

**KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI**

**ENSURING VALUE FOR MONEY IN PUBLIC PROCUREMENT: A CASE
STUDY OF KOFORIDUA POLYTECHNIC**

BY

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DECLARATION AND CERTIFICATION

I hereby declare that this submission is my own work towards the MSc. Procurement Management and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

KNUST

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DEDICATION

I dedicate this work firstly to the Almighty God for the gift of life and how far he has brought me. It's also to my dear wife Cecilia Dede Mahi, my mother Dora Atsuko Martey and my Children Elsie Dede Ademan and Elvin Kofi Ademan

God bless you all.

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ABSTRACT

Value for Money (VFM) is the primary driver for procurement. Given the limited resources available to government, ensuring VFM in procurement is key to ensuring the optimum utilisation of scarce budgetary resources. Value for money is therefore not a choice of goods or services which is based on the lowest bid price but a choice based on the whole life costs of the project or service. The aim of the study is to assess ways of ensuring value for money in procurement in Koforidua Polytechnic. The objectives of the study among others includes; identify the challenges in ensuring value for money and measures to ensure value for money in the procurement of goods and services. The main tools for the collection of data included questionnaires and interview while the target population for the data collection included administrators, finance officers and procurement officers. Statistical package for social scientists (SPSS V 20) using mean score ranking was employed to analyze data obtained. Procurement entity liaises with Public Procurement Authority always for timely and required procurement information, procurement activities of the institution are assessed annually by the Public Procurement Authority, management supports VFM objectives and institution plans annual procurement spending to ensure VFM were the major factors in ensuring value for money in procurement. The findings also revealed that inadequate skilled personnel in the procurement sector and inadequate measures for monitoring and evaluation of the procurement policy to ensure VFM are major challenges in public procurement. On measures to ensure value for money, procurement contract document should be stated in simple language devoid of different interpretations requiring revisions and reviews and regular procurement audits and monitoring for compliance with procurement activities were suggested.

The findings of the study will add to the existing body of knowledge in ensuring value for money in the procurement of goods, works and services in public institutions in the country.

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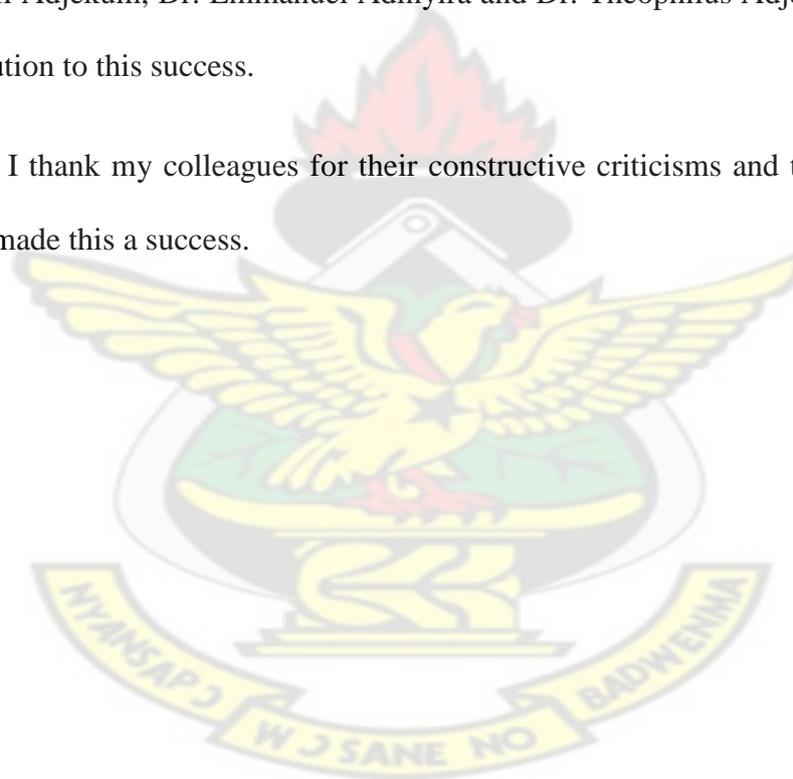


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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Public procurement is the process by which large amounts of public funds are utilized by public entities to purchase goods and services from the private sector (Hunja, 2003). According to Waara (2007), public procurement is any purchasing performed by any public authority within the classical sector or within the utilities sector. Therefore, public procurement is the process by which organizations acquire goods and services using public funds. It includes planning, inviting offers, awarding contracts and managing contracts. For procurement to achieve its goals, it should follow these two principles: Professionalism and Value for Money. Professionalism is the discipline whereby educated, experienced and responsible procurement officers make informed decisions regarding purchase operations. The role of procurement professionals is critical to Ghana's economic development. Value for Money refers to secure a judicious, economic and efficient use of state resources at a reasonable cost. Value for money is not about achieving the lowest initial price: it is defined as the optimum combination of whole life costs and quality. However, this study will investigate the ways of ensuring of value for money in public procurement in Ghanaian tertiary institutions in using Koforidua Polytechnic as a case study.

According to Roodhooft and Abbeele (2006), public bodies have always been big purchasers, dealing with huge budgets. For example, the Organization for Economic Cooperation and Development (OECD, 2002) maintains that government expenditure on procurement is estimated to be US \$2,000 billion in 1998 which represent 7% of world gross domestic product (GDP) and 30% of world merchandise trade in

advanced countries. Nonetheless, in developing countries and Ghana in particular, public procurement accounts for 50-70% of the national budget (after personal emoluments), representing about 24% of total imports and makes up about 14% of the country's Gross Domestic Product (GDP) (World Bank, 2003). Hence, public procurement has always been a big part of the developing countries economy and it is an area that needs attention in the face of increasing non-compliance (Odhiambo and Kamau, 2003). Procurement managers and stakeholders in the public service serve institutions created and governed by a complex array of statutes, regulations, policies, and directives. They operate in an environment of increasingly intense scrutiny and accelerated changes driven by technology, program reviews, and public and political expectations for service improvements. These combined result into growing institutional complexity and risks. Further, Ntayi (2009) observes that millions of dollars gets wasted due to inefficient and ineffective procurement structures, policies and procedures as well as failure to impose sanctions for violation of procurement rules thus resulting in poor service delivery. Consequently, public institutions are advised to ensure value for money in the procurement of goods, services and works in order to improve economy and efficiency in government procurement.

In Ghana, procurement process is hinged on the Public Procurement Act (Act 663) 2003 which was enacted to harmonize public procurement processes in the public service to ensure secure judicious, economic and efficient use of state resources. Additionally, Public Procurement Act presents comprehensive legislative framework designed to eliminate the shortcomings and organizational weaknesses, which were inherent in public procurement in Ghana. The PPA is established on the five basic pillars namely: comprehensive, transparent, legal and institutional framework; clear and standardised procurement procedures and standard tender documents;

independent control system; proficient procurement staff; and anti-corruption measures (World Bank 2003; Anvuur and Kumaraswamy, 2006). Notwithstanding public procurement in Ghana is characterized by anomalies such as poor contract management, contract variations, undue delay in payment for work done and failure to adhere to the Act 663 (Lamily, 2013). In addition, Osei-Tutu et al. (2012) indicated that non-conformity of the Act in the public institutions was very rife. On this basis, Anvuur and Kumaraswamy, (2006) argue that a framework for guiding the implementation of the public procurement Act and other alternative procurement arrangements and modalities will be required to sustain the momentum to reform, and improve the scope for achieving value for money in the public procurement function. Hence, this study has the purpose finding out ways Ghanaian tertiary can ensuring on value for money in procurement of Koforidua Polytechnic in Eastern Region of Ghana.

1.2 STATEMENT OF THE PROBLEM

The Public Procurement Law, 2003 (Act 663) is a comprehensive legislation designed to eliminate the shortcomings and organizational weaknesses which were inherent in public procurement in Ghana. The government of Ghana, in consultation with its development partners had identified the public procurement system as an area that required urgent attention in view of the widespread perception of corrupt practices and inefficiencies, and to build trust in the procurement system. A study by the World Bank (2003a) reported that about 50-70% of the national budget (after personal emoluments) is procurement related. Therefore an efficient public procurement system could ensure value for money in government expenditure, which is essential to a country facing enormous developmental challenges. Hence, the study aims

investigate the contribution of public procurement to value for money in Koforidua Polytechnic of Eastern Region in Ghana.

1.3 AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to assess ways of ensuring value for money in procurement in Koforidua Polytechnic in the Eastern Region.

The following specific objectives are proposed to guide the study:

- To assess the factors ensuring value for money in public procurement of Koforidua Polytechnic.
- To identify the challenges facing Koforidua Polytechnic in ensuring value for money in the procurement of goods, works and services.
- To examine the measures put in place to ensure value for money in the procurement of goods, works and services in Koforidua Polytechnic.

