compliance and expedience.

Despite of the differing functional responsibilities in the management of procurement business transactions within the Tanzania PEs; the fundamental tasked functions of maintaining and archiving procurement records of all kinds (current, semi-current, and non-current) are executed by personnel who are staffed and positioned in the PMUs and user departments. Administratively, the jurisdictional functions in creating, receiving, using, maintaining, archiving, or disposing procurement records shall always remain to be governed, administered and regulated by the personnel who are staffed and positioned in the Tanzania PEs. However, the sole responsible personnel by the envisaged regulatory and institutional frameworks shall always (unless, otherwise amended) remain to be the designated accounting officers (vide S. 9 of Act No. 3, 2002 cf. S. 36(1) of Act No. 7, 2011 as amended). Impliedly, all activities which are found in the management of procurement records are executed on behalf of the accounting officers who are the responsible public officials for each procurement transaction (vide S. 36(5) of Act No. 7, 2011 as amended).

Despite the concerted efforts of the personnel who are managing procurement records in the Tanzania PEs; management of procurement records through creation, receipt, use, maintaining, archiving and disposition have been found to be culminated by regulatory and institutional resource challenges. Mostly, the regulatory and institutional challenges facing the maintaining of procurement records are inter alia lack of procurement records management guidelines, inadequacy of professional staff in the procurement recordkeeping systems, insufficient records storage space for procurement recordkeeping, inadequate storage space, equipment and facilities for procurement recordkeeping, and insufficient security and safety measures in managing procurement records.

Quantitatively however, the focus of this specific objective was to determine the extent of knowledge, skills and competences of personnel who are involved in the management of procurement records in the studied Tanzania PEs. The findings revealed that two attributes of this construct (*Construct 1*), (1) specialised knowledge and skills in procurement records management and (2) competence and on-the-job training on procurement records management were identified and established to be non-significant at 5% significance level. However, the two attributes in this construct (*Construct 1*) have been found to possess positive marginal effects. Impliedly, procuring entities (PEs) where procurement records are managed by personnel who are knowledgeable and skilled are 2.64% more likely to properly manage their procurement records than PEs with the unknowledgeable and unskilled personnel, ceteris paribus.

Likewise, PEs where procurement records are managed by competent personnel who receive the on-the-job training on records management are 1.82% more likely to properly manage their procurement records than PEs with personnel who are incompetent and do not receive the on-the-job training, ceteris paribus. Despite the statistical non-significance of the two attributes, as evidenced by the logistic regression model results; yet, the two attributes have qualitative significance in managing procurement records. Essentially, personnel who are managing procurement records are required to acquire specialised professional knowledge, skills, and competences through either formalised trainings or effective on-the-job trainings in order to have the required knowledge, skills and competences for effective and efficient procurement recordkeeping.

### 6.2.2 Storage Space for Procurement Recordkeeping

The second specific objective was aimed at determining the extent of storage space for procurement recordkeeping. The foci of this specific objective were to qualitatively and quantitatively determine and assess the extent of availability and adequacy of storage space for procurement recordkeeping in the studied Tanzania PEs. Findings revealed that the availability of the storage space for keeping current procurement records is pleasing as all of the studied PEs had been found to have optimum available storage space for keeping current procurement records. However, for semi-current and non-current procurement records the availability was not pleasing as most of the studied Tanzania PEs had no specialised storage space for semi-current and non-current procurement records.

Furthermore, the findings revealed that two attributes of this construct (*Construct 2*), namely (1) availability of storage space for keeping all kinds of procurement records and (2) adequacy of storage space for keeping all kinds of procurement records were identified and established to be significant at 5% significance level. The quantitative statistical findings through marginal effect indicated that the adequacy of storage space for keeping all kinds of procurement records has a higher positive marginal effect of 13.46 per cent in improving management of procurement records, ceteris paribus. This was followed by availability of storage space with a positive marginal effect of 9.90 per cent. These construct attributes were determined to be statistically significance at 5% significance level. Impliedly, the availability and adequacy of storage space for procurement recordkeeping has vital influence on the management of procurement records in the studied Tanzania PEs, ceteris paribus.

### 6.2.3 Equipment and Facilities for Procurement Recordkeeping

The third specific objective was to determine the extent of equipment and facilities for procurement recordkeeping. This specific objective was aimed at determining and assessing the extent of availability and adequacy of equipment and facilities for procurement recordkeeping in the studied Tanzania PEs. Qualitatively, the adequacy of equipment and facilities for procurement recordkeeping go hand-in-hand with the availability and adequacy of storage space for procurement recordkeeping. However, quantitative findings have revealed that the two named attributes of this construct (*Construct 3*) were non-significant. That is, the availability of equipment and facilities for keeping procurement records and adequacy of equipment and facilities for keeping procurement records have been found to be non-significant at 5% significance level.

Furthermore, the availability of equipment and facilities for procurement recordkeeping had been found to have negative marginal effect of 5.55 per cent whilst adequacy of equipment and facilities for procurement recordkeeping has negative marginal effect of 8.52 per cent, ceteris paribus. This implies that, PEs that have no equipment and facilities for procurement recordkeeping are 5.55 per cent less likely to have proper management of procurement records compared to PEs with available equipment and facilities for procurement recordkeeping; whilst PEs that have limited equipment and facilities for procurement recordkeeping are 8.52 per cent less likely to have a proper management of procurement records compared to PEs with adequate equipment and facilities for procurement recordkeeping, ceteris paribus.

In principle, the findings over this specific objective had indicated that, most of the studied Tanzania PEs had been observed to have inadequate equipment and facilities for procurement recordkeeping. However, the findings have revealed that the availability and adequacy of equipment and facilities for procurement recordkeeping depend on the kinds of procurement records. Further, findings revealed that most of the studied Tanzania PEs had equipment and facilities for current procurement recordkeeping. But institutionally, resource challenges are found on the availability and adequacy of equipment and facilities for keeping some of the semi current and most of the non-current procurement records.

