

**ASSESSMENT OF FACTORS AFFECTING CONTRACT MANAGEMENT FOR
PROCUREMENT OF SERVICES IN PUBLIC SECTORS IN TANZANIA:**

A CASE OF TANROADS IN ARUSHA REGION

MAGDALENA FELIX MBISE

**Master of Business Administration in Procurement and Supplies Management
of Institute of Accountancy Arusha (IAA)**

November, 2022

**ASSESSMENT OF FACTORS AFFECTING CONTRACT MANAGEMENT FOR
PROCUREMENT OF SERVICES IN PUBLIC SECTORS IN TANZANIA:
A CASE OF TANROADS IN ARUSHA REGION.**

MAGDALENA MBISE F.

MBAPSM/0002/2021

**A dissertation submitted in Partial Fulfillment of the Requirements for the
Award of Degree of Master of Business Administration in Procurement and
Supplies Management of Institute of Accountancy Arusha (IAA)**

November, 2022

DECLARATION

I Mbise Magdalena F. declare that this dissertation is my own original work and that has not been presented and will not be presented to any other University of similar or other degree awards.

Signature

Date

CERTIFICATION

I, the undersigned certify that I have read and hereby recommended for acceptance by Institute of Accountancy the dissertation entitled **Assessment of factors affecting contract management for procurement of services in public sector in Tanzania. A case of TANROADS in Arusha region** in fulfillment of the requirement for the degree of Master of Business Administration in Procurement and Supplies Management offered by the Institute of Accountancy Arusha.

Signature.....

Dr. Thadei Kiwango

(Supervisor name)

Date:

COPYRIGHT

This dissertation is copyright material protected under the Berne Convention, the Copyright Act 1999, and other international and national enactments, on that behalf, of intellectual property. It should not be reproduced by any means, in full or in part, except for a short extract in fair dealing, for research or private study, critical scholarly review, or discourse with an acknowledgement, without the written permission of the Directorate of Postgraduate Studies, on behalf of both the author and the Institute of Accountancy Arusha.

ACKNOWLEDGEMENT

To begin with, I glorify the Almighty God for empowering me to complete this study because without His blessings, kindness, and, compassion all our efforts would be in unsuccessful.

I am also grateful to my supervisor, Dr. Thedei Kiwango for his diligent, determined, and generous supervision accompanied by continuous support and inspiration which kept me on track throughout my study. Indeed, Dr Thedei Kiwango has served as my stimulus. I am also thankful to all of my lecturers and fellow students at IAA for their support.

I also thank the management of TANROADS for allowing me to pursue my studies as well as collecting data in the organization without their cooperation this study would not be completed. I am also very thankful to my family, especially my lovely dad Felix Benarld Mbise and my lovely mother Oifrasia Manfred Kahwili, my young sisters Irene Mbise and Eunice Mbise for their tireless support and continuous prayers.

DEDICATION

I dedicate this work to my lovely father Felix Benard Mbise, my beloved mother Oifrasia Manfred Khawili and my lovely young sisters Irene Mbise and Eunice Mbise

ABSTRACT

The study assessed the factors Affecting Contract Management for procurement of services in Public Sector. A case of Tanzania National Roads Agency (TANROADS) In Arusha Region. The study aimed at achieving the following objectives, to establish the relationship between staff competency and contract management for procurement of services at TANROADS Arusha, to determine how technology adoption affect contract management for procurement of services TANROADS Arusha, and to examine the extent at which budgetary allocation affects effective contract management for procurement of services at TANROADS Arusha. The study used two theories including Agency Theory and Technology Acceptance Model (TAM). This study employs descriptive research design. Data were collected from 92 respondents. The study also used both primary and secondary data to gather information from the respondents. Quantitative data were analyzed using descriptive statistics such as frequencies and percentages. Qualitative data were analyzed using content analysis. From the above discussion, it can be deduced that Staff Competency had an influence on Contract Management. The study concludes that applying digital technologies to the procurement function will enable strategic sourcing to become more predictive, transactional procurement to become more automated, supplier management to become more proactive, and procurement operations to become more intelligent. In the last objective, the study concluded budgetary allocations affects effective contract management for procurement of service. This was witnessed through timelines, which management commitment and fund allocated. It is recommended that regular training on procurement contract management to the public staff to improve procurement performance. The study recommended that TANROADS officials should emphasis the use of computerization of contract management activities, use of procurement software and use of internet connections for the communication and collaboration with contractors so as to enhance better contract management.

TABLE OF CONTENTS

DECLARATION	i
CERTIFICATION	ii
COPYRIGHT	iii
ACKNOWLEDGEMENT	iv
DEDICATION	v
ABSTRACT	vi
LIST OF FIGURES	x
LIST OF TABLES	xi
LIST OF ABBREVIATIONS	xii
CHAPTER ONE	1
PROBLEM SETTING	1
1.1 Introduction.....	1
1.2 Background of the Problem	1
1.3 Statement of the Problem	3
1.4 Research Objectives	5
1.4.1 General Objective	5
1.4.2 Specific Objectives	5
1.5 General objective question	6
1.5.1 Research Questions	6
1.6 Scope of the study	6
1.7 Significance of the Study	7
1.8 Limitation of the Study	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 Chapter Overview	9

2.2 Definitions of key terms	9
2.3 Theoretical Literature Review	10
2.3.1 Agency Theory	10
2.3.2 Technology Acceptance Model (TAM).....	12
2.4 Empirical Literature Reviews	12
2.4.1 Staff Competency and Contract Management.....	12
2.4.2 Technology Adoption and Contract Management.....	15
2.4.3 Budgetary Allocation and Contract Management	18
2.5 Research Gaps.....	19
2.6 Conceptual Framework	21
CHAPTER THREE	24
RESEARCH DESIGN AND METHODOLOGY.....	24
3.1 Chapter Overview.....	24
3.2 Area of Research.....	24
3.3 Research Philosophy.....	24
3.3.1 Research Design	24
3.3.2 Research Approach.....	25
3.3.3 Study Population	25
3.3.4 Sample size and sampling procedures.....	25
3.4 Methods of Data Collection.....	26
3.5 Data Analysis.....	28
3.6 Validity and Reliability.....	28
3.7 Research Ethics Consideration	29
CHAPTER FOUR.....	30
DATA ANALYSIS AND PRESENTATION.....	30

4.1 Chapter Overview.....	30
4.2 Response Rate.....	30
4.3 General Information of Respondents.....	31
4.4. Test of Reliability and Validity.....	34
4.4.1 Reliability Test.....	34
4.4.2 Validity Test.....	35
4.5 Staff Competency and Contract Management.....	36
4.6 How technology adoption, affect contract management for procurement of services.....	40
4.7 The extent at which budgetary allocations affects effective contract management for procurement of service.....	44
4.8 Content Analysis Findings of Interview Data.....	47
4.9 Discussion of Findings.....	51
CHAPTER FIVE.....	54
CONCLUSIONS AND RECOMMENDATIONS.....	54
5.1 Chapter Overview.....	54
5.2 Conclusion.....	54
5.3 Recommendations.....	55
5.4 Suggestion for Further Study.....	56
5.5 Critical evaluation of the study.....	56
REFERENCES.....	58
APPENDIX I: QUESTIONNAIRE.....	62
APPENDIX II: INTERVIEW QUESTIONS.....	66

LIST OF FIGURES

Figure 1 Conceptual framework.....	22
------------------------------------	----

LIST OF TABLES

Table 3.1 Sample size Distribution	26
Table 4.1: Response Rate	30
Table 4.2: Distribution by Age of Respondents	31
Table 4.3: Distribution by Gender of the Respondents	32
Table 4.4: Distribution by Education Level of Respondents	32
Table 4.5: Time respondents have been involved in the current position	33
Table 4.6: Reliability Statistics	35
Table 4.7 KMO and Bartlett's Test	36
Table 4.8: Clear understanding of the needs	37
Table 4.9: Professionals experience	38
Table 4.10: Technical skills	39
Table 4.11: Level of education	40
Table 4.12: Computerization	42
Table 4.13: Software	43
Table 4.14: Internet connections	44
Table 4.15: Timelines	45
Table 4.16: Management Commitment	46
Table 4.17: Fund allocated	47

LIST OF ABBREVIATIONS.

CAG	-	Controller Auditor General
ICT	-	Information and Communication technology
PDC	-	Preventive Detective Corrective
PPRA	-	Public Procurement Regulatory Authority
RBV	-	Resource-Based View
SPSS	-	Statistical Package for Social Scientists
TANROADS	-	Tanzania National Roads Agency
TAM	-	Technology Acceptance model

CHAPTER ONE

PROBLEM SETTING

1.1 Introduction

This chapter comprised background of the study, statement of the problem, objectives of the study, research questions, significance of the study and limitations of the study.

1.2 Background of the Problem

A contract is a written or orally legally binding agreement between parties on a particular issue that can be enforced by law. Every contract is based on a promise made by individual person to a group or a group to an individual. The promise needs to be performed in order to have valid binding agreement (Arrowsmith 2014)

In order to fulfill the commercial and operational objectives outlined in the contract and, in particular, to deliver value for money, contract management is the process that makes sure each party completely complies with their respective obligations (Nguyen 2013). As a result, the competence needed by public sector organizations in the management of the majority is negotiating and administering contracts. There are many distinct sorts of contracts in the public sector, each requiring a particular approach to contract administration (Marigat 2018). Effects linked to inadequate contract management have been felt in various regions and nations, and have been described by various authors worldwide. For instance, in Malaysia in 2015, 417 government contract projects accounted for around 17.3% of the total (more than three months delay and abandoned). The report outlines the reasons for the delay and Malaysia's poor contract management. These factors include bad planning, poor site management, a lack of communication between stakeholders, and a scarcity of materials by the contractor. Time overrun, cost overrun,

disagreements, arbitration, litigation, and complete abandonment are the main consequences of delay and bad contract management in Malaysia (Elsevier 2017).