1.4 RESEARCH QUESTIONS

Following from the proposed objectives of the study, the study will seek answers to the following research questions:

- What are the factors ensuring value for money in the procurement of goods, works and services at the Koforidua Polytechnic?
- In Ensuring value for Money in Procurement what are some of the challenges, and how can the challenges be addressed?
- Value for money is the Ultimate goal of the Procurement Process, How can this be achieved?

1.5 SIGNIFICANCE OF THE STUDY

The findings of the study will add to the existing body of knowledge in ensuring value for money in the procurement of goods, works and services in public institutions in the country. It is intended that the findings of this research project may be useful to the management and staff of Koforidua Polytechnic in strengthening the acquisition, implementation and integration of procurement practices in administration of the procurement department. The study would also inform government policymakers with regard to designing changes to streamline the acquisition of goods and services in public institutions as set by the Public Procurement Act of 2003 of Ghanaian tertiary institutions.

1.6 DELIMITATIONS OF THE STUDY

This study was delimited to ways of ensuring value for money in public procurement of Koforidua Polytechnic in the Eastern Region. Further, this study concentrated on top management personnel or heads of departments, procurement officers, audit and finance officers and administrative personnel of the institution.

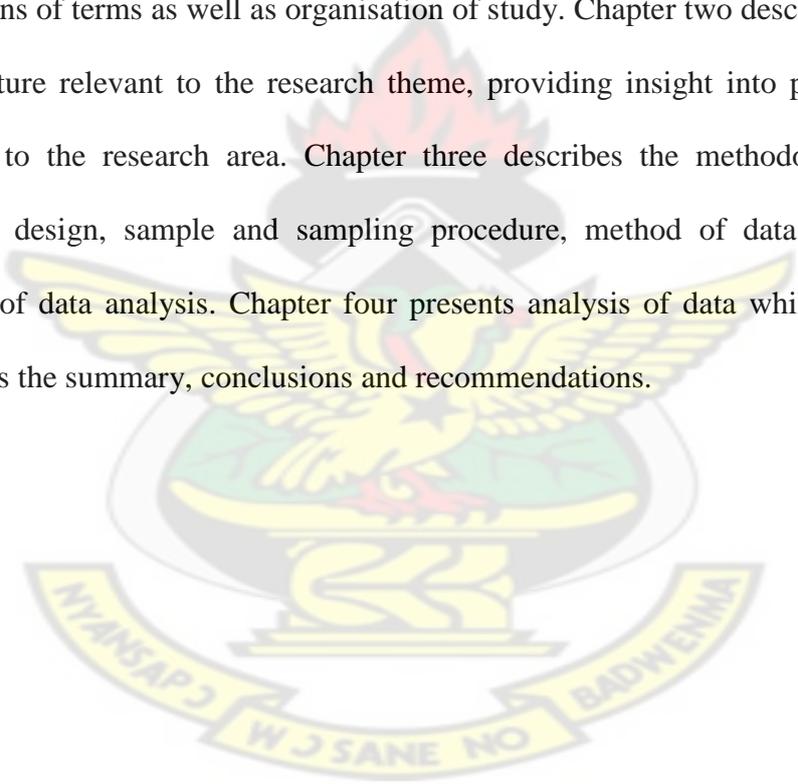
1.7 LIMITATIONS OF THE STUDY

This study is faced with a lot of limitations that will make the applicability of the findings quite restricted. In the first instance, the study adopted survey research methods which employed the use of questionnaire to collect data from the respondents. One of the limitations associated with the use of questionnaire is that the respondents may not provide all the needed information because they may think that the study will expose the flaws that are associated with ensuring value for money in the procurement of goods and services at the Koforidua Polytechnic. This weakness might have affected the results of the study.

Finally, the analysis was done in one institution: Koforidua Polytechnic which may not be a true reflection of what is happening in all the other nine polytechnics in the other regions, and for that matter other government institutions, therefore, it may not be a good inference tool but could only be used as a guide for future study.

1.8 ORGANISATION OF THE STUDY

This study is organised into five chapters. Chapter one covers the background to the study, objectives, research questions, significance of study and research scope, definitions of terms as well as organisation of study. Chapter two describes the review of literature relevant to the research theme, providing insight into previous studies relating to the research area. Chapter three describes the methodology including research design, sample and sampling procedure, method of data collection and method of data analysis. Chapter four presents analysis of data while chapter five describes the summary, conclusions and recommendations.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter aims at providing a focus for the study as well as the basis for the assessment of the findings. The literature will be reviewed on both conceptual and the empirical perspectives on the factors ensuring value for money in procurement of goods, works and services in public institutions. Further, the study is grouped under the following headlines:

- The concept of public procurement,
- Overview procurement activities in Ghana,
- Value For Money (VFM) in Public Procurement
- Factors ensuring value for money in public procurement and challenges in achieving value for money in the procurement of goods and services
- Challenges in Ensuring Value For Money in Public Procurement
- Strategies to ensure value for money in procurement

2.2 THE CONCEPT OF PUBLIC PROCUREMENT

Leenders et al (2006) explain that public procurement covers the supply in public institutions and agencies as well as publicly owned entities and is characterised by taxes which represent a major source of funds. The objectives of sound supply management in the public sector are basically effective contribution to organisational goals and assurance of value for money spent. They explained further that the unique environment in which public sector procurement operates presents special challenges in every country where the public buyer is subjected to special laws, rules, and

regulations and is ever mindful of the politically dictated targets while open to continuous public scrutiny.

Arrowsmith (2010) posits that public procurement refers to the government activity of purchasing the goods and services needed to perform its functions. According to Odhiambo and Kamau (2003), public procurement is broadly defined as the purchasing, hiring or obtaining by any contractual means, goods, construction works and services by the public sector. It involves the purchase of commodities and contracting of construction works and services if such acquisition is effected with resources from state budgets, local authority budgets, state foundation funds, domestic loans or foreign loans guaranteed by the state, foreign aid and revenue received from the economic activity of state. Hommen and Rolfstam (2009) posit that public procurement is the acquisition of goods and services by government or public organization. Arrowsmith (2010) contends that the concept of public procurement can be referred to as procurement planning, contract placement and contract administration.

Based on the above discussion, public procurement can be defined as the function whereby public sector organisations acquire goods, services and development and construction projects from suppliers in the local and international market, subject to the general principles of fairness, equitability, transparency, competitiveness and cost-effectiveness. It includes many activities that support the service delivery of government entities, ranging from routine items to complex development and construction projects. It also directly or indirectly supports government's social and political aims. Besides the fiduciary obligation to deliver goods and services to the constituents of the particular government administration, public procurement addresses a wide range of objectives (Uyarra and Flanagan, 2009). It has been used by

governments to achieve socio-economic objectives such as stimulating economic activity; protecting national industries from foreign competition; improving the competitiveness of certain industrial sectors; and remedying national disparities (Bolton, 2006; Thai, 2006). The objectives of public procurement are achieved through various means, and legal and regulatory rules on conducting public procurement (Arrowsmith, 2010).

Public procurement is the sheer volume of funds channelled through government procurement and is the largest single buyer in most countries (OECD, 2007). The size of public procurement varies between 5% and 8% of the gross domestic product (GDP) in most industrialised countries (OECD, 2007). In the Middle East and Africa, central government purchases range from 9% to 13% (Gul, 2010). This indicates that public procurement plays a vital role in a country (Odhiambo & Kamau, 2003). Public procurement has important economic and political implications, and ensuring that the process is economical and efficient is crucial. This requires in part that the whole procurement process should be well understood by the actors: government, the procuring entities and the business suppliers and other stakeholders, including professional associations, academic entities and the general public (Odhiambo & Kamau, 2003). Further, public procurement is increasingly recognised as a profession that plays a key role in the successful management of public resources, and a number of countries have become increasingly aware of the significance of procurement as an area vulnerable to mismanagement and corruption and have thus made an effort to integrate procurement into a more strategic view of government efforts. As part of the efforts to adopt a long-term and strategic view of their procurement needs and management, most countries have resorted to using their annual procurement plans as a possible problem solver (Mahmood, 2010).

2.3 OVERVIEW OF PUBLIC PROCUREMENT IN GHANA

According to World Bank (2003) reports, Ghana has accumulated considerable and valuable experience on public procurement under civil and military administrations. In the pre-independence era, that is prior to 1957 there was a public procurement policy in which public procurement was treated as part of the colonial administrative process in the British Empire. The colonial administration engaged Public Works Department (PWD) for procurement of works and Crown Agents for procurement of goods. From Independence (1957) to 1967, Government relied less frequently on Crown Agents for procurement of goods and procured goods directly through Ministries Departments Agencies (MDAs). For procurement of works, Government set up Ghana National Construction Corporation (GNCC) to carry out works and reduced the force account component of PWD. In 1960, the Government established the Ghana Supply Commission (GSC) for procurement of goods for all public institutions. Essentially GSC took over the functions of Crown Agents. In 1976, the Government established Ghana National Procurement Agency (GNPA) for procurement of bulk items such as sugar, fertilizers, auto parts, etc. for sale to public and private sectors. GSC and GNPA had purchasing manuals for their use. In 1975, the Architectural and Engineering Services Corporation (AESC) was established to carry out consulting services for works contracts. Except for SOEs, public institutions were mandated to use GSC, GNPA GNCC and AESC for public contracts (World Bank, 2003). In 1967 the Government set up Central, Regional and District Tender Boards as advisory bodies for works contracts and subsequently in 1996 changed them to contract awarding authorities.

