

**DETERMINANTS OF VALUE FOR MONEY IN THE
PROCUREMENT OF WORKS IN PUBLIC SECTOR:
A SURVEY OF SELECTED GOVERNMENT MINISTRIES IN
DAR ES SALAAM**

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PROCUREMENT OF WORKS IN PUBLIC SECTOR:
A SURVEY OF SELECTED GOVERNMENT MINISTRIES IN
DAR ES SALAAM**

By

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**A Dissertation Submitted to Mzumbe University in Partial Fulfillment of the
Requirements for Award of the Degree of Master of Science in Procurement
and Supply Chain Management of Mzumbe University**

2016

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled **Determinants of Value for Money in the Procurement of Works in Public Sector: A Survey of Selected Government Ministries in Dar es salaam**, in partial/fulfillment of the requirements for award of the degree of Master of Science in Procurement and Supply Chain Management of Mzumbe University.

Signature

Major Supervisor/ Dr. Leonada Mwangike

Signature

Internal Examiner

Accepted for the Board of

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Signature

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I, Ismail Abdi Changalima, declare that this dissertation 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.

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ACKNOWLEDGEMENTS

I would like to be grateful to Almighty God for the blessing and guidance at each and every step up to the finishing point of this dissertation work. I am grateful to my lovely parents for financing all costs of conducting the research and for their tireless efforts of all forms in order to inspire me to work hard; I am indebted to Mr. Mbogoyo Barakabitse Juma for his love, support, encouragement and making me a person I am today, may God bless you.

Special thanks to my major supervisor, Dr. Leonada Mwangike for her useful support and supervision during the whole period of conducting my dissertation. Also, I am grateful to Mr. Michael P. Chuwa, Raymond Renovatus, Mr. Bakari Maligwa, Miss. Jamila Abdul, Prisca Rutatola and Getrude Daniel for their assistance and support through discussions and all individuals who gave me assistance during the whole period of my dissertation.

I would like to extend my gratitude and heartfelt appreciation to the top management and specifically to heads and all members of Procurement and Management Unit (PMU) of the Ministry of Finance (MOF), Ministry of Transport (MOT) and Ministry of Works (MOW) of the United Republic of Tanzania for assisting me during data collection phase of this dissertation. Special thanks to Mr. Nyandalo Chaya the head of PMU of MOF, Mrs. Chuma of MOT and Mr. Daudi J. Sisso, Mr. Sikujua Sikunjema, Shose Minja, Teresa Michael, Sister Anna and Jacqueline Mkude of MOW.

DEDICATION

This dissertation work is dedicated to my lovely parents Mrs. Mwajuma Mbogoyo and Abdi Changalima without leaving behind a person who is like a father to me Mr. Mbogoyo Barakabitse Juma for laying down a firm foundation of my education and their efforts of inspiring me to work hard.

This work also is dedicated to my dear sisters and brothers namely; Juma, Ruhinda and Karim Changalima, Asma, Munira, Halima and Batuli; and all individuals who helped me at different stages until the completion of this dissertation work.

ABBREVIATIONS AND ACRONYMS

APPs	-	Annual Procurement Plans
CAG	-	Controller and Auditor General
CPAR	-	Country Procurement Assessment Report
GDP	-	Gross Domestic Product
ICT	-	Information and Communication Technology
MDAs	-	Ministries, Departments and Agencies
MOF	-	Ministry of Finance
MOT	-	Ministry of Transport
MOW	-	Ministry of Works
PE	-	Procuring Entities
PPA	-	Public Procurement Act
PPAA	-	Public Procurement Appeals Authority
PPOA	-	Public Procurement Oversight Authority
PPRA	-	Public Procurement Regulatory Authority
PSPTB	-	Procurement and Supplies professionals and Technicians Board
TCT	-	Transaction Cost Theory
UN	-	United Nations
UNICITRAL	-	United Nations Commission on International Trade Law
URT	-	United Republic of Tanzania
VfM	-	Value for Money

ABSTRACT

The study was conducted at the Ministry of Finance (MOF), Ministry of Transport (MOT) and Ministry of Works (MOW) Headquarters of the United Republic of Tanzania in Dar es salaam. The study sought to assess the determinants of value for money (VfM) in the procurement of works in public sector in Tanzania. The study specific objectives were to find out if procurement planning promotes VfM in procurement process at MOF, MOT and MOW, to determine if record management of all procurement proceedings promotes VfM procurement at MOF, MOT and MOW and to assess how ICT usages in procurement activities promote VfM in procurement at MOF, MOT and MOW. It was hypothesized that procurement planning, record management of all procurement proceedings and ICT usages in procurement are significantly related to VfM. The researcher used a survey design that involved a sample of selected respondents from MOF, MOT and MOW. Interviews were conducted and questionnaires were issued so as to get primary data and secondary data were obtained through documentary review. Data were analyzed both quantitatively and qualitatively and the findings were drawn. It was revealed that procurement planning promoted VfM in procurement process at MOF, MOT and MOW, record management of all procurement proceedings did not promote VfM in procurement process at MOF, MOT and MOW and ICT usages in procurement activities promoted VfM in procurement at MOF, MOT and MOW. Based on these findings, it was revealed that procurement planning and ICT usages were significantly related to VfM in procurement process and the study failed to establish the association between record management and VfM in procurement process. Therefore, it was concluded that procurement planning and ICT usage in procurement process were the major determinants of VfM in procurement process at MOF, MOT and MOW. It was recommended that these public entities should make sure that procurement planning is used as the tool for successful improving VfM procurement and application of e-procurement should be encouraged through Government support in all important aspects. The researcher suggested that further research could be conducted in order to assess the contribution of public private partnerships in achieving VfM in the procurement of construction works.

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CHAPTER ONE

AN OVERVIEW OF THE STUDY

1.1 Background of the problem

Procurement has been defined as the act of buying, renting, purchasing, leasing or else acquiring goods, works and/or services by a procuring entity (PE) and it comprises all functions that relate to the obtaining of goods, works and/or services (URT, 2011). Procurement can be basically regarded as the action of buying goods, works and obtaining services but the meaning of the term is more important when the action is conducted by a public entity and/or intended for the interest of the public (Mamiro, 2010).

According to Monczka, *et al.*,(2009) in a global view, procurement is important because it creates a direct link from the customer back to external suppliers and opens channels of communication that promote the sharing of ideas across organizations and functional groups. In Africa, competitive advantage as a part of an integrated logistics process can be created and sustained through effective procurement system (Christopher, 2011).

In most of African organizations, procurement denotes a very large amount that is spent therefore should be effectively managed so as to attain best value (Musanzikwa, 2013). Managing procurement is the best way to ensure that goods and services are bought at the right price, obtained from the right source and at the right specification that meets needs of end users in the right specified quantity, arranged for distribution at the right time and delivered to the right internal consumer (Monczka, *et al.*, 2009)

In developing countries like Tanzania, procurement on behalf of the public contributes to the best utilization of public resources leading to better attainment of development goals, for instance reduction in the level of poverty and improved health, infrastructure, education and other services (Chekol and Tehulu, 2014).

Public procurement can be treated as a tool towards ensuring national development as the major important function that public procurement offers to the government and public as whole is contribution on the economy (Badaso, 2014).

Within an organization, procurement influences cost and quality (Monczka, *et al.*, 2009) and regarded as a profit center because it maximizes the profit of the firm due to saving in material cost (Choi, 2010). Moreover, within public entities like Ministry of Finance (MOF), Ministry of Transport (MOT) and Ministry of Works (MOW), value co-creation, the development of contractual incentives and organized authority are the result of well managed procurement (Monczka, *et al.*, 2009). Also, these organizations acquire goods, services and works through public procurement (URT, 2012).

It must be noted that the size of public purchasing in the country is more and more increasing each year as it accounts for about 75% of Tanzanian annual development budget of each financial year (Nditi, 2014). Works contracts account more than 60% of the total value of procurement done in the country (Shirima, 2013). In this matter, VfM procurement is needed because more funds of the annual budget are directed in the public sector purchasing.

According to Amemba *et al.*, (2013) for a long time most of areas of public procurement process have been dominated with inefficiency, corruption and negation of fundamental "VfM" considerations. Studies which have been conducted have proven that the total amount of corruption in public procurement account over 200 billion USD per annual or about 3.5 percent of the total procurement spending all over the World (Mwemezi, 2013). Corruption in procurement especially in public sectors hinders the effort associated with achieving the best VfM in the procurement process.

In Tanzania, the effort to achieve VfM in public procurement is attacked by many problems as the case of dubious payments to tenderers especially in works contracts by some procuring entities as reported by (Shirima, 2013). The public do not receive the expected outcomes from the procurement function due to the poor performance

of the procurement function in the local governments despite the Government effort to establish laws and regulations governing the general procurement practices and function (Matambula and Makayi, 2014).

The continuous quest of achieving VfM in Tanzania is hindered by political intervention in the public procurement. As the result incompetent suppliers are mostly favored during awarding contracts due to personal interest (Mwemezi, 2013). Also, traditional procurement process which allows infamous maverick buying practice enables some procurement personnel to make purchases which are unplanned from non-favored suppliers at a higher unacceptable price (Basweti, 2013).

The procurement audit report for financial year 2013/2014 revealed that procuring entities made unjustified overpayments amounting to nearly 1.7 billion Tanzanian shillings to contractors for works which were not done (PPRA, 2014). Also, it must be understood that during tender processing, favoring some suppliers might hinder the achievement of VfM as the case of the Kinondoni Municipal Council in 2013 the Public Procurement Appeals Authority (PPAA) ordered the Municipal Council to restart a tender requested for provision of agency services for electronic tax collection system in the Municipality because the whole process was spoiled with favoritism (PPAA, 2013).

Therefore, lack of procurement procedures which are carried out in a way of achieving VfM can create problems to the procuring entity such as overall increase in procurement costs and neglecting customer needs by failing to meet the issue of quality which must be procured at the right price. For the case of public spending there are problems associated with poor quality of services and goods procured in relation to the misuse of public funds. Due to this situation the researcher intended to assess the determinants of VfM procurement in works in public sector in Tanzania.

1.2 Statement of the problem

The government of Tanzania has recognized the importance of VfM in public procurement to the economic development of the country (Nditi, 2014). Efficient utilization of public funds can be achieved through public procurement practices. Also, it contributes towards the comprehensive management of public expenditures, procurement planning in public procurement enables the identification of major investment expenses, which eases financial decision-making (URT, 2012).

Mlinga (2007) argued that public procurement is a significant function of any government and it needs to be well managed as the extent of procurement expenditures has a major influence on the economy. In addition to that, economic, social and other national objectives of any developed or developing countries can be achieved through public procurement (Makoye and Juma, 2013).

Most of PEs in Tanzania do not achieve VfM in their procurement functions due to political interference with procurement duties specifically in local governments, unrealistic plans, budgets and cost estimates, late delivery/completion of the contract, irregularities, fraud and corruption (Nditi, 2014). This shows that, aspects of planning such as financial plan and cost estimation are important when considering achieving VfM in procurement process.

According to Mamiro (2010) other reasons that hinder the achievement of VfM in procurement in the country included shortage of appropriate procurement skills, incompetent public procurement staff and rigid rules regulating public procurement systems. Also, within MOF, MOT and MOW the role of Information Technology (IT) can not be ignored when considering an efficient and effective way of performing procurement function in these public entities (Badaso, 2014).

The use of ICT in procurement activities is vital for reducing costs in the whole procurement process (Chaffey, 2009). This is as incorporated with the overall objective of e-Supply Chain Management that involves coordination and sharing of

information among stakeholders for competitive advantages (Pulevska-Ivanovska and Kaleshovska, 2013).

In this case, problems which were identified by Matambula and Makayi (2014) such as inadequate documentation of contracts and project records can be minimized as ICT usage leads to proper documentation of procurement records.

Matambula and Makayi (2014) found out that there were irregularities in the procurement activities which ranged from non-execution or delay completion of contracted works, inadequate documentation of contracts and project records, goods paid for but partially or are not delivered at all, procurement without competitive bidding or even approval by the tender board and including stores not brought to ledger.

Kangogo and Kiptoo (2013) in their study suggested that proper and appropriate documentation of procurement activities within public entities is needed which offers accurate and precise records of various procurement decisions made at different stages that are important in ensuring that transparency is maintained, during supply auditing, as official evidence in judicial challenge and when monitoring the use of public funds. Therefore, in order to ensure VfM in public procurement is achieved, public entities (PEs) are encouraged to keep properly their records of procurement activities and decisions made and they need procedures in place to facilitate this task of keeping records is observed.

Despite the fact that, various researchers with their studies were able to identify the problems associated with not achieving VfM in procurement process and being able to reveal the major contributions of proper procurement planning, application of information technology and proper procurement record management. These determinant factors were not assessed at MOF, MOT and MOW. So, the researcher intended to seek and gather data so as to assess the determinants of VfM procurement in works in these public organizations (MOF, MOT and MOW) in Tanzania.

1.3 Research objectives

The study intended to achieve the following objectives:

1.3.1 General objective

The general objective of this study was to assess the determinants of value for money in the procurement of works in public sector in Tanzania.

1.3.2 Specific objectives

The study focused on achieving the following specific objectives:

- i. To find out if procurement planning promotes value for money in procurement process at MOF, MOT and MOW.
- ii. To determine if record management of all procurement proceedings promote value for money in procurement process at MOF, MOT and MOW.
- iii. To assess how ICT usages in procurement activities promote value for money in procurement process at MOF, MOT and MOW.

1.4 Hypotheses of the Study

This study was governed by the following hypotheses which were developed on the assumption of the study:

H1: There is a significant relationship between procurement planning and value for money in procurement process.

H2: There is a significant relationship between record management of all procurement proceedings and value for money in procurement process.

H3: There is a significant relationship between ICT usage in procurement activities and value for money in procurement process.

1.5 Scope of the study

This study focused on determinants of VfM in procurement of works in public sector in Tanzania; it was confined in Dar es Salaam at MOF, MOT and MOW headquarters of the United Republic of Tanzania.

1.6 Significance of the dissertation

The study enabled the researcher to put the conceptual knowledge obtained from the classroom into practical manner. Therefore, it enabled a researcher to acquire new potential knowledge concerning the topic on hand. Also, increasing knowledge on how to conduct, write and present a research work in meaningful and appropriate manner.

The study enabled the individuals who are directly involved in procurement process especially at MOF, MOT and MOW to be aware of the key determinants for achieving VfM in procurement process. Also, it enabled top management of these organizations to make proper decisions so as to improve their procurement activities by relying in the main recommendations provided on this study.

This study provided a general summary on the meaning of VfM in procurement process and the results obtained from this study can be used by academicians when doing further studying especially those who want to research more on this topic.

1.7 Organization of the dissertation

This dissertation is organized into six main chapters; chapter one consisted of an overview of the study which includes the study background, statement of the problem, objectives of the research, research hypotheses, scope of the study, significance of the study, and organization of the study.

Chapter two dealt with the review of literature on the topic concern; this includes definition of concepts and terms, theoretical literature review and empirical literature review.

Chapter three explained the research methodology which includes study type, the area of the study, population, data analysis methods, variables measurement, sampling procedures, sample size, data types, data sources, and techniques for data collection

Chapter four included presentation of findings from the data obtained through interviews conducted and questionnaires issued at MOF, MOT and MOW.

Chapter five included the discussion of findings presented at the fourth chapter. The discussion is mainly relied on the research objectives and research hypotheses.

Chapter six which is the last chapter included the summary of findings, conclusions, recommendations, limitations of the study and areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter explains the theoretical base of the study, theories adopted, empirical literature review and the conceptual framework.

2.1 Definition of Terms

The following are the definitions of key terms used in the study:

2.1.1 E-procurement

This is the use of Information and Communication Technologies (ICTs) such as computers, scanners and printers in performing procurement functions (URT, 2011).

2.1.2 Procurement

This is the process in which a PE purchases, buys, leases, rents or obtains goods, works and services and contains all those activities which aimed at attaining goods, works and/or services, such as description of users' requirements, selecting and inviting tenderers, preparation of contract and awarding of contract (URT, 2011). It embraces the entire process of getting material goods and/or services (Basweti, 2013).

2.1.3 Public procurement

This is the government expenditure on various equipment, goods and services: weapons systems, stationery, furniture, food, capital projects including consultancy services, information systems and services, facilities management, also, medical services, building of roads and maintenance of utilities (Baily *et al.*, 2005). It refers to the activity of the government to purchase goods, works and/or services required to perform its major functions (Arrowsmith, 2010).

2.1.4 Value for Money

The meaning of the term VfM is associated with ideas of efficiency and effectiveness in manner that are infrequently made precise (Heald, 2003). This is the concept which is used to evaluate whether a firm has attained the benefit that is maximum from the products and services it obtains and /or offers, within its available resources (Nditi, 2014).

2.1.5 Procuring entity

This is the public entity or any entity, or unit which is recognized and authorized by government to carry out public functions (URT, 2011).

2.2 Theoretical literature review

2.2.1 Theories

The study was governed by the two major theories namely; the resource-based theory and the transaction cost theory. These theories are discussed as follow:

2.2.1.1 The Resource-Based Theory

According to Crook *et al.*, (2008) this theory helps to pinpoint the key and potential resources of the firm and ascertain whether these identified resources satisfy the following criteria, Valuable, Rare, In-imitable, and Non-substitutable (VRIN). More specifically the knowledge based view suggests knowledge resources are a critical part of interconnected resources or capabilities and, hence, valuable to organizations (Rastrick and Corner, 2010).

So these key resources are the important inputs (monetary resources, key employees, equipment and time) which are required by a firm so as to be effectively and efficiently used in attaining various organizational goals and objectives (Kakwezi and Nyeko, 2010). This theory related to the study because there were a lot of resources at MOF, MOT and MOW that were used in the procurement process. For example, funds, procurement personnel with adequate ICT skills to perform e-

procurement and other tangible resources such as computers and papers to facilitate the procurement process.

Due to this, there must be adequate funds to ensure that the purchasing is financed well and people who are involved in the procurement process especially in procurement planning must be knowledgeable to what they are doing (Apiyo and Mburu, 2014). In this case, advantages that an organization (MOF, MOT and MOW) can grasp from procurement activities that is to say, achieving VfM in procurement depends on the procurement people as resources of an organization.

2.2.1.2 The Transaction Cost Theory

This theory was established in order to ease the way of evaluating the comparative planning costs, adapting and monitoring completion of task under various different government structures (Williamson, 1985). The Transaction Cost Theory (TCT) has been used in learning the limits of the firm, vertical integration decisions and the justification for conducting procurement, a firm offers a way which is more efficient in organizing the market due to optimization of costs of doing transactions and overall value (Martins *et al.*, 2010). According to Williamson (1985) the unit of analysis in TCT was a transaction that was happened at the time when a product or service was transmitted across a technologically distinct interface.

According to Parker and Hartley (2003) when an organization is minimizing procurement transaction cost the better VfM can be achieved. An organization can increase the potential benefits through decreasing transaction cost due to an application of e-procurement (Pani and Agrahari, 2007). Therefore, at MOF, MOT and MOW the use of ICTs in procurement process led to reduction in procurement costs and hence achievement of better VfM.

The transaction cost theory was very important to the study as the application of ICTs in the procurement process may reduce transaction cost because the manual handled activities are now done electronically. Technology helped in synchronizing and balancing the major two different business objectives of attaining final customer

need at the lowest possible cost (Shiundu and Gladys, 2014). It is interesting to note that ICTs do not change the procurement cycle but change the way procurement is conducted.

2.2.2 VfM Procurement in Public Sector

VfM in public procurement process is the best measure of an economy and efficiency with which the financial resources of the public are transformed into acquired quality goods, works and services (URT, 2012). The major purpose of public procurement is to attain VfM that is procuring products and/or services at the best required quality and lowest possible price in a short period of a time frame with minimal costs of transaction (Engelbert, 2014).

Section 47 of the PPA No. 7 of 2011 and its regulations of 2013 requires PEs in the accomplishment of their responsibilities to realize the uppermost standards of fairness, considering the major aim of attaining the best VfM in purchased prices, quality and delivery made as specified and criteria. It must be noted that in all efforts of achieving best VfM within the procurement process means looking for the optimum combination of whole life cycle cost and quality intended to meet the requirement of the final user (Matambula and Makayi, 2014).

The issue of VfM of any physical assets is associated with the consideration of the life cycle costing analysis that is acquisition, operating and disposal costs of such an item (Woodward , 1997). Section 27 of the PPA No. 7 of 2011 mandates the appointed CAG to perform performance audit concerning VfM Audit for the aim of finding the efficiency, economy and effectiveness of any expenditure made or use of public funds in the MDAs, Local Government Authorities s and public Authorities and other entities.

Good practice in procurement is a way to achieve VfM in relation to other associated benefits such as government structure which is clear, improved control environment, reduced purchased cost, improved quality and lower lifetime costs (Badaso , 2014).

Procurement professionals are the key to achieve best practice in procurement process. They are required to be experts in applying value analysis and providing innovative suggestions at the designing stage that aimed at reducing costs without affecting the performance, quality, reliability and maintainability (Basweti, 2013).

For a PE to achieve VfM in the procurement process there are various factors other than the purchasing price to be considered. In the past, Pes had regularly determined that the VfM was attained by accepting the lowest possible price submitted by suppliers of goods, contractors and/or service providers (Musanzikwa, 2013).

Nowadays decisions which are made are under a multi-criteria perspective whereby more than one dimension of quality and price are well considered. (Dimitri, 2012). Though price is no longer the only criterion for the award of government contracts but it should remain the most important criteria during the procurement undertaking (Bolton, 2006).

The three E's which are well-known as economy, efficiency and effectiveness are used to describe the whole process of achieving VfM and this includes the minimum possible purchase price with maximum efficiency and effectiveness of the business (Nditi, 2014).