In the last eight years without much progress, the Kenyan government has wasted hundreds of millions of tax payer dollars due to canceled contracts, incomplete projects, poor service or product delivery, corruption, and extended contract terms. According to verified figures, the Kenyan government spends 10% to 30% of its GDP on just procurement. Due to poor management, 5% of that gets to the west. Due to these economic circumstances, the World Bank and the International Monetary Fund (IMF) were forced to interfere by imposing tight conditions on the government's ability to borrow money, which reduced economic growth by 2.1%. (Gordon 2017)

In Tanzania, also have faced problems which hinders ineffective implementation of the procurement contracts. The Controller and Auditor General (CAG) Report for the financial year 2019/2020 identified several weaknesses in contracts management and its practices in public procurement. These includes improper signing of contracts, lack of important contract information, inadequate quality assurance plan, liquidated damages were not applied for delayed services and services were not tested to ascertain whether they have attained the specifications required.

Today governments all over the world have received a great deal of attention as provider of essential services such as health, education, defense and security, and infrastructure. So as to be able to meet the demand of all these services government procure goods, works and services from supply markets (Waigwa and Njeru 2016). When a company wishes to buy products or services from suppliers or contractors, the procurement life cycle involves several important steps. The preparation of an organized plan for the procurement, finding sources and selecting a supplier or contractor according to the kind and scope of the procurement, receiving and managing the delivered products or services, including payment and contract management, are some of these

critical stages. To safeguard the public interest, laws governing all three phases of public procurement have been passed (Marco 2013). Contract management is an important aspect of public financial management, efficient contract management in public procurement system at TANROADS Arusha has significant socio-economic and political development implication where as poor contract management in public procurement may result to fewer services in the public like hospital, school, roads and bridges that it has been budgeted for, the thing which leads to social-economic and political underdevelopment.

1.3 Statement of the Problem

Most of public procurement contract have not been able to meet intended strategic objectives expressed in a contract (Marco 2013), that is to say a considerable number of procuring entities have not been able to execute contract management effectively and efficiently which results into failure to meet expected objectives from the contract (Annual Performances Evaluation Reports 2016). According to Procurement and Contract Management Audit Report (PPRA 2019) the purchasing process has focused on obtaining goods and services quickly but not purchasing it efficiently which in returns leads to unclear purchasing staff responsibilities. Also, the peer review process does not always ensure full and consistent compliance with applicable laws and regulations; This means that the purchase order files do not have necessary documentation to verify that the purchase orders were procured in compliance with applicable purchasing laws and regulations, therefore the department may not be purchasing services in compliance with applicable purchasing laws and regulations. The third audit result according to procurement and contract management audit report, (PPRA 2019) was contract monitoring practices do not ensure that contracts meet the needs of the department, in a manner that contract monitoring processes conducted by the department do not ensure contract deliverables are appropriate or have been

received and follow contract terms. Currently public sectors have run into losses of tax payer's money caused by cancellation of contract, incomplete projects, poor services delivery, dishonesties and prolonged contracts periods without major developments (Wambui 2017).

According to report of Controller and Auditor General (CAG 2021) there was a delay of Completion of Construction Projects worth TZS 214.54 billion across Government Institutions this is from the review of projects implementation reports, and site visits conducted on respective areas in December 2021. The report shows that 12 projects amounting to TZS 214.54 billion implemented by 12 Government institutions were significantly delayed to be completed for a period ranging from 6 to 96 months. It also came to the attention that the delays had been attributed to various reasons including inadequate funding to complete the projects, whereby the contractors have been partly paid and other institutional specific reasons. However; in some instances, no indication has been given on how the implementing institutions is addressing this challenge.

There have been studies on contract management, but few have addressed the variables influencing contract management of services in public sectors, particularly in Tanzania (Marco 2013). According to a 2018 study by Kanchan et al, contracting operations should be handled by the procurement team because poor management results in dissatisfied customers and unintended cost overruns. (Wambui 2017) suggests additional research in the field of contract management. After some time, a series of studies should be conducted based on the conclusions of Wambui's study to determine if any changes have occurred. Comparisons with the data may then be made to gauge the magnitude of the changes, if any, or not. It is possible that results from the study (Marigat 2018), which was focused to public secondary schools in Mogotiosub-county, Kenya, may not be entirely generalizable to the public sector nationwide. The measurement method utilized to evaluate the factors that contribute to good contract management in the public sector also had limitations.

The study by (Aluonzi 2016) was also constrained by a number of criteria, the analysis of which provides direction and areas for study in the one of contract management in Arua municipality, leaving out other local government units and central government. Since the operating environment will differ from that of Arua municipality and public entities, the same studies proposed for further study in the investigation of other elements in other public sectors or entities. Since the operating environment will differ from that of Arua municipality and public secondary school in Mogohosub-county, the same studies are recommended for further study in the investigation of other elements in other public sectors or entities. Poor contract management will continue to be a problem in the public sectors, which could result in dissatisfactory social-economic and political development in Tanzania, if we continue to rely on the factors raised in earlier studies without taking into account the contribution of new factors under investigation. Thus, based on the aforementioned investigations, the current studies sought to fill in any gaps by evaluating the variables influencing contract management for the purchase of services in the public sector. And also, the study assessed the effects of technology on contract management of services, effects of employee competency on contract management of services, and budgetary allocation effects on contract management.

1.4 Research Objectives

1.4.1 General Objective

The general objective of the study was;

- i.To assess the factors Affecting Contract Management for procurement of services in Public Sector in Tanzania. A case of Tanzania National Roads Agency (TANROADS) In Arusha Region, Tanzania.

1.4.2 Specific Objectives

The study was guided by the following specific objectives;

- i. To determine how staff competency, affects contract management for procurement of services at TANROADS Arusha.
- ii. To determine how technology adoption, affect contract management for procurement of services at TANROADS Arusha
- iii. To evaluate the extent at which budgetary allocations affects effective contract management for procurement of service at TANROADS Arusha.

1.5 General objective question

What are the factors affecting contract management for procurement of services in public sector at TANROADS Arusha?

1.5.1 Research Questions

- i. How staff competency affects contract management for procurement of services at TANROADS Arusha?
- ii. How does technology adoption affect contract management for procurement of services at TANROADS Arusha?
- iii. To what extent does the budgetary allocation affect effective contract management for procurement of services at TANROADS Arusha?

1.6 Scope of the study

This study was undertaken at Tanzania National Roads Agency (TANROADS) Arusha, Tanzania. TANROADS is an executive agency under the ministry of works, transport and communications, established under section 3(1) of the Executive Agencies Act (Cap 245) and came into operation in July 2000. The main objectives of TANROADS are to develop, maintain, and manage the trunk and regional roads in an efficient manner for a sustainable and safe network, consistent with the poverty reduction strategy and other government policies. The study specifically gathered data on the

relationship between staff competency and contract management of services at TANROADS, technology adoption in the contract management of services at TANROADS, and to what extent the budgetary allocations affects effective contract management at TANROADS

1.7 Significance of the Study

To researcher

The study anticipated to add knowledge on contract management of services which in return will encourage the social-economic development. Also, the research study enabled a researcher to provide possible solution, recommendation, suggestion and conclusion if any arise

To organizations

The findings of the study were significant to public sectors but also private sectors. Public sectors may gain understanding on how to manage contracts, this helped them to understand the ways of ensuring that contracts are executed full, on time and within the set budget.

The findings helped procuring entities to analyze the existing contracts management processes, identify shortfalls and enable them to look for the ways to equip with legal tools for efficiency and effective governing procurement process. The study also further helped the procuring entities to ensure effective and efficiency preparations of contracts, monitoring and control to reduce risks which might arise in the course of performing the contract. Moreover, the study helped the procuring entities to minimize disputes by implementing effective disputes management and resolution mechanisms for proper contract management.

To other researchers

Researchers and scholars benefited from the findings of the study. Prospective researchers utilized the study to broaden their study horizon in terms of scope and content especially on the core values

of procurement legal aspects for proper procurement process in public sector to deliver social-economic development to taxpayers.

1.8 Limitation of the Study

Data Accessibility

This study involved the collection of sensitive information, which in other occasion's respondents were not be available when needed and sometimes they were reluctant to provide needed information to researcher. Being aware about this an issue, the researcher arranged a schedule and contact with key respondents on specific duration to undertake information gathering with these respondents

Time factor

Limited time for research considering the submitting time and other classes responsibilities to researcher and difficulties during collection of data from the case study, a researcher arranged well the timetable so as to be able to conduct the research at the required time without interfering class timetable.

Financial limitation

Financial constraints this is one of the limits to the study since a researcher had no way to avoid costs in conducting research, cost such as printing of research paper, transport cost to the case study area for data collection and any other.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This section reviewed literatures which are relevant and concerned with the present study. It discussed the theories and practices that are relevant to study. This chapter comprised definition of key terms, theoretical literature review, empirical literature review, theoretical framework and conceptual frameworks, and research gaps on issues of contract management processes.

2.2 Definitions of key terms

Budgetary allocation; refers to the amount of money each department receives from the general fund to execute their strategic plan. Budgetary allocation breaks department spend down into an approved maximum amount each department can spend per resources whether it is on software, contractor or freelance assistance or advertisement for a marketing campaign. (George 2022)

Contract; is a written or orally legally binding agreements between parties on a particular issue that can be enforced by law (William 2021). The basic elements required for the agreement to be a legally enforceable contract are mutual assent, expressed by a valid offer and acceptance, adequate consideration, capacity and legality.