By 1996, GSC was overwhelmed by the demands from its clients, inefficiency was rampant, and there were numerous complaints on contract prices, delayed delivery

and at times delivery of wrong items. MDAs began to handle procurement of goods following FAR rules but without institutional arrangements. Works procurement procedures, though not comprehensive, are described under the Central, Regional and District Tender Board procedures. There are still no guidelines for procurement of consultant services. AESC and GSC were transformed into limited Companies in 1996 and 1999 respectively, thus rendering them no more providing services to public institutions on a mandatory basis. Due to the inadequacy of public procurement procedures, procurement procedures under World Bank-financed project signed from 2000, defined in a “Procurement Procedures Manual” prepared for the project. These manuals are based on World Bank guidelines and Bank’s standard bidding documents are used (World Bank, 2004). Hence, the Public Procurement Authority Annual Report of 2007 clearly articulated the purpose of the public procurement reforms in Ghana as to mainstream “good practices” into the procurement of goods, works and services, which transcend into the achievement of savings and value- for- money.

2.3.1 Objectives and Scope of the Public Procurement Act, 2003 (Act 663)

The main objectives of Act 663 are to harmonize public procurement processes in the public service; secure judicious, economic and efficient use of state resources and to ensure that public procurement functions undertaken within the public sector are fair, transparent and non-discriminatory. The Act applies to procurement financed wholly or partly from public funds; procurement of goods, works, services and contract administration; disposal of public stores and equipment, not forgetting procurement financed by funds or loans taken by the government of Ghana, including foreign aid funds. The Act establishes a regulatory body and specifies the functions of Tender Committees and Tender Review Boards in procurement entities.

It outlines rules for procurement, methods, procedures, appeals by tenderers and disposal of stores and the definition of offences and applicable penalties. Furthermore, it specifies thresholds, which require regular updating in schedules to the Act and authorises the issue of regulations, which are enforceable in the same way as the Act. The Act 663 however have some exceptions and does not apply to some situations such as: where the Minister decides that alternative procedures are in the national interest; where a loan or funding agreement specifies alternative procedures and excludes stores management and/or distribution.

2.3.2 Functions of the Public Procurement Act, 2003 (Act 663)

The Public procurement Act establishes the Public Procurement Board, entity tender committees and tender review boards; it specifies rules for procurement methods, procedures, appeals by tenderers and disposal of stores; defines offences and applicable penalties and also specifies the thresholds in schedules to the Act 663. It also authorizes the issues of regulations, which are enforceable under the Act. The Act 663 applies to various institutions such as the central management agencies; Ministries, Departments and Agencies (MDAs); subverted agencies and governance institutions. Others includes state own enterprises; public universities, schools, colleges and hospitals; the Bank of Ghana and financial institutions owned or majority owned by government and institutions established by Government for the general welfare of the public. Minister here refers to the Government of Ghana appointed political figure in charge of a government ministry for example the Minister in Charge of Finance (Public Procurement Training Manual, 2007).

2.3.3 Structure of the legal and regulatory framework for public procurement in Ghana

The basic structure of the legal and regulatory framework of public procurement in Ghana consists of the Public Procurement Act 663 of 2003; Public Procurement regulations, Public Procurement manual; Standard tender documents and Guidelines to assist public procurement practitioners. Under the Act 663, regulations are issued by the Minister of Finance in consultation with the Public Procurement Authority under section 97 of the Act. They contain detailed rules and procedures for all aspects of the procurement system; the operations of the Public Procurement Authority and the procurement entities and the conduct of procurement activities (Public Procurement Board, 2007). As part of the legal framework of the Act 663, the Public Procurement Board is authorized to issue guidelines and to provide supplementary guidance on specific topic that are needed to help streamline the conduct of public sector procurement in Ghana. The legal framework also covers the issue of standard tender documents and manual for the conduct of procurement by the Public Procurement Board.

The standard documents are issued by the Procurement Board and are listed in Schedule 4 of the Act 663. The standard tender documents comprises of standard invitation and contract documents for procurement of all values and includes standard tender documents for goods, works and services. While the manuals issued by the Public Procurement Board provides practical guidance and step by step procedures for undertaking of procurement functions in accordance with the Act 663 and with standard forms to assist in procurement record keeping (Public Procurement Board, 2007).

2.4 VALUE FOR MONEY (VFM) IN PUBLIC PROCUREMENT

Given the limited resources available to government, ensuring VFM in procurement is key to ensuring the optimum utilisation of scarce budgetary resources. VFM is the primary driver for procurement. It usually means buying the product or service with the lowest whole-life costs that is 'fit for purpose' and meets specification. Where an item is chosen that does not have the lowest whole-life costs, then the additional 'value added' benefit must be clear and justifiable. Assessment of supplier bids should be conducted only in relation to a published set of evaluation criteria, which must be relevant to the subject of the contract, and any 'added value' that justifies a higher price must flow from these defined criteria (Office of Government, 2007).

VFM also incorporates affordability; clearly, goods or services that are not affordable cannot be bought. This should be addressed as soon as possible within the process, ideally at the business case stage before procurement commences. In order to address this issue, a change in procurement approach, specification or business strategy may be required. VFM is often primarily established through the competitive process. A strong competition from a vibrant market will generally deliver a VFM outcome. But where competition is limited, or even absent, other routes may have to be used to establish value. These can include benchmarking, the construction of theoretical cost models or 'shadow' bids by the authority. For major contracts, this can require considerable financial expertise and external support may be justified.

VFM should always be assessed over the whole life of the project to take into account sustainability issues. This should include disposal (either sale proceeds or decommissioning costs) and take into account all costs and benefits to society as a whole, not simply those directly relevant to the purchaser as set out in HM Treasury's Green Book (2006). At award stage of procurement however, authorities may only

assess on criteria relevant to the subject of the contract. This approach ensures that all factors are understood before a purchase or investment decision is made. Value for Money (VFM), according to the HM Treasury (2006) and Grimsey and Lewis (2005), is defined as the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user's requirements. Value for money is therefore not a choice of goods or services which is based on the lowest bid price but a choice based on the whole life costs of the project or service. Morillos and Amekudzi (2008) reveal that VFM aids public agencies to decide whether to implement a project through public procurement or not. It is further argued that VFM assessment should ensure that the public sector focuses on the quality of the work as well as the competencies of the private party and not on the lowest bid in order to meet the objectives outlined in the project statement. Shaoul (2005) also associates VFM with (3) Es. These are: Economy (acquiring or using resources of an appropriate quality at minimum cost), Efficiency (gaining maximum output from the resources employed or devoting a minimum level of resources for a given level of output) and Effectiveness (making sure that the output from any given activity attains the desired goals). All public procurement of goods and services, including works, must be based on value for money, having due regard to propriety and regularity. Value for money is not about achieving the lowest initial price: it is defined as the optimum combination of whole life costs and quality. This policy is set out in guidelines issued to departments and reproduced in Public Procurement Act, 663 of Ghana. Goods and services should be acquired by competition unless there are convincing reasons to the contrary. The form of competition should be appropriate to the value and complexity of the procurement and barriers to the participation of suppliers should be removed (Public Procurement Act of Ghana, 2003).

2.5 FACTORS ENSURING VALUE FOR MONEY IN PUBLIC PROCUREMENT

Odhiambo and Kamau (2003) and the Public Procurement Act, 2003 (Act, 663) emphasize that the basic objectives of good procurement are to procure the right quality of goods, works or services from a reliable supplier in the right quantity ensuring cost effectiveness; delivered at the right time; to the right place; in the right quantity and at the right price whilst achieving the lowest total cost. In the achievement of the objectives of a good procurement system the following factors are of utmost importance: Professionalism; Transparency; Value for money; Competitiveness and Accountability. Other factors include Fairness; Efficiency and ethical approach to the conduct of procurement functions.

2.5.1 Value for money and competitiveness in public procurement

Value for money refers to the optimum combination of ‘whole life cost’ and ‘quality’ to meet the customer or the end-users requirement of the procured goods or service under consideration and usually reflected in the price of the item procured. The object of the Public Procurement Board is ‘to harmonize the processes of public procurement in the public service to secure a judicious, economic and efficient use of state resources in public procurement’ attest to the value for money principle of the procurement system (Public Procurement Act, 663). Competitiveness on the other hand refers to the active participation of the private sector and or suppliers in the procurement process through the making of procurement information accessible to all; through advertising of tenders; sourcing reviews; prequalification and the adoption of transparent procedures in the procurement systems. The benefits of competitiveness cannot be over emphasized and includes potential savings for the economy; increases

in the supplier base; and the development of the local industries within the economy and thereby eventually leading to economic development and poverty reduction. Consequently, Value for Money (VFM) is a measure of economy, efficiency and effectiveness (3Es) with which the financial resources of the Government are converted. The Association of Chartered Certified Accountants, ACCA (1999) explains that Value for Money is concerned with obtaining the best possible combination of services from the least resources. It is thus, the pursuit of economy, efficiency and effectiveness which are briefly explained below:

2.5.1.1 Economy

According to the ACCA (1999), economy is the term and condition under which an organization acquires human and material resources of the appropriate quality and standard at the lowest cost. The Ministry of Finance of Jamaica (2010) also related economy to procurement by stating that procurement is a purchasing activity whose purpose is to give the purchaser best value for money and that for complex purchases, value may imply more than just price since quality issues also need to be addressed.

2.5.1.2 Efficiency

The ACCA (1999) defines efficiency as the relationship between goods and services produced and resources used to produce them. It goes on further to stress that an efficient operation produces the maximum output for any given set of resource inputs; or, it has a minimum inputs for any given quantity and quality of services provided. Relating efficiency to a procurement system, the Ministry of Finance of Jamaica (2010) asserts that an efficient procurement is simple and swift, producing positive results without protracted delays. In addition, efficiency implies practicality,

especially in terms of compatibility with the government's administrative resources and professional

2.5.2 Transparency & Accountability (Ethical Standards)

Good procurement holds its practitioners responsible for enforcing and obeying the rules. It makes them subject to challenge and to sanction, if appropriate, for neglecting or bending those rules. Accountability is at once a key inducement to individual and institutional probity, a key deterrent to collusion and corruption, and a key pre-requisite for procurement credibility.

The Ministry of Finance of Jamaica (2010) concludes that a sound procurement system is the one that combines all the above elements. The desired impact is to inspire the confidence and willingness-to-compete of well-qualified vendors. This directly and concretely benefits procuring entities, responsive contractors and suppliers. It is the view of the researcher that the achievement of all what have been discussed above, especially, economy, effectiveness and efficiency depends upon the existence of sound arrangements for the planning, appraisal, authorization and control of the use of resources and it is management's responsibility to establish these arrangements and to ensure they are working properly.

2.5.3 Accountability, fairness and efficiency in public procurement

Accountability, fairness and efficiency are three cardinal pillars that procurement reforms seek to achieve in that a very fair and accountable procurement system helps in the efficient utilization of the state resources judiciously. Procurement practitioners need to be very fair in their day-to-day dealings with their suppliers and potential bidders and the public at large in order to earn the trust of the various actors within

the procurement system. Accountability refers to the process of holding an individual or an organization fully responsible for actions and functions they are engaged in over which they have authority to exercise those functions. The benefits of accountability and fairness are as follows: the strengthening of the perception of transparency and fairness; the reduction of the incidence of corruption; the development of mutual trust and the fact that procedures are adhered to for example in all stages of the tendering process. An efficient public procurement system has the benefit of being operated in a very timely manner with little or no bureaucracy and thereby helping to instill and underpin the trust worthiness of the procurement system.

2.5.4 Competition

Competition has been regarded as one of the most important factors in attaining value for money in PPPs. This is on the premise that competition amongst bidders can lead to improvements in pricing and alternative means of delivering VFM. According to Pitt et al. (2006), where a PPP project has been awarded through open tender, the argument for VFM is made easier to substantiate. Kee and Forre (2002) also observe that competition can produce an efficient delivery of goods and services. They further elaborate on a competitive market model which envisions many markets comprising a large number of buyers and sellers, complete knowledge on quality and production costs, arm's length negotiations, and absence of impediments to the entry of firms in the market. With the presence of these conditions, it is believed that a market would be a producer and allocator of services superior to the public sector (Kee and Forre, 2002). In summary, risk transfer has been regarded as the driver of efficiency, competition and contestability ensure that it is effectively transferred (OECD 2008). Competition can either be for the market (i.e. in the bidding process) or

competition/contestability in the market which occurs after the contract is concluded and is in operation. One may therefore conclude that whether or not a PPP represents value for money is dependent upon sufficient risk transfer and competition. On the contrary, the absence of competition or potential entry would lead to difficulties in attaining higher efficiency and value for money.

2.5.5 Professionalism and transparency in public procurement

Professionalism is the discipline whereby educated, experienced and responsible procurement officers make informed decisions regarding procurement functions and therefore can be argued that the role that procurement professionals play in the procurement system of the Ghanaian economy is critical to the economic development of the country (Public Procurement Board, 2007). It is therefore in recognition of this fact that one important object of the Public Procurement Board is stated as follows: ‘the professional development, promotion and support for individuals engaged in public procurement and to ensure adherence to ethical standards by trained persons’ (Adjei, 2006). Transparency on the other hand means the application of the same rules to all suppliers of goods, works and services and that these rules are publicized as the basis of procurement decisions prior to their use. Transparency enables the creation of open, fair and transparent procurement procedures. Transparency helps in the growth of in-country investments and competitiveness as the public sector is seen as a responsible business partner. Transparency is considered one of the best deterrents to corruption and allows access to information by the public. Furthermore, Managers ensure that goods and services and capital assets are procured within the legal framework by procurement personnel and are accountable to actors in policy making and management. Procurement

professionals make sure that operational agencies comply with procurement regulations and they are directly involved in procuring goods, services and capital assets as authorised and funded. According to Leenders et al (2003), the procurement department is in an extremely strategic position, due to its intimate relations with other functional departments on the one hand, and its close and on-going contact with large and diverse groups of outside organizations on the other. As a result of the access to information that the procurement department has regarding price trends, new and improved products and services, market conditions, and business outlooks, which is of particular importance for the purchasing department to develop, it can also make significant and valuable strategic contributions to the other departments that it serves. These contributions, according to Leenders et al (2003), provide another basis upon which to evaluate procurement department's performance. Again, Ivancevich et al (1994) explain that an organizational structure is the framework of goods and departments that direct the behaviour of individuals and groups towards achieving the organizational objectives. The contributions of the Procurement Office staff definitely depends on whether or not Top-Management is prepared to work with the suggestions of the Procurement Unit or not.

2.6 CHALLENGES IN ENSURING VALUE FOR MONEY IN PUBLIC PROCUREMENT

The study outlines some of the major challenges confronting public institutions in ensuring value for money in procurement. These are discussed in the subheadings as follows:

2.6.1 Lack of proper knowledge, skills and capacity

To fully achieve supply chain management objectives, the National Treasury provides support by facilitating the development of appropriate training materials to

government departments, municipalities and municipal entities (National Treasury, 2005). However, the shortage of skills has been a re-concurrent theme in public discussion. According to Sheoraj (2007), skills and capacity shortages have been identified as the single greatest impediment to the success of public procurement in South Africa. Adequate capacity in the form of appropriate structures with fully skilled and professional supply chain management personnel is a key success factor for proper supply chain management implementation. In some government entities, the quality of supply chain management personnel's skills and ability are well below standard. Migiro and Ambe (2008) assert that many supply chain management actors in the South African public sphere have attended a number of training workshops on supply chain management, but they still lack the appropriate knowledge for proper implementation. McCarthy (2006) contends that there is a lack of capacity and knowledge by supply chain management actors to handle procurement processes that have led to bad governance. The South African government embarks on programmes that educate practitioners, but implementation of its programmes always falls short.

Non-compliance with policies and regulations supply chain management is guided by a number of related policies and regulations (National Treasury, 2005). Compliance with these policies and regulations is a problem. As indicated by Mathee (2006), some of the practices relating to non-compliance with the rules and procedures relate to the tendency not to utilise a competitive process for both quotations and bids, and incorrect utilisation of the preference points system. Van Zyl (2006) also asserts that there is a lack of appropriate bid committees; use of unqualified suppliers, passing over of bids for incorrect reasons; utilisation of the incorrect procurement process in respect of the thresholds; extensions of validity periods; and incorrect utilisation of the limited bidding process. Furthermore, Ambe and Badenhorst-Weiss (2011b) noted

that there are inadequate controls and procedures for the handling of bids; appointment of bid committee members not aligned to policy requirements; and insufficient motivation for deviations from supply chain management procedures.

2.6.2 Inadequate planning and linking demand to the budget

Demand management is integral to the supply chain management process. It defines the decision-making process that allows departments to procure at the right time, at the right place and at the right cost. However, many government entities are still faced with the challenges of improper planning and linking demand to budget (Ambe & Badenhorst-Weiss, 2011a). Cost-effective procurement depends on a specialist's skills to ensure that buying requirements are reliably determined, appropriate contract strategies are developed, contracts are well managed and opportunities are seized to secure the best deals at the right time and at the right price. The importance of drawing up accurate and realistic strategic plans cannot be overestimated.

At times there is an absence of coherent plans. Some government entities cannot properly quantify the needs of those requiring their services or properly estimate costs, nor can they accurately track, control or report on expenditure (Luyt, 2008). Luyt (2008) indicates that there is a need to monitor the delivery of services properly to ensure that scarce resources are efficiently and effectively procured. Poor planning and budgeting have also affected the implementation of procurement. It is therefore vital that procurement practitioners adequately link demand planning to budget.

2.6.3 Accountability, fraud and corruption

Accountability constitutes a central pillar to public procurement (Soudry, 2007). Without transparent and accountable systems, the vast resources channelled through public procurement systems run the danger of being entangled with increased

corruption and misuse of funds (Jeppesen, 2010). According to Mahlaba (2004), fraud and corruption cost South African tax payers hundreds of millions of rand each year. Over the last few years, the impact of fraud has led to the promulgation of special legislation and improvement in existing legislation that led to the creation, among others, of the Directorate of Special Operations, commonly known as the Scorpions, the Asset Forfeiture Unit, the Public Protector, the Special Investigation Unit, Commercial Crime Units, Internal Audit Units, Special Investigation Units within departments, and the appointment of forensic consultants (Mahlaba, 2004).

According to Boateng (2008), since 1994, South Africa has enjoyed unprecedented social and infrastructural programmes. Yet, the majority of people who had hoped freedom would bring with it relative socio-economic liberation and improvement are feeling increasingly bitter towards government over issues that include a lack of perceived quality of governance, service delivery failure, fraud and corruption in some spheres of the economy and disillusionment with empowerment policies (De Lange, 2011). The Public Service Commission Committee (2011) indicated that a total of 7 766 corruption cases had been reported through the National Anti-Corruption Hotline since its inception in September 2004 up till June 2010. Corruption, incompetence and negligence by public servants were to be blamed (De Lange, 2011). About 20 per cent of government's procurement budget alone 'went down the drain each year. This was because officials had their fingers in the till, overpaid for products and services or failed to monitor how money was spent' (De Lange, 2011). Hence, there is an urgent need to rethink innovative ways of curbing corruption and some other administrative malpractices within South African spheres of government. To fight the scourge of maladministration, mismanagement of

finances, fraud and corruption, government needs to strengthen and review existing internal control systems to detect deficiencies.

Elodie (2005), emphasized that the disclosure of information should be differentiated depending on the stage of the public procurement process, that is, the identification of needs, the preparation for bidding, the bidding process, the award of contract or the contract management. Providing information on the public procurement process can be seen as positive for competition since it is likely to attract more competitors, which reduces the price and improves the quality of services provided to society. The importance of documentation and records management has also been emphasized by the Public Procurement Act, 2003 (Act 663), as well as the Public Procurement Authority's Training Manuals of 2006, 2007 and 2008. They emphasized that documentary records, both in print or electronic format, are essential for efficient and effective management of procurement activities, provide evidence in support of decisions and actions taken, and provide an audit trail for verification of transparency, accountability and effectiveness.

2.7 Strategies to Improve Value for Money in Procurement

Several strategies have proposed to promote compliance level with code of ethics on public procurement. Some of the proposition put will be discussed in the following subsections.

2.7.1 Monitoring and Evaluation

Controlling the performance of the procurement function and ensuring its efficiency and effectiveness is essential to the management of the procurement process. It is vital to evaluate how well the procurement process has gone, identify any weaknesses or problems and agree actions to prevent similar problems in the future. Evaluation may

include a formal procurement audit. Procurement monitoring is an essential part of procurement management and control linked to compliance with Act 663 and performance outcomes such as value for money, professionalism and code of conduct in procurement. This will involve the management of entity, staff of PPA, private sector, oversight bodies (internal and external audit), civil society (including NGOs), project beneficiaries, and media (PPA Annual Report, 2008).

2.7.2 Sanctions for non-compliance with code of conduct in public procurement

The adherence to the provisions of the Act and Regulations by public officials is obligatory and therefore failure to do so is considered an offence which is subject to sanctions. Officials suspected of non-adherence to the rules and regulations and found guilty following investigations would be suspended and his or her benefits including salary withheld while officials found misappropriating government funds regardless of the value were to be summarily dismissed. Hence section 92 of the Public Procurement Act 2003, establishes that contravention of any provision of the Act is an offence and stipulates the penalties to be applied while section 93 of the Act defines corrupt practices in terms of article 284 of the Ghanaian constitution, and the Criminal Code, 1960 (Act 29). The Act also stipulates that any tenderer, supplier, contractor or consultant who attempts to influence a procurement process, or the administration of a contract by any unfair method, will be subject to sanctions which may include debarment of the company from Government of Ghana contracts. Hunja (2003), in reporting on the assessment of procurement systems in developing countries found out that the abuse of procurement systems arises largely due to weak or inconsistent enforcement of the prevailing rules and regulations. He said that the weak enforcement of the rules was clearly reflected by the dissonance between prevailing

(formal) rules and what actually takes place in practice during the procurement process. Hunja (2003), further argued that public entities usually go the extra length to create a semblance of formal compliance with procedural and other requirements while seriously compromising the intent and spirit of such rules. Ambiguities and gaps in the rules also lead to different interpretations requiring revisions and reviews. The lack of enforcement therefore could be traced to weaknesses in the rules and therefore Hunja (2003), suggested a multi-faceted approach like for instance strengthening the right of bidders to obtain redress when public entities breach the rules; forcing greater transparency into the decision making process coupled with other institutional oversight mechanisms such as procurement audits. Hunja (2003) concluded that the challenge when it comes to the enforcement of the rules and regulations lies in achieving a proper balance so that mechanisms of enforcement do not become a barrier so as to make the system inefficient, bureaucratic and costly. The non-compliance to procurement rules and regulations do not help in the achievement of the objectives by which procurement reform programs are implemented and this is therefore considered a major hindrance to the effective implementation of such programs.

Thus, the sanctioning of agents (public procurement practitioners) who do not comply and the reward of those who comply in terms of incentives is expected to increase the intensity or degree of compliance (Gelderman et al., 2006). Blau and Scott (1962) and Murray and Heide (1998) also argued that in addition to the incentive effect of monitoring, monitoring arrangements can also increase member compliance because the monitoring process in itself may place uncomfortable social pressure on the agent. Ghana for example scored 57.64% for monitoring and control considered very satisfactory during the assessment of its procurement systems. Hence, though the

principal may have some information about the agent in terms of the agent's characteristics and capabilities, the principal's knowledge about the agent is limited and incomplete and this is term hidden information or adverse selection. It is possible to therefore argue that the human resource base of a reform program in public procurement is indispensable for a successful reform and for achieving public procurement in organizations (Public Procurement Board, 2007).

Also, a high degree of compliance because of the lack of knowledge or familiarity with the procurement rules can lead to non-compliance. Ghana achieved a score of 40.39% with respect to human resource base of the reform program which may not be considered very satisfactory and shows the lack of capacity and knowledge that need to be addressed with the necessary training and development. It is important to note that practitioners need to be very clear about the various rules and regulations governing public procurement, since the lack of clarity can lead to non-compliance. The lack of clarity is believed to increase the possibilities of deliberate non-compliance (Gelderman, 2002). Similarly, Rokkan and Buvik (2003) proposed that the lower the level of goal conflict the less likely it is that the agent will behave in opposition to the interests of the principal. For example, the goals and objectives of the procurement entity could be in conflict with what the reform program seeks to achieve or the other way, the goals and objectives of the public sector organization could be in conflict with that of the procurement reforms thereby making it difficult for the organization to achieve its goal while adhering to the rules and regulation of the public procurement law, and thereby making compliance with the rules a problem.

2.7.3 Training and Professional Development on Procurement Regulations

Public Procurement Oversight Authority (PPOA, 2007), posits that the procurement regulations were meant to ensure that efficient training had been offered to professionals to serve in procurement. It was also revealed by the study by the PPOA that the available expertise at the procurement units did not meet the need for specialized procurement knowledge despite there being steps towards developing a professional procurement workforce.

Public procurement is increasingly recognized as a profession that plays a key role in the successful management of public resources, and a number of countries have become increasingly aware of the significance of procurement as an area vulnerable to mismanagement and corruption and have thus made an effort to integrate procurement into a more strategic view of government efforts. As part of the efforts to adopt a long-term and strategic view of their procurement needs and management, most countries have resorted to using their annual procurement plans as a possible problem solver (Mahmood, 2010). Sauber et al., (2008) emphasize that procurement professionals need to acknowledge and devise strategies for managing procurement challenges. The professionals must be seen as champions of efficiency and effectiveness and must acknowledge the challenges and their various forms, and their sources. The requirements to educate professionals and equip them with new and higher-level skills have consequently become urgent. According to Peterson and Van Fleet (2004), a skill is the ability either to perform some specific behavioral task or the ability to perform some specific cognitive process that is related to some particular task. However, Lan, Riley and Cayer, (2005), report that finding, hiring and retaining dedicated, energetic, and ethical employees with special skills is always hard. While we understand that professionalism is a key mechanisms for, and primary targets of

institutional change, the precise role of professions and professional service firms in processes of institutional change remain under-theorized.

The procurement exercise follows steps according to the PPOA of 2007. These steps must be observed in order to ensure that all the stakeholders involved in the procurement exercise obtain fair treatment. The steps include; planning for the required procurement over a given period, identifying the source of the items, highlighting specifications/initiation of procurement, determination of procurement procedure, Sourcing (soliciting) offers, evaluation of offers, post qualification, commencement of contract, contract performance (delivery) and management, record keeping and accountability, payment and post contract performance (PPOA, Act, 2007).

2.7.4 Involvement of Top Management and Stakeholders in Ethical Procurement Practices

Public procurement malpractices could be limited through the employment of stakeholders such as civil society organizations to be part of the procurement process. The current status of the procurement system requires the creation of three bid committees, namely the bid specification committee, the evaluation committee and the adjudication committee. For the purpose of compliance and to minimize unethical and corrupt practices, stakeholders should be involved in the evaluation and adjudication process. This will ensure and support open governance. Open governance creates the conditions for effective collaboration between governments and citizens in a process that enhances legitimacy and accountability of public decision-making. Therefore, stakeholder involvement will also encourage public servants to be more deliberate about decisions they make and will provide citizens as

well as stakeholders with the opportunity to hold their leaders accountable. It will improve the efficiency of government institutions, reduce fraud and waste of public finances, strengthen the management of natural resources and ensure better service delivery.

2.7.4 Compliance with Ethical Procurement Practices

Kangogo and Kiptoo (2013) conducted a study on factors affecting ethical standards in public procurement in Kenya and recommended that frequent independent procurement audits and rigorous monitoring to ensure compliance to the procurement code of conduct as a way of enhancing the ethical standards in public procurement. Further, the study recommended that proper documentation of all public procurement activities ensures complete audit trails to trace fraudulent (unethical) procurement practices. Consequently, the adherence to the provisions of the Act and Regulations by public officials is obligatory and therefore failure to do so is considered an offence which is subject to sanctions. According to Section 92 of Ghana Public Procurement Act 633 (2003), officials suspected of non-adherence to the rules and regulations and found guilty following investigations would be suspended and his or her benefits including salary withheld while officials found misappropriating government funds regardless of the value are to be summarily dismissed. Hence, Section 92 of Act 2003, (Act 663) establishes that contravention of any provision of the Act is an offence and stipulates the penalties to be applied while Section 93 of the Act defines corrupt practices in terms of article 284 of the Ghanaian constitution, and the Criminal Code of Ghana, Act 29 (1960). Act also stipulates that any tenderer, supplier, contractor or consultant who attempts to influence a procurement process, or the administration of a contract by any unfair method, will be subject to sanctions which may include

debarment of the company from Government of Ghana contracts. In an assessment of procurement systems in developing countries, Hunja (2003), found out that the abuse of procurement systems arises largely due to weak or inconsistent enforcement of the prevailing rules and regulations. He says that the weak enforcement of procurement rules was clearly reflected by the dissonance between prevailing (formal) rules and what actually takes place in practice during the procurement process. Hunja further argues that public entities usually go the extra length to create a semblance of formal compliance with procurement procedures and other requirements while seriously compromising the intent and spirit of such rules. Simply, Falvey et al. (2007), state also that corruption depends on the lack of enforcement and monitoring systems and on the lack of an effective system of debarment for suppliers who have been accused of corruption. They suggested the following for limiting the opportunities for corruption at the stage of the procurement process:

- i. The criteria for the selection of suppliers could be set by law or regulation and the procuring authority should be bound by those criteria, in so limiting the discretion of the public authority and avoiding the use of ad hoc solution aimed at favoring corrupted bidders.
- ii. Clear and unambiguous rules regarding publication and advertisement of solicitation documents should be included in the law defining in clear and succinct terms time allowed for adverts for each procurement method used. Advertising rules and limits must be reviewed with the view to prescribing clear time limits for publication. The law should clearly state the criteria for setting the minimum time between advertisement and submission of tenders. Additionally, the law should clearly prescribe “sufficient time” for advertising for both national and international competitive tenders.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes the research design, the population, the sample and sampling procedure. It also describes the research instruments, the procedure for data collection and methods that are used for the data analysis.

3.2 STUDY AREA

Koforidua Polytechnic is one of the ten polytechnics established in every region in Ghana. It was founded in 1997 with the vision of producing high-level, career-focused and skilled manpower to support the country's industrial growth. Since 1999 it has produced graduates with HND in accountancy, marketing, purchasing and supply, statistics and computer science.

Currently the institution has three (3) schools and one institute: School of Business and Management Studies, School of Applied Sciences and Technology, the School of Engineering and the Institute of Open and Distance Learning. Since its establishment the polytechnic, its number of HND programs has increased from 2 to 14 programmes. For the 2012/2013 academic year, the polytechnic has a student population of 5,708.

Koforidua polytechnic has the support of a number of institutions which includes Ministry of Education and its agencies, National Council for Tertiary Education, National Accreditation Board, National Board for Professional and Technician Examinations, Ghana Education Trust Fund and the Council for Technical and Vocational Education and Training.

3.3 RESEARCH DESIGN

This study was conducted through a descriptive survey research design. According to Mugenda and Mugenda (2003) a descriptive survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. According to Bryman and Bell (2007), the major techniques or tools used in collecting data in descriptive survey design are the questionnaire, interview and observation. Descriptive survey design was appropriate for study, as it allowed the researcher to collect data on factors ensuring value for money in Koforidua polytechnic as well as the challenges in ensuring value for money in the procurement of goods, works and services. Furthermore, a descriptive survey research is suitable since it considers issues such as economy of the design, rapid turnaround in data collection and it is suitable for extensive research.

3.4 POPULATION

The target population of this study covered the entire staff of Koforidua Polytechnic involve in the procurement process. The target population of this study comprised Deans and Heads of Departments, Heads of Sections, Procurement Unit Staff, Accounts and the Internal Audit Unit, Transport, Stores and Development departments of Koforidua Polytechnic. At the time of the study, target population was (120) staff of Koforidua Polytechnic.

3.5 SAMPLE AND SAMPLING PROCEDURES

According to Bryman and Bell (2007), the ideal sample should be large number to serve as adequate representatives of the population and small enough to be selected

economically, that is in terms of subject availability. The sampling techniques that were adopted by the researchers for the research was purposive sampling.

With the purposive sampling, it is whereby the researchers try to get information from a target group who are ready to provide information in certain criteria designed by the researchers (Sanders, Lewis and Thornhill, 2007). In view of this, the researcher purposively selected 40 heads of departments and senior management members for the study.

3.6 SOURCES OF DATA

The study made an extensive use of both primary and secondary sources of information from selected public institutions. The primary sources of data include information that was gathered from the questionnaires that were administered to the respondents. The advantage of using primary data is that, they are more reliable since they come from the original sources and are collected especially for the purpose of the study. The secondary sources of data included annual reports, brochures and manuals. A number of both published and unpublished materials on public procurement in general from journals and articles as much as possible were used.

3.7 RELIABILITY AND VALIDITY

Bryman and Bell (2007) regard reliability as consistency in obtaining the same results after measuring the same variables repeatedly on different occasions. It entails consistence and quality measurement of data collected with minimum biasness and errors. In this study, reliability was achieved by structuring and designing questionnaires in such a way that would avoid yielding different meanings. Bryman and Bell (2007) suggested that a multiple-item measure in which each answers to each

questions are aggregated to form an overall score, we need to be sure that all our indicators are related to each other.

Validity implies the extent to which the chosen research instruments accurately measure what they are intended to measure. In terms of validity of the research, it has been achieved by ensuring that the instruments being utilised in the research are logically consistent and comprehensive enough to take into account all the abstract concepts under study. Apart from the definition of the salient concepts, the research has ensured that construct validity of variables through covering all aspects of the concepts under research.

3.8 RESEARCH INSTRUMENT

The research instrument used for the study was a questionnaire comprised of open and closed questions. The questionnaire was developed from the literature review based on research questions proposed for the study and covered three major sections. Section “A” of the questionnaire indicated background data of respondents. The section “B” examined factors ensuring value for money in procurement, and Section “C” finally, identifies challenges impending on achieving value for money in public procurement.

3.9 DATA COLLECTION PROCEDURE

An introductory letter was collected from the Department head of Kwame Nkrumah University of Science and Technology (Institute of Distance Learning) and this enabled the researcher to have a good rapport with the respondents selected for the study. The purpose of the study was explained to the respondents as well as the instructions for completing the questionnaire. The study took three weeks (from

August 15 to August 25, 2014) to collect the data and throughout these periods the researcher availed himself to answer questions that bordered on the study.

The researcher personally administered the questionnaire which contained series of structured questions which were related to the research work and directed to respondents with the aim of gaining first-hand information. The questionnaire consisted of both open ended and close-ended questions. Thus, in some cases, respondents were to choose the option that best reflected their opinions. The questionnaire afforded respondents much flexibility and privacy in answering the questions without any undue influence. The questionnaire was in simple and unambiguous language and as such, did not pose any problem as regards interpretation. The respondents were also assured that the information would be kept confidential. All questionnaires were filled and returned by the respondents.

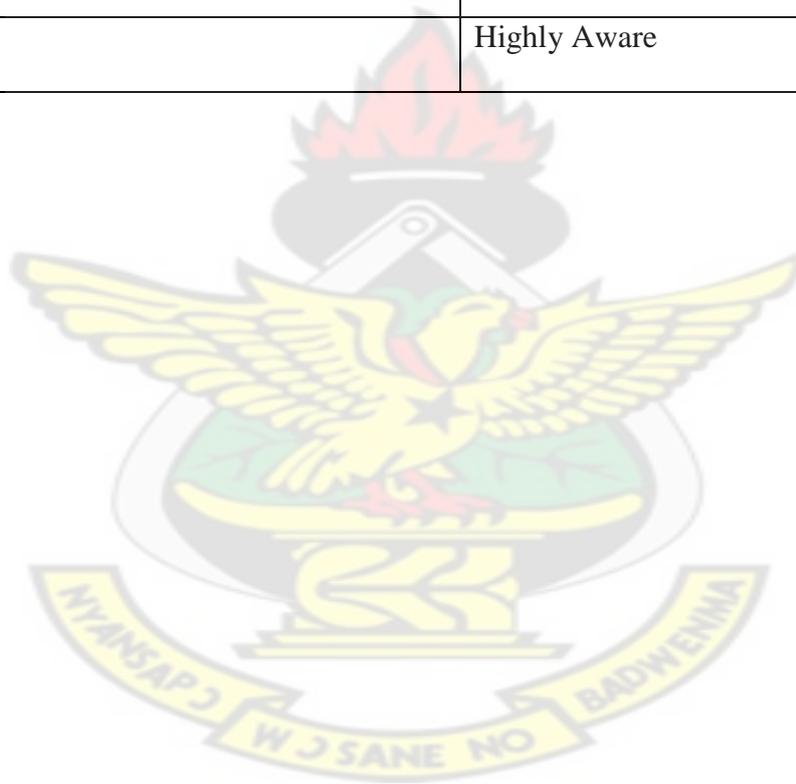
3.10 DATA ANALYSIS

The completed questionnaires were edited to ensure completeness, consistency and readability. Once the data had been checked, they were arranged in a format that enabled easy analysis. Quantifiable data from the questionnaires was coded into the software for analysis. Statistical Package for Social Sciences (SPSS 20.0) and Microsoft excel were then used to analyse the data because it was considered to be user-friendly. Frequency tables, percentages, bar charts and other descriptive were used to analyse the results. Respondents are required to provide answers by marking a number on a 5-point Likert Scale in order to make it easier for them. The five-point Likert scale scoring system mentioned earlier formed the basis of calculating the mean score for each of the factors; the relative ranking of the factors by all respondents, was then determined by comparing the individual mean score and the

standard deviation for each criterion. Table 4.1 shows the rating systems for the questions in the questionnaire.

Table 3.1: Rating System for the Questionnaire

Likert Scale/Rating Score	Level of Importance
1	Highly Aware
2	Unaware
3	Neither aware or unaware
4	Aware
5	Highly Aware



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

This chapter focuses on organization, structuring and characteristics of the data collected from the field as well as the analysis and interpretations drawn from it to address the key research objectives and questions captioned in chapter one. The results obtained are compared with the relevant literatures and the researcher comments are added. This chapter deals with the analysis and discussion of the data collected to assess ways of ensuring value for money in procurement.

4.2 BACKGROUND INFORMATION

This section presents background information on respondents such as the gender of respondent, level of educational qualification, age of respondent and years of experience. Such analyses are imperative because the background of the respondents helps generate confidence in the reliability of data collected; and eventually the findings of the study.

4.2.1 Gender of Respondent

Figure 4.1 shows the frequency and percent of the gender of the respondent. The respondents made up of male's constitute the highest with 83% while the remaining 17% constitute of females. This shows male dominance in public sector in the country.

4.2.2 Age of Respondent

Figure 4.2 shows the age of the respondent, 7% respondents out of the 30 respondent population are 18-25years'old whereas, 17% are between the ages 26-33years. In

addition 37% of respondents are within age's 34-41years, with ages between 42-49years having 27% respondent. Ages 50 years and above had 13% of the respondent in that category.

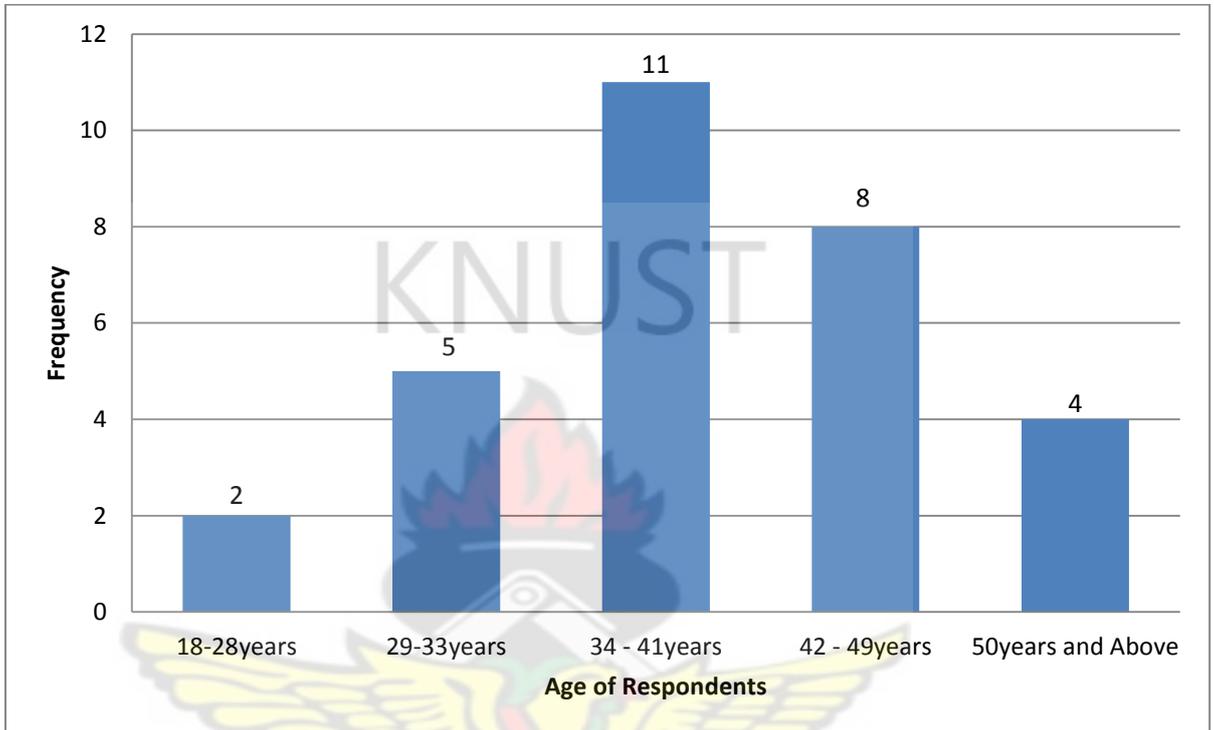


Figure 4.1 Age of Respondent

4.2.3 Educational Level

The question was posed to find the educational qualification of the respondents and since the level of this qualification to a larger extent determines a position in the institution and hence their involvement in the procurement activities. Such involvements determine the quality of responses given. A cursory look at Figure 4.3 reveals that 9% are Diploma/Professional Certificate holders while 38% of the respondents are holders of Masters/Postgraduate degree with 53% having Bachelor's degree. The deduction from the above statistics is that most of the respondents have higher degrees; hence their involvement in procurement decision is most likely.

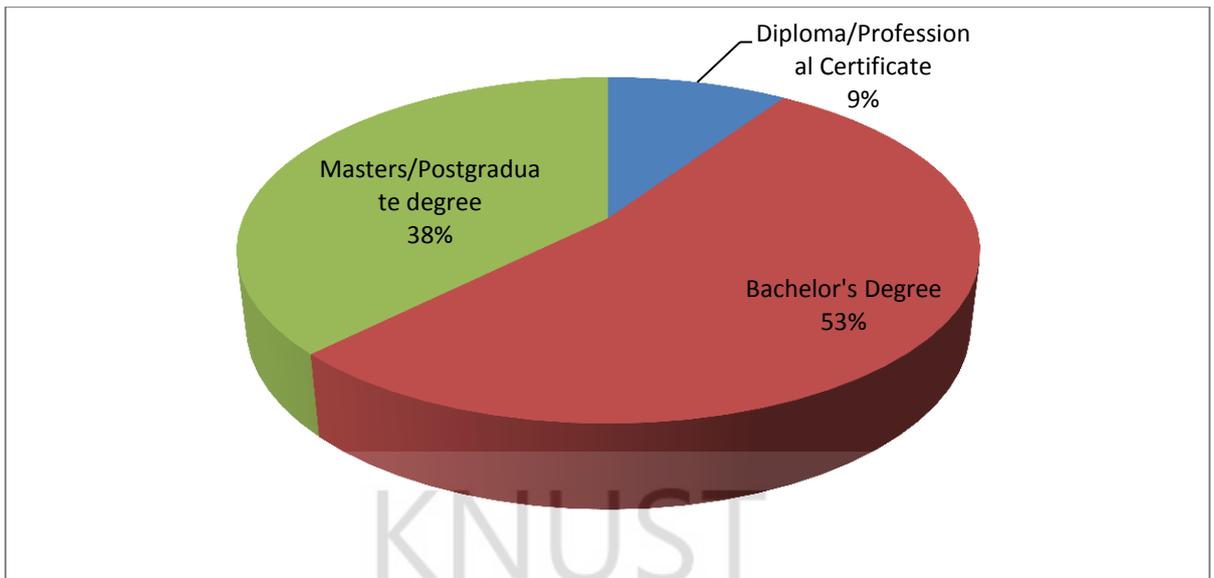


Figure 4.2 Level of Educational Qualification

4.2.4 Experience of Respondent

Generally, the results in figure 4.4 below indicate that the respondents have reasonable experience and expertise in the procurement activities in their respective unit in the institution. Furthermore, the findings suggest that most respondents are regularly active and the organisations investigated are well established. It seems therefore plausible to conclude that those who responded to the survey are sufficiently experienced in the procurement activity to provide data, which is credible.

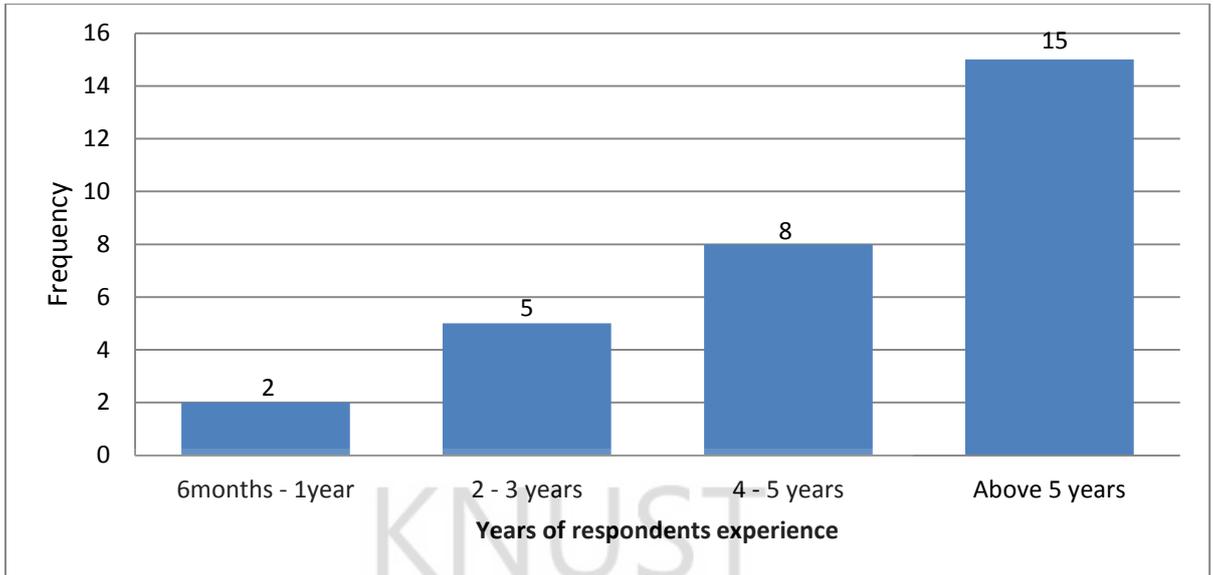


Figure 4.3 Years of Experience

4.3 ANALYSIS OF DEPENDENT VARIABLES

The respondents were asked to rank the various factors and challenges in terms of usage and level of knowledge using the likert scale. Using the five-point likert scale rating, a criterion is deemed significant if it had a mean score of 3.5 or more and 2.8 if it's based on the four-point likert scale. Where two or more criteria have the same mean score, the one with the lowest standard deviation is assigned the highest significance ranking (Ahadzie, 2007). Standard deviation values of less than 1.0 indicate consistency in agreement among the respondents of the reported level of results (Ahadzie, 2007). They were altogether used to assess the various variables under the different sub-sections. The procedure, findings and relevant discussions are as follows.

4.3.1 FACTORS ENSURING VALUE FOR MONEY (VFM) IN PROCUREMENT

In an attempt to assess the factors in ensuring value for money in procurement of goods, works and service, it deemed necessary and imperative to ascertain the level of awareness among the respondent. In view of this fourteen factors were identified from literature and respondents were asked to rate them according to their degree of awareness on them on a five-point likert scale items (highly unaware, unaware, neither aware nor unaware, aware, highly aware). Hence in establishing the level of awareness, two different tools were adopted – mean score and standard deviation.

From the analysis the respondents indicated that they had a higher level of awareness of factors in ensuring value for money in the procurement process. ‘Procurement Entity liaises with Public Procurement Authority always for timely and required procurement information’ was ranked 1st with a mean 4.767 and a standard. deviation of 0.430. The second factor in ensuring VFM was ‘Procurement activities of the Institution are assessed annually by the Public Procurement Authority’ with a mean of 4.733. It has been already indicated a mean score of less than 3.5 shows that a criterion is not significant.

From the analysis ‘management supports VFM objectives of the Polytechnic’, ‘the institution plans annual procurement spending to ensure VFM’, ‘the institution’s procurement activities are established through competitive process and negotiation’, ‘VFM ensures that the institution links its budgets to procurement activities’, ‘the Procurement officials of the Polytechnic are professionals and experienced in the field’, ‘the Institution applies fair and transparent rules for the selection of tenderers’, ‘VFM has reduced corruption and improved service delivery in procurement activities

of the Institution’ and ‘the procurement activities of the Institution aims at achieving VFM’ were the other major factors in ensuring value for money in public procurement in their order of ranking with a mean value above 3.5. The least factor was ‘the institution has a policy on VFM for procurement activities’ with a mean of 2.433.

The results confirm findings in literature in which ‘Procurement Entity liaises with Public Procurement Authority always for timely and required procurement information’, ‘Procurement activities of the institution are assessed annually by the Public Procurement Authority’, ‘Management supports VFM objectives’, ‘Institution plans annual procurement spending to ensure VFM’ (Odhiambo and Kamau, 2003;Public Procurement Act of Ghana, Act 663, 2003)



Table 4.1 Factors ensuring value for money (VFM) in procurement

VFM Factors	Mean Score	Std. Deviation	Ranking
Procurement Entity liaises with Public Procurement Authority always for timely and required procurement information	4.7667	.43018	1 st
Procurement activities of the Institution are assessed annually by the Public Procurement Authority	4.7333	.44978	2 nd
The management supports VFM objectives of the Polytechnic	4.5333	.50742	3 rd
The Institution plans annual procurement spending to ensure VFM	4.4333	.50401	4 th
The Institution's procurement activities are established through competitive process and negotiation	4.3333	.47946	5 th
VFM ensures that the Institution links its budgets to procurement activities	4.3000	.46609	6 th
The Procurement officials of the Polytechnic are professionals and experienced in the field	3.8333	.37905	7 th
The Institution applies fair and transparent rules for the selection of tenderers	3.8333	.37905	8 th
VFM has reduced corruption and improved service delivery in procurement activities of the Institution	3.6667	.47946	9 th
The procurement activities of the Institution aims at achieving VFM	3.6000	.49827	10 th
The VFM in the Institution serves as a check against unplanned procurement activities	3.4000	.49827	11 th
The management regularly appraise its procurement activities to ensure VFM	3.2000	.40684	12 th
Procurement activities in the Institution are simple and timely resulting in VFM	3.0333	.61495	13 th
The Institution has a policy on VFM for procurement activities	2.4333	.67891	14 th

Source: Field Data

4.3.2 CHALLENGES IN ACHIEVING VALUE FOR MONEY IN PROCUREMENT

Respondents were asked to score the major challenges in achieving Value For Money (VFM) in public procurement. When the responses of the professionals (administrators, finance officers and procurement officers) on the challenges in achieving VFM compared, the results showed no significant difference at 5% significance level. Hence, all the data were pooled together (Table 4.2). Table 4.2 below, shows that the mean scores of all the six (6) challenges evaluated are greater than the neutral value of 3.0 for all the respondents (head of department, finance, administrator and procurement officers). The results in Table 4.2 below reveal that all the six factors are major challenges in achieving value for money in procurement activities.

Table 4.2 Challenges in achieving value for money in procurement

Challenges to VFM	Mean Score	Std. