MOSHI CO-OPERATIVE UNIVERSITY

FACTORS AFFECTING IMPLEMENTATION OF PROCUREMENT
FRAMEWORK AGREEMENTS FOR COMMONLY USED ITEMS IN
SELECTED LOCAL GOVERNMENT AUTHORITIES IN
NORTHERN ZONE'S, TANZANIA

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FACTORS AFFECTING IMPLEMENTATION OF PROCUREMENT FRAMEWORK AGREEMENTS FOR COMMONLY USED ITEMS IN SELECTED LOCAL GOVERNMENT AUTHORITIES IN NORTHERN ZONE'S, TANZANIA

BY

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DISSERTATION SUBMITTED IN PARTIAL FULFILMENT FOR THE REQUIREMENT OF AWARD OF DEGREE OF MASTER OF ARTS IN PROCUREMENT AND SUPPLY MANAGEMENT OF MOSHI CO-OPERATIVE UNIVERSITY

NOVEMBER, 2022

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I, **ELIA MWALWEBE,** declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other higher learning Institution for a similar or any other academic award.

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Moshi Co-operative University a research report entitled, **"Factors Affecting Implementation of Procurement Framework Agreements for Commonly Used Items in the Selected Local Government Authorities in Northern Zone's, Tanzania"** in partial fulfilment of the requirements for the award of Master of Procurement and Supply Management of Moshi Co-operative University.

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ACKNOWLEDGEMENT

I would like to thank Almighty God for his continuous protection, guidance and love to me, especially throughout the academic journey. My heartfelt thanks go to individuals and institutions that supported this work.

I would like to acknowledge and grant special appreciation to my Research supervisors Dr. Isaac Kazungu and Dr. Nathaniel Towo for their guidance, enormous knowledge, constructive ideas and criticism, time and support that made it possible to accomplish my dissertation. Thank you, may God bless you.

I am also grateful to my family, Mr and Mrs Issack Mwalwebe and my brothers who gave me comfort and spending various resources like money, materials, time and moral support for making the research to be done in a conductive environment

Also, I am thankful to all six Local Government's Authorities and regional officers for incredible help during the research process.

Finally, I thank those who contributed directly or indirectly to this research study and spared their time and knowledge to offer their help. May the Almighty God bless you all.

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LIST OF ABBREVIATIONS

CAG   :   Controller and Auditor General

CUIS   :   Commonly Used Items

DFES :   Department for Education and Skills

EU   :   European Union

FAs   :   Framework Agreements

 GDP   :   Gross Domestic Product

GN   :   Governments Notice

GPSA :   Government Procurement Services Agent

LGAs :   Local Government Authorities

MCAR: Missing Completely at Random

OECD :   Organisation for Economic Co-operation and Development

PMU   :   Procurement Management Unit

PPA   :   Public Procurement Act

PPPDS: Public Procurement and Property Disposal Service

PPRA :   Public Procurement Regulatory Authority

RFQ   :   Request for Quotations

SEM   :   Structural Equation Modelling

TANePS: Tanzania National Electronic Procurement System

TZS   :   Tanzanian Shillings
UK   :   United Kingdom

ABSTRACT

In Tanzania Framework Agreements are used mostly for Procurements of CUIS and it is mandatory for Government institutions to procure CUIS from approved suppliers but some of LGAs procure CUIS from unapproved suppliers. Previous research did not fully address Factors Affecting the Implementation of Procurement Framework Agreements for Commonly Used Items in the Selected Northern Zone Local Government Authorities. This study analysed supplier performance, information exchange mechanism, employee's competency, and Public Procurement Legal Frameworks compliance. The study adopted cross-sectional research designs. Simple random and purposive sampling techniques were used to collect data from 233 respondents. Data were analysed using descriptive statistics and Structural Equation Modelling. The study findings revealed that supplier performance influence on the implementation of framework agreements (deliver goods on time, local purchase order, right quality, right quantity, provide corrective action, and technical support) has significant influence on implementation of framework agreements at P=0.001<0.05; information exchange mechanism (information exchange between Pe and supplier, absence of technological adaptation, adaptation of information exchange mechanism, adjustment of new technology, use of TANePS, and supplier participation on TANePS) has significant influence on implementation of framework agreements at P=0.000<0.05; employee competency (staff awareness, knowledge, skills, training and support respectively) has significant influence on implementation of framework agreements at P=0.000<0.05; and Public Procurement Legal Frameworks has significant influence on implementation of framework agreements at P=0.000<0.05. The study concluded that there is still a problem on supplier performance, information exchange mechanism, and employee competency. The study recommended that PPRA should allow the PE to come together with GPSA to form a cluster to discuss with their supplier, also on the Information exchange mechanism PPRA should provide training programs based on and to provide training to staff and suppliers on FA.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The procurement functions have consistently gained popularity amongst various organisations, both in the public and private sector, across the world. In the private sector procurement is viewed as a strategic function whose aim is the improvement of the organisation's profitability (Larsson, 2008). Public procurement is a notable part of the world economy as it accounts for 15% to 20% of global Gross Domestic Product (GDP) and 29% of total government expenditure across the Organization for Economic Co-operation and Development (OECD) countries (Flynn, 2018).

The framework agreement is an arrangement that establishes the contractual terms which will apply to subsequent orders made for the goods, services or works covered by the framework over the period of time it is in force (EU Directives, 2014). Framework Agreements (FAs) are a joint feature of many public procurement government's, FAs award tens of billions of dollars' worth of contracts annually around the globe and constitute a steadily increasing fraction of government's' procurement processes (European Commission, 2018). For example, FAs were awarded €85 billion in 2010 in the European Union only, accounting for 17% of the total value of all contracts awarded, and their use has increased in the European Union (EU) at an average rate of 18% since 2006 (Bednárová, 2021).

In 2004 for the first time, the public sector directive introduced into the European Union public procurement law covered the setting up and running of Framework Agreements by contracting authorities (Andrecka, 2017). Prior to 2014 the directives have provided regulations for using the Framework Agreement. Some European Union (EU) member states used framework-type arrangements, for example, France, Sweden and the United Kingdom (UK) (Graells, 2015). These members were permissible within the existing provision of the public sector. Other member states had little or no use of framework-type-arrangement (EU Directives, 2014).

Sub-Saharan countries introduced the systems for managing goods and services used in more than one procuring entity under the framework agreements to increase effectiveness and efficiencies of delivering services and goods for economic growth, However, achieving value for money becomes a big challenge (Aduamah, 2018).

Framework agreement is a basic agreement with suppliers which set out terms and conditions that allow public bodies to order goods or services throughout the terms of agreement under the terms and conditions specified under that framework agreement (Public Procurement and property administration Agency, 2011).

South African government developing FAs that municipalities can adopt for the procurement of key infrastructures. Also, the Municipal infrastructure support Agency (MISA) releases an expression of interest for FAs that will cover across twenty regions in South Africa (Creamer, 2016). The increasing adoption of FAs is credited to the potentials of the approach in addressing the key failings of short-term and fragmentation of the production team and processes of traditional contracting practices in response to the challenges of complexities and uncertainties in construction (Ayegba at all, 2020). The rationale for adopting the framework was to achieve economy of scale, accelerate purchases, and ensure effective information exchange between the stakeholders in the procurement of commonly used items adoption of framework was to achieve economy of scale, accelerate purchases, and ensuring effectively information exchange between the stakeholders in procurement of commonly used items, (Creamer, 2016).

Tanzania as one of Sub-Saharan countries established a framework agreement for the common use items and services which are procured by procuring entities through Government Procurement Services Agent (GPSA), The Agency is mandated to monitor the framework agreements in Tanzania Mainland (GPSA, 2021). Every year, GPSA invites suppliers and service providers under National Competitive Bidding to submit their relevant requirements for registration such as business registration, TIN number and other (Bryson, 2018). Tenderers shall, in order to participate in procurement proceedings, have to qualify by meeting appropriate criteria set out in accordance with this Act and Regulations whereby, Local tenderers wishing to participate in any procurement proceeding shall satisfy all relevant requirements for registration with appropriate statutory bodies in Tanzania (Public Procurement Regulatory Authority, (PPRA)2013; amendment PPRA, 2016).

The suppliers and service providers are awarded the contract in a region basis to allow procuring entities to select a supplier who is geographical locations near to buyer, the system of framework agreements involves economic operators who supply goods and services and public procuring entities that place call-off order for goods and services

from economic operators (PPRA, 2013). In Tanzania, the Framework Agreement Information exchange mechanism is elaborated in public procurement through information technology in public and in framework agreement there are system introduced by GPSA which is known as GPSA PMIS (GPSA, 2022), where by GPSA provided information which users of the system allow to access the name of the suppliers or service providers, addresses of awardees, framework agreement numbers, procurement reference number, service item to be procured and specifications or statement of requirements.

In 2018 PPRA introduced Tanzania National Electronic Procurement System (TANePS), which is a full-fledged e-procurement system that supports the entire public procurement circle from planning to contract management. It is based on the public procurement laws, particularly Part XI of the Government Notice (GN) No. 446, which provides regulations governing procedures for electronic procurement, PPRA (2022). Accordingly, and in line with Regulation 343 of GN No 446, the system comprises the following major features: User registrations; e-Tendering; e-Purchasing; e-Payment and e-Contract management. TANePS used in procuring entities on procurement of common use items, medicines and medical supplies, consistent with Regulation 342(1) of GN No. 446, whereas the system is also now open for registration of suppliers of goods and services, especially those interested in framework agreements, PPRA (2022).

Alto (2019), revealed that suppliers in framework agreement deliver goods on time upon the local purchase order and the capacity of the supplier to deliver all the requested goods at a time is in doubt during the execution of the framework agreement contract. Brayson (2018) revealed that procuring entities and suppliers did not comply with the terms and conditions of framework agreements, lack of a standard for common use items, and absence of supplier rating affect the effective implementation of Framework Agreements.

During a PPRA workshop in 2014, participants claimed that suppliers and service providers awarded framework agreements do not have enough capacity to supply quality goods, and even the prices are not well controlled (PPRA, 2014). Therefore, implementing a framework agreement on procuring entities is still a problem, especially on local government authority. The problem still exists and increased as stated by the CAG report of the financial year 2019/2020 where by the procurement of

goods and services from un approved supplier increased from TZS 4,353,203,757 in the financial year 2018/19 to TZS 5,130,195,752 in the financial year 2019/20. Due to this fact, the researcher thought that it is time to assess the factor affecting the implementation of a framework agreement on local government authorities.

1.2 Statement of the Problem

Public Procurement Act No. 7 of 2011, section 50 (1)-(3), as well as Public Procurement Regulation of 2013 Reg. 131 (1) & (2), authorised the procurement system for commonly used items and services under Framework Agreement contract (CUIS) in order to ensure the effectiveness of the entire procurement process and reduce costs associated with buying and selling goods and services (PPA 2011, section 50). Despite the Tanzanian government's efforts to improve public procurement accountability and effectiveness through procurement framework agreements for CUIS, some challenges remain in Local Government Authorities (LGAs) (Lawson, Hedvall, Thue-Hansen and Contreras, 2017). LGAs procured goods and services from unauthorised suppliers and procured goods from suppliers that did not have framework agreements with the GPSA (CAG, 2020). CAG reports of 2019/2020 in the audit of local government authority revealed that 39 LGAs procured goods and services from suppliers without having framework agreements from GPSA worth TZS 5,130,195,752, also CAG reported that procurement of goods and services from unapproved suppliers increased where by in the financial year 2016/17, 27 LGAs procured goods worth 936,775,623 from unapproved suppliers, in the financial year 2017/18, 18 LGAs procured goods worth 923,836,408, in the financial year 2018/19, 34 LGAs procured good worth 4,353,203,757 and in the financial year 2019/20, 39 LGAs procured goods worth 5,130,195,752. Local government authorities' offices in the Northern zone local government authorities are among the local government authority that procured goods and services from unapproved suppliers.

Studies such as Bryson (2018), Aduamah (2018) and Altho (2018) examined the effectiveness, and effects of framework agreements in public procuring entities and for common use items and services in public procurement. These studies revealed that, particularly on the use of framework agreement, suppliers in FAs either have no clear information about their capacity measurement or the information known is very little. However, these studies did not conduct study on factors affecting the framework agreement implementation in local government authority, specifically Northern Zone

Local. Therefore, this study fills the gap by assessing factors affecting the implementation of the framework agreement in local government authorities.

1.3 Research Objectives

1.3.1 Main objective

The main objective of the study is to assess the factors affecting implementation of framework agreement on local government authorities.

1.3.2 Specific objectives

  i. To examine the supplier's performance to influence on the implementation of framework agreement on Local government authorities.

 ii. To identify the information exchange mechanism on the implementation of framework agreement on Local government authorities.

iii. To determine the staff's competency and capability in implementing framework agreements.

 iv. Examine the moderating effect of the public procurement legal framework in the relationship between factors affecting FA and implementation of the framework agreement.

1.4 Hypothesis

H_{O1}- Supplier performance has no significant effect on implementation of FA.

H_{O2}- Information exchange mechanism has no significant effect on the implementation of FA.

H_{O3}- Staff competency and capability have no significant effect on implementing FA.

H_{O4}- There is no moderating effect of public procurement legal frameworks between factors affecting FA and implementation of the framework agreement

1.5 Justification of the Study

The study assessed factors affecting the implementation of the framework agreement on local government authorities and it is hoped that the findings of the study will provide knowledge and understanding of the implementation of the framework agreement, as a result, to apply for better procurement standards and guidelines as stipulated on public procurement act of 2011 and regulation of 2011 for procuring entity to procure common used items from the supplier selected by GPSA towards achieving development to the Public. Furthermore, through this study LGAs will get to know the inconveniences affecting them towards implementation of the framework

agreement hence the management will be able to formulate the policies which enable the organisation to perform activities with fewer problems for the Procurement sustainability of the organisation.

The study is expected to help policy makers tighten some rules and guidelines of framework Agreements to both Pes and LGAs. Also, the study is expected to give appropriate direction to the Central government on how they can control the procurement which is done by using framework agreement. This means the policies, procedures and principles will be formulated to escape the scenarios that hinder framework agreement. Also, the study is expected to enable the researcher to acquire knowledge on the framework agreements' procurement system and other related aspects of procurement and supplies.

1.6 Organization of the Study

The study was organised into chapter one to five; chapter one concentrated on background of the study, statement of the problem, study objectives, research hypothesis, significance of the study and organisation of the study. Chapter two was covered literature review with definition of concepts, and terms, theoretical review, empirical review and conceptual framework. Chapter three included research design of the study, geographical coverage, population, data collection method, data analysis, reliability and validity. Chapter four was covered with fact findings, analysis based on statistical and descriptive analysis. Chapter five included a summary of the findings, conclusions, and recommendations to the various interested parties.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Definitions of the Key Term

2.1.1 Public procurement

According to public procurement Act No 7 of 2011, its regulations of 2013 and it's amendments of 2016, procurement is buying, renting, leasing, purchasing or otherwise acquiring any goods, works or services by a procuring entity and includes all functions that pertain to the obtaining of any goods, works or services, including a description of requirements, selection and invitation of tenderers, preparation and award of contracts. Therefore, is directly associated with the procurement of goods, services and construction works to support national and local government operations and, most importantly to supply public goods and services (Lynch, 2014).

2.1.2 Local government

Yousef (2017) defined Local Government as part of the country's government which deals mainly with the problems or issues related to a given population within a given territory. Warioba (1999) in his report on local government in Tanzania defined local government authority as a branch of a country's government that operates at the local level and is governed by a representative body known as a council, which is empowered by law to exercise particular functions within a defined jurisdiction. Local government authorities are the government organs located in each district council to facilitate the activities mandated by central government, and these local government's procured goods on behalf of their citizens by adhering to Public Procurement Legal Frameworks. Among the Public Procurement Legal Framework is procurement of commonly used items under framework agreements whereby LGAs are supposed to procure commonly used items from suppliers whom GPSA approves under framework contract for procurements of Commonly Used Items (CUIS) in each of their districts and regions.

2.1.3 Framework agreement concept

Andrecka, (2016) defined a framework agreement as a long-term agreement that offers terms and conditions of the contract to smaller repeated orders for a definite time agreed between suppliers/service providers using call-off orders. Effective system of framework agreements realised when the key player of the system works as one team. Framework Agreement is an umbrella term whereby GPSA on behalf of PEs conduct all tendering procedures for CUIS and award the contract to the selected supplier and

list them to GPSA PMIS. FA allows a procuring entity to procure CUIS by agreement with a selected supplier based on specified terms and conditions without an agreed price through local purchase order.

2.1.4 Supplier performance

Supplier performance Refers to the supplier's ability to make use of its resources to meet the demands and business goals of manufacturers, from the perspective of the capability-based theory supplier performance is a key factor to support its future business development and promote the improvement of manufacturer performance. There is a fact that different supplier performance leads to different performance results (Dou *et al.,* 2015). In framework agreements supplier performance is the matter to be considered by PEs since all the other procedures for FA are conducted by GPSA the PEs are supposed to work closer with the supplier in order to ensure the goods delivered are at the right time, delivered in the right price, deliver in right quality, deliver at right quantity, and corrective action for defective items are done.

2.1.5 Staff's competency

Staff confidence is the capability, ability or underlying characteristic of an individual which is causally related to effective or superior performance (Armstrong and Baron, 1995). In framework agreement staff's capability refers to the skills, knowledge, awareness and training needed to the Pes staff, which will help them in the implementation of framework agreements from the initial stages to the final stages of execution of Framework agreement.