Contract management; is the process that ensures both parties to a contract fully meet the respective obligation as efficiently and effectively as possible in order to deliver the business and operational objectives required from the contract and in particular to provide value for money (Ahimbisiwe 2015)

Staff competency; this refers to specified skills, knowledge, attitudes and behavior necessary to achieve a task, activity or career (Ellstrom 2018). In order to demonstrate competence, workers must be able to perform certain tasks or skills with a required level proficiency. To achieve competence in a particular job, a person should be able to perform various tasks or skills at a target proficiency level

Technology adoption; this refers to the process which involves the use of computers, software and internet connections infrastructure for supporting information processing and communication function (Rogers 2017). Technology can be adopted so as to improve efficiency at work, competitive edge, remote work challenge and robust workflows

2.3 Theoretical Literature Review

The study was guided by two theories which are Agency theory and Technology Acceptance Model (TAM);

2.3.1 Agency Theory

This study was guided by the “agency theory”. The theory was put forward by (Jensen and Meckling 1976) and later expounded on by (Sarens and Abdolmohammadi 2010). An explanation and solution for problems in the interaction between business owners and their agents is found in the notion of agency. It makes an effort to clarify and settle conflicts between principals and their agents about priorities. The principal-agent problem refers to the conflicting priorities and interests of agents and principals. According to agency theory, a principal's and an agent's interests aren't necessarily congruent (Kopp 2020). Two major areas of conflict—the risk-sharing dilemma and the agency problem—are addressed by agency theory. When principals and agents have divergent perspectives on risk that result in conflicts about the course of action to be taken, there is a problem with risk sharing. And when agents' aims diverge from principals' goals, an agency problem

develops. This problem may also emerge when it is hard or expensive to verify that agents can carry out the delegated work with the required expertise that they claim to have.

The agency theory's basic presumptions and recommendations fit naturally with the problems present in supply chain management. Potential issues can arise while monitoring supplier quality in agency relationships. Buyers would naturally expect providers to deliver the desired quality and raise the standard of services and goods offered. In contrast, a supplier could be hesitant to make significant quality investments if they believe that customers will ultimately profit. Buyers and suppliers will each focus only on their own interests as a result of their disputes. The fundamental tenet of the principal-agency theory is that the agent must have a clear grasp of the principal's demands and be able to adequately meet those needs. The underlying principle of the principal-agency theory is that there should be a clear understanding of the needs of the principal and ability of the agent to meet these needs competently. Principal must closely monitor agents' performance; create reward structure that reinforces desired performances (Marigat 2018).

The principal agency theory can proudly be applied to the current study with a case a company acting as a principal and a contractor or service provider or supplier acting as an agent. The theory became significant to the study as it highlights the needs for robust contracts requirements and specification as well as objectively process of monitoring contractor performances. When contractor requirements, contract management team roles and responsibilities and key performances indicators are well defined, the principal and agents will find it easily to meets needs of each other in efficient way resulting into timely execution of the contract in pre- determined performances level. The study used this model to help in assessing the factors that influence the contract management for procurement of service at TANROADS Arusha

2.3.2 Technology Acceptance Model (TAM)

Technology acceptance model was developed by Davis in 1986, it is the theory on information systems that explains how users come to accept and use technology.

Technology acceptance model has been the only one which has captured the most attention of the information systems community. However, these systems may be risky. It is therefore very critical that the systems are specified in an organizational preference and logic.

This theory is based on two assumptions; perceived usefulness of the system such as; improved performance, enhanced productivity, effectiveness and efficiency in operations etc. and perceived ease of use of the new system such as ease to learn, ease to use, ease to control and to remember. This theory brings an understanding that acceptance and use of new technology is the function of the users' feelings about the system and its perceived benefits (Rotich & Okello 2015)

On the basis of this theory, when TANROADS Arusha develops an IT based system that will help on service delivery, they need to incorporate in the system features that will be appealing to the user. The system should also be easy to use and avoid of complicated terminologies that may confuse the user. This theory is related to the study because the technology to be useful in an organization it must be perceived as useful and accepted by the organization. This is linked with the second objective which was to determine how technology adoption affects contract management for procurement of services at TANROADS Arusha.

2.4 Empirical Literature Reviews

2.4.1 Staff Competency and Contract Management

According to (Kibogo and Mwangangi 2014) discerns three important types of competencies at work which are functional competencies, learning competencies and career competencies. Functional

competencies defined as knowledge and skills necessary for employees' tasks and roles. It differs according to the industry and function. Learning competencies increasingly gain importance in the work environment since the rise of knowledge economy and growing need for flexibility make it important for employees to continue invest in their development. Career competencies are described as individual characteristics of unemployed that enable him or her to guide his or her functional and learning competencies in the right direction.

Ismail et al (2010) did an article on "impacts of workers" competency on their performances in Malaysian private service sectors. "The articles analyzed the impacts of workers' competency toward their performances in the private services sector. The analysis was based on a sample of 1136 workers who were either executive, managers or professionals from three services sub-sectors, namely, education, health, and information and communication technology (ICT) in Selangor, Federal Territory of Kuala Lumpur, Penang and Johor collected in 2014/2015. In the analysis Workers' Performance used to analyses factors determining workers' performance in the selected service sector. The result showed that workers competency has significantly influence towards workers' performance. Besides that, human capital and workers' characteristics also determined workers' performance in the services.

Pooworakulchai et al (2018) conducted the study on the factors which affect contract administration in Thailand government construction projects. The project management of the private sector was also studied and assessed alongside government methodologies. The research was conducted by using mixed methodologies, both quantitative and qualitative. The study concludes the factors that affect the government's project contract management are both public and private sectors internal influences. The problem is caused by personnel, documentation, and the work processes primarily occurring before the auction procedure. Construction management is in private sector control and

to be effective it must carry out the recognized project start-up protocols. The government contract administration should be managed using the PDC model, which should improve continuity and flexibility in both stages before bidding and construction.

Waigwa (2016) conducted the study sought to establish the factors influencing contract management in Public Security Agencies. The specific objectives of the study were: to assess the influence of policy framework guidance on contract management in the Public Security Agencies, to examine the effects of the service markets on contract management in Public Security Agencies, and to establish the influence of training and motivation of procurement personnel on contract management in the Public Security Agencies. The study reviewed related literature in contract management and relate it to the objectives of the study and the research questions. The study adopted a case study research design. The population of the study was employees working with the procurement department of the Kenya Police Service who are sixty seven in number. Census method was used as the sampling method where all the supply chain management officers were considered. Questionnaire and interview schedule were used to collect data. The quantitative data was coded and entered into Statistical Packages for Social Scientists (SPSS) Version 21.0 and analyzed using descriptive statistics where frequencies and percentages were computed and inferential statistics where Pearson's correlation analysis and multivariate linear regression were computed. Study results were presented in frequency and percentage tables and charts while the explanation to the same presented in prose. The findings of the study indicated that procurement policy framework guidelines are important for the success of the contracts in public agencies, however it had lowest effect compare to the other two factors. The study also established that enhanced service markets using tools such as ICT will enhance efficient contract management among the public agencies. The study further established that training and motivation correlated

significantly with the success of contract management meaning that employees need to have the skills and knowledge needed to make the contract management effective. The three factors had positive and statistically significant effect as explained by the correlation and regression results. This study concludes that effective management of contracts of whatever size and for whatever purpose is an essential requirement to all public sector agencies and for this to happen then the agencies must ensure an effective policy framework, a good service market with improved ICT facilities and effective training and motivation of the staff.

2.4.2 Technology Adoption and Contract Management

Technology adoption involves the use of computers, software and internet connections infrastructure for supporting information processing and communication function (Marigat, 2018). Technology refers to scientific knowledge used in practical ways in industry, for example in designing new machines (Oxford learner's dictionary 2017). Technology focuses on making things happen. With the amount and proficiencies of contract management software in the market, any company that takes inventory management genuinely should make use of package and/or software. Software allows for more competent storage, recovery and consignment of goods, as well as precisely interaction between shipper and buyer about when goods are required and what their position is at a given time (Wambui 2017).

Kibogo & Mwangangi (2014) conducted a study and the purpose was to establish factors affecting contract management in public procurement sector. The specific objectives of the study were to establish the effect of technology, management styles, relationship management, and employee competence on contract management in the public procurement sector in Kenya. The study adopted a descriptive research design which sought to establish factors associated with certain occurrences, outcomes, conditions or types of behavior. It also enabled the researcher to answer the questions

of how, who, where, why, what and which. The target population was 220 and stratified random technique was used to arrive at a sample size of 130. Questionnaires were used to collect Data which was analyzed both quantitatively and qualitatively. The findings showed that information technology, management styles and employee competence influences contract management in public procurement.

Premathilaka (2020) conducted a study on the critical success factors affecting e-procurement adoption in public sector organizations in Sri Lanka. The main objectives of the study are to assess the level of e-procurement usage in the public-sector in Sri Lanka, to identify the significant factors affecting the public-sector e-procurement adoption in Sri Lanka and to identify the barriers in adopting e-procurement in those organizations. The population of the study comprises of the national level public sector entities such as Ministries, Departments, Statutory Boards and Public Companies. A sample of 114 officers who involved in the procurement function was selected as key informants based on stratified random sampling method. 74 officers were responded for the study. Both qualitative and quantitative methods were utilized in this study. Quantitative data were collected through a structured questionnaire to identify the determinants of successful e-procurement adoption and the level of e-procurement usage. The qualitative data were collected through 10 interviews to identify barriers in e-procurement adoption. The study found that Relative Advantage, Compatibility, Complexity, Top Management support, Employee Knowledge and skills and Supplier Readiness are statistically significant (at $p < 0.01$) determinants of e-procurement adoption. These variables altogether explain 66.2% of variance in e-procurement in the public-sector organizations in Sri Lanka. Among them, Top Management Support and Employee Knowledge are the major determinants of the successful e-procurement adoption. Weak procurement guidelines, Weak Legal framework and ICT infrastructure, and Lack of IT knowledge

and experience of employees are the present barriers to e-procurement adoption in public sector organizations in Sri Lanka. Finally, policy recommendations for the e-procurement adoption are proposed.

Karungani (2015) conducted the study on supply chain technology adoption and large manufacturing firms' performances in Nairobi. The study based on the purpose of establishing the drivers of supply chain adoption, the level of supply chain and relationship between extent of supply chain technology adoption and performances of manufacturing organizations, the study adopted an exploratory research design. The target population comprised of all 656 manufacturing firms operating in Nairobi as listed in the KAM directory of the manufacturers and exporters 2013. Stratified sampling was applied to pick 66 respondents. The structured questionnaire was used to collect data. The quantitative data was analyzed using descriptive statistics. The study used simple linear regression to analyze the relationship between extent of supply chain technology adoption and performances of manufacturing organizations. From the findings, the study concluded that the supply chain technology as a tool did not only improve efficiencies and effectiveness of the operations but also acted as a competitive weapon to the organization strategy. The study further concluded that supply chain technology adoption improved communication and productivity between an organizations and suppliers and led to reduction in costs; it also increased the efficiency across the extended supply chain and enhanced network relationship. According to this perspective, organizations cannot expect IT alone to produce sustainable performances and/or competitive advantage. Rather, it is how organizations use their IT resources to exploit pre-existing complementary resources that enables or inhibits superior performances and competitive advantage (Karungani 2015).

2.4.3 Budgetary Allocation and Contract Management

Budgetary allocation is the amount of cash or budget an organization allocates or designated to each item of expenditure in financial plan. It designates the maximum amount of funding an organization is willing to spend on a given item or program. Budget is a financial plan used to estimate revenues and expenditures for a specific period of time. It is a management and planning tool, not just an accounting document, also it assists in the allocation of resources. Budgets are usually developed for 12-month period (Ryckman 2019).

Onduso (2013) conducted the study on the effect of budget of financial performance of manufacturing company in Nairobi. The study determined the effect of budget on financial performance of manufacturing companies in Nairobi County. The study used close- section research method targeting 18 manufacturing firms listed in the Nairobi Security Exchange by employing a census survey to cover all manufacturing firms within Nairobi County. A researcher uses both primary and secondary data. A statistical package for social sciences was used as analyzing tool and also regression model was used to determine the association between dependent and independent variable. The study finding revealed that there was strong positive effect of budget on financial performance on manufacturing companies has measured by return on assets.

Kimani (2014) did a study titled 'The effect of budgetary control on effectiveness of Non-Governmental Organisations in Kenya.' The study examined the budgetary control in Non-Governmental Organizations and its effects on their performance. The research target population consisted of 7,127 Non-Governmental Organizations. Thirty Non-Governmental Organizations were selected using convenience judgmental sampling technique, both local and international organizations with headquarters in Nairobi. A descriptive survey was used in the data collection.

The statistical package for social sciences version 17.0 was used to analyze the data using descriptive statistics, including means and the influence of budgetary allocations on effective procurement contract administration in public secondary schools in Mogotio sub county, The relationship between budgetary controls and performance of the NGOs was analyzed using correlation and regression analysis. The research findings established that there was a weak positive effect of budgetary control on performance of Non-Governmental Organizations in Kenya measured by R square at 14.3%. The research recommended that employees needed to be sensitized on budgetary controls and the effect on performance of the organization. It also recommended that other factors that influence performance apart from budgetary controls be investigated by organizations. It also suggested that further research be done on the same area but a larger sample be used, (Kimani 2014).

Koech (2015) a study titled 'The effect of budgetary controls on financial performance of manufacturing companies in Kenya.' The main objective of the study was to assess the effects of budgetary control on the financial performance of selected manufacturing companies in Kenya. A descriptive research design was used in this study. Stratified sampling technique was used. The respondents were head of the finance department or an equivalent. The sample size was 50 respondents. Both primary and secondary data were used. Descriptive analysis was used to mainly summarize the data collected. The results showed that there was a significant relationship between financial performance in manufacturing companies and the three variables (planning, monitoring and control and participative budgeting).

2.5 Research Gaps

The study reviewed different studies done by other scholars. A study on "effectiveness in contract management in Tanzania was done by (Marco 2013)." Specific included; to determine the factors

affecting management of contracts in public procurement for works, to study the governing contract management practices in public procurement works, to explore the understanding of Tanzania procurement laws in implementation of contract management to achieve value for money for social, economic and political development, to show the importance's of legal professionals towards effective contract management in public procurement for works. The study did not look at any of the variables looked in this study. The variables include staff competency, technology adoption and budgetary allocations. Furthermore, the study is based on public procurement works. On the contrary, this study is based on public procurement services.

A study conducted by (Wambui 2017) on "factors affecting contract management in acquisition of goods and services in Kenya a case of integrated Young Murray Rutherford (YMR)". The study was conducted in Kenya whereas this study was conducted in Tanzania. It did not look at public sector; it was based on private organization. Furthermore, the study did not look at budgetary allocation as a variable.

In their study on factors influencing management of procurement contracts in public security agencies. A case of Kenya police service (Waigwa and Njeru 2016). Used the following objectives: to assess the influence of policy framework on contract management in public security agencies, to examine the effect of the service markets on contract management in public security agencies and to establish the influence of training and motivation of procurement personnel on contract management in public security agency. The study was conducted in a public security agency, different from this study which considered TANROADS Arusha. But also, the variables looked at in this study were not looked at in the study of Waigwa and Njeru. The study conducted by Kanchana, Niranjana and Karthick on factors affecting contract management on construction industry. The study

was conducted India whereas this study was conducted in Tanzania. The study was based on construction industry, and the variables looked at in the study were not looked at in their study.

2.6 Conceptual Framework

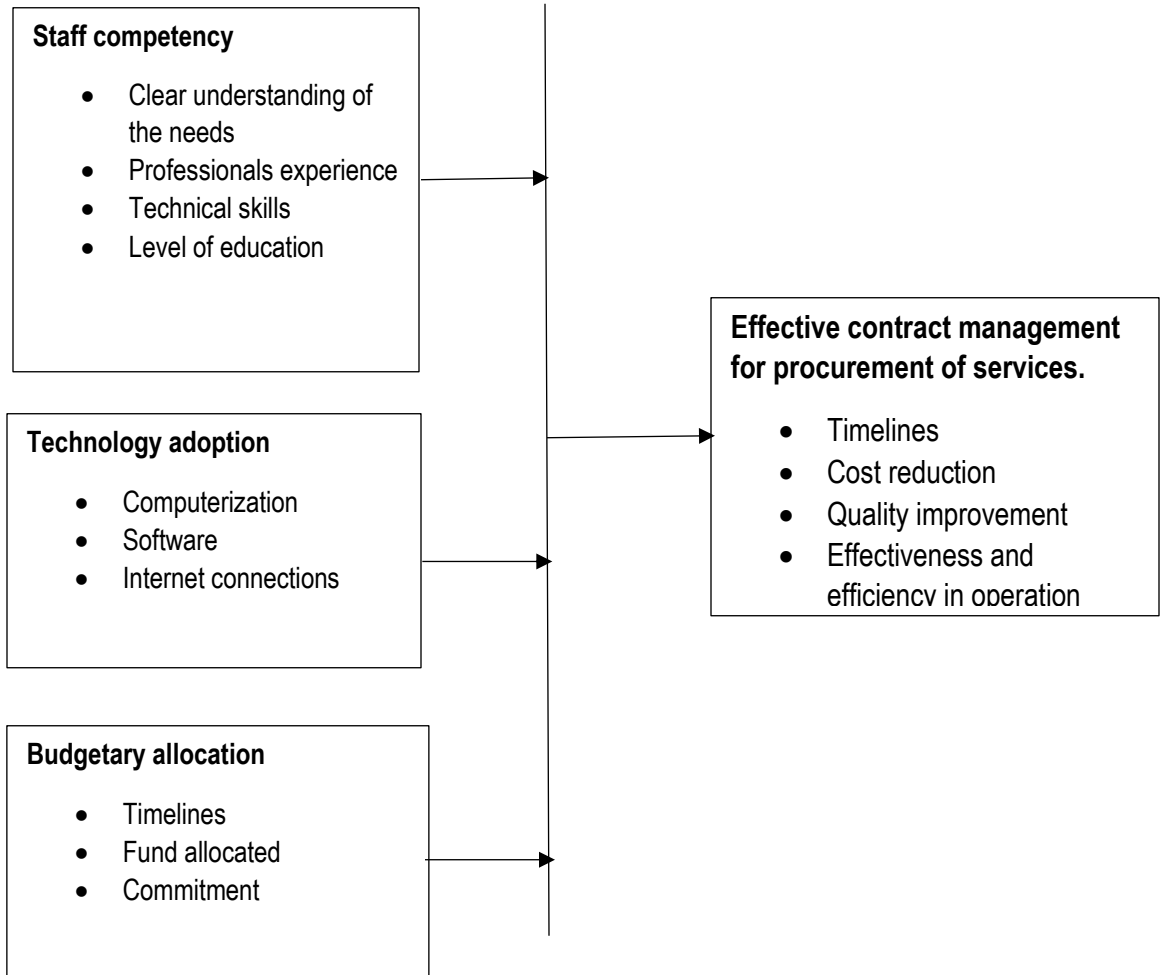
Conceptual framework is an analytical tool with several variation and context that show relationship between the dependent variables and independent variables. The study used three independent variables included: technology adoption, staff competency and budgetary allocation.

All these variables were analyzed with an intention of assessing how they affect contract management for procurement of services in public sectors at TANROADS Arusha. This is presented in figure 1

Figure 1 Conceptual framework

Independent Variables

Dependent Variable



Source: (Researcher 2021/ 2022)

Figure 1, shows the details of relationship of variables which are independent variables and dependent variables. Successful and effective contract management for procurement of services must meet timeliness, cost reduction, quality improvement, effectiveness and efficiency in operation. The term "timeliness" refers to the parties' mutually agreed-upon implementation timeframe, which is indicated in the contract form. Cost reduction is the entire amount of money that could be paid to the contractor if all of the conditions, clauses, and demands mentioned in the final agreement are fully satisfied. The capacity of a product to satisfy stated needs depends on its entire set of features and characteristics, which are referred to as quality improvement (Munyimi & Chari 2018). As a result, staff competency, technology adoption, and budgetary allocation were used as the independent factors to measure all of these indicators as dependent variables. It will be easier to manage contracts effectively for the purchase of services if employees or staff members are professionally trained, aware of legislation regarding procurement and related procedures, and ethical (Rendon 2010). The adoption of technology creates the possibility for enhanced collaboration and communication, for instance through the use of computers, software, and internet connections. Adopting new technology can enhance customer interactions as well as internal communications, creating a more streamlined environment for collaborative working. By having solid relationships with the parties completing the contract, this can lead to having good contract management for the procurement of services (Taherdoost 2018). Budget allocation in contract management can also assist in estimating and controlling contract expenses within approved budget limits as well as in achieving the specified objectives. By cutting needless expenditures and producing quality services, having adequate money at the correct moment can aid in contract management for the purchase of services (Osore 2019).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Chapter Overview

This chapter discussed the research methodology to be used in the study. It enhanced the procedures that are adopted in the research in a mission to find answers to the research questions. Specifically, it discussed the following; research philosophy, area of the research, sampling design and procedures, variables and measurement procedures, methods of data collection and processing analysis.

3.2 Area of Research

The client for the study was TANROADS in Arusha. TANROADS is an executive agency under the ministry of works, transport and communications, established under section 3(1) of the Executive Agencies Act (Cap 245) and came into operation in July, 2000. The main objectives of TANROADS are to develop, maintain, and manage the trunk and regional roads in an efficient manner for a sustainable and safe network, consistent with the poverty reduction strategy and other government policies.

3.3 Research Philosophy

3.3.1 Research Design

Research design refers to the arrangement of settings for gathering and evaluation of data in a way that aims to combine signifies to the research purpose. It is essentially through arrangement and structure of investigation (Wambui 2017). Since researcher's interest is to find the relationship between independent variable and dependent variables without manipulating them, the study

adopted descriptive research design. The descriptive research design seeks to establish the status of affairs without manipulating study variables (Marigat 2018)

3.3.2 Research Approach

This involves systematic empirical investigation quantitative properties and phenomena and their relationship, by asking a narrow question and collecting numerical data to analyze it utilizing statistical method. The study applied mixed research approach. The researcher used both quantitative and qualitative approaches. The quantitative approach, involves the generation of data in quantitative form which is rigorous quantitative analysis in formal and rigid fashion (Kothari 2004:5). Under the qualitative approach, the research was concerned with subjective assessment of attitudes, opinions and behavior (Kothari 2004:5).

3.3.3 Study Population

According to (Creswell 2012), population is defined as a group of individuals who have the same characters that distinguish them from other groups. The specification of the population to which the enquiry will be addressed affects decisions that researchers must make both about sampling and resources (Kothari, 2004). In Tanzania National Roads Agency (TANROADS) Arusha has population of 92 as a number of employees, in which a researcher intended to use the same as a targeted population. The expected populations to be surveyed are procurement unit, accounts and administration, maintenance and development and material laboratory unit.

3.3.4 Sample size and sampling procedures

A sample is a small portion of a target population. (Kothari 2015) explained Sample size is the number of elements pulled out from the population to generate a sample for a study from which vital data necessary to respond to the research questions are drawn. The size of the sample to be picked must be the most advantageous to guarantee the accomplishment of reliability, flexibility, efficiency,

as well as representativeness. In this study the researcher used census method for data collection since the population was not large and this ensured that a researcher got all relevant information about the population. Census method refers to the complete enumeration of the universe which may be a place, a group of people, or a specific locality

Table 3.1 Sample size Distribution

S/N	TYPE OF RESPONDENTS	SAMPL SIZE (N)	% OF SAMPLE SIZE
1.	Procurement unity	03	03.26
2.	Accounting and administration department	25	27.17
3.	Weighbridge unit	39	42.39
4.	Development and project unit	03	03.26
5	Planning unit	03	03.26
6	Engineering unit	12	13.04
7.	Laboratory unit	07	07.60
	TOTAL	92	100

Source: (HR information system, 2022)

3.4 Methods of Data Collection

Data collection is the process of gathering specific information aimed at providing some facts. The goal for all data collection is to capture quality evidence that allow analysis to lead to formulation of convincing and credible answers to the questions that have been posed (Marco 2013). This study used questionnaire and interview as the instruments for data collection. Hence primary and secondary data applied in this study.

3.4.1 Questionnaire

According to (Creswell 2012), a questionnaire is a technique for gathering data in which the respondents are given written and printed questions in a specific order, given the freedom to attempt the items on their own by writing, and given the opportunity to return the completed questions to the researcher. Researcher used this method of data collection because it enables collection of data from large number of people within a minimum period of time. Researcher gave brief overview on the purpose of the study and its significance to respondents. Thereafter, questionnaires were distributed to respondents to fill in their views on the questions asked and collected back after allowing them enough time to fill them. The researcher used this method because it is suitable where the sample size is large, it is free from biases, it offers greater assurance of anonymity, respondents have sufficient time to give good answers and thus the outcome could be made steadier and more consistent.

3.4.2: Interview

An interviewing guide was utilized to gather qualitative information that offers a thorough grasp of the variables influencing contract management for service procurement in the public sector. The collection of secondary data will involve the examination of relevant documents in general. An interview is a research tool for gathering data that involves both the researcher and the respondents. The researcher spoke with the respondents (management team) face-to-face and questioned each one of them separately to elicit information about the issue (Kothari and Garg, 2015). The researcher used structured interviews guide to ask questions that will enable to gather relevant information concerned with the study. The participants of the interviews were TANROADS

management staff, who provided in-depth information with regards to factors affecting contract management for procurement of services in public sector.

3.5 Data Analysis

The study had two types of data to be analyzed. The data were analyzed using Statistical Package for Social Sciences (SPSS) version 20 descriptively. Quantitative data were analyzed using descriptive statistics such as frequencies and percentages. Quantitative data were entered and coded on SPSS version 20. Qualitative data were analyzed using content analysis. Data were grouped into themes and analysed into categories accordingly. Direct quotations from respondents were used as justification to their answers. In presentation of findings, the researcher showed how the data from descriptive statistics and content analysis relates or not.

3.6 Validity and Reliability

3.6.1 Validity

Refers to the quality that an instrument (tool) used in research is accurate, correct, true, meaningful and right. Validity therefore implies that the researcher wants to obtain what is supposed to measure (Simon 2017). Researcher constructed a clear and understandable instrument to all respondents, so as to make it easy to communicate. The researcher looked for expert advice from at least two experienced researchers to endorse the items of the data collection instruments if they are suitable measures of the concepts being measured. Content validity were tested using assessing the quality of the items on the questionnaire and also by using Kaiser Meyer- Oklin (KMO) test.

3.6.2 Reliability

Refers to how consistent a research procedure or instrument it is. It is therefore meaning a degree of consistency demonstrated in a study. Hence reliability implies stability or dependability of an

instrument or procedure in order to obtain information. In this study, reliability was checked using calculating internal consistency that were measured by Cronbach's alpha statistic which is commonly used to determine the consistency of responses to the set of questions

3.7 Research Ethics Consideration

Observance of research ethics is an essential condition of any research study. This is because research studies are as a rule involve people and organizations that give data and information required for the study (Saunders et al 2012). Consequently, it is decisive to consider as well to observe anonymity, confidentiality and safety which are the three very important features of research ethics. Earlier to the start of data collection, the researcher asked for a research clearance letter from the Institute of Accountancy Arusha. Then, the researcher requested permission from the management of TANROADS Arusha to sanction data collection in their institution. Consent were also be requested from the individuals who participated in the study. The study did not involve data fabrication, data falsification as well as plagiarism and adhered to all conditions stipulated in the IAA dissertation guidelines

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Chapter Overview

This chapter examined the findings of the study and the study analysis related to them. The background information of the respondents and findings from the analysis based on the objectives of the study is also provided. The study sought to assess the factors affecting contract management for procurement of service in public sector.

4.2 Response Rate

The study based on factors affecting contract management for procurement of service a case study of TANROADS in Arusha region. From surveyed sample population of 92 respondents, questionnaires 92 were filled in and they were returned for analysis.

Table 4.1 Response Rate

Class	Respondents	Percentage (%)
Response	92	100
No response	00	00
Total	92	100

Source: (Field data 2021/2022)

4.3 General Information of Respondents

The respondents indicated their age during the time of the study, gender, length of time they have been involved in contract management and education level. All these were used to derive the respondents' general information.

4.3.1 Age of Respondents

The respondents were asked to indicate their age at the time the study was conducted and results were shown in table 4.2

Table 4.2 Distribution by Age of Respondents

Categories	Frequency	Percentage (%)
Between 18-20 years	10	11
21-30 years	18	20
31-40 years	40	43
41 years and above	24	26
Total	92	100

Source: (Field data, 2021/2022)

From the table above, respondents who had age from 41years and above were 26%. The respondents who had age between 31-40yrs were 43%. Respondents who had age between 21-30 years were 20% and respondents who had age between 18-20 years were 11%.

4.3.2 Gender of Respondents

The gender of respondents was also used to get their general information.

Table 2.3 Distribution by Gender of the Respondents

Categories	Frequency	Percentage (%)
Male	54	59
Female	38	41
Total	92	100

Source: (Field data, 2021/2022)

From table 4.3, it was found that out that 59% of respondents were male while 41% were female.

There is a relative gender balance. This indicated that there are more male employees than female at TANROADS.

4.3.3 Education Level of Respondents

The respondents were asked to indicate their highest level of education. Level was among certificates, diploma, bachelor degree, masters and PHD with results in table 4.4.

Table 4.4 Distribution by Education Level of Respondents

Categories	Frequency	Percentage (%)
Certificates	15	16
Diploma	27	30
Bachelor degree	34	37
Masters	12	13
PHD	4	4
Total	92	100

Source: (Field data, 2021/2022)

Most of the respondents (37%) indicated that they had a bachelor degree as their highest level of education. Respondents with a master’s degree as their highest level of education were 13% while 4% of the respondents had PHD and other 30% had diploma as their highest level of education and other respondents 16% had a certificate as their highest level of education. Knowing the respondents’ level of education is very important factor in measuring the respondents’ capacity and skills within the organization and his understanding to study contract management.

4.3.4 Time Respondents have been involved in Current Position

Table 4.5 Time respondents have been involved in the current position

Categories	Frequency	Percentage (%)
Less than 3 years	11	12
4-6 years	26	28
7-9 years	35	38
More than 9 years	20	22
Total	92	100

Source: (Field data, 2021/2022)

Respondents 22% indicated that they have been involved in the current position for more than 9 years. Respondents who have been involved in their position for 7-9 years were 38% and for 4-6 years were 28%. The least of respondents 12% indicated that they had been involved for less than 3 years. this implies that majority of respondents of TANROAD have long work experience in procurement for work and contract management. The finding therefore helped the researcher to

be sure that the respondents are experienced in contract management and could provide relevant information required for this study.

4.4. Test of Reliability and Validity

In order to determine if data collected are reliable and valid, researcher conducted validity and reliability test. Cronbach's alpha and KMO were used as a scale to measure reliability and validity of data collected respectively.

4.4.1 Reliability Test

In this study the results from the findings of Cronbach's Alpha was above 0.6 for all items, the coefficient are significant as shown in the table 4.6 below.

According to Leedy (2006) when Cronbach alpha is greater than 0.9 (>0.9) it means that the internal consistency reliability is excellent. When it is greater than 0.8 (>0.8) the reliability is good, while greater than 0.7 is accepted and greater than 0.6 is still acceptable. When it is 0.5 to 0.58 is poor and when it is less than 0.5, internal consistency in unacceptable.

The test yielded the Cronbach's Alpha of .890 for three items of objective one, .933 for four items of objective two and .965 for six items of objective three as shown in table 4.1. These results proved that the data collection tools were reliable. In Cronbach's Alpha in order to say the data is reliable, the reliability result should be above 0.7.

Table 4.6 Reliability Statistics

Variable	Cronbach Alpha	No. of items	Internal consistency
Objective one	0.890	3	Acceptable
Objective two	0.933	4	Acceptable
Objective three	0.965	6	Acceptable

Source: Field Data (2022)

4.4.2 Validity Test

Factor Analysis was used to assess the structural validity of the 5- Point Likert scale used. Factor Analysis is a technique used to find out and explore few unrelated and conceptually significant new variables (factors) by bringing together related variables. Before factor analysis method can be employed, Kaiser Meyer- Oklin (KMO) test should be conducted to test the sufficiency and adequacy of the data obtained and Barlett test should be conducted to test the normality of the distribution in the population (Pallant, 2005). The KMO tests whether partial correlations are small and whether the distribution is sufficient for factor analysis. The KMO value ranges from 0-1, it is interpreted as normal between 0.5 and 0.7, as good between 0.7 and 0.8, as very good between 0.8 and 0.9 and as perfect when it is over 0.9 (Field, 2005). After analyzing data collected on SPSS v.20 the result of KMO was 0.843. This implies that the results of this study were valid.

Table 4.7 KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.843
Bartlett's Test of Sphericity	Approx. Chi-Square	1.169
	Df	136
	Sig.	.000

Source: (Field Data 2022)

4.5 Staff Competency and Contract Management

4.5.1. Clear understanding of the needs

The descriptive results on Clear understanding of the needs are presented in table 4.8. Clear understanding of the needs had an impact on staff competency and Contract Management to a large extent. Results from the field show that majority of the respondents 45 (49%) strongly agree that clear understanding of the needs had an impact on staff competency and Contract Management to a great extent. Furthermore, 25 (27%) also agree with this statement, 19 (21%) of the respondents were neutral on whether Clear understanding of the needs had an impact on staff competency and Contract Management to a great extent or not. 5 (5%) of the respondents disagree with this statement Clear understanding of the needs had an impact on staff competency and Contract Management.

Results from the field indicated that staff competence as the level of excellence, skill, and quality of individuals of a certain profession, whereby employees must have necessary skills and knowledge to be able to undertake their assigned duties and responsibilities. It is very important to consider an individual's skills and knowledge when recruiting new employees. Employees therefore must be competent and preserve integrity and openness in their dealings in order to encourage and build

trust to people whom they serve. Having thorough knowledge of an organization’s mission and objectives, as well as performance metrics and guidelines, requires good qualification

Table 4.8 Clear understanding of the needs

Response	Frequency	Percent
Strongly agree	45	49
Agree	23	25
Neutral	19	21
Disagree	5	5
Total	92	100

Source: Field Data, (2022)

4.5.2 Professionals experience

In this sub variable, respondents in the field were requested to indicate the extent in which Professionals experience had an impact on staff competency and Contract Management.

Data from the field show that majority of the respondents strongly agreed that Professionals experience had an impact on staff competency and Contract Management and this was supported by 46 (50%) of the respondents. Furthermore, 25 (25%) also agreed with this statement that Professionals experience had an impact on staff competency and Contract Management, 12 (13%) were neutral on whether Professionals experience had an impact on staff competency and Contract Management or not. 7(8%) disagreed with this statement and also 2 (2%) strongly disagreed this statement that professionals experience had an impact on contract management. During the field, it was discovered that procurement as a profession calls for skills based on theoretical knowledge, prolonged training and education, competence based on tests and examinations, practicing and adherence to the professional code of ethics. Thus, an effective procurement system requires that

the procuring entity is staffed with procurement professionals, trained and recognized by the respective procurement professional body.

Table 4.9 Professionals experience

Response	Frequency	Percent
Strongly agree	46	50
Agree	25	27
Neutral	12	13
Disagree	7	8
Strongly disagree	2	2
Total	92	100

Source: Field Data, (2022)

4.5.3. Technical skills

The descriptive results on technical skills are presented in table 4.10. Technical skills experience had an impact on staff competency and Contract Management to a great extent. Results from the field show that majority of the respondents 51 (55%) agreed that technical skills had an impact on staff competency and Contract Management. Furthermore, 25 (27%) also strongly agreed with this statement that technical skills had an impact on staff competency and Contract Management, 13(14%) of the respondents were neutral on whether technical skills had an impact on staff competency and Contract Management to a great extent or not. 3 (3%) of the respondents disagreed with this statement that technical skills had an impact on staff competency and Contract Management.

It was revealed that lack of procurement skills and knowledge leads to corruption which ultimately impedes compliance of procurement rules and regulations in procuring entities and adversely

affects performance, therefore, the study revealed that staff competency is an essential factor to be considered by an organization during the contract management.

Table 4.10 Technical skills

Response	Frequency	Percent
Strongly agree	25	27
Agree	51	55
Neutral	13	14
Disagree	3	3
Total	92	100

Source: Field Data, (2022)

4.5.4 Level of education

In this sub variable, respondents in the field were required to show the extent in which level of education had an impact on staff competency and Contract Management. Majority of the respondents strongly agree that level of education had an impact on staff competency and Contract Management and this was supported by 47 (51%) of the respondents. 32 (35%) of the respondents also agreed with this statement that level of education had an impact on staff competency and Contract Management, 10 (11%) were neutral on whether level of education had an impact on staff competency and Contract Management or not. 3 (3%) disagreed with this statement.

From descriptive analysis the study exposed that the majority of employees have approved that their staffs are competent enough as a result of effective procurement contracts management performance, this simply indicated that staffs' commitment, experience, skills and being well trained have positive impact on procurement contracts management. This study aligns with that of Rendon (2010), which revealed that procurement staff should be well skilled based on hypothetical

information, continue workshops training and education, be committed and well-experienced, as it will enable effectively manage the procurements contracts. The interview of the respondents exposed that commitment of the staff is the key factor in influencing effective contract management which enable the organization to attain VFM.

Table 4.11 Level of education

Response	Frequency	Percent
Strongly agree	47	51
Agree	32	35
Neutral	10	11
Disagree	3	3
Total	92	100

Source: Field Data, (2022)

4.6 How technology adoption, affect contract management for procurement of services

The second research objective of this study was to establish how technology adoption, affect contract management for procurement of services. Using a five- point Likert scale, the study thought to know respondents' rate of agreements on various statements relating to the how technology adoption, affect contract management for procurement of services.

4.6.1 Computerization

In this sub variable, respondents in the field were required to shows the extent in which computerization as the technology adoption, affect contract management for procurement of services. Majority of the respondents strongly agree that computerization as the technology adoption, affect contract management for procurement of services and this was supported by 47

(51%) of the respondents. 29 (32%) of the respondents also agreed with this statement that the computerization technology adoption, affect contract management for procurement of services, 13 (14%) of the respondents were neutral on whether the computerization technology adoption, affect contract management for procurement of services or not. 3 (3%) disagreed with this statement.

Over the past years, the world has moved toward a more digital environment. Technology has become a crucial part of our life. This change is driven by the increasing technological demand of customers. Firms respond by changing the way of doing business. Firms adapt their business models, processes, structures, and increase technological investments, which leads to a decrease in costs and increase the firm's efficiency, even the way procurement contract are done today, technology cannot be left behind.

Applying digital technologies to the procurement function will enable strategic sourcing to become more predictive, transactional procurement to become more automated, supplier management to become more proactive, and procurement operations to become more intelligent” (Umbenhauer & Younger, 2018, p. 29). This defines the opportunities to fully deploy digital technologies in the purchasing department of a public organization.

Electronic procurement, also known as e-procurement or supplier exchange, is the process of requisitioning, ordering and purchasing goods and services online. It is a business-to-business process. For example, the use of e- contract management

Table 4.12 Computerization

Response	Frequency	Percent
Strongly agree	47	51
Agree	29	32
Neutral	13	14
Disagree	3	3
Total	92	100

Source: Field Data, (2022)

4.6.2. Software

Respondents in the field were required to show the extent in which software as the technology adoption, affect contract management for procurement of services. Majority of the respondents agreed that software as the technology adoption, affect contract management for procurement of services and this was supported by 54 (59%) of the respondents. 19 (21%) of the respondents also strongly agreed with this statement that the software as the technology adoption, affect contract management for procurement of services, 9 (10%) of the respondents were neutral on whether the software as the technology adoption, affect contract management for procurement of services or not. 10 (11%) disagreed with this statement.

It was discovered that, with software solutions for digital contract management integrated into your ERP system, you can manage all supplier contracts throughout their entire lifecycle in a clear and tamper-proof way. This way, compliance and cost risks can be significantly reduced and are easier to control.