According to Matambula and Makayi (2014), economy refers to the lowest financial resources deployed to make purchases in the quality or quantities required and effectiveness (doing the right things) refers to the achievement of goods or objectives without much regard to the amount of input resources involved while efficiency (doing things right) refers to the increase in the value, benefit or satisfaction at reasonable (acceptable) cost.

Assessing VfM in procurement must cover the issues of economy, efficiency and effectiveness respectively (Awidi, 2008). Since, effectiveness alone on procurement brings the most challenging problems mostly in description of objectives and performance measurement in terms of outcomes (Mchopaet *al.*, 2014).

Also, it must be noted that an indicator of efficient procurement system is the presence of a properly developed and well managed procurement strategy, followed by a good contract management regime (Matambula and Makayi, 2014).

2.2.3 VfM Logical Model

This is the logical model that ensures that there is a well-balanced combination of inputs through economic and efficient utilization of the resources that are available in making procurement and SCM undertakings for the socio-economic development impact (Maligwa, 2014).

Figure 2.1: VfM Logical Model

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACTS
<i>What resources injected into a procurement and supply chain system</i>	<i>What procurement and supply chain management activities that are done</i>	<i>What is produced after the Procurement and supply chain management activities are done</i>	<i>Greater and improved benefits of procurement and supply chain management activities</i>	<i>Socio-economic development</i>
Economic and efficient use of resources (financial, physical and human)	Economic and efficient execution of P and SCM activities	Efficient and effective provision of goods, services or works	Effective increased socio-economic well-being (customer satisfaction)	Qualitative and quantitative improved socio-economic well-being of the people

Source: Maligwa (2014)

2.2.4 Determinants of VfM in Public Procurement

In order to assess determinants of VfM in public procurement in Tanzania the study done by Mchopaet *al.*, (2014) can not be ignored. According to them; any PE that wish to achieve VfM in public procurement there are number of factors which have to be considered effectively, the factors include:

- a) Effective and open competition;
- b) Ethics and fairness;
- c) Accountability;
- d) Transparency; and
- e) Equity.

In Tanzania, assessing VfM in procurement in most of public entities is done by PPRA through major five indicators of VfM; these are: planning, design and tender documentation; procurement process; works supervision and contract administration; project completion and closure, and; quality and quantity of executed works (PPRA, 2014). These indicators are weighted giving more emphasis on the quality and quantity of executed works (Shirima, 2013).

Several researchers such as Badaso (2014) Matambula and makayi (2014) and Kangogo and Kiptoo (2013) in their studies found out that procurement planning, proper procurement record management in and the use of ICTs in procurement process may determine VfM in procurement process. This study focused only on these major three determinants.

2.2.4.1 Procurement planning and VfM

Procurement planning can be defined as the process that a company or public entity uses to plan procuring activity for a given time period (Agaba and Shipman, 2007). PEs are required to prepare an Annual Procurement Plans (APPs) which will guide them in their procurement undertakings during a certain financial year (Mlinga, 2007).

This helps PEs to attain value for their purchases of their goods, services and/or works. Procurement planning should be integrated with budget preparation process and any procurement exceeding the budget should get an approval from budget approving authority is the full council (URT, 2011).

The whole process of procurement planning involves key personnel who contribute in the process so as to ensure that the plan prepared is consistent with the budget. Before doing any procurement transaction PE is required to determine the need for that procurement that is consistent with the organizational objectives, this means that the PE is assessing of it is necessary to undertake that procurement transaction (Apiyo and Mburu, 2014).

Section 39 (2) of the procurement Act necessitates the user department of an organization during the budgeting time to make a list of their supplies, which must be sent to the PMU so as to prepare APP of the whole organization. Procurement planning and control enables PEs to achieve strategic performance (Bukhala, 2005). Planning in procurement is important because it will lead to a right time purchasing.

Also, procurement planning creates value in the procurement process through avoiding of delays in purchases. When a PE avoids delays in the whole process of procurement leading to saving of time and money, permitting the timely award of contract that enhances other dependant procurements (Bamfo-Agyei *et al.*, 2015).

Thus, the study considered the vital contribution of procurement planning in achieving VfM in procurement process; this provided the solid ground for formulation of the first hypothesis that stated as follow:

H1: There is a significant association between procurement planning and value for money in procurement process.

2.2.4.2 Record management in procurement and VfM

Records management means that area of overall organizational management which is associated with understanding economy and efficiency in the establishment, maintenance, use and disposal of firm's records throughout the course of their life cycle, and in ensuring that the information is available so as to sustain firm's business (PPOA, 2008).

Record management should be considered as a specific function of the corporate within a firm with the essential objectives, responsibilities, mandate and resources (Dikopoulou and Mihiotis, 2012). Section 61 subsection (1) of PPA No.7 of 2011 recommends each PE and tender board or accounting officer to retain a procurement record for each decision made and the details to justify the choice of that decision.

According to the Article 11 of United Nations Commission on International Trade Law (UNCITRAL of 1994) with guide to enactment on record of procurement

proceedings section the PE is mandated to maintain a procurement records covering the following information:

- a) A short precise explanation of the required goods, services or works to be acquired;
- b) Suppliers' or contractors' addresses and names that sent their tenders, proposals, quotations or offers;
- c) The supplier's or contractor's name and address with whom the procurement contract is entered into and the contract price;
- d) Information in relation to the qualifications of suppliers or contractors that sent their tenders, proposals, quotations or offers; and
- e) The unit price or the basis for defining the contract price.

With various threats facing PEs in today business world, prevention with management of record is one among important key towards effective management (Chimwani *et al*, 2014). Poor records management may result to loss in revenue, business claims and poor governance (Ayoti, 2012).

Therefore, organizations need procedures which are prepared to ensure that decisions concerning procurement matters are well acknowledged, justified and verified according to relevant procurement regulations and policies that govern procurement course, for the sake of promoting accountability (Kangogo and Kiptoo, 2013).

There are some problems that are encountered if there is a lack of proper documentation of tender process and record keeping for instance hindering proper enforcement and audit of projects. But the issue of poor record keeping could be addressed by conducting the enough number of audits, and by requiring a signed list of the present contents of the procurement file (CPAR, 2003). As the study found out that procurement records management is vital for any procuring entity, the second hypothesis is formulated as follow:

H2: There is a significant relationship between record management of all procurement proceedings and value for money in procurement process.

2.2.4.3 ICT usages in procurement and VfM

Since the 1990s, Information and Communication Technology (ICT) has had a profound impact on companies and business environments leading to the formation of the “network economy” (Evangelista *et al.*, 2013). Tanzania has adopted an ICT policy structure in order to empower her people to play a part fully in the economy of the country and minimizing high costs that exist in utilizing numerous opportunities (socio-economic) such as public purchasing market (URT, 2012).

IT is needed for efficient and effective operation of procurement process in any organization in this existing complex environment, as it can lead to easier and quicker process flow, efficient information dissemination, tasks and decisions decentralization, improved transparency and enhanced control (Basado, 2014).

Through E-invoicing many benefits mainly cost reduction, simplification of process, shorter payment time, greater security of data and other environmental benefits can be acquired by an organization (Barngetyun and Kimutai, 2015). In this matter, the contribution of IT application in procurement function is undeniable.

Also, information technology generates added value to the organization; not only that, but also resulting to well-tuned coordination between strategies and technologies (Pulevska-Ivanovska and Kaleshovska, 2013). Therefore, a PE that is wishing to apply ICT in its procurement activities should consider the appropriate technology is in place and it fits people who are going to use it. Finding the right people, the right numbers of partners, the technology and systems to be implemented are important pre-requisites before starting the implementation, this will add value and the act of adding value to the final customer is the most significant intention of many organizations (Pulevska-Ivanovska and Kaleshovska, 2013).

According to Chaffey (2009) an improvement in the procurement systems would yield largest cost saving in the company's cost structure and implementation of e-Procurement will decrease the procurement cycle time. A lot of new procurement technologies create value for organizations through reducing costs of procured goods

and services delivered, improved productivity and reducing processing costs and better information and well organizational planning (Cavinato and Kauffman, 2000).

In this matter, organizations that employ e-procurement technologies in their organizational function save about 42% of purchasing transaction costs due to simplified purchasing process and reduced procurement cycle time, this in turn leads to increased flexibility and more current information is provided at the time of placing an order (Mchopa, 2012). So, ICT usages play an important role in reducing transaction costs of an organization when conducting procurement activities.

Electronic data interchange has successfully enhanced the communication between firms as it enable the transfer of documents electronically from one personal computer system to another system that is from one organization (supplier) to another (procuring entity) (Gurung, 2005). The problem with evaluating the value related with e-procurement was given attention by various scholars and specialists, but a clear procedure to define the benefits associated with e-procurement adoption is still absent, especially for information technology (Ronchiet *al.*, 2010).

Despite the fact that application of ICTs in the procurement process does not change the way procurement activities are conducted, it should be noted that e-procurement must be viewed as a tool that make the procurement process more efficient in terms of cost, time, and attainment of VfM (Vaidyaet *al.*, 2006). Also, achiving VfM in procurement is accompanied with other policy objectives, for example The UN is concerned with realizingVfM in the way it acquiresproducts and services, then again has other policy purposes as well which variesamong private and public organizations (Walker and Harland, 2008).

H3: There is a significant relationship between ICT usage in procurement activities and value for money in procurement process.

2.3 Empirical literature review

In Tanzania, Suleiman (2013) conducted a study on the adoption of e-procurement and value addition to Tanzanian public institutions. He collected data in Dar es Salaam, Zanzibar, Morogoro and other regions of the country and found out that most of respondents had agreed that the practice of electronic procurement enables an organization to achieve VfM in its procurement of good, works and services.

In Uganda, Kiage (2013) in his study on factors affecting procurement performance: a case of Ministry of Energy. He found out that competent staff is required to do proper planning so as to make sure that stuffs and services are obtained as and when the need is anticipated. VfM is achieved if the procurement people are well-informed about specifications and play the role of connection between the user and the supplier.

Kakwezi and Nyeko (2010) in their study on procurement processes and performance: efficiency and effectiveness of the procurement function. They found out that in order to ensure VfM in the procurement process, there must be uninterrupted improvement in the efficiency of processes and systems within an organization to enable PEs to have better maintain structures so as to avoid costs which are unnecessary and hence cost reduction is achieved.

In Kenya, Ayoti (2012) in her study on the factors influencing effectiveness in tendering process in the public sector the case of Nyeri county in Kenya. She found out that majority of workers in public entities within the country felt that procurement method through tendering process adds value in the whole process and this is due to the fact that the process increases competition and hence lowering the price.

In South Africa, Mofokeng (2012) conducted a study on improving the effectiveness of procuring entities procurement practices. The researcher collected data from Gauteng, Limpopo, the North West, the Free state and Mpumalanga and found out that most public entities did not recognize the importance of information technology in the business operations as the procurement function was largely manual.

Information technology would contribute to improved productivity performance and service delivery.

In United Kingdom, Loader (2007) did a study on the challenge of competitive procurement: VfM versus small business support. The researcher found out that procurement was used as the tool of supporting small business within the complex environment and VfM in procurement can be attained if the procurement personnel do business with large firms which are more likely to meet the wanted cost and quality by a PE than small firms. When VfM is interpreted broadly into other criteria beyond cost and quality and in this case smaller local firms may have a chance to exploit their relative strengths such as responsiveness and flexibility.

2.4 Research gap

Despite the fact that various studies have identified the importance of realizing VFM in the procurement process, very little has been done on the contribution of procurement planning, record management and the use of ICT in the achievement of VFM in the procurement of works. In addition to that, no study has been conducted at MOF, MOT and MOW on how procurement planning, record management of all procurement proceedings and ICT usages in procurement promote VFM in the procurement of works. This is the research gap that the study expects to fulfill.

2.5 Conceptual framework

In this section a researcher identified a core set of connectors within a topic and showed how these connectors fit together and how they are connected in one way or another to the subject on hand (Krishnaswami, 2002). Figure 2.2 shows two major categories of variables (independent variables and dependent variable).

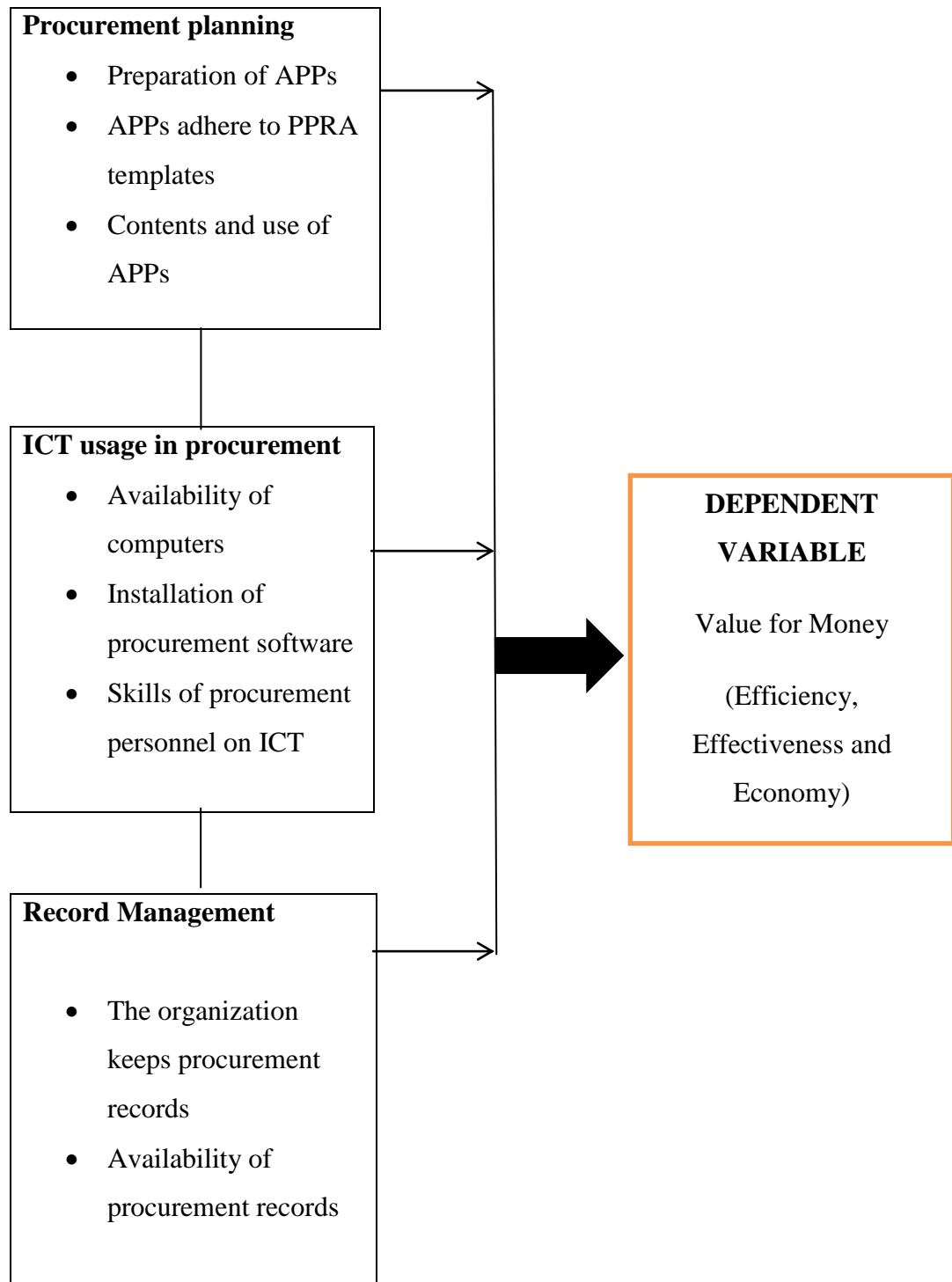
Independent variables include procurement planning which involves preparation of APPs, adherence of APPs to PPRA templates, contents and use of prepared APPs. ICT usage in procurement process involves availability of computers, existence of computers with installed procurement software and skills of procurement personnel on ICT. Record management of all procurement proceedings involves the existence

of practice of keeping records in the organization and availability of procurement records when required.

Value for money in the procurement process is the dependent variable of the study. This variable depends on the three independent variables of the study. Procurement planning, record management of all procurement proceedings and ICT usages in the procurement process affect VfM in the procurement process.

Figure 2.2: Conceptual framework

INDEPENDENT VARIABLES



Source: Survey data, 2016

In this study, procurement planning, record management and the use of ICT in procurement were independent variables and VfM in procurement process was dependent variable. Figure 2.2 shows that independent variables were procurement planning, record management and ICT usage in procurement process and dependent variable was VfM procurement.

As it was hypothesized procurement planning and ICT usage in procurement were the only independent variables that were significantly associated with VfM procurement. Generally, record management was not significantly related to the dependent variable (VfM) despite the fact that organization that kept records had an impact on VfM in the procurement process.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter explains the area of the study, research design chosen, population, sampling techniques and sample size, data collection methods, data reliability and validity issues and methods of analyzing data.

3.1 Study Area

This study was conducted in Dar es Salaam at three government Ministries namely; MOF, MOT and MOW headquarters. Dar es Salaam was a perfect area to conduct a survey design because these three public organizations are allocated within the region. The MOF through Public Procurement Policy Division (PPPD) has an authority of checking and evaluating the performance of public procurement institutions within Tanzania; the ministry monitors the executions of public procurement policies within public entities in the country (CAG, 2013).

The former Ministry of Infrastructure and Development (now, Ministry of Works and Ministry of Transport) was responsible for procurement of road works in Tanzania that used about 13% of the national budget (CAG, 2010). Therefore, MOF, MOT and MOW were potential areas as far as the topic is concerned because they are among public organizations that strive to achieve VfM in public procurement of works within the country.

3.2 Research Design

According to Kothari (2004) this is the organization of conditions for collecting and analyzing data in a way that intends to associate relevance to the research purpose with economy in procedure. It is the plan of conducting a research so as to answer a research problem.

The study used a survey research design which enabled the researcher to use multiple sources of evidences so as to examine the particular phenomena; with the intentions of understanding them (Saunders *et al.*, 2007). This design is concerned with conditions, terms or relationships that exist or effects that are evident (Kothari, 2004). Also, likely reasons for existing relationships among study variables can be established through data from a survey design which in turn help in producing models for existing relationships (Saunders *et al.*, 2007). The study involved a survey of MOF, MOT and MOW in Dar es Salaam.

Survey research design was adopted so as to gather data from different cases at particular time through face to face interviews and questionnaires that will answer a research problem. Also according to Saunders *et al.*, (2007) this design had the ability to enable the researcher to gain the wide knowledge of the issue under the study. So, a survey design was very important as it enabled the researcher to have the better insight and clarification on the matter through various sources of information so as to satisfy research objectives.

3.3 Target population

A target population included a total number of employees employed at MOF, MOT and MOW located in Dar es Salaam. These employees were direct participating in a procurement process mainly the procurement staff members, user departments, the tender board members, accounting officers and people from accounting and finance department. From this targeted population a sample was drawn for the study.

3.4 Sampling techniques and Sample size

3.4.1 Sampling technique

This simply means selecting units of enquiry from a target population (Kothari, 2004). In this study, a researcher used a sampling method called judgmental/purposive sampling. The main purpose of choosing this technique was to enable the researcher to get a sample that represented units from a target population

that was capable of giving adequate and accurate relevant information concerning the study as the technique required a researcher to select units of interest basing on his knowledge and judgment (Saunders, *et al.*, 2007).

3.4.2 Sample size

The researcher selected a sample of 47 respondents from a target population consisted of employees from MOF, MOT and MOW located in Dar es Salaam. The selected respondents helped the researcher to get required information so as to satisfy research objectives.

Table 3.1: Sample size composition

Section	MOF	MOT	MOW	Sample size	Target population	Sample Percentage (%)
PMU	4	6	8	18	27	66.67
Tender Board	3	3	4	10	18	55.56
Accounting Officer	1	1	1	3	3	100
User Departments	2	4	2	8	14	57.14
Accounting and Finance	4	3	1	8	17	47.06
TOTAL	14	17	16	47	79	59.49

Source: Research data (2016)

3.5 Types of data

The researcher collected both primary and secondary data so as to get required information. Therefore, various methods of data collection were employed which depended on the type of data to be obtained. In this research, questionnaires and interviews were used to collect primary data direct from respondents. On the other hand, Secondary data were obtained from various reports and documents that were allowed to be accessed by the respective organization, journals and other special documents related to procurement that were very valuable to the study.

3.6 Data collection techniques

In this study the researcher obtained data by employing various techniques. These include:

3.6.1 Questionnaires

In this study, questionnaires were used which enabled the researcher to ask various close-ended and open-ended questions that were direct or indirect meet research objectives. These questionnaires were prepared and administered to the selected respondents so as to get information. The sample questions to be asked are attached on appendix I.

3.6.2 Interview guide

Interview was conducted especially face-to-face interviews whenever possible. This enabled the researcher to get primary data directly from the selected respondents since questions were asked directly to the selected members who participated in data collection. The questions asked during interview are attached on the appendix II.

3.6.3 Documentary review

This was employed in order to get secondary data. Various documents were reviewed so as to get information concerning the topic on hand. Those documents included books, various reports of procurement activities and documents that were allowed to be accessed by the respective PE and articles from various journals especially from PPRA and Tanzanian procurement professional body.

The information collected through this technique included information on determinants of VfM procurement at MOF, MOT and MOW. Also, previous and current APPs which are prepared within these organizations and various procurement records stored at PMUs which were useful to the respective organizations. The data collected through this technique were related to the study objectives and the overall general purpose of the research.

3.7 Data Reliability and Validity

The techniques of data collection that are used most effectively are those that give out the relevant and correct information that will satisfy the research questions (Kothari, 2004). In this research the researcher expected to get relevant information that met the research objectives.

3.7.1 Reliability

For the purpose of avoiding the possibility of getting wrong answers to the research questions, reliability and validity have to be considered (Saunders, *et al*, 2007). A reliable measuring instrument delivers consistent outcomes and it contributes to validity, although it is not necessary for the instrument to be a valid one (Kothari, 2004). In this study, in order to ensure reliability various instruments for data collection were employed and the researcher did a thorough consideration of the required literatures from journal articles and reports.

3.7.2 Validity

Validity is all about whether the study findings present the reality (Saunders *et al*., 2007). In this research different instruments of data collection were employed and tested by the researcher so as to ensure that an instrument measured what it was supposed to measure.

3.8 Data Analysis

This has been defined as the practice of editing, adjusting, classifying, summarizing and expressing data concept and/or meaning (Houman, 2008). In this study data collected were edited for accuracy and completeness, the study analyzed data qualitatively by using interpretation and explanations and quantitatively by using statistical tools such as the use of tables, percentages and other statistical graphs so as to present facts. By using computer software known as Statistical Package for Social Sciences Windows Version 20.0 the researcher was able to analyze the data.

In order to test hypotheses in this study, the researcher used the chi-square test to examine whether there was an existence of association among the two variables (independent and dependent variables). This was due to the nature of variables that is, two categorical variables, a chi square test allows the researcher to test how possible the two variables are connected (Saunders, *et al.*, 2007).

3.9 Measurement of variables

The dependent variable which is VfM in procurement was measured depending on the VfM indicators as stipulated by the PPRA. These indicators included planning, design and tender documentation; procurement process; works supervision and contract administration; project completion and closure, and; quality and quantity of executed works and giving more emphasis on the last indicator (Shirima, 2013).

Table 3.2: Measurement of variables

Research Objectives	Indicators	Scales of measurement
i) To find out if procurement planning promotes value for money in procurement process at MOF, MOT and MOW.	<ul style="list-style-type: none"> • Preparation of APPs • APPs adhere to PPRA templates • Contents and use of APPs 	Nominal
ii) To determine if record management of all procurement proceedings promote value for money in procurement process at MOF, MOT and MOW.	<ul style="list-style-type: none"> • The organization do keep procurement records • Availability of procurement records 	Nominal
iii) To assess how ICT usages in procurement activities promote value for money in procurement process at MOF, MOT and MOW.	<ul style="list-style-type: none"> • Availability of computers • Installation of procurement software • Skills of procurement personnel on ICT 	Nominal

Source: Research data (2016)

CHAPTER FOUR

PRESENTATION OF FINDINGS AND ANALYSIS

4.0 Introduction

This chapter is all about the presentation of findings after analyzing and interpreting the collected data from issued questionnaires and conducted interviews at MOF, MOW and MOT. The data presented in this chapter as per research objectives were analyzed in the statistical software known as IBM SPSS Statistics version 20.

4.1 Procurement planning and VfM

The first objective of this research was to find out the extent to which procurement planning promotes VfM in procurement process. To meet this objective the researcher formulated various questions on questionnaires in relation to APPs preparation, APPs comply with the templates and guidelines of PPRA, contents of APPs and whether the prepared APPs are real adhered to. It was hypothesized that there is a significant relationship between procurement planning and VfM in the procurement process. The following are the four indicators that were used in this objective:

4.1.1 Preparation of APPs

The researcher aimed at finding if the organization of the selected respondents prepared the APPs for each financial year as per PPA requirements. This was important because APPs are the basis for the procurement expenditure for the given financial year.

Table 4.1 shows that 95.7% of all respondents agreed that their organization prepares APPs for each financial year as per PPA requirement. About 2.15% of all respondents selected “I don’t know” option and the remaining 2.15% of the respondents they did believed that their organization does not prepare APPs for each financial year.

Table 4.1: Preparation of APPs

The organization prepares APPs	Frequency	Percentage
YES	45	95.7
I DONT KNOW	1	2.15
NO	1	2.15
Total	47	100

Source: Research data (2016)

4.1.2 Compliance with the PPRA template

In this part, the researcher wanted to know if the prepared APPs comply with the templates for preparing APPs and guidelines of PPRA. Table 4.2 shows that 87.2% of all respondents agreed that the prepared APPs comply with the templates and guidelines of preparing APPs from PPRA, 10.6% of respondents do not know if the prepared APPs comply with the requirement of PPRA and only 2.2% of the respondents believed that the prepared APPs do not comply with the templates and guidelines of the PPRA.

Table 4.2: Compliance with the PPRA template

Prepared APPs comply with PPRA template	Frequency	Percent
YES	41	87.2
I DONT KNOW	5	10.6
NO	1	2.2
Total	47	100.0

Source: Research data (2016)

4.1.3 Contents of APPs

In this part the researcher wanted to find out if the prepared APPs contain all important contents as per requirement of the PPRA. Table 4.3 shows that majority of respondents that is, 89.4% agreed that the prepared APPs contain all important contents as per requirement of the PPRA, 6.4% of respondents did not agreed with

the statement and only 4.3% they did not know if the prepared APPs contain all important contents during its preparation.

Table 4.3: Contents of APPs

Prepared APPs contain all important contents	Frequency	Percent
YES	42	89.4
I DONT KNOW	2	4.2
NO	3	6.4
Total	47	100.0

Source: Research data (2016)

4.1.4 Adherence to APPs

The researcher aimed at knowing if the respective organization real use/follow (adhere to) the prepared APPs. Table 4.4 shows that 80.9% of all respondents agreed that their respective organization adhere to the prepared APPs, 10.6% of respondents did not know if the prepared APPs are real followed during the time of execution and the rest of respondents that is, 8.5% of respondents did not agreed that the prepared APPs are real followed by their respective organization.

This implies that majority of respondents were sure that the prepared APPs were followed accordingly. But those who denied reveals that sometimes the prepared APPs were not followed and this can be due to several reasons.

Table 4.4: Adherence to APPs

The organization real follow the prepared APPs	Frequency	Percent
YES	38	80.9
I DONT KNOW	5	10.6
NO	4	8.5
Total	47	100.0

Source: Research data (2016)

Also, the results from the interviews revealed that most of employees who agreed that they do not real follow/ use the prepared APPs were due to various constraints mainly new necessary purchasing needs from user departments and financial constraints during APP execution. For instance one respondent from MOW said that

“We always force our self to follow what is planned in APPs but due to new procurement needs arise from user department’s requirements (sometimes what was planned to be purchased as the new purchase may require just maintenance and repair) we alter what we planned to do, also financial constraint is another problem, this is mainly when prices are increasing higher than expected.”

4.1.5 Relationship between procurement planning and VfM

This study examined the association between procurement planning and VfM by considering the major key five indicators of VfM as recommended by (Shirima, 2013) as follow:

4.1.5.1 Procurement planning and planning, design and tender documentation

The researcher wanted to know how procurement planning has resulted into easing of planning, design and tender documentation. Table 4.5 shows that majority of respondents that is 68.1% strongly agreed that procurement planning has led to easing of planning, designing and tender documentation, 25.5% agreed to the statement and only 6.4% were neutral. This reveals that procurement planning led to design and tender documentation as an indicator of VfM as stipulated by the PPRA.

Table 4.5: Procurement planning and design and tender documentation

Procurement planning and design and tender documentation	Frequency	Percent
Strongly Agree	32	68.1
Agree	12	25.5
Neutral	3	6.4
Total	47	100.0

Source: Research data (2016)

4.1.5.2 Procurement planning and procurement process

The researcher aimed at understanding the connection between procurement planning and procurement process. Table 4.6 shows that about 74.5% of respondents strongly agreed that procurement planning has eased the procurement process and 21.3% agreed to the statement and 2.1% of respondents and the rest of 2.1% respondents were neutral and disagreed respectively to the statement. This implies that procurement planning may influence the whole procurement process because proper planning for procurement leads to effective procurement process as the objectives for procurement are achieved effectively.

Table 4.6: Procurement planning and procurement process

Procurement planning and procurement process	Frequency	Percent
Strongly Agree	35	74.5
Agree	10	21.3
Neutral	1	2.1
Disagreed	1	2.1
Total	47	100.0

Source: Research data (2016)

4.1.5.3 Procurement planning and works supervision and contract administration

Table 4.7 shows that about 31.9% and 42.6% strongly agreed and agreed respectively to the statement that procurement planning eased work supervision and contract management in their organizations. About 21.3% of respondents were neutral and 2.1% of respondents disagreed and the rest of respondents that is 2.1% strongly disagreed with the statement. Majority of respondents agreed that planning for procurement results into effective works supervision and proper contract administration this implies that planning in advance eases the supervision of works and the whole process of managing contract.

Table 4.7: Procurement planning and works supervision and contract management

Procurement planning and works supervision and contract management	Frequency	Percent
Strongly Agree	15	31.9
Agree	20	42.6
Neutral	10	21.3
Disagreed	1	2.1
Strongly Disagreed	1	2.1
Total	47	100.0

Source: Research data (2016)

4.1.5.4 Procurement planning and project completion and closure

The researcher wanted to find out if procurement planning has led to project completion on time and closure. Table 4.8 shows that 29.8% of respondents strongly agreed to the statement, about 51.1% agreed and 14.9% were neutral. Only 4.3% disagreed to the statement that procurement planning has led to project being completed on time and closure. This implies that procurement planning was necessary for ensuring that the work projects were completed on the planned time so as to meet the objectives of the client.

Also, the results from the interviews show that not all projects undertaken were completed on time. Sometimes extension was necessary so as to meet objectives of the client.

For instance one respondent from MOW said that

“Most of works are completed on time and handed over but it should be noted that this cannot apply to all projects undertaken due to circumstances and nature of those projects. For example budget constraints and other unforeseen events may affect some.”

Table 4.8: Procurement planning and project completion and closure

Procurement planning and project completion and closure	Frequency	Percent
Strongly Agree	14	29.8
Agree	24	51.1
Neutral	7	14.9
Disagreed	2	4.3
Total	47	100.0

Source: Research data (2016)

4.1.5.5 Procurement planning and quality and quantity of executed works

Table 4.9 shows that majority that is 48.9% agreed that procurement planning has influenced the quality and quantity of executed works, 10.6% of respondents were strongly agreed and 31.9% were neutral. Amount of respondents who disagreed account for only 4.3% and other 4.3% strongly disagreed with the statement. Therefore, majority of respondents agreed that the extent of quality and quantity of executed works may be influenced by the prior procurement planning, this implies that through planning quality and quantity of executed works can be improved.

Table 4.9: Procurement planning and quality and quantity of executed works

Procurement planning and quality and quantity of executed works	Frequency	Percent
Strongly Agree	5	10.6
Agree	23	48.9
Neutral	15	31.9
Disagreed	2	4.3
Strongly Disagreed	2	4.3
Total	47	100.0

Source: Research data (2016)

4.2 Record management and VfM

The second objective of the study was to determine the extent to which record management of all procurement proceedings promotes VfM procurement. To meet this objective the researcher formulated various questions on questionnaires in relation to the existence of record keeping at an organization and availability of records when needed. The following are the two indicators which were used in this objective:

4.2.1 The existence of record keeping

The researcher aimed at finding out if the respective organization keeps record for all procurement proceedings. Table 4.10 shows that 93.6% of all respondents agreed that their respective organization keeps records for all procurement proceedings, 4.3% of the respondents did not know if their organization keeps records for all procurement proceedings and 2.1% believed that the organization does not keep records.

Table 4.10: The existence of record keeping

The organization keep procurement records	Frequency	Percent
YES	44	93.6
I DONT KNOW	2	4.3
NO	1	2.1
Total	47	100.0

Source: Research data (2016)

4.2.2 Availability of Records

In this part, the researcher wanted to know if records that are kept in the organization become available when needed for different purposes. Table 4.11 shows that 91.5% of respondents agreed that the records that are kept become available when needed, 6.4% of respondents did not know if the records are becoming available when needed and 2.1% believed that records which are kept are not available when needed.

Table 4.11: Availability of records

Procurement records are available when needed	Frequency	Percent
YES	43	91.5
I DONT KNOW	3	6.4
NO	1	2.1
Total	47	100.0

Source: Research data (2016)

4.2.3 Relationship between record management and VfM

The study surveyed the relationship between record management and VfM. This was done through considering the major key five indicators of VfM and record management as follow:

4.2.3.1 Record management and planning, design and tender documentation

Table 4.12 shows about 42.6% of respondents strongly agreed that record management in procurement improved planning, designing and tender documentation, about 46.8% agreed to the statement and only 10.6% were neutral. Therefore, record management of procurement facilitated to planning, design and tender documentation. This implies that record management in procurement activities influences the planning process, designing and documentation of tenders.

Table 4.12: Record management and planning, design and tender documentation

Record management and planning, design and tender documentation	Frequency	Percent
Strongly Agree	20	42.6
Agree	22	46.8
Neutral	5	10.6
Total	47	100.0

Source: Research data (2016)

4.2.3.2 Record management and procurement process

The study aimed at identifying the existing association between record management of procurement proceedings and the whole procurement process as the second indicator of VfM. Table 4.13 shows that about 42.6% of respondents strongly agreed that record management of procurement proceedings has influenced the whole procurement process. About 21.3% of respondents agreed with the statement and the other 21.3% were neutral. Also, about 6.4% and 8.5% of respondents disagreed and strongly disagreed respectively.

Table 4.13: Record management and procurement process

Record management and procurement process	Frequency	Percent
Strongly Agree	20	42.6
Agree	10	21.3
Neutral	10	21.3
Disagreed	3	6.4
Strongly Disagreed	4	8.5
Total	47	100.0

Source: Research data (2016)

4.2.3.3 Record management and works supervision and contract administration

Table 4.14 reveals that about 17.1% of all respondents strongly agreed that record management of procurement proceedings led to easing supervision of works and administering of contracts. About 55.3% agreed and 25.5% were neutral to the statement, only 2.1% of respondents disagreed with the statement.

Table 4.14: Record management and works supervision and contract administration

Record management and works supervision and contract administration	Frequency	Percent
Strongly Agree	8	17.1
Agree	26	55.3
Neutral	12	25.5
Disagreed	1	2.1
Total	47	100.0

Source: Research data (2016)

4.2.3.4 Record management and project completion and closure

The researcher wanted to examine the existing relationship between record management and project completion as the fourth indicator of VfM. Table 4.15 shows that majority of respondents that is, about 55.3% strongly agreed with the statement, about 31.9% of them agreed and the remaining 12.8% were neutral. This means that project completion and closure was more influenced with the level of record management of procurement proceedings.

Table 4.15: Record management and project completion and closure

Record management and project completion and closure	Frequency	Percent
Strongly Agree	26	55.3
Agree	15	31.9
Neutral	6	12.8
Total	47	100.0

Source: Research data (2016)

4.2.3.5 Record management and quality and quantity of executed works

Table 4.16 shows that 14.9% of respondents strongly agreed with the statement that record management of procurement proceedings has led to quality and quantity of

executed works. About 31.9% and 25.5% agreed and were neutral respectively, about 19.2% disagreed and the remaining 8.5% strongly disagreed with the statement.

Table 4.16: Record management and quality and quantity of executed works

Record management and quality and quantity of executed works	Frequency	Percent
Strongly Agree	7	14.9
Agree	15	31.9
Neutral	12	25.5
Disagreed	9	19.2
Strongly Disagreed	4	8.5
Total	47	100.0

Source: Research data (2016)

4.3 ICT usages and VfM

The third objective of the study was to assess how ICT usages in procurement activities promote VfM procurement in the organization. To meet this objective the researcher formulated various questions on questionnaires in relation to the use of ICTs in procurement activities, availability of any useful procurement software in computers that are used within the offices.

4.3.1 ICT usages in procurement

The researcher wanted to find out if the respective organization uses the ICTs in conducting their procurement activities. Table 4.17 shows that about 70.2 percent agreed that their organizations use ICT in conducting procurement, only 6.4 percent of respondents were not aware if their organizations uses ICT in performing activities process and about 23.4 percent of respondents claimed that their organizations do not use ICTs in conducting procurement tasks.

Table 4.17: The use of ICTs in procurement

There is the use of ICT in procurement activities	Frequency	Percent
YES	33	70.2
I DONT KNOW	3	6.4
NO	11	23.4
Total	47	100.0

Source: Research data (2016)

4.3.2 Availability of useful procurement software

In this part, the researcher wanted to know if there was any useful procurement software that is used by staff when conducting e-procurement. Table 4.18 shows that 53.2% of all respondents agreed that there was a useful procurement software that was used in conducting e-procurement, 34% of respondents believed that there was no any useful procurement software that is used in conducting e-procurement and 12.8% of respondents did not know if there was any procurement software which is used in conducting e-procurement.

Table 4.18: Availability of procurement software

Useful procurement software is installed in computers	Frequency	Percent
YES	25	53.2
I DONT KNOW	6	12.8
NO	16	34.0
Total	47	100.0

Source: Research data (2016)

4.3.3 Availability of procurement personnel with ICT skills

In this section, the researcher aimed at finding out if the personnel who are involved in the procurement process possess ICT skills that enable them to conduct e-procurement. Table 4.19 shows that majority of respondents that is, 68.1 percent

agreed that they possess ICT skills and they can conduct e-procurement, about 6.4 percent claimed that they don't know if they possess ICT skills and they cannot conduct procurement electronically. The remaining respondents about 25.5percent claimed that they do not possess any ICT skills and they cannot conduct e-procurement.

Table 4.19: Availability of procurement personnel with ICT skills

Procurement personnel possess ICT skills	Frequency	Percent
YES	32	68.1
I DONT KNOW	3	6.4
NO	12	25.5
Total	47	100.0

Source: Research data (2016)

4.3.4 Relationship between ICT usages and VfM

The researcher used the major five key indicators of VfM to examine the existing relationship between ICT usages in procurement process and VfM.

4.3.4.1 ICT usages and planning, design and tender documentation

Table 4.20 shows that about 6.4% and 48.9% strongly agreed and agreed respectively to the statement that ICT usages in procurement process had influenced planning, designing and tender documentation. About 29.8% were neutral and the remaining 14.9% disagreed with the statement.

Table 4.20: ICT usages and planning, design and tender documentation

ICT usages and planning, design and tender documentation	Frequency	Percent
Strongly Agree	3	6.4
Agree	23	48.9
Neutral	14	29.8
Disagreed	7	14.9
Total	47	100.0

Source: Research data (2016)

4.3.4.2 ICT usages and procurement process

Table 4.21 shows that majority of respondents almost 55.3% agreed with the statement that ICT usages in procurement process has influenced the whole procurement process in their organizations. About 17.1% strongly agreed with the statement and other 17% were neutral. But about 10.6% disagreed with the statement. Since majority of respondents agreed that the use of ICT influenced the whole procurement process, this implies that the significance of ICT usage in the procurement process cannot be ignored.

Table 4.21: ICT usages and procurement process

ICT usages and procurement process	Frequency	Percent
Strongly Agree	8	17.1
Agree	26	55.3
Neutral	8	17
Disagreed	5	10.6
Total	47	100.0

Source: Research data (2016)

4.3.4.3 ICT usages and work supervision and contract administration

The researcher wanted to find out if the ICT usages in procurement process may influence work supervision and easing contract administration. Table 4.22 shows that about 6.4% strongly agreed with the statement and 40.4% of respondents agreed that an ICT usage has influenced work supervision and contract administration. About 27.7% of respondents were neutral and 14.9% of respondents disagreed. However, about 10.6% of all respondents strongly disagreed with the statement. This implies that the use of ICT in the procurement process assists in work supervision and administration of contract.

Table 4.22: ICT usages and work supervision and contract administration

ICT usages and work supervision and contract administration	Frequency	Percent
Strongly Agree	3	6.4
Agree	19	40.4
Neutral	13	27.7
Disagreed	7	14.9
Strongly Disagreed	5	10.6
Total	47	100.0

Source: Research data (2016)

4.3.4.4 ICT usages and project completion and closure

Table 4.23 shows that about 36.2% and 25.5% strongly agreed and agreed respectively with the statement that ICT usages in procurement process had influenced project completion and closure. About 36.2% of all respondents were neutral and only 2.1% disagreed with the statement. This implies that some respondents were aware that ICT usages influence timely completion of projects and hence closure. Those who were neutral were not aware of the importance of ICT usages o timely completion of projects. ICT usages may result into successful project completion through project management software such as planning software and scheduling software.

Table 4.23: ICT usages and project completion and closure

ICT usages and project completion and closure	Frequency	Percent
Strongly Agree	1	36.2
Agree	17	25.5
Neutral	12	36.2
Disagreed	17	2.1
Total	47	100.0

Source: Research data (2016)

4.3.4.5 ICT usages and quality and quantity of executed works

The study aimed at examining the association between ICT usages in procurement process and quality and quantity of executed works. Table 4.24 shows that about 27.7% of respondents strongly agreed that ICT usages in procurement process had influenced the quality and quantity of executed works. About, 31.9% of respondents agreed while 29.8% of them were neutral. About, 8.5% and 2.1% of all respondents disagreed and strongly disagreed with the statement respectively. Since majority of respondents agreed that ICT usages in procurement process may influence the quality and quantity of executed works, this implies that through project management software the contractor can meet the scheduling requirements through planning and hence meeting the quality requirements of the client.

Table 4.24: ICT usages and quality and quantity of executed works

ICT usages and quality and quantity of executed works	Frequency	Percent
Strongly Agree	13	27.7
Agree	15	31.9
Neutral	14	29.8
Disagreed	4	8.5
Strongly Disagreed	1	2.1
Total	47	100.0

Source: Research data (2016)

4.4 Hypothesis testing

In this research there were three specific objectives from which the researcher was able to formulate three hypotheses.

The following is the first hypothesis of the study:

H₀ There is no significant relationship between procurement planning and value for money in procurement process.

H₁ There is a significant relationship between procurement planning and value for money in procurement process.

The researcher tested this hypothesis by examining the existing connection between procurement planning and VfM in procurement process by using a chi square test. Each indicator of the procurement planning that is used in the study was tested to establish the existing association with VfM in the procurement process. Preparation of APPs, compliance of the prepared APPs with the PPRA templates, contents of the prepared APPs and adherence of the prepared APPs were tested with VfM indicators which were grouped into two categories (quality and quantity of executed works and other indicators).

Table 4.25 shows the results of a chi-square analysis on the association between procurement planning and value for money in the procurement process:

Table 4.25: Results of chi-square analysis on the association between procurement planning and VfM

Preparation of APPs	VfM			Total	χ^2 -value	DF	P-value
	Quality and quantity of executed works	Other indicators	VfM				
If PE plans	13	32	45				
If PE do not plan	1	1	2	3.945	1	0.042**	
Compliance with the PPRA templates							
Compliance	12	29	41				
Non compliance	2	4	6	5.246	1	0.022**	
Contents of APPs							
Contains all contents	13	29	42				
Do not contain all contents	1	4	5	2.417	1	0.120NS	
Adherence of Prepared APPs							
Follow APPs	12	26	38				
Do not follow APPs	2	7	9	4.261	1	0.039**	

**Significant at $p < 0.05$

From table 4.25 results supported that there was an association between organizations that do plan and VfM as the p-value is equal to 0.042. Also, there was a significant association between APPs prepared with the compliance to the PPRA templates and VfM in the procurement process ($P < 0.05$). The study failed to establish the association between contents of the prepared APPs and VfM in the procurement process; therefore, the overall relationship was insignificant ($P > 0.05$). On the other hand, the results support the hypothesis that there was a significant association between procurement planning and VfM.

Therefore the null hypothesis is rejected and the alternative hypothesis was accepted since the two variables are associated.

The following is the second hypothesis; the researcher tested this hypothesis by using a chi-square test:

H₀ There is no significant relationship between record management of all procurement proceedings and value for money in procurement process.

H₁ There is a significant relationship between record management of all procurement proceedings and value for money in procurement process.

As table 4.26 depicts VfM was categorized into two categories from which each indicator of measuring record management was tested. Record management indicators included the existence of procurement record keeping and availability of procurement records when needed.

Table 4.26: Results of chi-square analysis on the association between procurement record management and VfM

The existence of procurement record keeping	VfM		Total	χ ² -value	DF	P-value
	Quality and quantity of executed works	Other VfM indicator				
If records are kept	13	31	44	3.945	1	0.047**
If records are not kept	1	2	3			
Procurement records availability						
Records are available	13	30	43	2.072	1	0.150NS
Records are not available	1	3	4			

**Significant at $p < 0.05$

Source: Research data (2016)

Table 4.26 shows that the association between organization that do keep records and VfM was significant as $P = 0.047$. But on the other hand availability of records had

no impact on VfM in the procurement process ($p = 0.150$). In this these organizations may keep records but they can be poorly managed. For that case availability of records may become an issue. All in all, these findings failed to reject the null hypothesis that record management of all procurement proceedings is not significantly related to VfM at the selected organizations.

The following is the third hypothesis; also, under this hypothesis the researcher used a chi-square test to test how likely the variables are associated.

H₀ There is no significant relationship between ICT usage in procurement activities and value for money in procurement process.

H₁ There is a significant relationship between ICT usage in procurement activities and value for money in procurement process.

As it was operationalized under the first and second hypotheses, VfM involved only two major categories (quality and quantity of executed works and other remaining indicators). ICT usages in procurement process involved the applicability of ICT in conducting procurement activities, availability of computers with stalled procurement software and availability of procurement personnel with ICT skills. Table 4.27 shows the results as the third hypothesis was operationalized.

Table 4.27: Results of chi-square analysis on the association between ICT usage and VfM

The use of ICT in procurement	VfM		Total	χ^2-value	DF	P-value
	Quality and quantity of executed works	Other VfM indicators				
If PE uses ICT	6	27	33			
If PE do not use ICT	8	6	14	7.134	1	0.008**
Availability of computers with procurement software						
Availability of software	4	21	25			
Non availability of software	10	12	22	4.854	1	0.028**
Availability of procurement personnel with ICT skills						
Procurement personnel with ICT skills	6	25	31			
Procurement personnel with no ICT skills	7	9	16	6.635	1	0.01**

**Significant at $p < 0.05$

Source: Research data (2016)

Results on table 4.27 shows that the e-procurement had an impact on VfM in the procurement process ($p = 0.008$).

Also, there was significant relationship between availability of computers with useful procurement software and VfM ($p < 0.05$). Skills possessed by procurement personnel on the use of ICT had an impact on VfM as $p = 0.01$. From these results on the table 4.12, the null hypothesis was rejected and the alternative hypothesis was accepted; therefore, there was a significant association between ICT usage in procurement activities and VfM in the procurement process.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0 Introduction

This chapter delivers a thorough discussion of the findings of this study. The general objective of this study was to assess the determinants of VfM in procurement of works in public sector. This discussion is based on the specific objectives of the study.

5.1 Procurement planning and VfM

Procurement planning was measured through preparation of APPs, compliance with the PPRA templates, contents of prepared APPs and adherence to the prepared APPs. The indicators of VfM were grouped into two major categories which included quality and quantity of executed works and other VfM indicators. The quality and quantity of executed works was considered as an important indicator of VfM because it is given more weight when assessing VfM in public procurement of works in Tanzania (Shirima, 2013). In this study, both aspects of planning were measured only into two categories and tested the association with VfM.

The study hypothesized that procurement planning is significantly related to VfM. Under this hypothesis, the results of the study found that there was a significant association between procurement planning and VfM in procurement process. This finding supports the study of Apiyo and Mburu (2014) who found that almost 15 percent of respondents indicated that procurement planning helps to achieve VfM in their organization to a low extent.

Majority of respondents agreed that it was cheaper to procure goods, services or works in aggregate than frequently purchases and this contributed to the reduction in transaction cost as major costs involved in procurement planning range from need identification until customer requirement is met. In this way, planning costs could be reduced, these findings support those of Kennard (2006) who found that procurement

plans may lead to lower costs shorten timescales and enhance stakeholder relationships, reduce risks and improve risks.

Also, the results of the study show that procurement planning is associated with VfM in aspect of quality and quantity of executed works. These results support those of Mchopa, *et al* (2014) who found out that planning might help an organization in managing quality of construction projects by spelling out how the quality performance and objectives will be achieved and providing details on the quality control checks.

Despite the fact that all aspects of procurement planning were tested significantly to VfM in procurement process, the study failed to establish the existing association between contents of prepared APPs and VfM. It was believed that those organizations (MOF, MOT and MOW) that included important contents in their prepared APPs would perform better in conducting their procurement activities for the given financial year, but based on the sample the evidence was not enough to support this.

5.2 Record management of all procurement proceedings and VfM

Procurement record management included if the organization did keep any procurement records and the availability of those procurement records when needed. VfM included quality and quantity of executed works and other VfM indicators. Both the existence of procurement record management and availability of procurement records were tested for association with VfM.

The study hypothesized that record management of all procurement proceedings is significantly related to VfM. However, findings of the study failed to establish the existing relationship between record management of all procurement proceedings and VfM as $p > 0.05$.

However, the finding is contrary to the finding by Mchopa, *et al* (2014) who found that record management especially on contract management has an impact on the achievement of VfM in procurement process. At first place the researcher believed there was a significant relationship between record management and VfM. But the study did not have enough evidence based on the sample to reject the null hypothesis, it was concluded that the study failed to reject the null hypothesis. Therefore, there was no significant relationship between record management and VfM.

The availability of procurement records had no an impact on VfM in procurement process. Also, it was found out that organizations that do keep records had an association with VfM in the procurement process at $p = 0.047$. Therefore, researcher suggested that further research should be done so as to test this significant association.

5.3 ICT usages in procurement process and VfM

ICT usage in procurement process was measured through the use of ICT in procurement activities, Availability of computers with procurement software and availability of procurement personnel who had ICT skills. As from other hypotheses VfM included quality and quantity of executed works and other VfM indicators. Both, the use of ICT in procurement activities, availability of computers that are installed procurement software and existence of procurement staff with ICT skills were tested for the association with VfM.

It was hypothesized that ICT usage in procurement process is significant related to VfM. The results of this study show that ICT usage in procurement process is significantly related to VfM ($p < 0.05$). The findings support those of Vaidya, *et al* (2006) who found out t e-procurement enables the process of procurement to be more efficient and enhancing VfM. Therefore, an ICT usage in procurement process has an impact on VfM.

ICT usages in procurement process reduce procurement costs; transaction costs theory suggested that costs associated with the search of a supplier are among of transaction costs (Bremen, *et al.*, 2010). Findings of this study contributed to the transaction cost theory as the theory try to identify and reduce transaction costs. The theory is relevant to the study as majority of respondents believed that transaction costs are minimized when ICT is employed in procurement process. These costs include costs of finding new suppliers and those associated with order follow-up.

Also, e-procurement had an impact on VfM procurement as the results revealed that the use of ICT in procurement activities was significantly related to VfM procurement. Both, availability of computers that had useful procurement software and availability of personnel that who had ICT skills tested significantly to VfM as the $p < 0.05$. This showed that ICT usages in procurement process had an impact on VfM of procurement process. This contributed to the Resource-Based Theory as the resources of an organization (personnel with skills and ICT equipment) are vital for the performance of an organization.

Majority of respondents agreed that ICT equipment such as computers are useful in conducting procurement activities such as preparing bidding documents, placing an order (for those who have procurement software), sourcing and keeping procurement records. Also, computers are useful in conducting an online submission of APPs and reports to the PPRA. This revealed that e-procurement at MOF, MOT and MOW is vital for the organization performance.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS

6.0 Introduction

This chapter explains about the summary of findings, conclusions, and recommendations from the researcher, limitations of the study and areas for further research.

6.1 Summary of findings

The main objective of this study was to assess determinants of VfM in procurement of works in public sector. Specifically, the study aimed at finding out the extent to which procurement planning promotes VfM in procurement process, determining the extent to which record management of all procurement proceedings promote VfM procurement and finding out the extent to which ICT usages in procurement activities promote VfM procurement in the organization.

Based on the study findings it was revealed that most of employees at MOF, MOW and MOT agreed that their organizations do prepare APPs for each financial year, but in few cases these organizations do not follow/use the prepared APPs mostly due to unavailability of funds. Also, templates and guidelines for preparing APPs as underlined by the PPRA help these individuals in preparation of their APPs. There was a significant relationship between procurement planning and VfM therefore; procurement planning has effects on the VfM in procurement.

Also, it was revealed that majority of respondents from both organizations claimed that their organizations do keep records. At MOF, MOW and MOT records of all procurement proceedings in most cases were available when required during auditing activities and for references. The relationship between record management of all procurement proceedings and VfM was tested through a chi square test which revealed that there was no significant relationship between the two variables, hence the effects of record management of procurement proceedings has no impact on the VfM.

The study revealed that some respondents believed that their organizations do apply ICTs in their procurement activities despite the fact that most of their computers in offices were not installed with any e-procurement software. Those computers were mainly used in preparing bidding documents, storage of important documents for referencing and for online sourcing (those connected with the internet). The relationship between ICT usages in procurement and VfM was significant and therefore, ICT usage in procurement activities has an impact on the VfM in procurement.

6.2 Conclusion

The general purpose of the study was to assess determinants of VfM in procurement process in public sector. In order to achieve this objective three hypotheses were formulated. Firstly, there is association between procurement planning and VfM in the procurement process, secondly there is association between record management and VfM and the last hypothesis assumed that the use of ICT in procurement process has an impact on VfM.

Based on these research hypotheses, the results revealed that procurement planning and VfM were significantly associated. Also, the use of ICT in the procurement activities had significant impact on VfM. The findings failed to establish the existing association between procurement record management and VfM.

Therefore, the researcher concluded that procurement planning and ICT usages in the procurement process are the major key determinants of VfM in procurement. Despite the fact that there are various contributions of record management in achievement of VfM, results of this study failed to establish that record management of all procurement proceedings is among the determinant of VfM.

6.3 Policy Implications

The findings of the study provide important implications for policy makers, public organizations, government and other stakeholders. For instance the government could use the study findings to improve its agencies and public entities so as to realize the benefits of achieving VfM in the procurement of works.

6.4 Recommendations

The following were the recommendations that the researcher managed to come up with based on the study findings:

Since, procurement planning was significantly associated with VfM in the procurement process; public entities in this aspect MOF, MOT and MOW should ensure that APPs are prepared and followed; also, procurement planning is used as the tool for improving VfM in procurement activities. This can be possible through top management support and inclusion of competent required staffs during planning phase.

Despite the fact that, procurement record management had no impact on VfM, proper record management is required at MOF, MOT and MOW so as to improve its contribution to the attainment of VfM in procurement process. The PMUs of all respective public entities are required to make sure that this is happening as they are responsible for keeping and maintaining procurement records as stipulated in the PPA and its regulations.

Also, the use of ICTs in procurement process had an impact on VfM; public entities should make sure that e-procurement is applied so as to move from traditional procurement systems to e-procurement systems. This is possible if the government keeps more focus on improvement of technological and legal infrastructure that supports the adoption and application of e-procurement because MOF, MOT and MOW are among public entities. These entities should be ready for change after improving their organizational infrastructure.

6.5 Limitation of the study

This study was confined at MOF, MOT and MOW in Dar es Salaam; therefore, it is limited only in these organizations and generalization may not be accepted. Moreover, this research was limited with one major factor, that is, refusal of some respondents to give important information concerning questionnaires issued and interview conducted. But this was solved by informing them that the information given was confidential and was intended only for academic purposes.

6.6 Areas for further research

The study was carried out so as to assess the determinants of VfM in procurement of works in public sector: a survey of government Ministries in Dar es Salaam. Further research can be conducted so as to assess the contribution of public private partnerships in achieving VfM in procurement of construction works. This is important interesting area for further research in Tanzania especially after the enactment of the public private partnership Act in 2010 and increasing importance of private sector in construction projects.

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APPENDICES

APPENDIX I

QUESTIONNAIRE FOR RESPONDENTS

Questionnaire No.....

**Determinants of Value for Money in the Procurement of Works in Public
Sector: A Survey of Selected Government Ministries in Dar es Salaam**

The data provided on this paper will be confidential as the study is intended for academic purpose only. Please, I request your support by responding to the questions below by providing appropriate answers according to your understanding.

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Mzumbe University

This questionnaire has been divided into five (5) parts please put a [√] mark on the best option among many on each questions that suits your opinion.

The Name of your organization.....

PART I: EDUCATION LEVEL AND EXPERIENCE

1. The highest education level attained.

- a) Bachelor degree and above ()
- b) Diploma ()

c) Certificate ()

d) Secondary ()

2. For how long have you been participating in the procurement process in your organization?

a) One year and less ()

b) More than one year up to five years ()

c) More than five years ()

PART II: ASSESSING VfM IN PUBLIC PROCUREMENT

In this part please put a [√] mark on the best option among the three responses on each question that suits your opinion.

S/N	Indicator	Questions	Response		
1	<i>Planning, design and tender documentation</i>	Does your organization plan for it procurements?	YES	I DON'T KNOW	NO
		Does your organization prepare adequate design and specifications necessary for tendering and project accomplishment?	YES	I DON'T KNOW	NO
2	<i>Procurement process</i>	Does your organization comply with PPA and its Regulations?	YES	I DON'T KNOW	NO
3	<i>Works supervision and contract administration</i>	Is there project monitoring and control for the procured works?	YES	I DON'T KNOW	NO
		Do works executed comply with contract conditions and specifications?	YES	I DON'T KNOW	NO
4	<i>Quality and quantity of completed works</i>	Do the completed works are of expected quality and quantity?	YES	I DON'T KNOW	NO
		Do technical specifications observed during work execution?	YES	I DON'T KNOW	NO
5	<i>Project completion and closure</i>	Are works completed on time and handed over?	YES	I DON'T KNOW	NO

PART III: PROCUREMENT PLANNING AND VfM

3. Does your organization prepare Annual Procurement Plans for each financial year?

a) YES ()

b) I DONT KNOW ()

c) NO ()

4. Do the prepared Annual Procurement Plans comply with the templates for Preparing Annual Procurement Plan and guidelines of PPRA?

a) YES ()

b) I DONT KNOW ()

c) NO ()

5. Do the prepared Annual Procurement Plans contain all important contents as per requirement of the PPRA?

a) YES ()

b) I DONT KNOW ()

c) NO ()

6. Does your organization real use/follow the prepared Annual Procurement Plans?

a) YES ()

b) I DONT KNOW ()

c) NO ()

7. For each statement below please circle the number that indicates your level of agreement or disagreement which best describes your opinion on the organization.

Procurement planning leads to:-	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a) Preparation of adequate design and specifications for purposes of tendering and project execution	1	2	3	4	5
b) An increase in the level of compliance with PPA and its regulations	1	2	3	4	5
c) Works supervision and contract administration	1	2	3	4	5
d) Quality and quantity of executed works	1	2	3	4	5
e) Project completion on time and closure	1	2	3	4	5

PART IV: RECORD MANAGEMENT AND VfM

8. Does your organization keep records of all procurement proceedings?

- a) YES ()
- b) I DONT KNOW ()
- c) NO ()

9. Do the records kept become available when they are needed?

- a) YES ()
- b) I DONT KNOW ()
- c) NO ()

10. For each statement below please circles the number that indicates your level of agreement or disagreement which best describes your opinion on the organization.

Record management leads to:-	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a) Preparation of adequate design and specifications for purposes of tendering and project execution	1	2	3	4	5
b) An increase in the level of compliance with PPA and its regulations	1	2	3	4	5
c) Works supervision and contract administration	1	2	3	4	5
d) Quality and quantity of executed works	1	2	3	4	5
e) Project completion on time and closure	1	2	3	4	5

PART V: ICT USAGES IN PROCURMENT ACTIVITIES AND VfM

11. Does your organization use Information and Communication Technologies (ICTs) in conducting procurement activities?

- a) YES ()

b) I DONT KNOW ()

c) NO ()

12. Is there any useful procurement software installed in computers at your office?

a) YES ()

b) I DONT KNOW ()

c) NO ()

13. Are there any procurement professionals who possess skills on conducting e-procurement in your department?

a) YES ()

b) I DONT KWOW ()

c) NO ()

14. For each statement below please circles the number that indicates your level of agreement or disagreement which best describes your opinion on the organization.

ICT usages on procurement leads to:-	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a) Preparation of adequate design and specifications for purposes of tendering and project execution	1	2	3	4	5
b) An increase in the level of compliance with PPA and its regulations	1	2	3	4	5
c) Works supervision and contract administration	1	2	3	4	5
d) Quality and quantity of executed works	1	2	3	4	5
e) Project completion on time and closure	1	2	3	4	5

15. What are the uses of those computers in your daily procurement activities in the organization?.....

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APPENDIX II

INTERVIEW GUIDE

1. What is the meaning of value for money concept in procurement process?
2. Do you consider that your organization achieve value for money in the procurement process?
3. Please, explain the main factors that make the procurement process effective in your organization.
4. What are the problems does your organization encounter in achieving value for money in procurement process?
5. What should be done in response to question 5?
6. What is your opinion on the PPA No. 7 of 2011 and its Regulations of 2013 on performance of procurement process in public procurement?

APPENDIX III

PRELIMINARY QUESTIONNAIRE'S RESPONSES

Response rate

In this study, during the data collection activity, the researcher issued 47 questionnaires which were administered to the selected respondents at MOF, MOT and MOW. Out of 47 issued questionnaires the researcher was able to get back only 47 questionnaires which were filled. In this aspect the response rate was 100%, this was possible because the researcher administered himself the questionnaires to the respondents and made several follow-ups.

Table 1: Response rate per organization

Institution	No. of issued questionnaires	No. of returned questionnaires	Response rate (%)
MOF	14	14	100%
MOT	17	17	100%
MOW	16	16	100%
TOTAL	47	47	

Source: Research data, 2016

Sample characteristics

In this section, the researcher summarized characteristics of the respondents which included the name of their organization, education level and their level of experience.

The name of organization

In this study respondents were selected from three public organizations namely MOF, MOT and MOW. In this case, 29.8% of all respondents were from MOF, 36.2% of all respondents were from MOT and MOW consisted of 34% as shown in table 2.

Table 2: The name of organization

Institution	Frequency	Percent
MOF	14	29.8
MOT	17	36.2
MOW	16	34.0
Total	47	100.0

Source: Research data (2016)

The education level

Table 3 shows that 72.3% of all respondents had attained at least a bachelor degree, 21.3% has attained a diploma while the remaining 6.4% has attained a certificate level of education. Since more than 70% of total respondents had reached at least a bachelor level of education, this reveals that the majority of all employees at MOF, MOT and MOW are well educated to exercise their procurement functions.

Table 3: The education level

The level of education attained	Frequency	Percent
Bachelor Degree and Above	34	72.3
Diploma	10	21.3
Certificate	3	6.4
Total	47	100.0

Source: Research data (2016)

The level of experience

Table 4 shows that majority of respondents that is, 46.8% have an experience of more than one year up to five years, 34% have an experience of more than five years and only 19.1% have an experience of at most one year. Therefore, the nature of respondents generally seems are of adequate experience to conduct their daily duties.

Table 4: Experience level

The level of experience	Frequency	Percent
One Year and Less	9	19.1
More than One Year up to Five Years	22	46.8
More Than Five Years	16	34.0
Total	47	100.0

Source: Research data (2016)