2.1.6 Information exchange mechanism

The information exchange mechanism is a tool for the commission and contracting authorities to share information about various public procurement aspects. The mechanism also serves as a platform for discussing different aspects of procurement projects, such as the type of procurement procedure involved, the project stages and implementation (European commission, 2014). In Tanzania, Information exchange mechanism is elaborated in public procurement through information technology in public and in framework agreement, there is a system introduced by GPSA which is known as GPSA PMIS.

2.2 Theoretical Literature Review

2.2.1 Transactional Cost Theory

Transaction Cost Theory (TCT) is one of the theories in the procurement discipline and study of economics issues. It explains the existence of the various organisations, how they can sustain in a market and what ways can they expand and exploit different opportunities available at a national and global level for the sustainability of the firms. Transactional cost theory focuses on the principle that buyer and supplier make decisions based on the cost-efficient way of conducting business (Sandson et al. 2015). Procuring entities focus on obtaining goods and services at low cost from a selected supplier, while the supplier strives to achieve the buyer's goal by offering high-quality materials at best value.

This theory describes a government framework based on the net effect of internal and external transactions other than the contractual relationship with shareholders. Transaction cost theory focuses on efforts and costs required for buyer and supplier to complete an economic exchange (Williamson, 1981). It was developed to determine how efficient production from suppliers can ensure low prices to buyers (Lozano and Valles, 2013). According to Walker and Brammer (2009), transaction cost is very important in analysing the tendering process.

The theory assumes that opportunism is offering incomplete and/or inaccurate information during both the negotiation and implementation of economic transactions, bounded rationality is the other assumption that individuals tend to be rational merely in intent rather than being rational in the absolute sense (Kalemc, 2013). Holt (2004) criticised that behaviour is vital uncertainty in the organisation contracts to be discussed as one of the reasons for uncertainty in adverse selection and other moral hazards. The level of trust and integrity directly impact organisational structure and transaction costs with bounded rationality and opportunism.

The theory implies that buyer and supplier interaction form a symmetrical way of achieving business transactions more efficiently. Suppliers offer goods and services to the buying organisation in line with the terms and conditions established by the buyer at cost-efficient. The theory is relevant to this study specifically to Suppliers, and selected public procuring entities because it focuses on the economic contracting which applies during selecting right suppliers, negotiation of contractual terms and conditions under framework contract and monitoring supplier performance to realise value for

money for goods and services. However, transaction cost theories do not complement the relationship between principal agent relationship between suppliers, GPSA and Pes, also transaction cost theory does not complement the information exchange mechanism between PEs, supplies and GPSA, hence the study will be supported by Agency theory.

2.2.2 Agency Theory

Jensen and Meckling (1976) define an agency relationship as a contractual relationship in which one or more parties (principals) contract another party (agent) to execute some defined activity on their behalf with the principals delegating defined decision-making authority to the agent. In the agency relationship, the agent makes decisions that serve the principal's interest. Procurement function staff are equally expected to act in the interest of user departments that request for the procurement services. Okoth & Kongore, (2016) define an agency association as a contractual relationship whereby one or more parties (principals) contract the other party (agent) to execute certain defined activities on their behalf with the principal delegate defined decision making authority to the agent. In the agency relationship, the agent makes decisions that serve the interest of the principal. Procuring entities engage in contractual relationships with service providers or suppliers under a framework contract for supply of common use items and services (CUIS).

The theory assumes that attempts to influence bureaucratic behaviour take place in a setting where institutional arrangements and organisational variables are prime importance, individual are motivated by variety of factors and interests, also, information is a commodity whereby the availability of which varies over time and across policy areas and the political system are is characterised by a multiplicity of principal agent linage, Worsham (2015). However, the theory has the following critique, human responsibility and freedom are logically incompatible with causal determination and also agency theory is most distinctive and controversial (William, 1981). The agency theory is also part and parcel of this study because it has put much emphasis on the relevance of framework agreement as the base for public procurements where by the applicability of framework agreement consists of two or more parts which consist of suppliers who are selected by GPSA and GPSA as a government agency provide the list of selected suppliers to the PEs. Agency theory does not complement the information exchange mechanisms between GPSA, Suppliers and Pe Hence Information Asymmetry Theory will support the study.

2.2.3 Information Asymmetry Theory

The economic theory of asymmetric information was developed in the 1970s and 1980s as a plausible explanation for market failures. The theory proposes that an imbalance of information between buyers and sellers can lead to market failure. Asymmetry of information theory shows that it is in possession of information in different ways by individuals involved in running streams between the stakeholders and the company, under which individuals have different behaviours and different decisions which may affect the performance of companies (Asma N, 2014). Information asymmetry revealed that individuals involved in all streams of links between the company and stakeholders do not have the same information, at the same point of time. Information asymmetry cannot be ignored when a supply chain involves multiple members (Shenetal.,2019).

In this regard, it is often perceived that when a number of players are involved in the supply chain for delivering an asset or service, parties may not be willing to reveal the private information or such kind of information which reveals the flaws of the party. In the product markets, vertical integration (Grigg (2018)) can relieve the asymmetry conditions on information such as budget, legal talent, and risk aversion (Williamson, 1971).

The theory assumes that sellers may possess more information than buyers, skewing the price of goods sold. Also, the theory argues that low-quality and high-quality products can command the same price, given a lack of information on the buyer's side (Muller, 2002). Information asymmetry theory is part and parcel of this study since it incorporates information exchange mechanisms between GPSA, Pes and suppliers where information dispersion affects the implementation of Framework Agreements.

2.3 Empirical Literature Review

A study by Okoth (2016) in Kenya is based on factors influencing adoption of framework agreements at national irrigation board; researcher uses sample size of 43 respondents' data collected by questionnaires, the study uses a case study design. The study revealed awareness of the framework agreement as one of the procurement methods prescribed by the Public Procurement and Asset Disposal Act, 2015 (Act). The study also found out that NIB did not majorly adopt framework agreements and did not majorly adopt framework agreements as a procurement method in its procurement processes. It was concluded that there is a significant positive relationship

between legislative provisions and adoption of framework agreement. The study used agency theories and diffusion theory. This study will use transaction cost theory and the study will be based on local government Authorities.

Aduamah (2018), in his paper titled assessing effects of public Procurement framework on procurement practices in secondary schools in Ghana, explained that despite the importance of having public framework contracts in secondary school still process and respective procedures have not been well known to the user of the system. The study concluded that to gain more benefits of the system, suppliers and procurement officers from secondary school need to induce training programs to be more conversant with the system. However, the study recommends further study to be done on assessing the challenges facing framework agreements.

Meressa (2018) on the study of Assessment of framework agreements in the public procurement and property disposal service (PPPDS) in Ethiopia, A descriptive research method was used in the study. The researcher used a sample size of 30 respondents, data were collected by using a self-development questionnaire. The study reveals that the government has significantly reduced price in some items compared with the purchase made by different ministry offices using proforma invoice and other procurement methods. In relation to the workforce research revealed that the actual human power and the work burden is unbalanced. The study used descriptive research design and unstructured questionnaire to collect data to suggest possible solutions that may address framework agreement. This study will use cross-section study research design and structured questionnaires to assess factors affecting implementation of force accounts on LGAs.

Genene (2019) on the study of The Challenges and Prospects of Procurement Framework Agreement Practice: The Case of Ethio Telecom. The researcher used descriptive research design and stratified random sampling technique to select the respondents. Researchers used a sample size of 107. The study revealed that there is an existing problem in the applicability of procurement framework agreement in terms of proper procurement planning, specification development, and identifying the right and capable potential supplier. improper contract management and suppliers handling management. The study concluded by recommending partnership level of agreement with suppliers, adequate training for staff to handle well equipped planning and specification development, involvement for sharing information. No theory used in the

study, the study adopted Descriptive Research Design. This study will use cross sectional study and will be based on LGAs in Tanzania.

Bryson (2018) on the effectiveness of framework agreements in public procuring entities in Tanzania a survey of selected public entities in dares salaam, researcher used sample size of 36 respondents' data collected by using interview and questionnaires. The study revealed that criteria used to select suppliers in framework agreements were least effective, legal capacity and resource of suppliers before awarding framework agreements. It was revealed that procuring entities and suppliers did not comply with the terms and conditions of framework agreements; absence of supplier rating affected effective implementation of Framework Agreements. It was concluded that criteria for selecting suppliers were important and both suppliers and procuring entities did not comply with terms and conditions of framework agreements. Suggestion for further study focuses on assessing transparency of framework agreements in public sectors. The study used agency theories and diffusion theories; this study will use transaction cost theories.

Altho (2019) assessed the effectiveness of framework Agreement for common use items and services in Public Procurement: a case of public procuring entities in Arusha Urban District. Both quantitative and qualitative research designs were applied in the study. The researcher revealed that suppliers' capacity has an impact on ensuring an effective public procurement process particularly on the use of framework agreement. Suppliers in FAs either have no clear information about their capacity measurement or the information known is very little. It was concluded that suppliers should improve their capacity to deliver all the requested goods at a time. The study used two theories which are Agency theory and transaction cost theory in assessment of the effectiveness of framework agreements on Commonly Used Items (CUIS). The research adds the knowledge of transaction cost theory and empirical reviews. This study will use only one theory which is transaction cost theory.

2.4 Research Gap

Different studies such as Bryson (2018), Okoth (2019, Aduamah (2018), and Altho (2019) identified that studies on framework agreements are mostly based on central government, parastatals and GPSA and leave aside the Local Government authorities. However, CAG reports of 2016/2017 and 2019/2020 indicate that trend of goods and services procured by LGAs from suppliers without having a framework agreement

from GPSA increased the number of local government's from 34 LGAs reported in 2018/19 to 39 LGAs reported in 2019/20. Most of previous studies used survey design and descriptive research, this study adopted a cross-sectional research design and data were analysed by using Structural Equation Model (SEM). From the above indicated studies there is a need for conducting further study in this area, specifically on the factor affecting implementation of framework agreements on local government's authorities taking Northern Zone LGAs as a case in point.

2.5 Conceptual Framework

The conceptual framework illustrates the relationships between the variables. The dependent variable is Framework agreement, measured by Value for money and Cost Reduction.

Independent variables are factors affecting the implementation of Framework Agreements. The independent variables are: Supplier performance on meeting specifications was assessed based on capacity to deliver goods on time, capacity to deliver in right price, capacity to deliver right quality on implementation of framework agreements in achieving value for money and reducing the procurement costs; Information exchange mechanism were assessed based on, Technological adaptation, Adjustment of new technology, Adaptation of information exchange mechanism quality on implementation of framework agreements in achieving value for money and reducing the procurement costs; and Staff competency and capability were assessed Awareness, Knowledge and Attitude quality on implementation of framework agreements in achieving value for money and reducing the procurement costs. Also, in this study the independent variable leads to mediating variable which is Public Procurement Legal Frameworks, at which both independent and mediating variable has effect on dependent variable, mediating variable will assess the Standard framework tender document, Supplier obtains through min competition and General terms and conditions. Transaction Cost theory, agency theory and information asymmetry theory were used to assess factors affecting the implementation of framework agreements and its relation to framework agreements.

Independent Variable   **Mediating Variable**   **Dependent Variable**

Supplier performance
Deliver time
Deliver in right price
Deliver right quality
Deliver at right quantity
Corrective actions

**Public Procurement
Legal Frameworks**
Standard framework tender
   documents
Supplier obtains through
   min competition
General terms and

**Information exchange
mechanism**
   Technological
   adaptation
   Adaptation of
   information exchange
   mechanism
   Adjustment of new
   technology
   Information sharing

**Framework
agreement**
   Economy
   Efficiency
   Lead time
   Effectiveness

**Staff competency and
capability**
   Awareness
   Knowledge
   Skills
   Training

Figure 1 : Conceptual Framework

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a cross-sectional research design by administering questionnaires to collect primary information from respondents. cross-sectional was used as it allows collection of data from a population or a representative subset at a specific time (Bayley and Nancarrow, 1998; Babbie, 1990; Cresswell, 2017). It is considered to be favourable when resources are limited in terms of finance, human resource and time (Philips & Depeoul, 2010). Also, it was preferred because of the nature of the study, which does not need the observation of changes on the dependent variable over time and it allows a multifaceted approach to data collection and analysis (Kumar,2011)

3.2 Geographical Coverage

The study was carried out in the Northern Zone United Republic of Tanzania (URT), involving the selected District Councils, namely Moshi Municipal council, Moshi District Council, Arusha City Council, Arusha District council, Babati District Council and Babati Town Council. The choice of the study area is supported by the selected LGAs are among the LGAs which procured goods and services from unapproved suppliers (CAG, 2019) also PPRA reported that procurement framework agreements were not conducted through TANePS and the researcher's accessibility to the respective area in relation to subject matter which provide the possibility of gathering the needed data within a given time.

3.3 Population

The study targeted population was 1461 employees (LGAs, 2022) who were employees of six northern zone local government authorities office and consist of Procurement Management Unit (PMU), Evaluation Committee, Tender Board Members and User Departments (Education Department, Finance Departments, Planning Department, Internal Auditors, Legal Officers, Health Departments).

3.4 Sampling Frame

A Sampling frame was drawn from six LGAs office from the Northern Zone of the (URT) and includes Procurement Management Unit (PMU), Evaluation Committee, Tender Board Members And User Departments which comprise of Education Department, Finance Departments, Planning Department, Internal Auditors, Legal

Officers, Health Departments. The study included PMU, and Evaluation Committee since of their involvement in procurement proceedings FA, while Users department are the initiator of the procurement process through preparing the list of CUIS needed and also are the users of CUIS in FAs.

3.5 Sample and Sampling Techniques

3.5.1 Sample size

The sample size was determined using the formula developed by Yamane (1967) and at 233 respondents arrived. Yamane formula was adopted since the population of the study is known and less than 10,000. The sample size was distributed according to the ratio obtained from the sample size.

The sample size according to Yamane (1967) is given as;

$$n = \frac{N}{1 + N(e)^2}$$

Where

n=sample size

N=Population size

e= Margin of error 0.06

$$n = \frac{1461}{1+1461(0.06)2}$$

n= 233

Table 1: Sample size

Local government	Sample frame	Ratio	Sample size
Moshi Municipal council	225	0.15	36
Moshi District Council	208	0.14	33
Arusha City Council	342	0.23	54
Arusha District council	236	0.17	40
Babati Town Council	247	0.16	38
Babati District Council	202	0.14	32
TOTAL	1461	1	233

Table 2: Respondent's distribution

Regional	District	Pmu	Evaluation committee	Tender board	User departments	Total
Kilimanjaro	Moshi MC	6	9	5	13	33
	Moshi DC	4	6	5	12	27
	Total	**10**	**15**	**10**	**25**	**60**
Arusha	Arusha CC	8	15	5	15	43
	Arusha DC	7	12	5	10	34
	Total	**15**	**27**	**10**	**25**	**77**
Manyara	Babati TC	4	17	5	11	37
	Babati DC	3	13	5	10	31
	Sub total	**7**	**30**	**10**	**21**	**68**
	Total	**32**	**72**	**30**	**71**	**205**

3.5.2 Sampling technique

Study respondents were obtained through simple random sampling by picking respondents from user departments randomly where by questionnaire were distributed to the departments and randomly selection of available employees was done, simple random sampling was used because of equal opportunity to all respondents to be selected. Also, purposive sampling was used to collect data from PMU, evaluation committee and tender board members in order to ensure that data collected are related to what the researcher intends to get and also to get crucial information regarding implementation of procurement framework agreement.

3.6 Data Collection Methods and Tools

This study collected both primary data and secondary data that are related to the implementation of procurement framework agreements for commonly used items.

3.6.1 Sources of data

Both qualitative and quantitative data from primary and secondary sources were collected and analysed. Primary data in this study were collected from respondents based on supplier capability, information exchange mechanism, employee competency, and moderating effect of Public Procurement Legal Framework in implementation of procurement framework agreements for commonly used items. Secondary data were collected from procurement journals, previous research and evaluation reports to support the primary data. All the data collected was related to factors affecting the implementation of FA.

3.6.2 Types of data

The primary data were collected directly from selected local government authorities office staff by using survey method, supplemented by interviews from the key

informants who are head of procurement. To complement the primary data, secondary data was collected from published procurement reports, previous research for procurement framework agreements that helped in tracking procurement for commonly used items in local government authorities.

3.7 Data Collection Methods

3.7.1 Survey method

Survey was conducted using a structured questionnaire, containing close-ended questions to collect primary data from the Procurement Management Unit (PMU), evaluation committee, tender board members and user departments. Since respondents have necessary knowledge on procurement framework agreements, the researcher was prepared a set of self–administered questionnaire copies which was given them through drop and pick method later, and collected after they had filled. A survey was preferred to this study because it allows rapid data collection and is convenient in data gathering (Burns & Burns, 2012). The structured questionnaire used a Likert scale of 1 to 5 consist of three independent variables, moderating variable and dependent variable related to factor affecting implementation of framework agreements was distributed to the respondents, some of questionnaire was collected at the first day and others collected to the second day due to some challenges where by some of respondents were busy on the first day and agreed to respond the questionnaire on the second day.

3.7.2 Interview

The interview was used to collect data from the potential or key informer in the organisation. The study interviewed six HPMU of selected LGAs so as to get the detailed information which are crucial to the study and that information was directly related to factors affecting implementation of framework agreements. In order to achieve flexibility in data collection using the interview method, a face-to-face semi structured interview for key informants was conducted.

3.8 Data Analysis

Qualitative data were analysed using the content analysis technique by discovering useful information, and suggestions on factors affecting the implementation of procurement framework agreements for commonly used items in local government authority. The analyses were done stage-wise: reading previous papers related to framework agreements, recorded, categorised, and grouped into themes relating to the

specific objective of local government's procurement framework agreements for commonly used items. The contents were summarised to skip irrelevant information, filtered out to common domains in question and looking for features to describe the actual situation in need.