Table 4.13 Software

Response	Frequency	Percent
Strongly agree	19	21
Agree	54	59
Neutral	9	10
Disagree	10	11
Total	92	100

Source: Field Data, (2022)

4.6.3. Internet connections

In this sub variable, respondents in the field were requested to elaborate if Internet connections as the technology adoption, affect contract management for procurement of services. Majority of the respondents strongly agreed that Internet connections as the technology adoption, affect contract management for procurement of services and this was supported by 57 (62%) of the respondents. 23 (25%) of the respondents also agreed with this statement that Internet connections as the technology adoption, affect contract management for procurement of services, 9 (10%) of the respondents were neutral on Internet connections as the technology adoption, affect contract management for procurement of services or not. 3 (3%) disagreed with this statement.

Table 4.14 Internet connections

Response	Frequency	Percent
Strongly agree	57	62
Agree	23	25
Neutral	9	10
Disagree	3	3
Total	92	100

Source: Field Data, (2022)

4.7 The extent at which budgetary allocations affects effective contract management for procurement of service

4.7.1. Timelines

The descriptive results on timelines are presented in table 4.15. Timelines budgetary allocations affects effective contract management for procurement of service to a large extent. Results from the field show that majority of the respondents 41 (45%) strongly agreed that timelines budgetary allocations affect effective contract management for procurement of service. Furthermore, 18 (20%) also agreed with this statement, 29 (32%) of the respondents were neutral on whether Timelines had an impact on budgetary allocations affects effective contract management for procurement of service or not. 4 (4%) of the respondents disagreed with this statement timelines had an impact on budgetary allocations affects effective contract management for procurement of service.

An essential part of contract management is identifying the critical path. The critical path is the sequence of activities, which add up to the shortest time possible to complete the contract. Identifying the activities, the sequencing and other dependencies, and estimating times for completion

Table 4.15 Timelines

Response	Frequency	Percent
Strongly agree	41	45
Agree	18	20
Neutral	29	32
Disagree	4	4
Total	92	100

Source: Field Data, (2022)

4.7.2 Management commitment

In this sub variable, respondents in the field were requested to indicate the extent in which management commitment affects effective contract management for procurement of service to a large extent. Data from the field show that majority of the respondents agreed that management commitment affects effective contract management for procurement of service and this was supported by 56 (61%) of the respondents. Furthermore, 23 (25%) also strongly agreed with this statement that management commitment affects effective contract management for procurement of service 11 (12%) were neutral on whether management commitment affects effective contract management for procurement of service or not. 2 (2%) strongly disagreed with this statement.

Table 4.16 Management Commitment

Response	Frequency	Percent
Strongly agree	23	25
Agree	56	61
Neutral	11	12
Strongly disagree	2	2
Total	92	100

Source: Field Data, (2022)

4.7.3. Fund allocated

The descriptive results on technical skills are presented in table 4.17. Fund allocated affects effective contract management for procurement of service to a great extent. Results from the field show that majority of the respondents 41 (44%) strongly agreed that fund allocated affects effective contract management for procurement of service. Furthermore, 29 (32%) also agreed with this statement fund allocated affects effective contract management for procurement of service, 20 (22%) of the respondents were neutral on whether fund allocated affects effective contract management for procurement of service to a great extent or not. 2 (2%) of the respondents disagreed with this statement that Fund allocated affects effective contract management for procurement of service.

Table 4.17 Fund allocated

Response	Frequency	Percent
Strongly agree	41	44
Agree	29	32
Neutral	20	22
Disagree	2	2
Total	92	100

Source: Field Data, (2022)

4.8 Content Analysis Findings of Interview Data

The study collected qualitative data using interviews. The data were collected from procurement and legal officers. The data were analyzed using qualitative content analysis.

4.8.1 Interview Question one: Does the formal training influence contract management?

In the interview, one of the interviewees said;

There is a need for contract managers to receive formal training when entering in their contract management, the aim is to ensure that both individual and employer take responsibility to ensure that the contract manager has the skills required to effectively lead the contract.

Companies need to be ensuring that there is no skills and knowledge gaps and working with procurement professionals to develop training plans where necessary. He said individuals need to recognize what skills were needed to do the job and those that are starting in first-time contract

manager roles should seek guidance from experienced professionals, either directly within the organization.

4.8.2 Interview Question two: Does a good contract help to achieve value for money?

In the interview, one of respondent said;

The central aim of contract management is to obtain the services as agreed in the contract and achieve value for money. As a result, developing and managing contracts is a skill required by public sector entities in the management of the majority, if not all, programmes. He added that, public sector procurement is one of the significant sectors in Tanzania which has a large impact in the country's economic development. The underlying objective is to obtain value for money to the government procurement by ensuring that public funds are spent in a transparent, efficient and fair manner

4.8.3 Interview Question three: Do contract management techniques are well implemented?

Another interviewee had the opinion that;

Despite that all public organizations apply contract management techniques in order to enhance procurement of services by ensuring suppliers or contractors fulfill their contractual requirements on time, with agreed quality and quantity, but a number of obstacles are observed in contract management process. Some of the public institutions fail to achieve the objectives established during procurement of works due to existence of factors impeding contract management

4.8.4 Interview Question four: Do Contract management team have enough skill to manage contract?

In the interview, one of respondent said;

Contract management team refers to a group of staff responsible for administering the procurement contract. The effective contract management team contributes to facilitates proper procurement management and reduces complains associated with contract management. He added that, Contract management team as the group of people responsible for managing procurement contracts in the organization are highly skilled employee who facilitates to increase the effectiveness of contract management team

4.8.5 Interview Question five: Does the Procurement contract management be an instrument in managing contract?

In the interview, one of respondent said;

Procurement contract management is an instrument used by the government to provide essential public services and projects to the citizens. These projects range from buildings, roads, harbors, airports, bridges, highways, subways, railroads, power lines, pipelines, underground structures, water treatment and distribution. However, in the context of procurement, these projects are delivered through efficient contract management by procuring organizations

She added that, although some countries in Africa have made a great step in reforming their procurement system, however, the aspect of contract management has not been well implemented to yield best results in terms of value for money

4.8.6 Interview Question six: Does the procurement contract management affect by competent staffs?

In the interview, one of respondent said;

The increasing importance of procurement contract management for enhancement of public

procurement performance suggests that PEs should employ competent staff to manage procurement contract. He added that, in many PEs in Tanzania contract management performance is poor due to the reason of insufficient and under skilled staff in procurement unit. As a result, the enacted procurement laws, rules, regulations and procedures are not appropriately applied.

Another interviewee had the opinion that;

The Government of Tanzania has done several efforts to curb the incompetence in order to ensure effective contract management in public procurement entities through the Procurement and Supplies Professionals and Technicians Board (PSPTB), which is responsible for expansion and training of procurement professionals in respect of their professional conduct

4.8.7 Interview Question seven: Are there any controls in procurements contracts?

In the interview, one of respondent said;

Liquidated damages are an amount of money, agreed upon by the parties at the time of the contract signing that establishes the damage / compensations that can be recovered in the event a party breaches the contract. The amount is supposed to reflect the best estimate of actual damages when the parties sign the contract

This control in the project helps the client/ buyer to impose penalties to the contractor when they fail to complete the project within the intended/ agreed time by charging them a certain percent during effecting their payment.

REG.2013, 242 (2) Where receipt of goods is delayed, or is likely to be delayed beyond the time for delivery prescribed in the contract, the procuring entity shall seek reports and explanations from the

suppliers or their agents and may institute liquidated damages as may be provided for in the contract.

4.9 Discussion of Findings

This part provides the discussion of the findings. The discussion related the findings presented in chapter four and those from past studies.

Wambui, (2017), described staff competence as the level of excellence, skill, and quality of individuals of a certain profession, whereby employees must have necessary skills and knowledge to be able to undertake their assigned duties and responsibilities. It is very important to consider an individual's skills and knowledge when recruiting new employees. Employees therefore must be competent and preserve integrity and openness in their dealings in order to encourage and build trust to people whom they serve. According to Baily et al., (2008), having thorough knowledge of an organization's mission and objectives, as well as performance metrics and guidelines, requires good qualification.

Lyson and Farrington (2012) assert that procurement as a profession calls for skills based on theoretical knowledge, prolonged training and education, competence based on tests and examinations, practicing and adherence to the professional code of ethics. Thus, an effective procurement system requires that the procuring entity is staffed with procurement professionals, trained and recognized by the respective procurement professional body (Lowe,2013).

According to Cotula and Lorenzo (2007), staff competency provides a documentation guide that depicts behavioral changes among employees within an organization. Thus, competency is employed to uncover employee requirements not only within the organization but also outside the organization. In addition, staff competence experienced in organizations is viewed in different scenarios the moment an employee takes action upon an initiative. In dare situations, employees

in many organizations react based on past behavior they have found instituted. Thus, competent employees interpret situations with an aim of formulating possible reaction to take. This should be based on the context of how they have been trained to react to emergency cases.

Gilbert (2003) asserts that competence entails knowledge, skills and abilities that form an employee's attribute of job specification. It also shows specific qualities correlated with competent job performance used to measure employee performance. Moreover, it can be used to recruit and develop employees in the long run. This shows that competency is a model employed to all staff within an organization at various departmental positions. Also, it is the most effective way of meeting critical and competent standards within the human resource management system. An organizations core competency differentiates its market share from other companies to gain a competitive edge in the market place. This is mainly viewed as a strategic strength. Thus, organizations are in a perfect position to define behavioral pattern to yield profitable results based on an organizations desire. By incorporating competencies, employees are capable of knowing what areas to focus on to remain productive and competent. As a result, organizations will have a clear picture on possible effective tactics to improve and develop employee competency plan (Argawal 2010)

Stein (2009) stated that the method of proficiency progress is a lifetime sequence of undertaking. As skills apply to occupations, permanent competence growth is linked to individual growth as a management theory. To add on this, it requires a distinct atmosphere, where the guidelines are essential in order to bring together novices. However, individuals at a more progressive stage of proficiency will methodically violate the procedures if the conditions require it. This atmosphere is defined using terms such as learning, information establishment, organizing and enablement. In specific organization or professional communities, professional skills, are more often than not valued. Similar skills must be verified in a job interview. Nonetheless, nowadays there is different

ways of looking at things: that is, there are broad areas of work-related abilities required to hold a post, or get a promotion. For all organizations and groups there is a set of duties that capable people have to provide to all the time.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Chapter Overview

In this last chapter, the conclusion, recommendations as well as critical evaluation of the study on the factors affecting contract management for procurement of services in public sector using TANROADS Arusha as a study case were presented.

5.2 Conclusion

From the above discussion, it can be deduced that Staff Competency had an influence on Contract Management. It means for effective procurement contracts management performance, staffs' commitment, experience, skills and being well trained have positive impact on procurement contracts management. This study is consistent with that of Rendon (2010), who found that procurement employees should be well-skilled based on fictitious information, continuing workshops training and education, be committed and well-experienced, as it will enable effectively manage the procurement contracts. The respondents' interview revealed that the staff's dedication is the primary influence on efficient contract management, which enables the business to achieve VFM.

In the second objective, the study concluded that technology adoption, affect contract management for procurement of services. The study concludes that applying digital technologies to the procurement function will enable strategic sourcing to become more predictive, transactional procurement to become more automated, supplier management to become more proactive, and procurement operations to become more intelligent.

In the last objective, the study concluded budgetary allocations affects effective contract management for procurement of service. This was witnessed through timelines, which management commitment and fund allocated.

5.3 Recommendations

5.3.1 Regular training on procurement contract management

There should be regular training on procurement contract management to the public staff. Public sector should ensure that their employees are well trained and educated on procurement contract management issues as it will enable the organization to have employees who will formulate and execute procurement contracts effectively and enable the organization to improve its procurement performance

5.3.2 Staff competency and contract management

The study recommended that staff knowledge levels and technical skills of staffs enhance efficiency and effectiveness in contract management. Various measures need to be kept in place to ensure employee competency is provided in running and survival of TANROADS Arusha. The management of TANROADS Arusha should ensure that the employees have knowledge in staff competency required to carry out the contract management procedures.

5.3.3 Technology Adoption and Contract Management

In respect to technology adoption, there should be use of technology on contract management policy that will increase knowledge to the organization and widespread management of their organizational goals in the firms. The management of technology is an area of business where substantial improvements and cost savings can be made and may require a specialist to deal with contract management policy. The study recommended that TANROADS officials should emphasis

the use of computerization of contract management activities, use of procurement software and use of internet connections for the communication and collaboration with contractors so as to enhance better contract management

5.3.4 Budgetary Allocation and Contract Management

Budgetary allocation included in the organization management knowing the funds available for each period to enhance savings. The study recommended that TANROADS Arusha should know exactly the available funds for each period of time so as to ensure savings. But also considering time committed in budget preparation so as to enhance better contract management.

5.4 Suggestion for Further Study

Based on findings drawn from this study there should be a sequence after a while to find out if there are any changes that have occurred and a comparison with this data may be done to measure the extent of change or otherwise. A replicate study may be carried out in other areas of contract management.

5.5 Critical evaluation of the study

It was not an easy task to complete the study on the assessment of factors affecting contract management of procurement of services in public sectors using TANROADS Arusha. The researcher had a great time to enjoy and equip herself with experience and skills of undertaking a research project. Theories being turned into practice were the best moment the researcher had experienced. On the other hand, despite the new experience achieved, the researcher encountered several challenges the most challenging part of the study was on data collection within the shortest time as per the given schedule by the IAA. However, this challenging part was passed successful through use of internet and social network which facilitated timely collection of

data. Then came the second challenge of organizing the data, cleaning, analysing and interpreting. But through enthusiastic and eagerness to learn, the challenge was also conquered successful.

REFERENCES

- Aluonzi, G., Oluka, P. N., & Nduhura, A. (2016). Contract management and performances of road maintenance project. Research report. A case of Arua municipality. International academic journal of procurement and supply chain management.
- Arrowsmith S (2014) Law of public and utilities procurement 3rd edition. Sweet & Maxwell, United Kingdom
- CAG (2019). The Annual report on the Audit of The Central Government for The Financial Year Ended 30 June 2019. Dodoma: National Audit Office
- CAG. (2021). The Annual Report on The Audit of The Central Government for The Financial Year Ended 30 June 2021. Dodoma: National Audit Office
- Creswell, J. W. (2013). Educational Research: Planning, conducting and evaluating quantitative and qualitative Research (4th Ed). Pearson Education Inc: Boston.
- Creswell, J. W. (2018). Research Design: Qualitative, Quantitative and Mixed Method Approaches (5thed.). Thousand Oaks, CA: Sage
- Elsevier (2017) International Journal of project management, Association for project management, United Kingdom
- Gordon R (2017) Transparency International the global coalition against corruption. Berlin Germany.
- Ifrah A. M., Kerosi E., And Ondabu I. T (2015). Analysis Of The Effectiveness Of Budgetary Control Techniques On Organizational Performance At Dara-Salaam Bank Headquarters In

Hargeisa Somaliland. International Journal Of Business Management And Economic Research (IJBMER), 6(6),2015,327-340.

Ismail R and Abidin S, Z (2010). Impact of workers' competence on their performances in the Malaysian private service sector. Business and economic horizons.

Jela E. O (2013). Supply chain technology adoption and large manufacturing firms 'performances in Nairobi, unpublished MBA project, University of Nairobi Kenya.

Kanchana S, Niranjana V, and Karthick G, A (2018). A study on factors affecting contract management in construction industry.

Karungani W, P (2015). Effect of procurement contracts determinants on organizational performances. Research report. A case of Nairobi County

Kibogo A, D and Mwangangi, M (2014). Factors affecting contract management of public procurement sector in Kenya. Research report. A case of Kenya literature bureau. Emerald journal of business management.

Kipkemoi, E. and Gacuiru, J., 2018. The Influence of Budgetary Allocations On Effective Procurement Contract Administration In Public Secondary Schools In Mogotio Sub County, Kenya. International Journal of Business Management and Processes (ISSN 2616-3209), 2(3), pp.9-9.

Kothari C. R. (2010) Research Methodology 2nd Edition New Delhi; Pertinence Hall.

Kulundu, L.(2014). Challenges of Procurement Strategy Implementation among Road Agencies in Kenya. International Journal of Business, Humanities and Technology.

- Marco S (2013). Effectiveness in contract management in Tanzania. Research report. A case of tanroads. Unpublished Msc. PCM dissertation of Mzumbe university, Tanzania.
- Marigat E, K (2018). Determinants of effective contract administration in public secondary schools in Mogotio sub-county Kenya. Emerald journal of business and management.
- Mauki, R. (2014). The Regions Perspective of the Factors Influencing the Implementation of Public Procurement and Disposal ACT in Kenyan Judiciary. Journal of Management Research
- Munyimi, T.F., 2019. The role of procurement quality controls in procurement performance in the energy sector in Zimbabwe. *Cogent Engineering*, 6(1), p.1631563.
- Nguyeni, P (2013). *Contract lifecycle management on the sell-side, a case study in upstream oil and gas industry*, Thesis, Lahit University of Applied Sciences.
- Onduso, E. (2013). The Effects of Budget on Financial Performances of Manufacturing Companies in Nairobi County. Unpublished MSC in Finance project, University of Nairobi, Kenya.
- Oxford learners dictionary, 2017
- PPRA. (2019). Annual Performance Evaluation Report for Financial Year 2018-19. Dodoma: Public Procurement Regulatory Authority
- Premathilaka, K.M. and Fernando, R.L.S., 2020. Critical success factors affecting e-procurement adoption in public sector organizations in Sri Lanka.
- Rotich, G. K., & Okello, B. (2015). Analysis of Use of E-Procurement on Performance of Procurement Functions in County Governments in Kenya. (1381-1398, Ed.)
- Simon, J (2017). The factors affecting delays in road construction projects in Tanzania. A case of TANROAD Dar Es Salaam city.

Waigwa, M, W &Njeru, A (2016). Factors influencing management of procurement contracts in public security agencies. Research report. A case of Kenya police service. Emerald journal of procurement and supply management.

Wambui N, P (2017). Factors affecting contract management in acquisition of goods and services. Research report. A case study of Integrated YMR Partnership

APPENDIX I: QUESTIONNAIRE

Please put a tick against the information most applicable to you. Fill your answer or comment in the blank spaces provided. Tick inside the box provided where necessary and for explanation please is brief. The response you provide will be strictly confidential and highly appreciated.

SECTION A: General Information

1. Gender

Male ()

Female ()

2. Age Bracket

Between 18-20 years ()

21-30 years ()

31-40 years ()

41 years and above ()

3. Highest level of education

PhD ()

Masters ()

Bachelors ()

Diploma ()

Certificate ()

4. How long you have worked in the current position

Less than 3 years ()

4-6 years ()

7-9 years ()

More than 9 years ()

SECTION B: Staff Competency

5. Does staff competency affect contract management in organization in TANROADS Arusha?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

6. Clearly understanding of the needs can affect contract management in public sectors in
TANROADS Arusha?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

7. Do staffs who are knowledgeable, right education and with technical skills do things efficiently and effectively, hence improving procurement contract management?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

SECTION C: Technology Adoption

8. Do technology affect contract management in your organization to a high extent?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

9. Does computerization of procurement contract management activities increase effectiveness and speed of doing things, hence improving procurement contract management?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

10. Does procurement software help to improve procurement contract management by reducing costs and increase productivity?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

11. Does an internet connection help to improve communication and collaboration more effectively with contractors at a cost-effective manner, hence saving time?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

SECTION D: Budgetary Allocation

12. Does contribution of budgetary allocation affect positively toward the contract management in your organizations?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

13. Does it become much easier to save money when you know exactly how much you have available in each period?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

14. Does cost estimation effects positively the contract management of procurement services?

Strongly agree ()

Agree ()

Neutral ()

Disagree ()

Strongly disagree ()

INTERVIEW QUESTIONS

1. Does formal training influence contract management?
2. Does good contract help to achieve value for money?
3. Does contract management techniques are well implemented?
4. Does Contract management team have enough skill to manage contract?
5. Does the Procurement contract management be an instrument in managing contract?
6. Does the procurement contract management affect by competent staffs?
7. Are there any controls in procurements contracts?