#### 6.2.4 Security and Safety Measures in Managing Procurement Records

The fourth specific objective was to examine the security and safety measures in managing procurement records. Qualitatively, the focus of this objective was to assess the accessibility to the recorded and documented procurement record files and finally assess the availability of the security and safety measures in managing procurement records in the studied Tanzania PEs. Whereas, quantitatively the objective was to determine the sufficiency of security and safety measures in managing procurement records in the Tanzania PEs.

The findings from exploratory case study indicated that, at least 80 per cent of the studied Tanzania PEs had no security and safety measures in managing procurement records. Impliedly therefore, most of the recorded and documented procurement record files in the studied Tanzania PEs that had no security and safety measures were at high risk. Quantitatively however, this construct (*Construct 4*) had two attributes, namely (1) availability of security and safety measures in managing procurement records and (2) sufficiency of security and safety measures in managing procurement records. It is statistically evidenced that availability of security and safety measures in managing procurement records is non-significant whilst sufficiency of security and safety measures in managing procurement records is significant at 5% significance level. The sufficiency of security and safety measures in managing procurement records has been determined to possess positive significant contribution at marginal effect of 8.91 per cent in improving management of procurement records in the Tanzania PEs, ceteris paribus. Impliedly, this is an indication that sufficiency of security and safety measures in managing procurement records should not be underrated at any cost.

## 6.3 Conclusion

The study established that, factors influencing the management of procurement records are real, noticeable and exist within and across the studied Tanzania PEs. The identified and assessed factors are: the capacity of personnel involved in managing procurement records; the storage space for procurement recordkeeping; the equipment and facilities for procurement recordkeeping; and the security and safety measures in managing procurement records. The study established that, most of the Tanzania procuring entities are institutionally constrained by: the incapacity of personnel involved in managing procurement records; the inadequacy of storage space for keeping all kinds of procurement records; the inadequacy of equipment and facilities for keeping all kinds of procurement records; and the insufficiency of security and safety measures in managing procurement records. Qualitative assessments on the influences of these factors were made. It was assessed that, the factors significantly influence the management of procurement records in the Tanzania PEs. However, the magnitude of the influences of the determined factors in the management of procurement records varied considerably.

It was learnt that, personnel in the Tanzania PEs need specialised professional knowledge, skills, competencies, and professional ethics on the RAM practices in order to efficiently manage procurement records. It was further learnt that, personnel need to be provided with the on-the-job training on the procurement recordkeeping best practices and recordkeeping system standards as far as management of procurement records is concerned. Tanzania PEs would have been in a position to properly manage procurement records as required by the RAM legislation, RAM best practices, RAMS standards, and international requirements if personnel were inculcated with the RAM professionalism. That would be the essence of complying with the requirements of the procurement law in terms of appropriate staffing the PMUs with adequate and capable administrative and technical personnel.

In terms of PEs institutional physical resources, findings indicated that the adequacy of storage space, equipment and facilities and sufficiency of security and safety measures play significant role in the efficient management of procurement records. However, the determined inadequacy on the storage space, equipment and facilities, and insufficiency of security and safety measures continue to make things worse in the procurement recordkeeping within the Tanzania procurement recordkeeping systems. Unless otherwise, management of procurement records in most of the Tanzania PEs shall remain to be in crisis, ceteris paribus.

The qualitative analytical and interpreted findings have indicated that personnel involved in managing procurement records in most of the studied Tanzania PEs are inadequate and incapable to execute the procurement records management activities. Together with the internal incapability of the envisioned personnel in the studied PEs, most of the studied PEs had been observed to have inadequate storage space, equipment and facilities for procurement recordkeeping, and insufficient security and safety measures in managing procurement records. The insufficiency of the security and safety measures is dangerous to the management of vital procurement records. Principally, the findings have indicated that procurement records are improperly managed and cared throughout the Tanzania procurement recordkeeping systems. This conclusion is a justification of the recorded and documented audit evidences that procurement recordkeeping is weak in most of the audited Tanzania PEs.

Based on the debates on the RAM practices and RAMS standards in Tanzania and in East Africa, much can be empirically deduced and compared. The RAM and RAMS debates in the ESARBICA and generally in Africa provide empirically comparisons of either success or failures of the RAM practices and RAMS standards that could be established thereto. Globally, the debate on the RAM practices and RAMS standards is viral. It is clear, that RAM and RAMS have received the needed academic and professional attention. However, the debate is still limited on the perspectives of the management of procurement records. Generally, more academic and professional debates are needed on the management of procurement records. But specifically, the debate should be on the management of procurement records in the Tanzania procurement recordkeeping systems.

The debate is not solid and specific on the ground of comprehensive understanding of the procurement recordkeeping best practices and procurement recordkeeping system standards in the Tanzania PEs. In this context, management of procurement records have not yet received the desired governmental and institutional attention and policy support. Oftentimes, procurement records and archives management are taken for granted. That is why, there are records management crisis pertaining the RAM practices and RAMS standards. Therefore, the identified and established factors influencing the management of procurement records in the Tanzania PEs should be considered as relevant to revamp the effectiveness and efficiency of management of public records, including procurement recordkeeping as enshrined in the RAMP, in the UNCAC (Article 9), in the UNCITRAL Procurement Modal Law (Article 25), and generally in the national and regional regulatory and institutional frameworks.

Conclusively, after this assessment of the factors influencing management of procurement records in the Tanzania PEs; it is hereby concluded: that, the factors influencing the management of procurement records are real and exist; that, despite of the regulatory and institutional resource challenges culminating Tanzania PEs in managing procurement records, personnel in the PEs’ institutional organs do maintain and archive procurement records; and that, the factors especially the availability of storage space for keeping all kinds of procurement records, the adequacy of storage space for keeping all kinds of procurement records, and sufficiency of security and safety measures in managing procurement records do play significant role in influencing the management of procurement records in the Tanzania PEs. Principally, despite of the observed non-compliance with proper recordkeeping, and existence of the regulatory and institutional resource challenges culminating the management of procurement records in the Tanzania PEs; personnel do create, receive, use, maintain, archive, and dispose procurement records to facilitate their basic institutional mandates as enshrined in the public procurement legislation (Cap. 410).

## 6.4 Contribution of the Study

The findings of this study manifest several contributions. The study has linked institutional theory and the RBT that integrated key elements of the TOC to assess factors influencing management of procurement records in the Tanzania PEs. The institutional theory and RBT (with the key elements of the TOC) have been combined in such a way to study and establish linkages between regulatory and institutional frameworks and their associated institutional resources within the combined effects of the institutionalised internal resources including human and physical resources and the informed regulatory requirements in assessing how they influence management of procurement records for improved institutional performance and on goal achievements of the procurement recordkeeping in the Tanzania procurement recordkeeping systems.

The findings of this study would contribute to the enhancement of the existing body of literature by empirically confirming that implementation of the efficient procurement records management in the Tanzania PEs requires effective normative, regulative, and institutional frameworks. The study contributes to the institutional theory by establishing the specific effects of the normative, regulative, and cultural-cognitive pillars on the management of procurement records. The study further extended the theoretical discourse on the RBT by empirically illustrating the essence of studying records management in the procurement function as a business process focusing on the use of PEs internal resources and institutional capabilities for organisational success in ensuring proper management of procurement records in the procurement business transactional processes and activities therein.

Findings of this study may have academic value to researchers and scholars in providing more insights on how regulatory and institutional resource factors could influence the management of procurement records in the Tanzania PEs. The study may be sought to lay a theoretical foundation for future empirical studies on the procurement recordkeeping best practices and procurement recordkeeping system standards where new institutional economics and management theories and philosophies other than the well-known and established RAM theories, principles and models could be used. Apart from the usefulness in line with the literature review, the findings of this study may be of great academic and professional value to records and archives managers, procurement specialists and practitioners in both the public and private business domains as it adds to the body of knowledge on the applicability of theories and practices of efficient RAM and effective RAMS in the procurement management perspectives.

As mentioned in statement of the problem, there have been very few attempts to empirically research on the public procurement records management. The implication is that, this study may be a source of both academic and professional inspiration to the experienced and novice researchers in developing a more robust and practical methodology for studying the regulatory and institutional frameworks for the public procurement system if they comply with the needs of effective and efficient procurement recordkeeping practices and procurement recordkeeping system standards compliant with the ISO 15489:1.

The findings have furthered and contributed to the debate on effective management of procurement records in the Tanzania PEs. Theoretical and empirical literatures on the RAM practices have indicated limited debate on the management of procurement records in the Tanzania PEs. Therefore, this study is sought to add significant value in filling such a knowledge gap on the factors limiting the efficient management of procurement records in the perspectives of the institutional theory, resource based theory and theory of constraints. The findings of this study are sought to contribute to the on-going debate by providing empirical evidences on how the management of procurement records in the context of Tanzania PEs is influenced by regulatory and institutional resource factors.

Also, the findings have contributed to the debate in furthering the agenda on the importance of RAM in the public procurement management sector. Public procurement management in the public sector is highly regulative and requires strong institutions. Therefore, the findings of this study would be used for the public sector management policy makers to think of the re-formulation and implementation of national public records and archives management to incorporate procurement records management. It would also contribute to the re-alignment of procurement records management issues that need harmonisation between the two principal legislations and therefore speed the formulation and commissioning of the procurement records management guidelines which are inexistence.

## 6.5 Policy Implications

Management of procurement records is built on the regulatory and institutional frameworks. For public records and archives management, as a function of public administration and management, it is part and parcel of good governance. It is therefore necessary for the decision makers in the governing political system to have some political will in ensuring that procurement recordkeeping systems are effective and efficient to the best of RAM practices and RAMS standards as enshrined in the national, regional and international legislations and regulations. The decision makers in the macro and mezzo levels in the governing and political systems should be driven by commitments and desires to ensure that public procurement and RAM regulatory and institutional frameworks are harmonised in line with the need for professionalism, RAM best practices and RAMS generally acceptable standards. It is hereby asserted that, the findings of this study would stimulate procurement records management policy reformulation and implementation thereof. Once procurement records management policies are formulated and aligned thereto; the regulatory and institutional arrangements could be streamlined with guidelines to enforce compliance. The essence of procurement records management policy and regulatory alignment is to enable the streamlining of the management of procurement records within and across the Tanzania PEs.

Findings of this study have policy implication for the Government and the Tanzania PEs. The Tanzania procuring entities, as public offices, are obliged by their reasons of being to deliver qualified, quantified, and specific (QQS) procurements in terms of goods, works, and services. The performance of the Tanzania PEs in delivering value to the economic development of Tanzania is of paramount importance. Therefore, the findings of this study would assist the Tanzania PEs in complying with the rules and regulations on the good governance of the public procurement management through efficient procurement records management. It is has been established in the national RAM policy that, “Records and archives management underpin all public sector functions and services (URT, 2011).”Therefore, public procurement management is one of the public sector functions that are underpinned with the RAM policy. Essentially, the public procurement delivery of public goods and services depending on the viable and feasible decision making that is facilitated by recorded and documented procurement records and evidenced by information contained therein. Procurement records policy framework is therefore envisaged for harmonised regulatory and institutional frameworks.

Ineffective harmonisation and the implementation of the RAM normative, regulative, and institutional frameworks by the Tanzania PEs is not a good indication to either stakeholders or policy makers. That, insisting on compliance with proper recordkeeping by the Tanzania PEs whilst the procurement recordkeeping guidelines have been delayed enough to be prepared and issued for use in the Tanzania PEs does not indicate any good faith whatsoever. Tanzania is obliged to have procurement records management guidelines for proper management and care of procurement records within and across the PEs.

Further, findings of the study indicate that the factors influencing the management of procurement records in the Tanzania PEs play significant role. This implies that, the Government and PEs decision makers should focus more on ensuring that the PEs are appropriately staffed with personnel who have the required professional and technical knowledge, skills, and professional ethics on the procurement recordkeeping practices and procurement recordkeeping system standards. Whilst ensuring appropriate staffing, the PEs should make certain that they have adequate storage space, adequate equipment and facilities, and sufficient security and safety measures for efficient procurement recordkeeping systems in the Tanzania PEs. These procurement recordkeeping systemic issues require policy analysis and therefore policy affirmative statements with promulgation of rules and regulations to govern their conduct within the context of the PEs regulatory and institutional frameworks.

Usually, it is sought that enforcement of the rules and regulations increases the levels of compliance. That is the essence of the initiated procurement audits since 2007 and recordkeeping being one of the components of procurement auditing. However, audit findings recorded and documented indicate that performance on the recordkeeping for most of the audited PEs is dwindling below the targeted levels. The implication is that, the procurement auditing should focus on why there are observed recurring audit weaknesses on procurement recordkeeping for most of the audited PEs instead of continuing to audit the same with almost the same audit findings. Here also, the RAMD should also be empowered to foster and enforce compliance on the RAM best practices and RAMS standards as required by the RAM legislation (Cap. 309, RAM Act No. 3 of 2002) and the attendant regulations. These require policy affirmative statements and actions thereto.

Management of procurement records is an administrative and management perspective in the good governance spectrum. Therefore, administration and management of procurement records involve policy issues. The procurement auditing has to continue in ensuring that the Tanzania PEs are compliant with the law, regulations and guidelines in governing, administering and regulating efficient procurement recordkeeping in the Tanzania procurement recordkeeping systems. The procurement auditing should enhance compliance audits and performance audits on procurement recordkeeping by enhancing the components of the procurement recordkeeping. Together with enhancement of the procurement recordkeeping components, the responsible institution for public procurement auditing may also add punitive measures to deal with the audited PEs that are going to be non-compliant with the requirements of proper procurement recordkeeping systems. In principle, this will in no doubt increase the compliance with the efficient management of procurement records in most of the Tanzania PEs, ceteris paribus. Therefore, the institutions dealing with public procurement auditing have to focus on auditing how procurement records are managed and cared within the Tanzania procurement recordkeeping systems.

The findings also revealed that most of the personnel in the Tanzania PEs have the basic professional knowledge, skills, and ethics in terms of procurement management specialisation but not on the RAM practices and standards. The challenge was on the specialised professional knowledge, skills, and competencies in the RAM and knowledge on the RAM regulatory requirements. It is sought that, Tanzania PEs should have either in-house or tailor-made training programs in place to enable personnel dealing with the management of procurement records (both newly recruits and existing staffs) acquire formalised training within the auspices of the RAM best practices and RAMS standards for efficient procurement recordkeeping systems. Therefore, there should be policy on this that has to be inculcated into the regulatory and institutional frameworks for the Tanzania PEs to comply with.

## 6.6 Limitations of the Study

This study has some limitations. The limitations include the type of the sampled PEs, respondents, perceptions of the respondents, and the nature of the study in the current political philosophy. Based on the type of the sampled PEs, especially the fifteen deliberately sampled and used elements; the study used mostly in-depth interviews where oftentimes the respondents were busy, reluctant or afraid to be interviewed. There were also some sorts of subjectivity on the part of some interviewed key informants that would have hampered the essence of research objectivity. Despite of the aforementioned limitations, the study managed to effectively use the in-depth interviewing protocol and the interview guide to align the responses on the specific objectives of the study. On top of that, whenever there were some aspects of subjectivism, interview data were triangulated within, between and across the interviewees in order to ensure validity and reliability of the qualitative data. The researcher ensured that the interviewing protocol and the interview guide were effectively used. Multiple perspectives in interpreting a single set of in-depth interview data and information were used. In-depth interview data were triangulated between and across the interview responses whilst interpreting the qualitative findings.

The study used qualitative data that were heavily depended on the perceptions of the interviewees. Therefore, some interviewees were not in a position to divulge more of what they understand and comprehend on the procurement records management in their designated PEs. Their worry, due to phobia; was identified to be that, may be this study was a covert research initiative to collect either data or information on the confidentiality of the recorded and documented procurement record files kept by the studied PEs. However, the worries of the interviewees were lessened by assurance that, the study was purely academic. The researcher assured the interviewees that, their anonymity shall be strictly maintained. Whereas, the collected data and information shall not in any way be used for other than academic purpose for this particular study, thesis to be written and academic papers to be derived therefrom.

The process to be confidential, as a requirement of the public procurement legislation on the recorded and documented procurement record files, was highly complied with. This study did not and shall not; in anyway or anyhow, use the recorded and documented procurement information. Rather, the study was concerned with how procurement records were managed and cared for within and across the Tanzania PEs. The research ethics were extremely complied with. In-so-much, the respondents were given the basic knowledge of the research objectives and the requirement of data and information throughout the in-depth interviews and the structured questionnaire survey.

### 6.7 Potential Areas for Further Research

Today, the management of procurement records and archives has received much attention in the public policy circles and therefore in the governance and public administration of the world governments and private businesses. Despite of the crisis facing the RAM and RAMS in many developed and developing countries; yet, academicians and professionals in the academia and professionalism circles alike would like to venture in studying the RAM practices on the management and care of procurement records and archives in order to add value in the theoretical and empirical literature on the existing body of knowledge. This study was conducted within and across the selected Tanzania PEs by considering specific study objectives as proposed before. Therefore, in order to further the research on studying the procurement recordkeeping systems in Tanzania, it is recommended that the following research areas could be sought.

First, a study is required in order to comprehend the requirements of the RAM knowledge, skills, competencies and professional ethics within and across the Tanzania PEs for personnel who are dealing with receipt, creation, use, maintaining, archiving, or disposition of procurement records in the Tanzania procurement recordkeeping systems. The focus should be on determining what would be the minimum professional and technical requirements in terms of knowledge, skills, competencies and professional ethics are required for the personnel to efficiently manage procurement records within the Tanzania PEs.

Second, a study could be considered to carefully examine the procurement recordkeeping systems constraining factors and how they are evolving within the context of management of procurement records in the Tanzania PEs. Why and how these constraints continue to influence the management of procurement records in the procurement recordkeeping systems? It would be prudent to study why these constraints are impinging the management of procurement records despite the reforms and changes occurring in the regulatory and institutional frameworks in the Tanzania national procurement system.

Third, there could be specific study to be made on the harmonisation of the principal RAM legislation and the principal public procurement legislation on matters and issues related to management of procurement records within the context of regulatory and institutional frameworks. This is due to the fact that, there is limited empirical evidence indicating why harmonisation of principle legislations (Cap. 410 and Cap. 309) has taken so long since 2011 when the policy gaps were first identified in the national RAM policy document. The study could involve some matters and issues related to the delayed promulgation of the procurement records management guidelines contrary to Reg. 88(4) of the GN No. 446, 2013 as amended.

Fourth, there should be a study to be focussed on evaluating the functions of the RAMD in ensuring that the Tanzania procuring entities are compliant with the RAM normative, regulative, and cultural-cognitive as enshrined in the National Records and Archives Management Policy of 2011, the Records and Archives Management Act No. 3 of 2002, and the Records and Archives Management Regulations (GN No. 77) of 2007. Lastly, there could be a study on the econometrics of value of procurement records in line with the essence of the management of procurement records. This study would think of the overall objective to determine the value of procurement records by considering the relevant policy, regulatory and institutional resource issues that are opportunities which could be used to revitalise the essence of value of procurement records in ensuring that the Tanzania PEs’ institutional goals in public procurement are accomplished with the best value for money.

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## APPENDICES

### APPENDIX 1: In-depth Interview Protocol

The in-depth interview questions for this study were primarily levelled against the specific study objectives. Questions were made to enable key informants in the Internal Audits Units (IAUs), Procurement Management Units (PMUs), and individual consultants who are engaged by the PPRA for procurement audit to explore and express their expertise in the needed construct variables of analysis in line with the specific objectives of the proposed study on the issues of management of procurement records and matters related therein.

| No. | In-depth Questions | Specific In-depth Interview Questions |
|---|---|---|
| 1 | How does involvement of actors ensure management of procurement records? | **Part 1:***Involvement of Actors in Managing Procurement Records*<br><br>1. Who are the actors that are directly involved in managing procurement records in this organisation?<br><br>2. Could you provide any regulatory and institutional frameworks that establish the mandates for institutional actors' involvement in managing procurement records?<br><br>3. How do institutional actors properly manage procurement records in this organisation? To what extent (1=Very Low; 2=Low; 3=Moderate; 4=Large; 5=Very Large)? |
| 2 | What is the role of the factors influencing the management of procurement records in the Tanzania procuring entities? This specific research question had four itemised sub specific research questions. These were inter alia:<br>1. To what extent does capacity of personnel foster management of procurement records?<br><br>2. To what extent does adequacy of storage space facilitate management of procurement records?<br><br>3. To what extent does adequacy of equipment and facilities facilitate management of procurement records?<br><br>4. To what extent do security and safety measures suffice for management of | **Part 2a:***Capacity of Personnel in Managing Procurement Records*<br><br>1. Does the number of personnel in this organisation suffice for management of procurement records? What is the extent of staffing level (1=Very Low; 2=Low; 3=Moderate; 4=Large; 5=Very Large)?<br><br>2. Are the personnel involved in managing procurement records knowledgeable, skilled, and competent enough in records and archives management practices? To what extent (1=Very Low; 2=Low; 3=Moderate; 4=Large; 5=Very Large)?<br><br>**Part 2b:***Adequacy of Storage Space* |

| | | |
|---|---|---|
| | procurement records? | 1. Does this organisation have space for keeping (storing) procurement records? Is the space sufficient?<br>2. What problems does this organisation currently experience in keeping and maintaining procurement records?<br>**Part 2c:** *Adequacy of Equipment and Facilities*<br>1. Does this organisation have equipment and facilities for keeping (storing) procurement records? Are they sufficient for proper records management?<br>2. What problems does this organisation currently experience in keeping and maintaining procurement records?<br>**Part 2d:** *Sufficiency of Security and Safety of Procurement Records*<br>1. Who has or does not have access to procurement records? Why?<br>2. Does this organisation have any security and safety measures for procurement records? If yes, state them. |
| **3** | How do the records and archive management (RAM) regulatory and institutional arrangements facilitate the management of procurement records in Tanzania? | **Part 3:** *Management of Records and Archives versus Procurement Records Management*<br>1. Do records and archives management regulatory and institutional arrangements fairly feature with the management of procurement records? How?<br>2. Does this organisation have any contacts with the Records and Archives Management Department (RAMD) in specific matters related to management of procurement records? How? |

APPENDIX 1A: Interview Guide

This is an interview guide composed of in-depth interview questions for the Internal Auditors of deliberately selected fifteen (15) procuring entities, heads of PMUs, and consultants (who are doing procurement audit with the PPRA).

**Part 1:***Involvement of Institutional Actors in Managing Procurement Records*

1. Who are actors that are directly involved in managing procurement records in this organisation?
2. Could you provide any regulatory and institutional frameworks that establish the mandates for actors' involvement in managing procurement records?
3. How do actors manage procurement records in this organisation? To what extent?

**Part 2a:***Capacity of Personnel in Managing Procurement Records*

1. Does the number of personnel in this organisation suffice for management of procurement records? What is the extent of staffing level?
2. Are the personnel involved in managing procurement records knowledgeable, skilled, and competent enough in records and archives management practices? To what extent?

**Part 2b:***Adequacy of Storage Space*

1. Does this organisation have space for keeping (storing) procurement records? Is the space sufficient?
2. What problems does this organisation currently experience in keeping and maintaining procurement records?

**Part 2c:***Adequacy of Equipment and Facilities*

1. Does this organisation have equipment and facilities for keeping (storing) procurement records? Are they sufficient for records management?
2. What problems does this organisation currently experience in keeping and maintaining procurement records?

**Part 2d:***Sufficiency of Security and Safety of Procurement Records*

1. Who has or does not have access to procurement records? Why?
2. Does this organisation have any security and safety measures for procurement records? State them.

**Part 3:***Management of Records and Archives versus Procurement Records Management*

1. Do records and archives management regulatory and institutional arrangements fairly feature with the management of procurement records? How?
2. Does this organisation have any contacts with the Records and Archives Management Department (RAMD) in specific matters related to management of procurement records? How?

APPENDIX 2: Questionnaire

## FACTORS INFLUENCING MANAGEMENT OF PROCUREMENT RECORDS IN TANZANIA: A SURVEY OF SELECTED PROCURING ENTITIES

Dear Respondent,
My names are **Bakari Maligwa Mohamed**, a PhD candidate at Mzumbe University. I am doing an academic research which is looking at *assessing the factors influencing the management of procurement records in Tanzania procuring entities*. This study intends to collect opinion from respondents within the procuring entities who are routinely working with procurement process activities. I humbly request for your deliberate participation in this study. Your opinion is extremely important and I promise to keep your anonymity as required by research ethics. Thank you for your time to participate in this study. God bless you!

**A: *General Information*** (please tick [√] where appropriate)
1. Work station: PMU […..]; User Department […..]; Other […..] (specify)………………….
2. Sex: Male [……]; Female [……]
3. What is your level of education?
Certificate […..]; Diploma […..]; 1st Degree […..]; Masters […..]; Doctorate […..]; Other: […...] (specify):…………………………………………….....................
4. Number of years working in the procurement and related activities: 0 to 5 […..]; 5 to 10 […..]; 10 to 15 […..]; 15 to 20 […..]; more than 20 […..]
5. Have you attended any training on records management? YES […..] or NO […..]

**B: *Perception of Respondents on the Involvement of Institutional Actors in Managing Procurement Records***
In the table below, circle your opinion on involvement of institutional actors in managing procurement records in your organisation.
**Key:** 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

| S/N | Attributes | Respondent's Opinion | | | | |
|---|---|---|---|---|---|---|
| 1 | Institutional actors are compliant with procuring entity's institutional arrangements in managing procurement records | 1 | 2 | 3 | 4 | 5 |
| 2 | Institutional actors are committed for management of procurement records | 1 | 2 | 3 | 4 | 5 |
| 3 | Institutional actors strictly comply with the regulatory and institutional requirements for management of procurement records | 1 | 2 | 3 | 4 | 5 |
| 4 | Institutional actors are committed for the dual regulatory requirements for management of procurement records and archives management | 1 | 2 | 3 | 4 | 5 |

**C: *Perception of Respondents on the Factors for Management of Procurement Records***
In the table below, circle your opinion in the given statements on factors for management of procurement records in your organisation.

**Key:** 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

| S/N | Statements | Respondent's Opinion | | | | |
|---|---|---|---|---|---|---|
| **Capacity of personnel involved in managing procurement records** | | | | | | |
| 1 | Management of procurement records is done by personnel who have the specialised knowledge in the procurement functional activities | 1 | 2 | 3 | 4 | 5 |
| 2 | Personnel who are managing procurement records have the required records management skills | 1 | 2 | 3 | 4 | 5 |
| 3 | Procurement records management is executed by personnel who have the required competences on records management | 1 | 2 | 3 | 4 | 5 |
| 4 | Personnel who are managing procurement records do receive specialised on-the-job training on records management practices | 1 | 2 | 3 | 4 | 5 |
| **Adequacy of storage space for keeping procurement records** | | | | | | |
| 1 | There is storage space for keeping procurement records | 1 | 2 | 3 | 4 | 5 |
| 2 | There is adequate storage space for keeping procurement records | 1 | 2 | 3 | 4 | 5 |
| 3 | There is storage space for keeping all kinds of procurement records | 1 | 2 | 3 | 4 | 5 |
| 4 | There is adequate storage space for keeping all kinds of procurement records | 1 | 2 | 3 | 4 | 5 |
| **Adequacy of equipment and facilities for keeping procurement records** | | | | | | |
| 1 | There is equipment for keeping procurement records | 1 | 2 | 3 | 4 | 5 |
| 2 | There is adequate equipment for keeping all kinds of procurement records | 1 | 2 | 3 | 4 | 5 |
| 3 | There are facilities for keeping procurement records | 1 | 2 | 3 | 4 | 5 |
| 4 | There are adequate facilities for keeping all kinds of procurement records | 1 | 2 | 3 | 4 | 5 |
| **Sufficiency of security and safety measures in managing procurement records** | | | | | | |
| 1 | There are security measures in managing procurement records | 1 | 2 | 3 | 4 | 5 |
| 2 | There are sufficient security measures in managing procurement records | 1 | 2 | 3 | 4 | 5 |
| 3 | There are safety measures in managing procurement records | 1 | 2 | 3 | 4 | 5 |
| 4 | There are sufficient safety measures in managing procurement records | 1 | 2 | 3 | 4 | 5 |

**D:** ***Perception of Respondents on Extent of Management of Procurement Records***

In the table below, circle your assessment on management of procurement records in your organisation.

**Key:** 1 = YES; 0 = NO

| Statement | Respondent's Opinion | |
|---|---|---|
| Procurement records are properly managed | 1 | 0 |

**E:** ***Perception of Respondents on the Regulatory and Institutional Arrangements***

In the table below, circle your opinion on the regulatory and institutional arrangements in the management of procurement records.

**Key:** 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

| S/N | Attributes | Respondent's Opinion | | | | |
|---|---|---|---|---|---|---|
| 1 | The procurement records management is compliant with the national and archives policy issues | 1 | 2 | 3 | 4 | 5 |
| 2 | The records and archives regulatory and institutional arrangements are compliant with respect to the management of procurement records | 1 | 2 | 3 | 4 | 5 |
| 3 | The records and archives management legislation is compliant with the nature and essence of procurement records | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | There is a link between procuring entity and the Records and Archives Management Department (RAMD) on procurement records management | 1 | 2 | 3 | 4 | 5 |

**THANK YOU**

APPENDIX 3: Summary of Institutional Mandates on Procurement Records

| **S/N** | **Institutional arrangements** | **Personnel or institutional actors** | **Records management activities** | **Institutional mandate** | **Regulatory and institutional requirements** |
|---|---|---|---|---|---|
| **1** | Budget Approving Authority | Chairperson<br>Members | - Receives records<br>- Use records<br>- Creates records<br>- Maintains records (*under the custodian of designated secretariat* or *the designated accounting officer*) | - To review and approve<br>- To ensure implementation of recommendations<br>- To discipline staff for wrongdoings | S. 33(2) of Act No. 7, 2011 as amended under Act No. 5, 2016 |
| **2** | Head of the Public Office (the PE) | Accounting Officer | - Receives records<br>- Uses records<br>- Creates records<br>- Maintains records<br>- Establish good recordkeeping | - To establish tender board and the PMU<br>- To appoint members of the tender board, evaluation committee, inspection and acceptance committee, and negotiation team<br>- To appoint works supervisor<br>- Approving authority<br>- Certification<br>- Handling complaints<br>- Ensuring implementation of contracts<br>- Providing feedback | - S. 36(1) of Act No. 7, 2011 as amended under Act No. 5, 2016<br>- S. 9 of Act No. 3, 2002<br>- Reg. 3(1) of GN No. 77, 2007 |
| **3** | Tender Board | Chairperson<br>Members | - Receives records | - Deliberations<br>- Review | S. 33(1) of Act No. 7, 2011 as amended |

| S/N | Institutional arrangements | Personnel or institutional actors | Records management activities | Institutional mandate | Regulatory and institutional requirements |
|---|---|---|---|---|---|
| | | | - Uses records<br>- Creates records<br>- Maintains records (*under the custodian of the secretary of the tender board* – Head of the PMU) | - Approving authority<br>- Examination<br>- Ensure best practices | under Act No. 5, 2016 |
| **4** | Procurement Management Unit (PMU) | Head of PMU<br>PMU Staff | - Receives records<br>- Uses records<br>- Creates records<br>- Maintains records<br>- Keep or store records (*current*, *semi-current*, and *non-current*)<br>- Archive records | - To manage procurement activities except adjudication and award<br>- Implementing decisions<br>- Planning<br>- To maintain and archive records<br>- To prepare tender documents<br>- To prepare monthly, quarterly and other reports<br>- To coordinate procurement activities with user departments | S. 38 of Act No. 7, 2011 as amended under Act No. 5, 2016<br><br>- Keep (store) procurement records on behalf of the accounting officer as under S. 9 of Act No. 3, 2002<br>- Reg. 3(1) of GN No. 77, 2007 |
| **5** | User Department | Head of Department or<br>Heads of Sections (Functional Units)<br>Staff | - Receives records<br>- Creates records<br>- Uses records<br>- Maintains records<br>- Archive records | - To initiate procurement and disposal by tender<br>- To prepare technical inputs and technical specifications<br>- To certify payments<br>- To report any departure of | - S. 39(1) and S. 39(2) of Act No. 7, 2011 as amended under Act No. 5, 2016<br>- Keep (store) procurement records on behalf of the accounting officer as under S. 9 of Act No. 3, 2002 |

| S/N | Institutional arrangements | Personnel or institutional actors | Records management activities | Institutional mandate | Regulatory and institutional requirements |
|---|---|---|---|---|---|
| | | | | terms and conditions of a contract<br>- To forward details of contract amendments<br>- To oversee contracts implementation | - Reg. 3(1) and Reg. 4 of GN No. 77, 2007 |
| **6** | Evaluation Committee | Members | - Receives records<br>- Uses records<br>- Creates records | - To conduct evaluation<br>- To report on the evaluation findings | - S. 40(1) of Act No. 7, 2011 as amended under Act No. 5, 2016<br>- Regulations 203(1), 204(1), 204(2), 205, 220(1), 299(12), 299(13), 303(1), 303(2), 303(4), 303(8), 307(1), and 335(25) of GN No. 446, 2013 as amended. |
| **7** | Internal Audit Unit | Head of Internal Audit Unit Internal Auditors | - Receive records<br>- Use records<br>- Maintains records | - To conduct audit (examination) to provide opinion on compliance of the PE on Act No. 7, 2011 (as amended) and regulations therein (as amended) | S. 48(2) of Act No. 7, 2011 as amended under Act No. 5, 2016 |
| **8** | Goods Inspection and Acceptance Committee | Members | - Receive records<br>- Use records<br>- Creates records | - To conduct inspection and counting of goods<br>- To accept or reject the goods<br>- To report on the inspections conducted | Reg. 245 (a) and (b), Reg. 247(1) and Reg. 248 of GN. No. 446, 2013 as amended under GN. No. 333, 2016 |

| S/N | Institutional arrangements | Personnel or institutional actors | Records management activities | Institutional mandate | Regulatory and institutional requirements |
|---|---|---|---|---|---|
| **9** | Works Inspection Committee | Works supervisor Members | - Receive records<br>- Uses records<br>- Creates records<br>- Maintains records | - To supervise works<br>- To inspect works<br>- To report on the inspections conducted | Reg. 252(1) of GN. No. 446, 2013 as amended under GN. No. 333, 2016 |

**Source:** Field data, content analysis, Act No. 3, 2002 and attendant regulations GN No. 77, 2007; Act No. 7, 2011 (as amended) and attendant regulations GN No. 446, 2013 (as amended).

## APPENDIX 4: Sample Characteristics

The considered sample is the set of respondents who were administered with the structured questionnaire. The presentation of the envisaged sample characteristics is hereby tabled in order for the readers to understand and comprehend the sample characteristics. Sample characteristics presented in this appendix are limited to gender, education level, working experience (in years), and attendance of the respondents to the RAM trainings. Despite presentation of the sample characteristics, they have no direct significance to any of the objectives of this particular study.

### Appendix 4.1: Sample Distribution by Gender

It was envisaged to capture the gender of the respondents. However, the gender of the respondents had no directly relationship with any variable of this study. However, it was captured in order to show the distribution of respondents in the given study. The gender has facilitated the assessment of involvement of males and females personnel in this particular study.

**Table 4A:***Sample distribution by gender*

| Gender | Frequency | % |
|---|---|---|
| Male | 99 | 66.0 |
| Female | 51 | 34.0 |
| **TOTAL** | **150** | **100.0** |

**Source:** Field data and analysis, 2017

Table 4A is evident that there were more male (66%) respondents than female (34%) respondents who filled the questionnaires in the course of structured questionnaire administration. Despite the findings on the gender imbalance, the issue of gender had nothing to do with any objective of the study. It was just a matter of describing representation of males and females. In principle however, this revelation implies that the study had encountered more male staffs than female staffs in the studied Tanzania PEs.

**Appendix 4.2: Sample Distribution by Education Level**

In this study, the education level was measured by asking the highest level of education of every respondent. Five levels of education were considered. The considered levels were certificate, diploma, bachelor degree, master degree, and doctorate. It was also sought that respondents had to provide professional attainments. Respondents were asked to provide professional qualifications such as the *Certified Supplies Professional* (CSP), the *Certified Procurement and Supplies Professional* (CPSP), *Member of the Chartered Institute of Purchasing and Supply* (MCIPS) of United Kingdom, among others, that are professionally recognised within the Tanzania public sector management system. Table 4.B establish that a majority of respondents had bachelor degrees and above. Whereas, 86 (57.3%) had bachelor degrees, fourteen (9.3%) had master degrees, 46 (30.9%) had bachelor degrees with CPSP and four (2.7%) had master degree with CPSP. There were no respondents who had certificate and diploma education levels.

**Table 4B:***Sample distribution by educational level*

| Education Level | Frequency | % | Cumulative % |
|---|---|---|---|
| Bachelor | 86 | 57.3 | 57.3 |
| Masters | 14 | 9.3 | 66.7 |
| Bachelor & CPSP | 46 | 30.7 | 97.3 |
| Masters & CPSP | 4 | 2.7 | 100.0 |
| **TOTAL** | **150** | **100.0** | |

**Source:** Field data and analysis, 2017

Table 4B is evident that 50 (33.4%) questionnaire respondents had at least bachelor degree with the CPSP. This is an indication that at least 30% of the professional staff working within the PMUs had been examined and certified with the CPSP by the Procurement and Supplies Professionals and Technicians Board (PSPTB).

**Appendix 4.3: Sample Distribution by Working Experience**

In this study working experience was measured by the number of years respondents had been working in the procurement and related activities within the studied PEs. Findings (Table 4C) established that a majority of respondents had a working experience in the procurement and related activities of more than five years. Two

(1.3%) respondents had a working experience of 0 to 5 years exclusive, 55 (36.7%) had a working experience of 5 to 10 years exclusive, 71 (47.3%) had a working experience of 10 to 15 years exclusive, seventeen (11.3%) had a working experience of 15 to 20 years exclusive, and five (3.3%) had a working experience of more than 20 years (Table 4C).

**Table 4C:***Sample distribution by working experience*

| Years | Frequency | % |
|---:|---:|---:|
| 0 to 5 | 2 | 1.3 |
| 5 to 10 | 55 | 36.7 |
| 10 to 15 | 71 | 47.3 |
| 15 to 20 | 17 | 11.3 |
| > 20 | 5 | 3.3 |
| **TOTAL** | **150** | **100.0** |

**Source:** Field data and analysis, 2017

Table 4C is evident that the majority of respondents 143 (95.3%) had the working experience between 5 and 20 years. This is an indication that the respondents encountered in this study had a working experience of at least five years. Impliedly, the responses provided by the envisaged respondents on the questionnaires were sought to be objective, reliable and valid. This is due to the nature of their jurisdictional institutional functions based on the experiences given the routine procurement business transactions within and across the PEs. Whereas the matters and issues of either creating, receiving, using, maintaining, archiving, or disposing procurement records were being done within the perimeters of the respondents' institutional jurisdictional functions or powers or both.

### Appendix 4.4: Sample Distribution by Attendance to RAM Trainings

The questionnaire had a dichotomous question that required respondents to state if they had attended any training on the RAM or otherwise. The question had asked that: *Have you attended any training on records management*? Respondents were required to answer the dichotomous question by either *yes* or *no*. Findings (Table 4D) show that 30 (20.0%) respondents had answered *yes* whilst 120 (80%) had answered *no*. This is an indication that majority of the respondents (80%) had not received any RAM trainings on either tailor-made or in-house training.

**Table 4D:***Sample distribution by attendance to RAM trainings*

| Response | Frequency | % |
|---|---|---|
| Yes | 30 | 20.0 |
| No | 120 | 80.0 |
| **TOTAL** | **150** | **100.0** |

**Source:** Field data and analysis, 2017

The findings (Table 4D) would be either: an implication that the Tanzania procuring entities were not investing adequate financial resources in the training of their staffs on the RAM practices; or impliedly, this could be considered as doing procurement business transactions with little attention on the RAM matters and related issues; or else, the respondents had not seen any necessity of attending such RAM trainings whenever they were offered.