Gathered quantitative data were cleaned to get relevant data for the study objectives. As such, cleaned data was coded, analysed and interpreted by using the statistical package for social sciences (SPSS). Data were analysed by using descriptive statistics using population parameters such as mean, frequency distribution, percentages and standard deviation. To interpret mean score, the study adopted the interpretation procedure as shown in the table in table 3.

Likert scale interval point

$$Interval = \frac{Highest\ score - Lowest\ score}{Number\ of\ intervals}$$

$$Interval = \frac{5 - 1}{5}$$

Interval = 0.8

The mean score obtained from each item was interpreted into degree of factors as shown in the table 3:

Table 3: Likert Scale Point

Scale	Average score (Mean)	Rating
Strong disagree	1.00 – 1.80	Very low
Disagree	1.81 – 2.60	Low
Neutral	2.61 - 3.40	Average
Agree	3.41- 4.20	High
Strong agree	4.21 -5.00	Very high

Structure Equation Modelling (SEM) was used to test the relationship between variables, model fitness, significance of the results and consequently the validity of the findings. Analysis of moment structure (AMOS) software made SEM easy was composed of the measurement model and the structural model, measurement model measures the latent variables or composite variables to obtain the Regression model while the structural model tests all the hypothetical dependencies based on path analysis (Hoyle 1995, 2011; Kline 2010). The study used SEM to obtain a regression model based on the assumption of Normality of observations, which justifies that the model

is fit by using the estimation technique as per the skewness and kurtosis of data in hand. Also, based on the assumption of complete in data which justify that there is no missed data and the missing data was treated through the missing completely at random (MCAR) approach, this approach assumes that missing data is totally irrelevant in study Also, assumption of model fit index basically defines the usability of given model drawn from the sample on the population Measurement and Sampling Error caused by biassed tool and techniques used for collection of information (Kumar & Upadhaya, 2017).

Each objective (i-iv) was analysed by SEM because it incorporates observed (measured) variable and unobserved variables (latent construct) also it explicitly specifies errors: thus it is best strategy model when examining multiple test and it solve multicollinearity problem (Lei & Wu 2007). To ensure an accurate understanding of the SEM model, it was critical to test for normality, multicollinearity and linearity.

Econometric Model

$$Y = SC.X_1 + IEM.X_2 + ECX_3 + RR.X_4 + e \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Where:

e = Error Term

X_1 = Supplier Capability

X_2 = Information Exchange Mechanism

X_3 = Employee Competency

X_4 = Public Procurement Legal Frameworks

Y = Framework Agreements

Table 4: Measurement of the Variables

Variable	Measurement	Instrument	Analysis Technique
Dependent Variable			
Efficiency	5-point Likert scale	Questionnaire and Interview Guide	Structural equation model Descriptive statistics
Economy	5-point Likert scale	Questionnaire and Interview Guide	Principal component analysis (PCA)
Effectiveness	5-point Likert scale	Questionnaire and Interview Guide	
Lead time	5-point Likert scale	Questionnaire and Interview Guide	
Independent			
Supplier performance	5-point Likert scale	Questionnaire and Interview Guide	Structural equation model Descriptive statistics
Information exchange mechanism	5-point Likert scale	Questionnaire and Interview Guide	Principal component analysis (PCA)
Staff competency	5-point Likert scale	Questionnaire and Interview Guide	
Moderating variables			
Public Procurement Legal Frameworks	5-point Likert scale	Questionnaire and Interview Guide	Structural equation model Descriptive statistics Principal component analysis (PCA)

Sources: Researcher's own constructs (2022).

3.9 Results of Pilot Test

Pre-testing was done to modify and remove ambiguous items on research instruments (Kothari, 2004). These enable the content validity and reliability of the questionnaire and interview schedule to be used in the study. Reliability is the stability or consistency of scores over time, while validity refers to the extent to which an instrument truly measures what it is intended to measure or how truthful the research instruments are (Golafshani, 2013). In order to check and improve reliability and validity, a pilot study was undertaken in Rombo district council, Kilimanjaro. The developed research instruments were pre-tested using an identical sample in the specified strata and the process helped in appraising data collection instruments. It also helped to ensure that research instruments were stated clearly and had the same meaning to all respondents. To achieve high precision pilot studies, 1% to 5% of the sample constituted the pilot test size (Lancaster, *et al*., 2012). A total of 10 respondents who are staff from Rombo district council were sampled for pilot testing.

3.10 Reliability and Validity Data

3.10.1 Reliability

Reliability of the instrument for collecting data is said to be accurate when it develops simple and straightforward questions to attract a common understanding among the participants in the field. Cronbach's alpha coefficient was used to test the internal

consistency reliability of constructs; because it is the most used in social science research and provides better results than other methods of measuring reliability. Hazarika and Jena, (2017) state that reliability of .70 is highly satisfactory. Similarly, Field, (Noble and Smith, 2015) revealed that an alpha coefficient between .70 and .80 is an acceptable value. Questions were developed in such a way that they can measure respondents' knowledge on the impacts of the study (Noble and Smith, 2015). Based on these scholarly findings, in this study, the test was done with 205 respondents from local government authorities offices in the Northern zone. The reliability was found to be 0.750 for all study variables which implies the study internal consistency is internally stable and reliable. The reliability of data was presented in table 5.

Table 5: Reliability

Statement	Cronbach's Alpha	No of items
Supplier performance	0.75	6
Information exchange mechanism	0.86	6
Employee competency	0.745	5
Public Procurement Legal Framework	0.94	4

3.10.2 Validity Data

Data Validity, developed questions are simple to understand and simple language was used in the field to ensure validity. Fernandez and Chiambaretto, (2016) claim that the instrument's ability to ensure the phenomenon's consistency is designed to capture different data. The validity of the instruments was established by carrying out pilot study before the actual use of instruments for data collections. The training was also done to research assistants and the questionnaires passed through experts for proof reading for validity improvements. The study also allowed a transparent process in conducting research and tried to be as open as possible towards the readers and experts for better sustainable report production (Gupta and Narain, 2012). Internal validity was also assured by controlling and isolating other conditions that can influence dependent variables. Generalisations were only possible and guaranteed when internal validity was achieved (external validity). To ensure data validity, the study employed the content validity index, which involves collecting data to validate the instrument through qualitative (content validity) and quantitative (cognitive interview).

3.11 Test of Assumption of Model

3.11.1 Correlation of the study variables

The study used Pearson product moment correlation coefficient (r) to measure the

strength of the linear relationship between the independent and dependent variables. The result as illustrated by the correlation matrix in table 6 indicated the lowest correlation was between supplier performance and framework agreements and adaptation of e-procurement (r = -0.158 p <0.05) indicate that supplier performance has negative correlation with implementation of framework agreements. The highest correlation was on the relationship between Public Procurement Legal Framework and employee competency (r = 1 p < 0.05) which indicates that Public Procurement Legal Frameworks had positive information exchange mechanisms. In this study, the variable varied from -1 to +1 which indicates that the variables were sufficiently different measures of separate variables. Therefore, all the variables were retained in the study.

Table 6: Correlations Matrix

		SC	IEM	EC	RR	FA
SC	Pearson Correlation	1				
	Sig. (2-tailed)					
IEM	Pearson Correlation	.140*	1			
	Sig. (2-tailed)	.046				
EC	Pearson Correlation	.513**	.556	1		
	Sig. (2-tailed)	.000	.000			
RR	Pearson Correlation	.513**	.761**	1.000**	1	
	Sig. (2-tailed)	.000	.000	.000		
FA	Pearson Correlation	.158*	.236**	.161*	-.161*	1
	Sig. (2-tailed)	.000	.000	.000	.000	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

SC= supplier capability, IEM= information exchange mechanism, employee competency, RR= Public Procurement Legal Frameworks, FA= framework Agreement

3.11.2 Testing for multicollinearity

Variance inflation factor (VIF) analysis was conducted to test for Multicollinearity in the regression model. Multicollinearity refers to the degree of correlation between predictor variables (Field, 2013). Multicollinearity in the data occurs when the independent variables are too highly correlated with each other. When VIFs are equal to 1 indicates no or little Multicollinearity; and when VIFs are greater than 1 indicates moderate Multicollinearity. With VIFs between 5 and 10 there is high correlation and when VIFs are greater than 10 implies that coefficients are poorly estimated, and there is a Multicollinearity problem, and it should be fixed accordingly (Sheskin, 2011). The analysis (Table 7) revealed that the VIFs for all predictor variables were found to be equal to 1, implying that the multicollinearity problem does not exist as the independent variables of the study are not correlated to each other.

Table 7: Multicollinearity Statistics

Variables	Tolerance	VIF
Supplier performance	0.724	1.381
Information exchange mechanism	0.980	1.020
Employee competency	0.736	1.358
Public Procurement Legal Frameworks	0.834	1.230

3.11.3 Testing of normality

Kurtosis and Skewness tests were conducted to detect whether the samples drawn from the population were normally distributed. Skewness measures the deviation of distribution from symmetry while Kurtosis measures Peakness of the distribution. For perfectly symmetrical data, the value of Skewness and Kurtosis is 0 (Field, 2013; Pallant, 2013; Ghasemi and Zahediasl, 2012). If the value of Skewness and Kurtosis is significantly different from 0, then data are non-normal. However, since it is quite unlikely to be perfectly symmetrical, the values of Skewness and Kurtosis approximately range between -1 and +1. Descriptive analysis in table 8 revealed the approximate normal distribution of the data related to all three variables under this study (Table 8).

Table 8: Testing of Normality

	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
SP	.992	.207	.170	-.996	.338
IEM	.599	-.467	.170	-.646	.338
EC	.800	.168	.170	-.688	.338
RR	.800	.168	.170	-.688	.338
FA	.594	-.342	.170	-.304	.338

SP= supplier performance, IEM= information exchange mechanism, employee competency, RR= Public Procurement Legal Frameworks, FA= framework Agreement

3.12 Ethical Considerations

Relevant measures were taken to ensure the study preserved high levels of ethical standards. This was done as a prerequisite as all research activities concerning this dissertation involved human deeds which are prone to weaknesses and other human errors. Necessary data collection certifications, permits and introduction documents approving determinations of this study objectives, assurance and the consequent uses of collected data was attained as presented in this study appendices. Further the researcher gained consent of contribution from targeted respondents by this study. Data collection tools especially the questionnaires did not involve acquisition of deep

information of respondents like names identification, contacts and other personal matters so as to enable confidentiality research and right respect. Right of access to the data field was as well limited to the legalised researcher only to safeguard public data safety.

CHAPTER FOUR

4.0 FINDINGS AND DISCUSSION

4.1 Response Rate.

A total of 233 questionnaires were prepared and distributed to the respondents and 205 were responded which was 87.9%. The response rate of 87.9% was excellent and conforms to Mugenda and Mugenda (2003) stipulation that response rate of 50% is adequate for analysis and reporting; a response rate of 60% is good and a response rate of 70% and above is excellent. The excellent response rate was achieved by the researcher through self-administered questionnaires therefore all 205 questionnaires were used for data analysis.

4.2 Demographic Characteristics of Respondents

Several demographic characteristics that influenced the study topic were analysed and discussed. Specifically, the study sought to understand the gender, age, level of education, and experience were examined. These are discussed immediately after the response rate. As shown in table 9, the number of males were the most dominant gander representing greater than the number of females, meaning the level of male employed was more than the number of females employed in an organisation. Table shows that 128 employees were male formed 62.4%, and 77 employees were female, which formed 37.6% of the general respondents, 205 respondents.

As shown in table 9 the employees with 21-30 years were 48 formed 23.4 %, the employees with 31-40 years are 102 formed 49.8%, the employees with 41-50 years were 34 formed 16.6%, and the employees with 51-60 are 21 with 10.2%. This confirmed that the ages below 40 have a high number of employees of 73.2% since they are young, energetic, powerful and able to perform multiple activities to the organisation that is why their presence is inevitable. A study by Ramadhani(2020) found that the practice of multigenerational workplace mentoring through a mixed-age workforce whereby employees of all ages have the opportunity to teach, share and learn from one another their knowledge, experience and skills. However, the older the employee becomes, the less the job they do.

As shown in table 9, the respondent with a certificate is 14 employees forms a 6.8%, the respondent with a diploma were 14 employees formed 6.8%, the respondent with Advanced diploma were 7 employees formed 3.4%, the respondent with a Bachelor

degree were 150 employees with 73.2% and the respondent with master degree and above were 20 employees which form 98 %. This means that the number of Bachelor degrees were higher than other academic qualifications as most universities were providing Bachelor degrees thus the elites with degrees were widely available in different public organisations.

The findings in table 9 indicate that 5.4% of respondents had been working in local government authority between 6 to 10 years, followed by 25.8% had worked more than 10 years, while 23.6% had been working for 3 to 5 years and lastly the minority of 15.7 had been working around 2 years only. From the data, one can see that 60.6% of the respondents had work experience of six years and above. This was important since respondents' knowledge of the procurement processes at the entity helped smooth implementation of FA. With such a long work experience, the respondents had arguably vast knowledge of their jobs and the overall work environment, including the prevailing management and organisation policies (DFES, 2002). It can be concluded that these respondents were in position to provide enough information and perspectives with regard to work life balance experience in the banking industry and its influence on staff 'job satisfaction.

Table 9: Demographic characteristics of respondents

Demographic	Statement	Frequency	Percentage
Sex	Male	128	62.4
	Female	77	37.6
Age	21-30	48	23.4
	31-40	102	49.8
	41-50	34	16.6
	51-60	21	10.2
Education level	Certificate	14	6.8
	Diploma	14	6.8
	advance diploma	7	3.4
	Degree	150	73.2
	master degree and above	20	9.8
Experience	Below 5	11	5.4
	5-15	160	78.0
	Above 15	34	16.6

4.3 Implementation of Framework Agreements

The implementation of framework agreement on Local government authorities is measured through its efficiency, effectiveness, economy, and reduction of procurement lead time. The respondents were requested to rate several statements about those factors on a scale of 1 to 5.

4.3.1 Descriptive analysis for the implementation framework agreements

Table 10 indicated that the majority of the respondents, 67.1% (136), agreed that implementation of framework agreements leads to efficiency. Results imply that the implementation of framework agreements leads to efficiency in local government authorities. The mean for efficiency was 3.68, indicating respondents have a high response to the questions raised. It was evident that implementation of framework agreements leads to efficiency in procurement activities.

Table 10 revealed that the majority of the respondents, 61.9% (127), agreed that implementation of framework agreements leads to economy. Results implies that Implementation of framework agreements leads to economy. The mean for economy was 3.71, indicating respondents have a high response to the questions raised. It was evident implementation of Framework agreement led to economy.

Table 10 indicates that the majority of the respondents, 72.6% (149), agreed that implementation of framework agreements leads to Procuring Entity to effectiveness. Therefore, results imply implementation of framework agreements lead to procuring entities to their effectiveness. The mean for effectiveness was 3.42, indicating respondents have a high response to the questions raised. It was evident that implementation of Framework agreement led to effectiveness.

Table 10 indicates that the majority of the respondents, 61.1% (131), agreed that implementation of framework agreements leads to reduced procurement lead time. Results implies Implementation of framework agreements lead to Procuring Entity to effectiveness, The mean for lead time was 3.39, indicating respondents have a high response to the questions raised. It was evident that implementation of Framework agreement reduces lead time for procurement activities.

Table 10 : Implementation of Framework Agreements

Statement	SD% (F)	D% (F)	N% (F)	A% (F)	SA% (F)	Min	Sd
Implementation of framework agreements lead to efficiency	12.2(25)	11.7(24)	9.8(20)	28.3(58)	38.8(78)	3.6829	1.39746
Implementation of framework agreements lead to economy	26.3(54)	0.5(1)	7.8(16)	29.3(60)	34.1(70)	3.7073	1.35480
Implementation of framework agreements lead to Procuring Entity to effectiveness	9.8(20)	0.5(1)	7.8(16)	29.3(60)	34.1(70)	3.4829	1.60451
Implementation of framework agreements lead to reduce procurements lead time	29.3(60)	5.9(12)	3.9(8)	19.1(39)	42(92)	3.3854	1.72148

4.4 Supplier Performance and Implementation of Framework Agreements

The first objective of the study is supplier's performance influence on implementation of framework agreement on Local government authorities. The respondents were requested to rate several statements about those factors on a scale of 1 to5. The researcher found that factors such as delivery of goods and services on time; delivery of goods and services as per local purchase order; delivery of right quality as per specification; delivery of right quantity; provision of corrective actions for defective items; offering of technical support for goods sold to the implementation of framework agreements in local government's authorities.

4.4.1 Descriptive analysis of supplier performance

The findings on table 11 show that the majority of the respondents 50.7% (104) disagreed on the statement that suppliers deliver the required goods on time during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements do not deliver the ordered goods on time hence suppliers affect the implementation of local government's authority in local government's. The results also have mean for the supplier good on time was 2.54, indicating respondents have a low response to the questions raised. The answer indicated that the supplier does not deliver the required goods on time. Also, suppliers did not deliver goods to purchasers within time specified in the contract, and this affected the execution of framework agreements in Procuring Entities

in Tanzania (Bryson, 2017). Supplier delivery on time is among the challenges and prospectus of procurement framework practice (Genene, 2019).

Table 11 shows that the majority of the respondents 53.2% (109) disagreed on the statement that; suppliers deliver goods and services as per local purchase order during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements do not deliver goods and services as per local purchase order hence suppliers affect the implementation of local government's authority in local government's. The results also have mean for the local purchase order was 2.42, indicating respondents have a low response to the questions raised. The answer indicated that the supplier does not deliver goods and services as per local purchase order. Also, suppliers did not deliver goods to purchasers within time as per local purchase order and it affected the execution of framework agreements in Procuring Entities in Tanzania (Bryson, 2017). Supplier delivery on time is among the challenges and prospectus of procurement framework practice (Genene, 2019).

Table 11 revealed that the majority of the respondents 54.1% (111) disagreed on the statement Supplier delivery right quality as per specification during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements do not deliver the right quality as per specification hence suppliers affect the implementation of local government's authority in local government's. The results also have mean for the supplier delivering the right quality was 2.75, indicating respondents have a low response to the questions raised. The answer indicated that the supplier does not deliver the right quality as per specification. This finding is similar to the Meressa (2017) study on the influencing factors of framework agreement effectiveness in public procurement and property disposal service, Ethiopia, who found that 42% of respondents replied that Suppliers are not delivering the right quality as per the specification.

Table 11 indicates the majority of the respondents 68.3% (141) disagreed on the statement Supplier delivery right quantity during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements do not deliver the right quantity hence suppliers affect the implementation of local government's authority. The results also

have mean for the supplier delivering the right quantity was 2.54, indicating respondents have a low response to the questions raised. The answer indicated that the supplier does not deliver the right quantity of goods. It was evidence that Supplier delivery right quantity is important elements during implementing Framework Agreements on Local Government's Authorities. This finding is similar to the study of Meressa, 2018) studied on the influencing factors of framework agreement effectiveness in public procurement and property disposal service, Ethiopia who found that suppliers are willing to give technical support for sold goods.

Findings in Table 11 indicate that 50.3% (103) of the respondents agreed that supplier prompt provide corrective actions for defective items during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements promptly provide corrective actions for defective items hence suppliers affect the implementation of local government's authority. The mean for the prompt provision of corrective action for defective items was 3.39; indicating respondents have a high response to the questions raised. It was evidence that Supplier prompt provide corrective actions for defective items is important elements during implementing Framework Agreements on Local Government's Authorities. (Tasse, 2008) argued that investigation of necessary support functions is strongly recommended that the buyer have the option of conducting capability evaluation on its supplier.

Findings in Table 11 indicate that 57.6% (118) of the respondents disagreed that suppliers provide technical support for goods sold during implementation of framework agreements on local government's authority. Results imply that suppliers who are registered by GPSA on framework agreements do not provide technical support for goods sold hence suppliers affect the implementation of local government's authority. The mean for the provision of technical support was 2.31; indicating respondents have a low response to the questions raised. It was evidence that Supplier does not provide technical support for goods sold and hence it affects implementation of Framework Agreements on Local Government's Authorities. This finding is similar to the study of (Bryson, 2017) who found that 46.2% of the respondents are at a moderate level when they are asked to reply on supplier's willingness to prompt corrective action for defective items when needed by the procuring entity.

Table 11 : Supplier performance and framework agreements

Statement	SD% (F)	D% (F)	N% (F)	A% (F)	SA% (F)	Mean	Std.
Supplier deliver the required good on time	14(29)	36.6(75)	13.7(28)	22.0(45)	13.7(28)	2.5439	1.2966
Supplier deliver goods and services as per local purchase order	18(37)	35.1(72)	14.6(30)	11.7(24)	20.5(42)	2.4146	1.4089
Supplier delivery right quality	24.9(51)	29.3(60)	7.8(16)	22.4(46)	15.6(32)	2.7463	1.4431
Supplier deliver right quantity	6.3(13)	62.4(128)	10.7(22)	11.7(24)	8.8(32)	2.5415	1.0685
Supplier prompt provide corrective actions for defective items	6.3(13)	23.4(48)	20(41)	24.9(51)	25.4(52)	3.3951	1.2661
Supplier offer technical support for good sold	25.4(52)	32.3(66)	10.2(21)	10.2(21)	22(45)	2.3122	1.4984

The fact that supplier performances effects on implementation of framework agreements in terms of delivery time, right quality, right quantity, provision of corrective action and technical support are among of the factor affecting implementation of Fa as agreed by one of the key informative interview

> *"…. Supplier performance is real the existing problem, we select them for the aim of saving time and reduce cost but in saving time there is a great problem since supplier does not deliver what we order through local purchase order on time, some of them they said that they are out of stock, as for other supplier does not delivery what we request they deliver what they have in their store and they come with many excuse and their price is not stable sometimes they are higher than normal price market……''* (Arusha District council, July 6, 2022)

(Bryson, 2017) also had similar findings to the findings obtained from this study. She found that supplier capacity is an important factor when it comes to ensuring the effectiveness in the entire processes of procurement for the purposes of obtaining value for money and safeguarding public funds for public interests at large.

4.4.2 Supplier performance sampling adequacy

After running descriptive statistics, then two statistical tests for assessing factorability of data for structure detection were performed which are Kaiser-Meyer-Olkin (KMO)

measuring sampling adequacy and Bartlett's Test of Sphericity KMO measure of sampling adequacy indicates the proportion of variance in variables that might be due to underlying factors, whereby high values close to 1 generally indicate that a factor analysis can be useful with the data (Pallant, 2016). Bartlett's Test of Sphericity tests the hypothesis that one's correlation matrix is an identity matrix, which indicates that the variables are not related and therefore unsuitable for data detection. A p-value ($p < 0.05$) of the significance level implies that a factor analysis may be useful.

Findings in table 12 showed the KMO index of sampling adequacy was 0.786 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2013; Kaiser 1970, 1974). Bartlett's Test of Sphericity was also highly significant (Chi-square = 976.749 with 15 degrees of freedom at $p < 0.05$). Based on the results, statements under supplier performance are concluded to be reliable for further statistical analysis.

Table 12 : KMO Sampling Adequacy and Bartlett's Sphericity Test

Test		Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.786
	Approx. Chi-Square	976.749
Bartlett's Test of Sphericity	Df	15
	Sig.	0.000

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and Bartlett's test of sphericity. Factor analysis was conducted using the Principal Components Analysis (PCA) approach. Extraction of factors followed the KI method proposal by Kaiser (1960) whereby only the factors that have values greater than 1 were retained for analysis. Total variance explained by the extracted factor is 82.650% shown in table 12. The factor communalities of the 5 variable constructs on supplier performance influence on implementation of FA are greater than 0.5. This concurred with Izquierdo *et al* (2014) who pointed out that 100 or 200 subjects are usually sufficient if the communalities are greater than 0.5.

Table 13 : Supplier Performance Total Variance Explained

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
| | | | | | | Cumulative |
Component	Total	% of Variance	Cumulative %	Total	% of Variance	%
1	3.862	64.366	64.366	3.862	64.366	64.366
2	1.097	18.284	82.650	1.097	18.284	82.650
3	0.557	9.277	91.927			
4	0.236	3.940	95.866			
5	0.162	2.693	98.559			
6	0.086	1.441	100.000			

Extraction method: principal component analysis

a. When component is correlated, sum of squared loading cannot be added to obtain a total variance

A simplified factor loading matrix or a pattern matrix for supplier performance in table 13 shows the factor loading where 5 statements attract coefficients of more than 0.5 and therefore further statistical analysis of SEM is allowed since there are more than 3 variables. A factor loading to or greater than 0.5 is considered adequate as it has good factor stability and leads to desirable and acceptable solution (latinyiru and Ketyenya, 2017).

Table 14: Loading and cross-loading of supplier performance

| | Component | |
Item	1	2
Supplier deliver the required good on time during implementation of FA	0.911	
Supplier deliver goods and services as per local purchase order during implementation of FA	0.929	
Supplier deliver right quantity during implementation of FA	0.903	
Supplier prompt provide corrective actions for defective items during implementation of FA b	0.860	
Supplier offer technical support for good sold during implementation of FA	0.751	

4.4.4 Test of overall theoretical model

Structural Equation Modelling (SEM) with Amos 23 was used to analyse the relationship among variables in value perception. The fact structure equation modelling must be measured from three parts including fit criteria; fit of internal structure of model and overall model fit was admitted by Anderson, Hair, Babin, and Black (2013). Test results of preliminary fit criteria specify that the factor loading value of latent variables were at standardised levels between 0.5 and 0.9, and all of them have reached the significant level. So, the theoretical model of this paper is fit for the basic fitting standards.

Test results of overall fit shown in table 14 indicate that measurement of absolute fitness, $\chi^2 = 91.13$, degree of freedom (df) is 30, root mean square error of approximation (RAMSEA) is 0.083 is lower than 0.090, which indicates that all

indicator rich the accepted level. In the measurement of asymptotic fitness, the value of incremental fit index (IFI) = 0.834, Normed fit Index (NFI) = 0.817, comparison fit index (CFI) is 0.832 are larger than 0.80. As to measure the measurement of summarised fitness, value of Pasmonial Normed Fit Index (PNFI) is 0.553 and Pasmonial Comparison Fit Index (PCFI) is 0.531are larger than 0.5, and $\chi^2/d.f$ (3.75) is less than 5, which indicate that all indicators reach the accepted level, which indicates that the theoretical model of this paper has a good overall model fit.
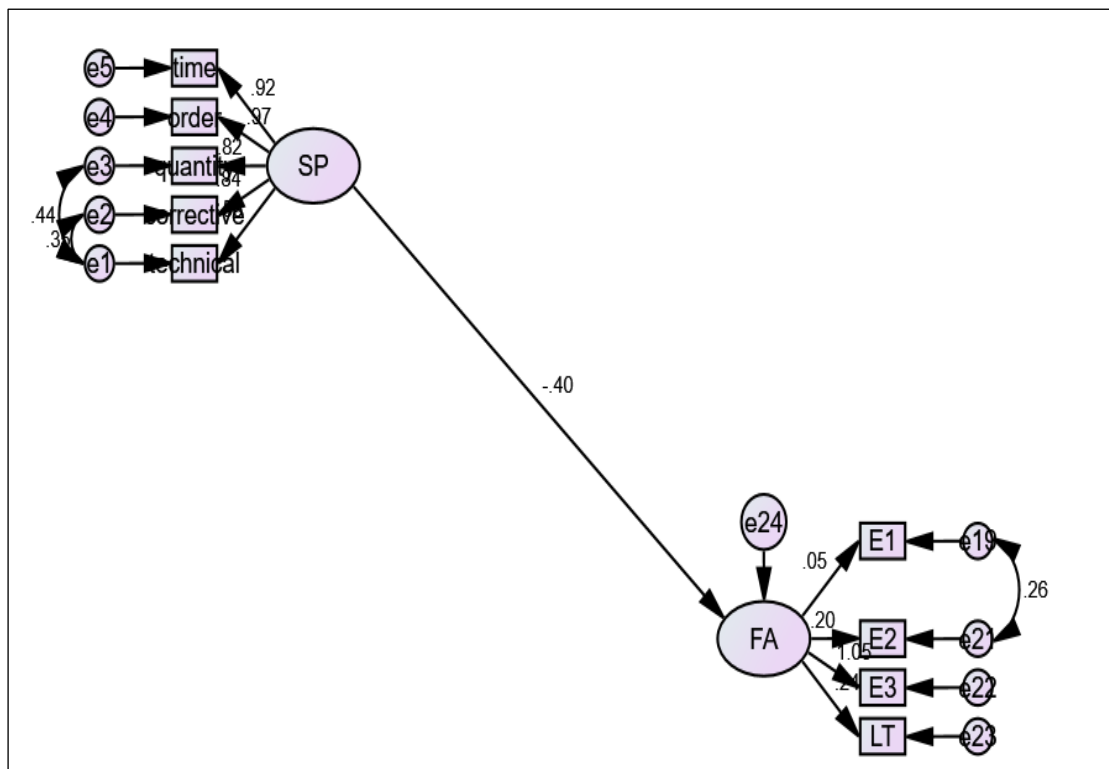
Figure 2: Supplier performance and Framework agreements

SP: supplier performance; FA: framework Agreements: E1: economy; E2: efficiency; E3: effectiveness; LT: lead Time

The loading for supplier performance factors count for 40% on indicators used to lead framework agreements. This implies that supplier performance was significant and the moderating influence of framework agreements on local government's authorities. The loading of all indicators in the latent variable in the endogenous variable were above 50%. This implies that FA supplier performance aspects have to be achieved**.**

4.4.5 Regression weight

The regression weights of the confirmatory factor analysis path were also extracted as presented in table 15. The actual strength of the relationship of the variables was

evaluated by the estimates whereby, regression weight estimates for quantity 0.820, orders placed 1.285, time delivery 1.22, and technical support 0.782 implied that when supplier performance increased also the regression weights for quantity, order placement, delivery time, and also provision of technical support increased. Also, the regression weight for Supplier performance in the prediction of Framework is significantly different from zero at the 0.001 level (two-tailed). The results implied that supplier performance strongly predicts implementation of framework agreements on LGA.

Table 15: Regression weights

			Estimate	S.E.	C.R.	P	Label
Framework	<---	SP	0.629	0.104	6.054	0.001	par_7
Corrective	<---	SP	1.000				
Quantity	<---	SP	0.820	0.056	14.530	0.001	par_1
Order	<---	SP	1.285	0.065	19.725	0.001	par_2
Time	<---	SP	1.122	0.062	18.049	0.001	par_3
Economy	<---	Framework	1.000				
Lead	<---	Framework	0.191	0.162	1.179	.0023	par_4
Effectiveness	<---	Framework	0.159	0.092	1.725	.045	par_5
Efficiency	<---	Framework	0.038	0.061	.619	.036	par_6
Technical	<---	SP	0.792	0.080	9.928	0.001	par_8

SC= Supplier performance

4.4.6 Standardised regression weight

The standardised beta estimates in table 16 showed the strength of each exogenous variable in influencing change in the endogenous variable. The results indicated that supplier performances positively impacted by receiving good on time, received good as per local purchase order, good received in right quantity, supplier providing corrective action and technical support to Pe. Importantly local purchase order on supplier performances more effectively stronger than other variables as shown on table

Table 16: Standardised Regression Weights

			Estimate
Corrective	<---	SP	0.840
Quantity	<---	SP	0.816
Order	<---	SP	0.970
Time	<---	SP	0.921
Technical	<---	SP	0.555

SP= Supplier performance

4.4.7 Squared multiple correlations

The squared multiple correlations are provided table 17. The results estimated the that the predictors of Technical explain 30.8 percent of its variance as a result the error

variance of Technical is approximately 69.2 percent of the variance of Technical support itself, predictors of Time explain 84.8 percent of its variance as a result the error variance of Time is approximately 15.2 percent of the variance of Time itself, the predictors of Order explain 94.2 percent of its variance In other words, the error variance of local purchase Order is approximately 5.8 percent of the variance of local purchase Order itself, predictors of Quantity explain 66.6 percent of its variance. In other words, the error variance of Quantity is approximately 33.4 percent of the variance of Quantity itself, and predictors of Corrective action explain 70.6 percent of its variance thus the error variance of Corrective action is approximately 29.4 percent of the variance of Corrective itself.

Table 17: Squared Multiple Correlations

Statement	Estimate
Technical support	0.308
Time	0.848
Order	0.942
Quantity	0.666
Corrective	0.706

4.4.8   Test of hypothesis

The result of hypothesis testing in the table shows p-value = 0.001 which is less than 0.05. Therefore, null hypothesis (Ho) is rejected and alternate hypothesis accepted, then it was concluded that supplier performance has significant effects on implementation of framework agreements. This means there is positive correlation between supplier performance and framework agreements that means as the supplier performance increases also framework agreements increase as well.

Table 18: Hypothesis Testing

	Sig. (2-tailed)	Hypothesis	Results
SP	0.001	Ho	Rejected

Note: SP=Supplier performance

4.5 Information Exchange Mechanism and Framework Agreements

The second objective of the study is information exchange mechanism on implementation of framework agreement on Local government authorities. The respondents were requested to rate several statements about those factors on a scale of 1 to 5. The researcher found that factors such as information exchange mechanism between shareholders; Absence of technological adaptation; adjustment of new

technology; use of TANePS and participation of suppliers in TANePS to the implementation of framework agreements in local government's authorities.

4.5.1 Descriptive analysis for information exchange mechanism

The findings on table 19 show that the majority of the respondents 57.6% (118) disagreed on the smooth information exchange mechanisms between PE and other stakeholders in implementation of framework agreement on local government's authority. A result implies that there are no smooth information exchange mechanisms between PE and other stakeholders in implementation of framework agreement local government's authority. The results are also significant as the Pearson chi-square sig is 0.000. The mean for smooth information exchange mechanism between Pe and Supplier was 2.56, indicating respondents have a low response to the questions raised. It was evidence that Smooth information exchange mechanisms between PE and other stakeholders affects the implementation Framework Agreements on Local Government's Authorities. Costur (2014) argued that it is essential that partners strengthen their capacity to gather, share, analyse and disseminate such information.

Table 19 shows that the majority of the respondents 66.6% (156) agreed on the statement absence of technological adaptation in framework agreement during implementation of framework agreement. Results implies that Absence of technological adaptation in framework agreement affects the implementation of framework agreements on local government's authority. The mean for absence of technological adaptation was 3.66, indicating respondents have a high response to the questions raised. It was evidence that there was absence of technological adaptation when implementing Framework Agreements on Local Government's Authorities. This finding is similar to the study of (Meressa, 2018) studied on the influencing factors of framework agreement effectiveness in public procurement and property disposal service, Ethiopia, who found that 49.5% of the respondents responded that the service has no ICT system to interact with public bodies and suppliers.

Table 19 revealed that the majority of the respondents 61 (140) agreed on the statement Staff's adaptation of information exchange mechanism during implementation of FA on local government's authority. Results imply that staffs are adapting the technology brought by the government during the implementation of framework agreements and hence the adaptation of new technology done by staff does

not affect implementation of Framework agreements on local government's authorities. The mean for staff's adaptation of information exchange mechanism was 3.75; indicating respondents have a high response to the questions raised. It was evidence that staff's adaptation of information exchange mechanism does not affect implementing Framework Agreements on Local Government's Authorities. Also, this finding is similar with study of Simba (2013) challenges in the implementation of the system for procurement of common use, and services in public procuring entities The Study revealed that there was a considerable number of PE's who were not using the system for procurement of CUIS.

Table 19 indicates the majority of the respondents 75.6% (155) disagreed on the statement that adjustment of new technology FA will be proper on local government's authority. Results imply that without adjustment to new technology framework agreements on local government authority will not prosper. The mean for adjustment of new technology was 2.11, indicating respondents have a low response to the questions raised. It was evidence that adjustment of technology in framework agreements is among the important factors during implementation of Framework Agreements on Local Government's Authorities. Costur (2014) argued that it is essential that partners strengthen their capacity to gather, share, analyse and disseminate such information.

Findings in Table 19 indicate that 69.8% (143) of the respondents agreed   that use of TANePS effectively implements framework agreements on local government's authority. Results imply that the use of TANePS is the factor that affects implementation of FA on Local Government's Authorities. The mean for use of TANePS was 3.67, indicating respondents have a high response to the questions raised. Therefore, use of TANePS is among the factors that affect implementation of framework agreements on LGAs. Arrowsmith & Quinot (2013) additionally, it was discovered that information and communication technology is crucial for enabling effective public procurement under framework agreement contracts in today's science and technology period.

Findings in Table 19 indicates that 67.3% (138) of the respondents agreed   that the rate of suppliers who participate in TANePS tenders affects implementation of framework agreements on local government's authority. Results imply that Rate of suppliers who participate in TANePS is low and hence they affect implementation of Framework

Agreements on local government's authority. The mean for supplier participation in TANePS was 3.58, indicating respondents have a high response to the questions raised. It was evidence that Rate of suppliers who participate in TANePS tenders are among factors that affect the Framework Agreements on Local Government's Authorities. Alto (2019) revealed that Information and communication technologies (ICTs) have an impact on public procurement on FA; public procurement has an ICT system to exchange information with suppliers and public bodies; it was discovered that information exchange between services, public bodies, and suppliers does not take a few days.

Table 19: Information Exchange Mechanism and Framework Agreements

Statement	SD% (F)	D% (F)	N% (F)	A% (F)	SA%(F)	Mean	Sd
Smooth information exchange mechanisms between PE and stakeholders'	37.6(77)	20(41)	7.3(15)	18.5(38)	16.6(34)	2.5659	1.5409
Absence of technological adaptation in framework agreement	17.6(36)	1(0.5)	5.4(11)	51.7(106)	24.9(51)	3.6585	1.3396
Staff's adaptation of information exchange mechanism	6.3(13)	20(41)	5.4(11)	29.3(60)	39(80)	3.7463	1.3262
Adjustment of new technology Fa will prosper	39(80)	36.6(75)	7.3(15)	8.3(17)	8.8(18)	2.1122	1.2572
Use of TANePS effect implementation of framework agreements	9.3(19)	14.6(30)	6.3(13)	39.5(81)	30.2(62)	3.6683	1.2975
Rate of supplier who participate in TANePS tenders	10.7(22)	15.6(32)	6.3(13)	39.5(81)	27.8(57)	3.5805	1.3283

The information exchange mechanism between Pe and Supplier plays a vital role in implementation of FA agreements as agreed by one of key informant on interview

> *".... There is a contradiction in the Information Exchange mechanism between the supplier and us. Sometimes we place a tender in the TANePS but there are delays due to an unstable network and we re-tender because the threshold of tender becomes outdated due to network error and time. Also, the participation of supplier in TANePS are so low and hence it reduces the competition and lapse of time since most of suppliers are not visit the portal frequently...''* (Babati District council, 22 July, 2022)

4.5.2 Information exchange mechanism sampling adequacy

Two statistical tests which assess the factorability of data for structure detection were

performed which are Kaiser-Meyer-Olkin (KMO) measuring sampling adequacy and Bartlett's Test of Sphericity. KMO measure of sampling adequacy indicates the proportion of variance in variables that might be due to underlying factors, whereby high values close to 1 generally indicate that a factor analysis can be useful with the data (Pallant, 2016). Bartlett's Test of Sphericity tests the hypothesis that one's correlation matrix is an identity matrix, which indicates that the variables are not related and therefore unsuitable for data detection. A p-value ($p < 0.05$) of the significance level implies that a factor analysis for information exchange mechanism may be useful.

Findings in table 20 showed the KMO index of sampling adequacy for information exchange mechanism was 0.583 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2013; Kaiser 1970, 1974). Bartlett's Test of Sphericity was also highly significant (Chi-square = 976.746 with 15 degrees of freedom at $p < 0.05$). Based on the results, statements under supplier performance are concluded to be reliable for further statistical analysis.

Table 20: KMO Sampling Adequacy and Bartlett's Sphericity Test

Test		Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.583
Bartlett's Test of Sphericity	Approx. Chi-Square	477.669
	Df	15
	Sig.	0.000

4.5.3 Factor analysis of information exchange mechanism

Table 21 Information Exchange Mechanism total variance explained Factor analysis after successful testing of validity and reliability using KMO coefficient and Bartlett's test of sphericity. Factor analysis was conducted using the Principal Components Analysis (PCA) approach. Extraction of factors followed the KI method proposal by Kaiser (1960) whereby only the factors that have values greater than 1 were retained for analysis. Total variance explained by the extracted factor is 74.05% shown in the table. The factor communalities of the 5 variables on information exchange mechanisms are greater than 0.5. This concurred with Izquierdo *et al* (2014) who pointed out that 100 or 200 subjects are usually sufficient if the communalities are greater than 0.5.

Table 21: Information Exchange Mechanism total variance explained

Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.990	33.169	33.169	1.990	33.169	33.169
2	1.310	21.837	55.007	1.310	21.837	55.007
3	1.142	19.038	74.045	1.142	19.038	74.045
4	0.908	15.126	89.171			
5	0.592	9.860	99.030			
6	0.058	0.970	100.000			

A simplified factor loading matrix or a pattern matrix for information exchange mechanism in table 22 shows the factor loading for Public Procurement Legal Framework where 5 statements attracted coefficients of more than 0.5 and therefore further statistical analysis. A factor loading to or greater than 0.5 is considered adequate as it has good factor stability and leads to desirable and acceptable solution (latinyiru and ketyenya, 2017).

Table 22: Loading and cross-loading of information exchange mechanism

	Component		
	1	2	3
Smooth information exchange mechanisms between PE and other stakeholders' implementation of Framework agreements		0.559	
Absence of technological adaptation in framework agreement during implementation of framework agreement	0.746		
Without Adjustment of new technology Fa will prosper			0.874
Use of TANePS effect implementation of framework agreements	0.974		
Rate of supplier who participate in TANePS tenders affect implementation of FA	0.974		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.

4.5.4 Test of overall theoretical model

Structural Equation Modelling (SEM) with Amos 23 was used to analyse the relationship among variables in value perception. The fact structure equation modelling must be measured from three parts including fit criteria; fit of internal structure of model and overall model fit was admitted by Anderson, Hair, Babin, and Black (2013). Test results of preliminary fit criteria specify that the factor loading value of latent variables were at standardised levels between 0.5 and 0.9, and all of them have reached the significant level. So, the theoretical model of this paper is fit for the basic fitting standards.

Test results of overall fit shown in the table indicate that measurement of absolute fitness, $\chi^2 = 122.55$, df =48, RAMSEA (.0873) is lower than 0.09, which indicates that

all indicators of information exchange mechanism are at the accepted level. In the measurement of asymptotic fitness, values of IFI (0.916), NFI (0.877), CFI (0.915) are larger than 0.80. As to measure the measurement of summarised fitness, value of PNFI (0.6334) and PCFI (0.6609) are larger than 0.5, and χ^2/d.f (2.8497) is between 1 and 3 where by the required level is when Chi-Square/Df < 5 (Marsh & However, 1985)., which indicate that all indicators of information exchange mechanism reach the accepted level, which indicates that the theoretical model of this paper has a good overall model fit.
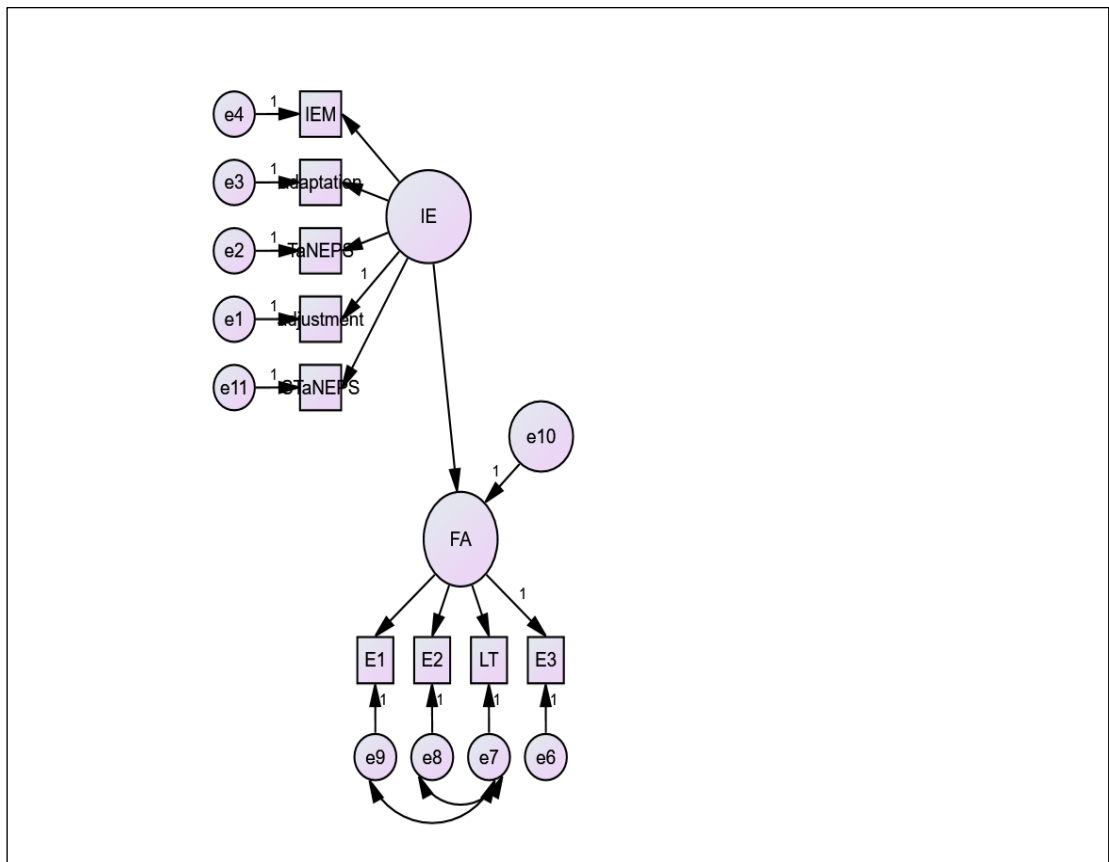
Figure 3 : Information exchange and FA

IE: information exchange mechanism; FA: framework Agreements: E1: economy; E2: efficiency; E3: effectiveness; LT: lead Time

The loading for information exchange mechanism factors count for 70% on indicators used to lead framework agreements. This implies that information exchange mechanisms were significant and the strong influence of framework agreements on local government's authorities. The loading of all indicators in the latent variable in the endogenous variable were above 50%. This implies that FA information exchange mechanism aspects have to be achieved**.**

4.5.5 Regression weight

The regression weights of the path were also extracted as presented in table 23, the actual strength of the relationship of variables were evaluated by the estimates. The results indicated that information exchange mechanisms were positively impacted by Absence of technological adaptation with a regression weight of 0.2704, Adjustment of new technology by regression weight 0.8319, and suppliers who participated in TANePS as negative impact information exchange mechanisms by -0.1453. Importantly, adjustment of new technology on information exchange mechanisms is more effectively stronger than other variables. The results confirmed that regression weights are significant at 0.0026 in technological adaptation, 0.0016 in adjustment of new technology, 0.048 in use of TANePS and also supplier participation in TANePS is not significant by 0.3569. The results implied that the information exchange mechanism strongly predicts implementation of framework agreements on LGA.

Table 23: Regression Weights

			Estimate	S.E.	C.R.	P	Label
FA	<---	Info	1.2390	0.3634	3.4090	0.001	par_8
Information exchange	<---	Info	1.0000				
Technological adaptation	<---	Info	0.2704	0.1908	-3.0080	0.0026	par_1
Adjustment	<---	Info	0.8319	0.2486	3.3465	0.001	par_2
TANePS	<---	Info	0.257	0.1518	-0.1690	0.0048	par_3
Supplier participation	<---	Info	-0.1453	0.1578	0.9212	0.3569	par_4
Economy	<---	FA	1.0000				
Lead time	<---	FA	0.4931	0.1370	3.5995	0.001	par_6
Effectiveness	<---	FA	0.3346	0.1100	3.0425	0.0023	par_5
Efficiency	<---	FA	0.2642	0.1051	2.5140	0.0019	par_7

FA= Framework Agreements, Info= Information exchange mechanism

4.5.6. Standardised regression weight

The standardised beta estimates in table 24 showed the strength of each exogenous variable in influencing change in the endogenous variable. The standardised beta estimates showed the strength of each exogenous variable in influencing change in the endogenous variable. The results indicated that information exchange mechanisms were positively impacted by information exchange mechanisms between supplier and buyer, technological adaptation, adjustment of new technology, and use of TANePS. Also, supplier participation in TANePS has a negative impact on information exchange mechanisms.

Table 24: Standardised Regression Weights

			Estimate
Information exchange	<---	IEM	0.0475
Adaptation	<---	IEM	0.1003
Adjustment	<---	IEM	0.6703
TANePS	<---	IEM	0.8396
Supplier participation	<---	IEM	-0.1198

4.5.7 Squared multiple correlations

The squared multiple correlations are provided table 25. The results estimated the predictors of information exchange mechanism had an average of 38.4%, adaptation of Information exchange as average of 58.8%. Adaptation of TANePS as 84.4% and also an average of 42.1% on supplier participation on TANePS during implementation of framework agreements.

Table 25: Squared multiple correlations

	Estimate
Information exchange	0.384
Adaptation	0.588
TANEPS	0.814
Supplier participation	0.421
Supplier participation	0.742

4.5.8 Test of Hypothesis

The result of hypothesis testing in table 26 shows p-value = 0.000 which is less than 0.0001. Therefore, null hypothesis (H_0) is rejected and it is concluded that information exchange mechanism is a significant factor affecting implementation of framework agreements on local government authorities, meaning there is a positive correlation between information exchange mechanism and framework agreement as information exchange mechanism increases and framework agreements implementation increase in Public Entities.

Table 26: Hypothesis Testing

	Sig. (2-tailed)	Hypothesis	Results
IEM	0.000	H_0	Rejected

IEM= Information Exchange Mechanism

4.6 Employee Competency and Framework Agreements

The third objective of the study is staff's competency and capability on implementation of framework agreements. Employee competency in implementation of frameworks agreements were analysed by the factors such as awareness, training, knowledge, skills and support.

4.6.1 Descriptive analysis for information exchange mechanism

Table 27 shows that the majority of the respondents 61.9% (127) disagreed on the statement Staffs have awareness of implementation of framework agreements on local government's authority. Results implies that staff who are the main user and initiator of procurement services since they are the one who communicate their needs to the procurement unit for their fulfilments of their duties are not aware of Framework agreements; it means that they will affect the implementation of local government's authority in local governments. The mean for the staff's awareness was 2.60, indicating respondents have average response to the questions raised. It was evidence that staff have moderate awareness on implementation of Framework agreements.

The findings on table 27 show that the majority of the respondents 66.9% (137) disagreed on the statement staff knowledge during implementation of framework agreements on local government's authority. Results implies staff are not well understanding the implementation of framework agreements and hence it affects the procurements of commonly used items since user departments are the one who provide the requirements to procurement units in order for the officer to prepare local purchase orders and the local purchase orders shall not exceed the budget agreed in the framework contract. The mean for the staff knowledge was 2.40, indicating respondents have an average response to the questions raised. It was evidence that staff have moderate knowledge on Framework Agreements.

Table 27 revealed that the majority of the respondents 41.9% (71) disagreed on the statement Staffs have skills on implementation of framework agreements on local government's authority. Results imply that staffs do not have adequate skills which are required on implementation of framework agreements and hence staffs affect the implementation of local government's authority. The mean for staff's skills was 3.07, indicating respondents have a high response to the questions raised. It was evidence that some Staffs have skills and others do not have implementation of framework agreements.

Table 27 indicates the majority of the respondents 37.1% (76) agreed on the statement Organisation provides training to the staff regarding the framework agreements. Results imply that organisations provide training to their staff regarding framework agreement. The mean for provision of training was 3.21, indicating respondents have a

medium response to the questions raised. It was evidence that organisation provision does not provide training to all staff.

Findings in Table 27 indicate that 37.6% (77) of the respondents agreed that organisations provide support in implementation of Framework Agreements. Results implies that organisations provide support in implementation of Framework agreements hence organisation support affects the implementation of local government's authority. The mean for provision of support was 3.41; indicating respondents have a high response to the questions raised.

The role played by Employee in implementation of framework agreement is crucial even though governments provide supports and training for the employees but employee competency and skills are still the problem as supported by one of the key informants

> *".... employees are not aware with implementation of FA, we member of tender board and evaluation committee some we have knowledge and experience of implementation of Fa procedures but most of them t does not have adequate knowledge and skills so there is a need of conducting training regarding framework agreements when the new tender board member are appointed ''* *(*Moshi District council*, 27 July 2o22)*

It was evidence that organisation support is important elements during implementing Framework Agreements on Local Government's Authorities. Also, employee competence during implementation of FA affects the execution of framework agreements in Procuring Entities in Tanzania (Genene, 2019).

Table 27: Employee Competency and Framework Agreements

Statement	SD% (F)	D% (F)	N% (F)	A% (F)	SA% (F)	Mean	Sd
Staffs have awareness of implementation of framework agreements	54.11(111)	7.8(16)	0(0)	0(0)	38(78)	2.6000	1.9036
Staffs have knowledge on implementation of framework agreements	37.6(77)	29.3(60)	8.8(18)	4.9(10)	19.5(40)	2.3951	1.5065
Staffs have skills on implementation of framework agreements	41(84)	0(0)	25.9(53)	18.5(38)	14.6(30)	3.0683	1.0870
Organisation provide training to the staffs regarding the framework agreements for cuis	0(0)	32.2(66)	30.7(63)	20.5(42)	16.6(34)	3.2146	1.0723
Organization provide support to staffs in implementation of FA	0(0)	23.4(48)	39.0(80)	21.0(43)	16.6(34)	3.4073	1.0089

4.6.2 Employee competency sampling adequacy

Two statistical tests which assess the factorability of data for structure detection were performed which are Kaiser-Meyer-Olkin (KMO) measuring sampling adequacy and Bartlett's Test of Sphericity. KMO measure of sampling adequacy indicates the proportion of variance in variables that might be due to underlying factors, whereby high values close to 1 generally indicate that a factor analysis can be useful with the data (Pallant, 2016). Bartlett's Test of Sphericity tests the hypothesis that one's correlation matrix is an identity matrix, which indicates that the variables are not related and therefore unsuitable for data detection. A p-value ($p < 0.05$) of the significance level implies that a factor analysis may be useful.

Findings in table 28 showed the KMO index of sampling adequacy was 0.798 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2013; Kaiser 1970, 1974). Bartlett's Test of Sphericity was also highly significant (Chi-square = 1134.948 with 10 degrees of freedom at $p < 0.05$).

Based on the results, statements under employee competency are concluded to be reliable for further statistical analysis.

Table 28: KMO Sampling Adequacy and Bartlett's Sphericity Test

Test		Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.798
	Approx. Chi-Square	1134.948
Bartlett's Test of Sphericity	Df	15
	Sig.	0.000

4.6.3 Factor analysis of employee competency

Table 30 on the employee competency total variance explained Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and Bartlett test of sphericity. Factor analysis was conducted using the Principal Components Analysis (PCA) approach. Extraction of factors followed the KI method proposal by Kaiser (1960) whereby only the factors with values greater than 0.5 were retained for analysis. Total variance explained by the extracted factor is 94.189% shown in the table. The factor communalities of the 5 variable constructs are greater than 0.5. This concurred with Izquierdo *et al* (2014) who pointed out that 100 or 200 subjects are usually sufficient if the communalities are greater than 0.5.

Table 29: Employee competency total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.048	60.960	60.960	3.408	60.960	60.960
2	1.661	33.229	94.189	1.661	33.229	94.189
3	.143	2.852	97.041			
4	.097	1.933	98.975			
6	.051	1.025	100.000			

4.6.4 Test of overall theoretical model

Structural Equation Modelling (SEM) with Amos 23 was used to analyse the relationship among variables in value perception. The fact structure equation modelling must be measured from three parts including fit criteria; fit of the internal structure of model and overall model fit was admitted by Anderson, Hair, Babin, and Black (2013). Test results of preliminary fit criteria specify that the factor loading value of latent variables were at standardised levels between 0.5 and 0.9, and all of them have reached the significant level. So, this paper's theoretical model fits the basic fitting standards. Test results of overall fit indicate that measurement of absolute fitness, $\chi^2 = 84.22$, dt $=28$, RAMSEA (0.087) is lower than 0.09, indicating that all indicators are at the

accepted level. In the measurement of asymptotic fitness, the values of TLI (0.8420), RFI (0.8165), NFI (0.8858), CFI (0.9017) are larger than 0.80. To measure the measurement of summarised fitness, the value of PNFI (0.5512) and PGFI (0.5610) are larger than 0.5, and χ^2/d.f (3.007) is between 1 and 3, which indicate that all indicators reach the accepted level, which indicates that the theoretical model of this paper has a good overall model fit.
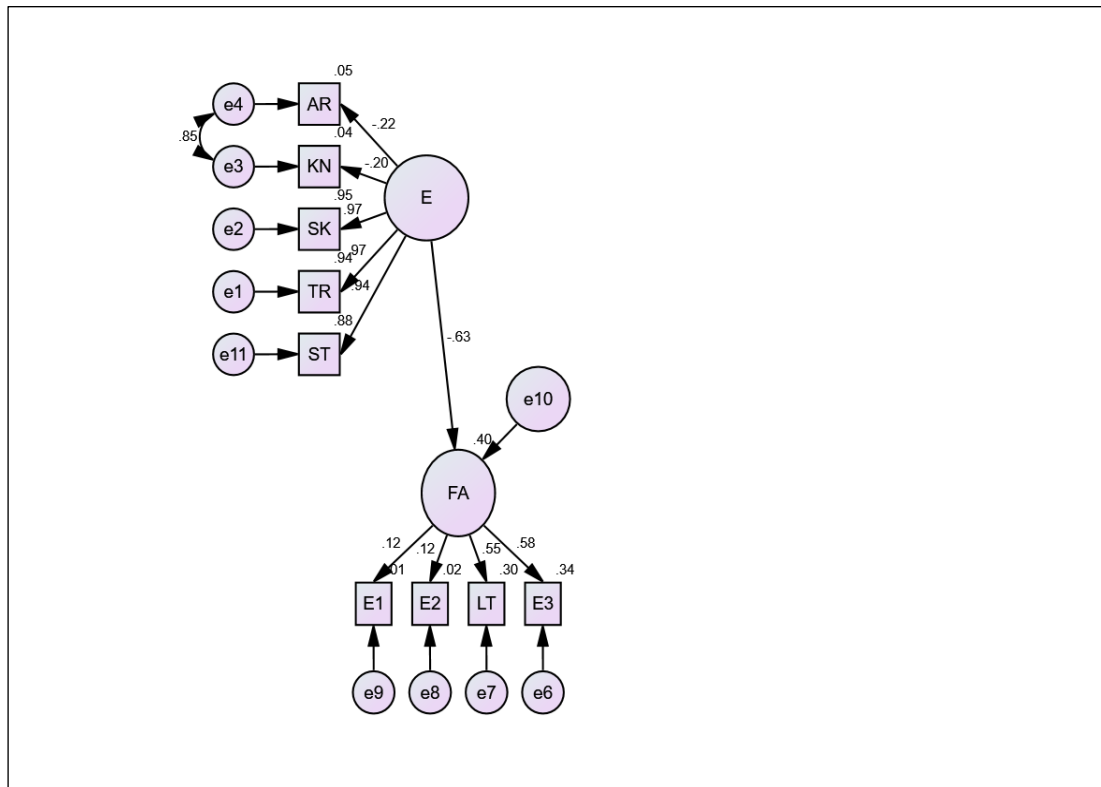
Figure 4: Employee Competence and FA

E: Employee competence; AR: awareness; KN: knowledge; SK: skills; TR: training; SK: support; FA: framework Agreements: E1: economy; E2: efficiency; E3: effectiveness; LT: lead Time

The loading for employee competence factors count for 63% on indicators used to lead framework agreements. This implies that employee competence was significant and the strong influence of framework agreements on local government's authorities. The loading of most indicators in latent variables in endogenous variables were above 50%. This implies that FA employee competence aspects have to be achieved**.**

4.6.5 Regression weight

The regression weights of the confirmatory factor analysis path were also extracted as presented in table 30 the actual strength of the relationship of the variables was evaluated by the estimates, whereby, regression estimates for employee skill 1.018,

employee knowledge 0.289, employee awareness 0.406, and management support 0.910 implied that when employee competency increased also the regression weights for employee skills, knowledge, awareness and government support. Also, employee competency in prediction of framework agreements is 0.01 all indicators of employee competency except for employee knowledge which has a significance level of 0.004. The results implied that employee competency strongly predicts implementation of framework agreements on LGA.

Table 30: Regression Weights

			Estimate	S.E.	C.R.	P	Label
Framework	<---	EC	0.571	0.118	4.827	0.001	par_7
Training	<---	EC	1.000				
Skills	<---	EC	1.018	0.026	39.807	0.001	par_1
Knowledge	<---	EC	0.289	0.101	2.871	0.004	par_2
Awareness	<---	EC	0.406	0.126	3.207	0.001	par_3
Economy	<---	Framework	1.000				
Lead	<---	Framework	0.775	0.200	3.873	0.001	par_4
Effectiveness	<---	Framework	0.180	0.173	1.039	0.299	par_5
Efficiency	<---	Framework	0.174	0.152	1.144	0.025	par_6
Support	<---	EC	0.910	0.029	31.430	0.001	par_8

Ec=Employee competency

4.6.6 Standardised regression weight

The standardised beta estimates in table 31 showed the strength of each exogenous variable in influencing change in the endogenous variable. The results indicated that supplier competence as positively impacted by employee awareness is more effectively stronger than other variables. The results confirmed that supplier participation is the mostly positive predictor of employee skills (0.975), followed by employee training (0.971), government support (0.939), employee knowledge (-0.200), and employees' awareness (-0.222).

Table 31 : Standardised Regression Weights

			Estimate
Training	<---	EC	0.971
Skills	<---	EC	0.975
Knowledge	<---	EC	-0.200
Awareness	<---	EC	-0.222
Support	<---	EC	0.939

4.6.7   Squared multiple correlations

The squared multiple correlations are provided table 32, The results estimated the predictors of employee awareness had an average of 4.9%%, employee knowledge as

average of 4%, employee skills as 95.1%, employee training 94.3% and Also management support as an average of 88.2%

Table 32 : Multiple correlation

	Estimate
Support	.882
Awareness	.049
Knowledge	.040
Skills	.951
Training	.943

4.6.8 Test of Hypothesis

The result of hypothesis testing in table 33 shows p-value = 0.000 which is less than 0.001. Therefore, the null hypothesis (H_0) is rejected and it is concluded that, information exchange mechanism is a significant factor affecting implementation of framework agreements on LGAs. This means that there is positive correlation between information exchange mechanism and framework agreement as the information exchange mechanism increases and framework agreement implementation increases in Public Entities.

Table 33: Hypothesis Testing

	Sig. (2-tailed)	Hypothesis	Results
EC	0.000	H_0	Rejected

Note: EC= Employee Competence

4.7 Moderating Effect of Public Procurement Legal Frameworks on Relationship Between Factor Affecting Implementation of Framework Agreements and Implementation of Framework Agreements

The fourth objective of the study is moderating effects of Public Procurement Legal Frameworks on implementation of framework agreements on local government's authorities. The respondents were requested to rate several statements about those factors on a scale of 1 to 5.

4.7.1 Descriptive analysis of public procurement legal frameworks

Table 34 indicated that the majority of the respondents 64.4% (134) agreed on the statement that framework agreement tender documents are prepared according to PPRA Standard of tender framework document. Results implies that framework agreement tender documents are prepared according to PPRA Standards of framework tender document and hence it positively affects the implementation of framework

agreements on local governments. The mean for tender documents was 3.62; indicating respondents have a high response to the questions raised. It was evident that Framework agreement tender documents are prepared according to the PPRA Standard of tender framework document on Local Government's Authorities. Also, this finding is similar with study of (Simemba, 2013) on challenges in implementing the system for procurement of common use and services in public procuring entities. The finding revealed that framework tender documents are compatible with the one published by PPRA.

The findings on table 34 show that the majority of the respondents 72.7% (149) agreed on the statement that during the execution of framework agreements, suppliers are obtained through competition on local government's' authority. Results imply that during execution of framework agreements suppliers are obtained through min competition hence it affects the procurements of commonly used items. The mean for min competition was 3.75; indicating respondents have a high response to the questions raised. It was evidence suppliers obtained through min during implementing Framework Agreements on Local Government's Authorities. This finding is similar with study of Bryson (2017) study on effectiveness of framework agreements in public procurements in public procuring entities in Tanzania, a survey of selected public entities in Dar Es Salaam found that 25% of respondents agreed that suppliers obtained through mini competition offer high price than the prevailing market price, 27.8% of respondents were neutral while 47.2% of respondents disagree that suppliers obtained through mini competition offer high price than prevailing market price.

Table 34 revealed that the majority of the respondents 63.4% (130) disagreed on the statement Framework agreements tender procedures follow PPRA regulation during the implementation of framework Agreements on local government's authority. Results imply that Framework agreements tender procedures follow PPRA regulation during implementation of Framework agreements on local government's authority. The mean for follow-up regulation was 3.42, indicating respondents have a high response to the questions raised. It was evidence that adherence to tender procedures is important when implementing Framework Agreements on Local Government's Authorities. Also, tender documents follow rules, regulations, and Tanzania's Entities (Bryson, 2017).

Table 34 indicates that the majority of the respondents, 37.1% (76), agreed on the statement Framework agreements adhering to the terms and conditions of Fa 2011 and

amendments 2016. Results imply Framework agreements adhering with terms and conditions of Fa 2011 and amendments 2016 during the implementation of a framework agreement on local government's authority. The mean for adherence of Public Procurement Legal Frameworks was 3.39; indicating respondents have a high response to the questions raised. It was that Framework agreements adhered with the terms and conditions of Fa 2011 and amendments 2016 during implementation framework Agreements on Local Government's Authorities. PE shall be responsible for, effecting payments for goods and services delivered and accepted, claiming for damages caused by delayed delivery (Public Procurement Act, 2013).

Table 34 : Public Procurement Legal Frameworks

Statement	SD% (F)	D% (F)	N% (F)	A% (F)	SA% (F)	Min	Sd
Framework agreement tender documents are prepared according to PPRA Standard of tender framework document	10.7(22)	17.6(36)	7.3(15)	27.8(57)	36.6(75)	3.6195	1.40434
During execution of framework agreements, suppliers are obtained through min competition	12.7(26)	14.4(29)	0.5(1)	30.7(63)	42(86)	3.7512	1.44221
Framework agreements tender procedures follow PPRA regulation	26.3(54)	2.4(5)	7.8(16)	29.3(60)	34.1(70)	3.4244	1.60281
Compliance with the terms and conditions of Fa 2011 and amendments 2016 effects FA	24.4(50)	13.2(27)	3.9(8)	13.7(28)	44.9(92)	3.4146	1.69740

4.7.2 Public procurement legal frameworks sampling adequacy

Two statistical tests assessing the factorability of data for structure detection were performed: Kaiser-Meyer-Olkin (KMO) measuring sampling adequacy and Bartlett's Test of Sphericity. KMO measure of sampling adequacy indicates the proportion of variance in variables that might be due to underlying factors, whereby high values close to 1 generally indicate that a factor analysis can be useful with the data (Pallant, 2016). Bartlett's Test of Sphericity tests the hypothesis that one's correlation matrix is an identity matrix, which indicates that the variables are not related and therefore unsuitable for data detection. A p-value ($p < 0.05$) of the significance level implies that a factor analysis may be useful.

Table 35 showed the KMO index of sampling adequacy was 0.793 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2013; Kaiser 1970, 1974). Bartlett's Test of Sphericity was also highly significant (Chi-square = 469.746 with 8 degrees of freedom at $p < 0.05$). Based on the results, statements under Public Procurement Legal Frameworks are concluded to be reliable for further statistical analysis.

Table 35: KMO Sampling Adequacy and Bartlett's Sphericity Test

Test		Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.793
Bartlett's Test of Sphericity	Approx. Chi-Square	110.76
	Df	6
	Sig.	0.000

4.7.3 Factor analysis for public procurement legal framework

Table 36 Public Procurement Legal Framework total variance explained Factor analysis was conducted after successfully testing validity and reliability using KMO coefficient and Bartlett's test of sphericity. Factor analysis was conducted using the Principal Components Analysis (PCA) approach. Extraction of factors followed the KI method proposal by Kaiser (1960) whereby only the factors with values greater than 0.5 were retained for analysis. The total variance explained by the extracted factor is 71.316%, as shown in the table. The factor communalities of the 5 variable constructs are greater than 0.5. This concurred with Izquierdo *et al* (2014) who pointed out that 100 or 200 subjects are usually sufficient if the commonalities are greater than 0.5.

Table 36 : Public Procurement Legal Frameworks Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.812	45.292	45.292	1.812	45.292	45.292
2	1.041	26.024	71.316	1.041	26.024	71.316
3	.722	18.043	89.359			
4	.426	10.641	100.000			

Extraction Method: Principal Component Analysis.

4.7.4 Test of overall theoretical model

Structural Equation Modelling (SEM) with Amos 23 was used to analyse the relationship among variables in value perception. The fact structure equation modelling must be measured from three parts, including fit criteria; fit of the internal structure of

the model and overall model fit was admitted by Anderson, Hair, Babin, and Black (2013). Test results of preliminary fit criteria specify that the factor loading value of latent variables were in standardised levels between 0.5 and 0.9, and all of them have reached the significant level. So, this paper's theoretical model fits the basic fitting standards.

Test results of overall fit indicate that measurement of absolute fitness, $\chi^2 = 54.222$, dt $=19$, RAMSEA (0.089) is lower than 0.095, indicating that all indicators are at the accepted level. In the measurement of asymptotic fitness, values of TLI (0.8671), NFI (0.8321), CFI (0.8965) are larger than 0.80. To measure the measurement of summarised fitness, the value of PNFI (0.7501) and PGFI (0.6521) are larger than 0.5, and $\chi^2/d.f$ (2.8537) is between 1 and 2, which indicates that all indicators reach the accepted level, which indicates that the theoretical model of this paper has a good overall model fit.
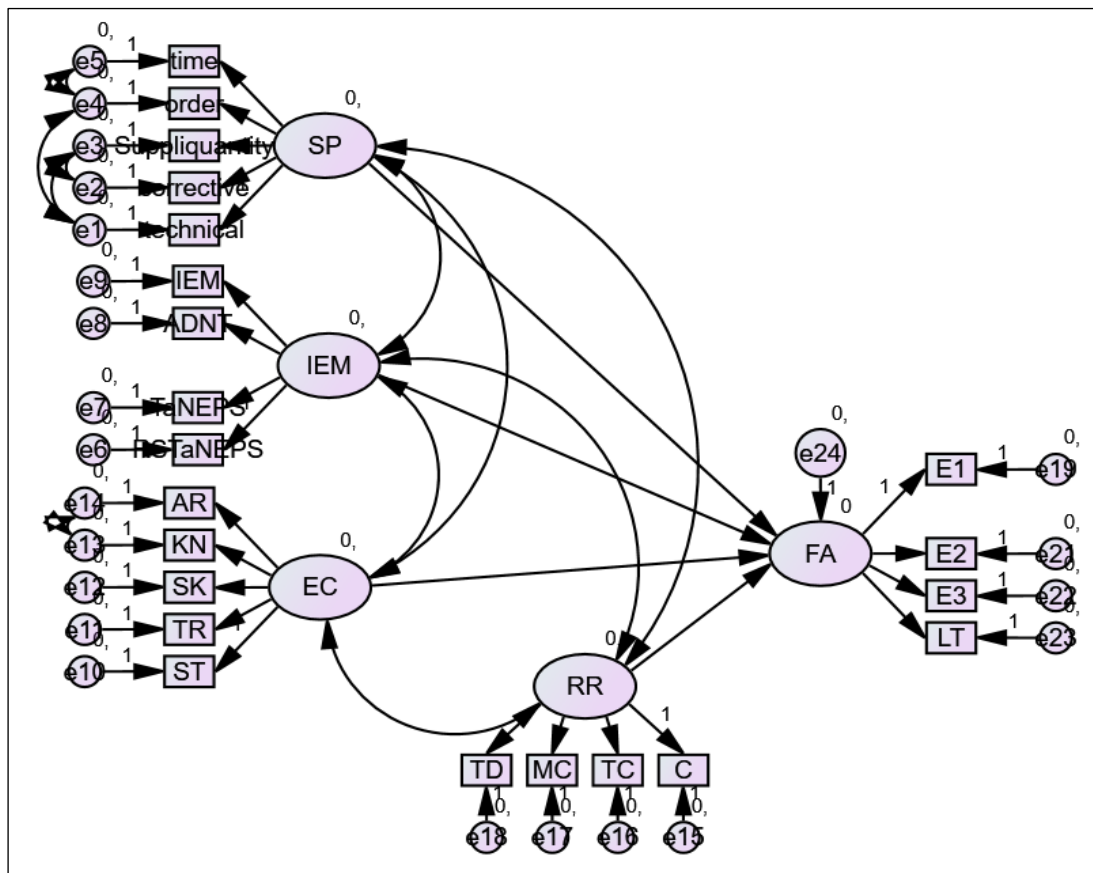

Figure 5: Moderating effect

RR: rules and regulation; SP: supplier performance; E: Employee competence; AR: awareness; KN: knowledge; SK: skills; TR: training; SK: support; FA: framework Agreements: E1: economy; E2: efficiency; E3: effectiveness; LT: lead Time

4.7.5 Regression weights

Data processing in Amos resulted into a relationship analysis among variables in table 37 the questions obtained based on analysis is **Y= 0.3086SP + 1.0084IEM+ 0.011EC-0.254.PLF** + e, the critical ratio (CR) value is used to calculate the regression weight. The tested results obtained show that all coefficients are significant, hence the null hypothesis is rejected and alternate hypotheses are accepted that each indicator has causality, which means the modal is acceptable. This equation means that supplier performance (SP), information exchange mechanism (IEM), employee competence (EC), and Public Procurement Legal Framework as moderation effect (RR) variables have a significant effect on the Framework Agreements (FA).

Table 37 : Regression Weights

			Estimate	S.E.	C.R.	P	Label
FA	<---	RR	0.3086	0.0846	3.6474	0.001	par_1
FA	<---	EC	1.0084	0.0817	1.0915	0.001	par_2
FA	<---	IEM	0.0011	0.0012	.8504	0.001	par_3
FA	<---	SP	-0.0254	0.0704	-.9174	0.001	par_4
Technical	<---	SP	1.0000				
Corrective	<---	SP	1.0795	0.0912	11.8364	0.001	par_5
Quantity	<---	SP	0.8788	0.0779	11.2803	0.001	par_6
Order	<---	SP	1.2833	0.1142	11.2401	0.001	par_7
Time	<---	SP	1.0946	0.0967	11.3182	0.001	
Supplier participation	<---	IEM	1.0000				
TANePS	<---	IEM	0.3695	0.0662	5.5850	0.001	par_9
Technological adaptation	<---	IEM	-0.0034	0.0152	-0.2210	0.825	par_10
Information exchange	<---	IEM	0.0195	0.0188	1.0407	0.298	par_11
Support	<---	EC	1.0000				
Training	<---	EC	1.0865	0.0342	31.7582	0.001	par_12
Skills	<---	EC	1.1159	0.0327	34.1049	0.001	par_13
Knowledge	<---	EC	-0.2829	0.1103	-2.5640	.0103	par_14
Awareness	<---	EC	-0.3964	0.1389	-2.8533	.0043	par_8
Compliance	<---	RR	1.0000				
Terms	<---	RR	1.3508	0.1318	10.2482	0.001	par_15
Competition	<---	RR	0.4648	0.1024	4.5406	0.001	par_16
Tender	<---	RR	0.2733	0.0827	3.3037	0.001	par_17
Efficiency	<---	FA	1.0000				
Effectiveness	<---	FA	1.3795	0.5083	2.7142	0.001	par_19
Economy	<---	FA	5.6375	1.3784	4.0899	0.001	par_18
Lead	<---	FA	4.0363	1.0436	3.8676	0.001	par_20

4.7.7 Test of Hypothesis

The result of hypothesis testing in table 38 shows p-value = 0.000 which is less than 0.0001. Therefore, the null hypothesis (H_0) is rejected and it is concluded that the information exchange mechanism is a significant factor affecting implementation of

framework agreements on LGAs. This means there is a positive correlation between the information exchange mechanism and framework agreement as the information exchange mechanism increases also, framework agreement implementation increases in Public Entities.

Table 38: Hypothesis Testing

	Sig. (2-tailed)	**Hypothesis**	**Results**
RR	0.000	H_0	Rejected

RR= Public Procurement Legal Frameworks

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an introduction, summary of the study, conclusion, and recommendations to the findings basing on the areas in which the Researcher aimed the work to be reached as to solve the intended problems and suggestions for further studies or research regarding to the factors affecting the implementation of a framework agreement in local government's authorities.

5.2 Summary of the Major Findings

The study assesses Factors Affecting Implementation of Procurement Framework Agreements for Commonly Used Items in the Selected Northern Zone Local Government Authorities, six local government's authority as the case study. The study was facilitated by specific objectives which are to examine the supplier's performance influence on implementation of framework agreement on LGAs; to identify the information exchange mechanism on implementation of framework agreement on LGAs; to determine the sta ff's competency and capability on implementation of framework agreements; and examine the moderating effect of Public Procurement Legal Framework in the relationship between factors affecting FA and implementation of framework agreement.

The findings reveal that from supplier performance in implementation of framework agreements in local government's authorities, there was a problem associated with procurement performance in relation to supplier deliver good on time with mean (2.54), supplier deliver good and service as per Local Purchase Order (2.42), supplier deliver right quantity (2.54), supplier deliver right quality (2.75), prompt provision of corrective action (3.39), and supplier provide technical support (2.31)

The findings showed that the information exchange mechanism affects implementation of framework agreements in local government's authorities, There is still a problem in relation to absence of technological adaptation with mean (2.57), staff adaptation of Information exchange mechanism (3.66), and without adjustment of new technology framework agreement will prosper (3.75),the information exchange mechanisms between PE and other stakeholders (2.11), Use of TANePS (3.67), supplier participation in TANePS (3.58).

The findings explained that there is still a problem to employee competency on Implementation of framework Agreements, where staff awareness have mean of 2.60, staff knowledge (2.40), staff skills (3.07),organisation does not provide training to tender board member and evaluation committee (3.21), and organisation provide support to staff (3.31).

The moderating effect explained that Framework agreements tender documents are prepared according to PPRA Standard of framework tender document, in relation tender are prepare according to PPRA standard have mean of (3.62), suppliers obtained through min competition (3.75), Framework agreements tender documents follow PPRA General Format (3.42), and there is Compliance with terms and conditions of Fa 2011 and amendments 2016 (3.41).

The study also sought to establish the relationship between independent variables (supplier capability, information exchange mechanism and employee competency). Structural equation model was used to analyse the relationship between the study variables. The analysis showed that implementation frameworks lead to efficiency (3.68), lead to economy (3.71), lead in effectiveness (3.42), and implementation of Procurement framework agreements lead to reduction in Lead time (3.39).

5.3 Conclusion

It is very necessary to understand the factors Affecting Implementation of Procurement Framework Agreements for Commonly Used Items on local government's authority, since the number of problems have been arisen frequently but because of ignorance of procedures, principles and familiarity of various scenarios resulting to hinder success of procurement development in achieving goals, objectives, targets and desires which are planned by the local government's authorities.

The study revealed and concluded that that supplier selected by GPSA are not providing corrective action for the defective items as well as do not provide technical support for the items sold, also, they do not provide the quantity required as per quality, specification at the right time, hence the supplier performance on meeting specification requirements is still a problem in framework agreement implementation.

The study author concluded that the information exchange mechanism between PE and other stakeholders and technological adaptation are still the problems to the Local Government's Authorities. Also, the supplier selected by GPSA does not meet contract

terms and conditions of framework agreement whereby they offer a higher price than market price and fail to deliver goods on time.

Furthermore, staff competency is still a problem that needs to be resolved by the local government's authorities through provision of training for staff regards the framework Agreements since the procedures are started from users' departments and also the personnel who are appointed in Tender board and evaluation committee are the normal staff.

The study found and concluded that there are moderating effects of Public Procurement Legal Frameworks on the implementation of framework agreements; this implied that the more Public Procurement Legal Framework will be adhered to, the procurements under framework arrangement will prosper and some of the problem will be eradicated.

5.4 Recommendations

The study identified factors affecting the implementation of procurement framework agreements for commonly used items in the local government office. Recommendations were therefore made basing on the basis of key issues as listed.

It was found that supplier performance during implementation of the framework agreements on local government authority is still the problem. Therefore, the study recommended PPRA allow the procurements staffs of the Local Government's Authorities to come together with GPSA to form a cluster to provide education to suppliers on adherence of requirement

It was found that information exchange mechanism between Pe and supplier is steel the problem therefore the study recommended that the organisation and PPRA should provide training and education to all staffs and supplier on the effectiveness of the use of TANePs and also to ensure all the documents required for tendering procedures are kept in the system for easy application for example there is a need of insert covenant form to the TANePS. On the other hand, in order to eliminate the challenges of information exchange mechanism organisation should ensure that information exchange between LGAs and stakeholders done on time and accurately, there is a need of adopting new technology as well as adjustment of their technology and providing training to Tender board Member and evaluation committee on the usage of available information exchange mechanism.

Also, since it was found that employee competence is not adequate there is a need of providing training each year to new appointed tender board member and evaluation committee on the implementation of framework agreements specifically in procedures to be followed from the initial stages of framework procedures to the final stage, also PPRA and government's should provide the needed support to the local government's authorities

It was found that Public Procurement Legal Frameworks are moderating effects of procurement framework agreements during its implementation hence government's are recommended   to enact laws in a parliament which will tight the government's authorities to follow the Public Procurement Legal Frameworks and they will impose the permissions for continuous of same mistakes, also recommended that the procurement management unit, tender board, evaluation, committee and other stakeholder to adhere with Public Procurement Legal Frameworks in the execution of procurement framework agreements.

5.5 Implication and Contribution of the Study
5.5.1 Theoretical implication

The transaction cost theory links together supplier performance which influence the implementation of Procurement framework agreement and explain their relationship that leads to attain effectiveness, efficiency, and cost reduction, while Agency theory link together Employee competency which influence the implementation of FA where by GPSA as government's agents provide the list of suppliers who registered under framework umbrella and Pes employees conduct the selection process of suppliers through conducting min competition, and information asymmetry theory link together information exchange mechanism and implementation of procurements framework agreements. The study sought to assess factors affecting the implementation of procurements agreements for commonly used items in local government's authorities on the assumptions of transaction cost theory, agency theory, and information asymmetry theory. The study found that supplier performance, information exchange mechanism, employee competency and Public Procurement Legal Frameworks as moderating variables affect the implementation of procurement framework agreements. Therefore, assuring of supplier delivery on time as per specification at the right quantity and quality, information exchange mechanisms especially the use of TANePS and provision of training to employees in order to add their knowledge and

skills regarding framework agreements will influence implementation of FA. It was therefore proven that when the governments take into consideration the factors affecting implementation of FA results into overall implementation of Procurement framework agreements.

5.5.2 Knowledge contribution

The study has clearly analysed factors affecting the implementation of Procurement Framework Agreements for commonly used items. It was clearly found and discussed that supplier capacity, information exchange mechanism, employee competency, and Public Procurement Legal Frameworks as moderating effect when implementing procurement framework agreements have significant and positive effects on implementation of framework agreements in local government authority. Moreover, it was clearly analysed that in Order for procurement framework agreements to be implemented effectively, strong understanding and follow-up of Public Procurement Legal Frameworks should be considered. Furthermore, the study was conducted in local government's authorities in Kilimanjaro, Arusha, and Manyara. Therefore, the local government's Authority in Kilimanjaro, Arusha, and Manyara are now documented as a part of literatures on the matter related to procurement framework agreements.

5.5.3 Methodological contribution

The study adopted the use of Structural Equation Modelling (SEM). Structure Equation Modelling requires and assumes for normal distribution of data, less or no multicollinearity among the predictor variables. Diagnostic tests were conducted and it was revealed that the assumptions related to the use of Structure Equation Model, Pearson correlation and Chi-Square Tests were adopted and met in this study. Furthermore, the study had four dependent variables and one independent variable measured at ordinal level which on the other hand is a fundamental requirement of Structural Equation Modelling. Therefore, the basic assumptions methodologically adopted under this study brought good and acceptable results.

5.5 Areas for Further Studies

The study was carried out in order to assess Factors Affecting Implementation of Procurement Framework Agreements for Commonly Used Items in the Selected Northern Zone Local Government Authorities used SEM as analytical modal. The study gets involved with tough challenges from the period of starting to write proposals,

data collection and finalising the report. The study was based on local governments. The researcher encouraged further studies on the same topic, with great focus on the central government's and parastatal and expansion of study area.

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APPENDICES

Appendix I: Questionnaire

I am **Elia Mwalwebe**, a student of Masters of Arts in Procurement and Supplies Management (MA-PSM) at Moshi Cooperative University (MoCU). As part of my studies, I am undertaking research titled "**Factors Affecting Implementation of Procurement Framework Agreements for Common Used Items in the Selected Northern Zone Local Government Authorities**". I kindly request your involvement to answer this questionnaire. All information provided will strictly be committed for academic purposes in developing this research study and will be treated with respective confidentiality. I therefore request you to answer the questions in the questionnaire warmly. Thank you for devoting your time and consideration.

Part I: Personal information (Choose the correct answer)

S N	STATEMENT	RESPONSES
1	Gender (1=male 2= female)	
2	Age	
3	Education level	
4	Working experience (1=less than 1, 2= 2-10, 3= 11-20 , above 20)	

Part II:

Please, tick the appropriate rating box against each of the statements to show the level to which you agree with the statement. Note: 1 = Strongly disagree, 2 = Disagree, 3= Neutral, 4= Agree 5= Strongly agree

SECTION A: INDEPENDENT VARIABLE

Supplier capacity

S n	Statement	1	2	3	4	5
1	FA Supplier deliver the required goods and services on time					
2	Supplier selected for FA deliver goods and services as per local purchase order					
3	Approved suppliers under FA delivery right quality as per specifications					
4	Approved suppliers by GPSS delivery right quantity					
5	The FA Supplier prompt provide corrective action for defective items					
6	Approved supplier offers technical support for goods sold					

Information exchange mechanism

Sn	Statement	1	2	3	4	5
1	There are smoothly information exchange mechanisms between PE and other stakeholders in implementation of framework agreement					
2	Absence of technological adaptation in framework agreement during implementation of framework agreement					
3	Staff's adaptation of information exchange mechanism during implementation of FA					
4	Without adjustment of new technology, framework agreement and other procurement tasks will prosper					
5	The use of TANePS effects the implementation of FA					
6	Rate of Supplier who participation in TANePS tenders effects the implementation of FA					

Staff competency and capability

Sn	Statement	1	2	3	4	5
1	Staffs have awareness of implementation of framework agreements					
2	Staffs have knowledge on implementation of framework agreements					
3	Staffs have skills on implementation of framework agreements					
4	Organisation provide training to the staffs regarding the framework agreements for cuis					
5	Organization provide support to staffs in implementation of FA					

SECTION B: MEDIATING VARIABLE

Public Procurement Legal Frameworks

Sn	Statement	1	2	3	4	5
1	Framework agreements tender documents are prepared according to PPRA Standard of framework tender documents					
2	During execution of framework agreements suppliers are obtained through min competition					
3	Framework agreements tender documents follow PPRA General format					
4	Compliance with terms and conditions of Fa 2011 and amendments 2016 effects FA					

SECTION C: DEPENDENT VARIABLE

Implementation of framework agreements

Sn	Statement	1	2	3	4	5
1	Implementation of framework agreements lead to efficiency					
3	Implementation of framework agreements lead to economy					
4	Implementation of framework agreements lead to Procuring Entity to effectiveness					
5	Implementation of framework agreements lead to reduce procurements lead time					

Appendix II: Interview Guide

1. Framework agreements enable the timely supplying of goods and service which are commonly used items by public bodies which have national strategic significance in your opinion is this objective achievable or not and please share your opinion in relation to framework agreement

2. In order to have Framework Agreement implementation, suppliers' capacity can play a vital role in implementation of it. How you evaluate a supplier's capacity.

3. What are the core problems you observed on the implementation of Framework agreements?

4. Nowadays ICT plays a vital role in procurement. How how supplier and Pes integrated in order to implement FA

5. Employees are the key personnel for the implementation of Fa, is there any Government effort in provision of training Regarding FA.

FACTORS AFFECTING THE IMPLEMENTATION OF PROCUREMENT FRAMEWORK AGREEMENTS FOR COMMONLY USED ITEMS IN THE SELECTED NORTHERN ZONE LOCAL GOVERNMENT AUTHORITIES

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ABSTRACT

In Tanzania Framework Agreements are used mostly for Procurements of Commonly used items through call-off order and it is mandatory for Government's institutes to procure CUIS from approved suppliers who have Framework Agreements Contract from GPSA but some of them procure CUIS from unapproved suppliers. Previous research does not fully address Factors Affecting the Implementation of Procurement Framework Agreements for Commonly Used Items in the Selected Northern Zone Local Government Authorities   This study analysed supplier performance on implementation of FA. The study adopted cross-sectional research designs and simple random and purposive sampling techniques to collect data from 205 respondents from 6 selected northern zone Local government's authority Tanzania. Data were analysed using descriptive statistics to establish frequencies, and percentages, on the factors Structural equation modelling were applied to establish the strength of the relationship and association between the variables. The study revealed that supplier performance has effects on implementing FA. Moreover, findings show that supplier does not deliver required goods on time, supplier does not deliver required goods. The study therefore concluded that the supplier does not deliver the right quantity quality at the right time in the right specification on implementation of framework agreements. Therefore, the study recommended that The Public Procurement Regulatory Authority (PPA) should allow the procurement staff of the Local Government's Authorities to come together with GPSA to form a cluster to undertake their own tendering process.

Keywords – *Framework Agreements, Commonly Used Items, Procurement, Supplier performance*

1.0 INTRODUCTION

The procurement functions have consistently gained popularity amongst various organisations, both in the public and private sector, across the world. In the private sector procurement is viewed as a strategic function whose aim is the improvement of the organisation's profitability (Larsson, 2008). Public procurement is a notable part of the world economy as it accounts for 15% to 20% of global Gross Domestic Product (GDP) and 29% of total government expenditure across the Organization for Economic Co-operation and Development (OECD) countries (Flynn, 2018; European Commission, 2018).

In 2004 for the first time, the public sector directive introduced into the European Union public procurement law covered the setting up and running of Framework Agreements by contracting authorities. Prior to 2014 the directives have provided regulations for using the Framework Agreement. Some European Union (EU) member states used framework-type arrangements, for example, France, Sweden and the United Kingdom (UK). These members were permissible within the existing provision of the public sector. Other member states had little or no use of framework-type-arrangement (EU Directives, 2014).

Sub-Saharan countries introduced the systems for managing goods and services used in more than one procuring entity under the framework agreements to increase effectiveness and efficiencies of delivering services and goods for economic growth. However, achieving value for money becomes a big challenge (Aduamah, 2018). Framework agreement is a basic agreement with suppliers which set out terms and conditions that allow public bodies to order goods or services throughout the terms of agreement under the terms and conditions specified under that framework agreement (Public Procurement and property administration Agency, 2011).

South African government developing FAs that municipalities can adopt for the procurement of key infrastructures. Also, the Municipal infrastructure support Agency (MISA) releases an expression of interest for FAs that will cover across twenty regions in South Africa (Creamer, 2016). The rationale for adopting the framework was to achieve economy of scale, accelerate purchases, and ensure effective information exchange between the stakeholders in the procurement of commonly used items adoption of framework was to achieve economy of scale, accelerate purchases, and ensuring

effectively information exchange between the stakeholders in procurement of commonly used items, (Creamer, 2016).

Tanzania as one of Sub-Saharan countries established a framework agreement for the common use items and services which are procured by procuring entities through Government Procurement Services Agent (GPSA), The Agency is mandated to monitor the framework agreements in Tanzania Mainland. Every year, GPSA invites suppliers and service providers under National Competitive Bidding to submit their price offers and other terms and conditions for the items and services that public entities commonly use (Bryson, 2018).Whereby each procuring entity submit to GPSA their requirement: A procuring entity by the end of January each year, submit to the Agency, their provisional annual estimates of the required common use items and services which shall include descriptions, specifications, statement of requirements and quantities. (Public Procurement Regulatory Authority 2013).

The suppliers and service providers are awarded the contract in a region basis to allow procuring entities to select a supplier who is geographical locations near to buyer, the system of framework agreements involves economic operators who supply goods and services and public procuring entities that place call-off order for goods and services from economic operators (PPRA), 2013). In Tanzania, the Framework Agreement Information exchange mechanism is elaborated in public procurement through information technology in public and in framework agreement there are system introduced by GPSA which is known as GPSA PMIS (GPSA, 2022), whereby GPSA provided information which users of the system allow to access the name of the suppliers or service providers, addresses of awardees, framework agreement numbers, procurement reference number, service item to be procured and specifications or statement of requirements.

In 2018 PPRA introduced Tanzania National Electronic Procurement System (TANePS), which is a full-fledged e-procurement system that supports the entire public procurement circle from planning to contract management. It is based on the public procurement laws, particularly Part XI of the Government Notice (GN) No. 446, which provides regulations governing procedures for electronic procurement, PPRA (2022). Accordingly, and in line with Regulation 343 of GN No 446, the system comprises the following major features: User registrations; e-Tendering; e-Purchasing; e-Payment and e-Contract management. TANePS used in procuring entities on procurement of common use items, medicines and

medical supplies, consistent with Regulation 342(1) of GN No. 446, whereas the system is also now open for registration of suppliers of goods and services, especially those interested in framework agreements, PPRA (2022).

A number of studies have been done such as Bryton (2018) and Altho (2018) examined the effectiveness of framework agreements in public procuring entities and for common use items and services in public procurement. These studies revealed that suppliers' capacity has an impact on ensuring an effective public procurement process, particularly on the use of framework agreement; suppliers in FAs either have no clear information about their capacity measurement or the information known is very little. However, these studies do not conduct study on factors affecting the framework agreement implementation in local government authority, specifically Northern Zone Local. Therefore, this study will fill the gap by assessing factors affecting the implementation of the framework agreement in local government authorities.

i. To examine the supplier's performance to influence on the implementation of framework agreement on Local government authorities.

ii. To identify the information exchange mechanism on the implementation of framework agreement on Local government authorities.

iii. To determine the staff's competency and capability in implementing framework agreements.

iv. Examine the moderating effect of Public Procurement Legal Framework in the relationship between factors affecting FA and implementation of the framework agreement.

2.0 Methodology

This study adopted a cross-sectional research design by administering questionnaires to collect primary information from respondents. cross-sectional was used as it allows collection of data from a population or a representative subset at a specific time (Bayley and Nancarrow, 1998; Babbie, 1990; Cresswell, 2017). The study was carried out in the Northern Zone United Republic of Tanzania (URT), involving the selected District Councils, namely Moshi Municipal council, Moshi District Council, Arusha City Council, Arusha District council, Babati District Council and Babati Town Council. Both primary and secondary source of data were used to collect data from 205 respondents, Study respondents were obtained through simple random sampling in picking respondents from user departments, and purposive sampling was used to select respondents from PMU,

evaluation committee and tender board members. Survey was conducted using an administered structured questionnaire to collect primary data, interview was used to collect data from the potential or key informer in the organisation the study interviewed six HPMU also used Documentary review to review documentation relating to factors affecting implementation of framework agreement on local government authorities. Structural equation modelling was used to obtain regression weights of the study variables.

2.1 Data Reliability

Reliability of the instrument for collecting data is said to be accurate when it develops simple and straightforward questions to attract a common understanding among the participants in the field. Cronbach's alpha coefficient was used to test the internal consistency reliability of constructs; because it is the most used in social science research and provides better results than other methods of measuring reliability. Hazarika and Jena, (2017) state that reliability of .70 is highly satisfactory. Similarly, Field, (Noble and Smith, 2015) revealed that an alpha coefficient between .70 and .80 is an acceptable value. The reliability was found to be 0.850 for all supplier performance variables which implies the study internal consistency is internally stable and reliable. The reliability of data was presented in table 2.1

Table 2.1: Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	No of items
0.850	0.850	6

3.0 Findings and Discussions

3.1 Sampling Adequacy

Two statistical tests which assess the factorability of data for structure detection were performed which are Kaiser-Meyer-Olkin (KMO) measuring sampling adequacy and Bartlett's Test of Sphericity. KMO measure of sampling adequacy indicates the proportion of variance in variables that might be due to underlying factors, whereby high values close to 1 generally indicate that a factor analysis can be useful with the data (Pallant, 2016). Bartlett's Test of Sphericity tests the hypothesis that one's correlation matrix is an identity matrix, which indicates that the variables are not related and therefore unsuitable for data detection. A p-value ($p < 0.05$) of the significance level implies that a factor analysis may be useful.

Findings in the table showed the KMO index of sampling adequacy was 0.786 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2013; Kaiser 1970, 1974). Bartlett's Test of Sphericity was also highly significant (Chi-square = 976.749 with 15 degrees of freedom at $p < 0.05$). Based on the results, statements under supplier performance are concluded to be reliable for further statistical analysis.

Table 3.1: KMO Sampling Adequacy and Bartlett's Sphericity Test

Test		Coefficient
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.786
	Approx. Chi-Square	976.749
Bartlett's Test of Sphericity	Df	15
	Sig.	0.000

3.2 Factor Analysis of Supplier performance

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and Bartlett's test of sphericity. Factor analysis was conducted using the Principal Components Analysis (PCA) approach. Extraction of factors followed the KI method proposal by Kaiser (1960) whereby only the factors that have values greater than 1 were retained for analysis. Total variance explained by the extracted factor is 82.650% shown in table 3.2 The factor communalities of the 5 variable constructs are greater than 0.5. This concurred with Izquierdo *et al* (2014) who pointed out that 100 or 200 subjects are usually sufficient if the communalities are greater than 0.5.

Table 3.2: Supplier performance Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %
1	3.862	64.366	64.366	3.862	64.366	64.366
2	1.097	18.284	82.650	1.097	18.284	82.650
3	.557	9.277	91.927			
4	.236	3.940	95.866			
5	.162	2.693	98.559			
6	.086	1.441	100.000			

Extraction method: principal component analysis
b. When component are correlated, sum of squared loading cannot be added to obtain a total variance

A simplified factor loading matrix or a pattern matrix for supplier performance in table 3.2 shows the factor loading for Public Procurement Legal Framework where 5

statements attracted coefficients of more than 0.5 and therefore further statistical analysis. A factor loading to or greater than 0.5 is considered adequate as it has good factor stability and leads to desirable and acceptable solution (latinyiru and ketyenya, 2017).

Table 3.3: Loading and cross-loading of supplier performance

	Component	
Item	1	2
Supplier deliver the required good on time during implementation of FA	.911	
Supplier deliver goods and services as per local purchase order during implementation of FA	.929	
Supplier deliver right quantity during implementation of FA	.903	
Supplier prompt provide corrective actions for defective items during implementation of FA	.860	
Supplier offer technical support for good sold during implementation of FA	.751	

4.2.1.4 Test of Overall Theoretical Model

Structural Equation Modelling (SEM) with Amos 23 was used to analyse the relationship among variables in value perception. The fact structure equation modelling must be measured from three parts including fit criteria; fit of internal structure of model and overall model fit was admitted by Anderson, Hair, Babin, and Black (2013) . Test results of preliminary fit criteria specify that the factor loading value of latent variables were at standardised levels between 0.5 and 0.9, and all of them have reached the significant level. So, the theoretical model of this paper is fit for the basic fitting standards.

Test results of overall fit indicate that measurement of absolute fitness, $\chi^2 = 91.3$, dt =30, RAMSEA (0.083) is lower than 0.095, which indicates that all indicators are at the accepted level. In the measurement of asymptotic fitness, values of IFI(0.871), NFI(0.829), CFI (0.847) are larger than 0.80. As to measure the measurement of summarised fitness, value of PNFI (0.553) and PCFI(0.5650) are larger than 0.5, and χ^2/d.f (3.04) is between 1 and 3, which indicate that all indicators reach the accepted level, which indicates that the theoretical model of this paper has a good overall model fit.
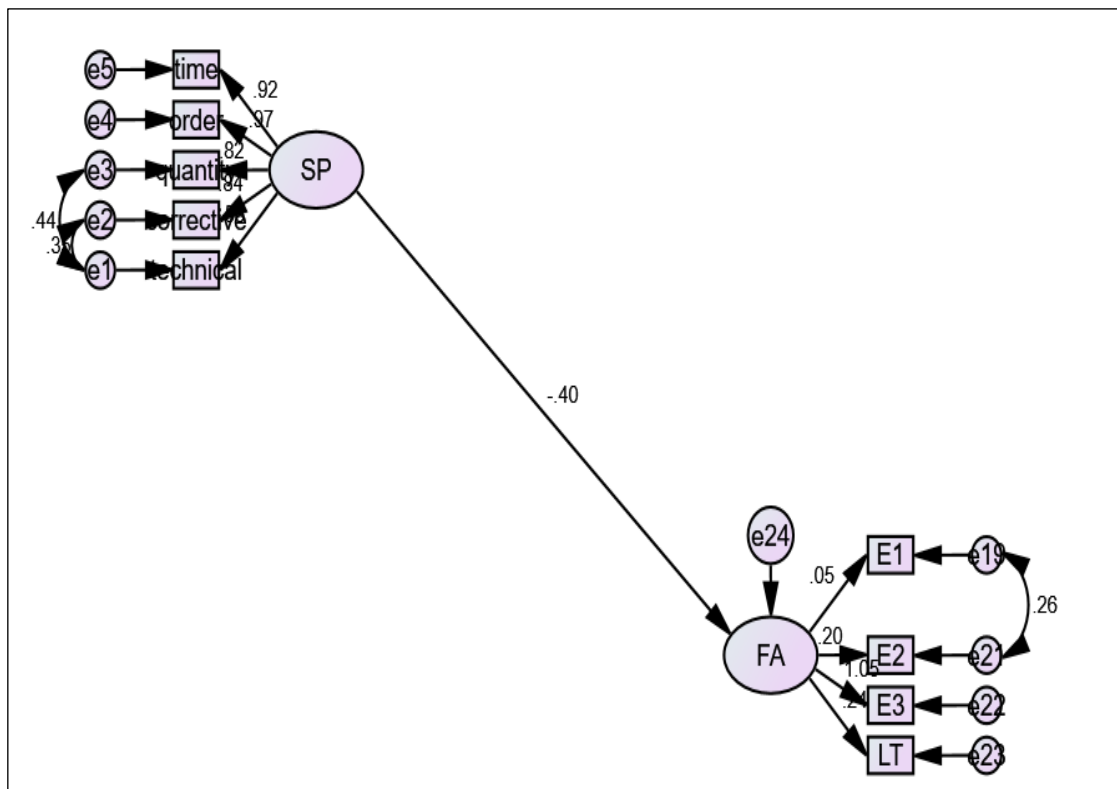
Figure 3 1 Supplier performance and Framework agreements

SP: supplier performance; FA: framework Agreements: E1: economy; E2: efficiency; E3: effectiveness; LT: lead Time

The loading for supplier performance factors count for 40% on indicators used to lead framework agreements. This implies that supplier performance was significant and the moderating influence of framework agreements on local government's authorities. The loading of all indicators in the latent variable in the endogenous variable were above 50%. This implies that FA supplier performance aspects have to be achieved**.**

4.0 Conclusion and Recommendation

The study revealed and concluded that that supplier selected by GPSA are not providing corrective action for the defective items as well as do not provide technical support for the items sold, also, they do not provide the quantity required as per quality, specification at the right time, hence the supplier capacity on meeting specification requirements is still a problem in framework agreement implementation. The study recommended that The PPRA should allow the procurement staff of the Local Government's Authorities to come together with GPSA to form a cluster to undertake their tendering process and select their own suppliers in a regional manner.

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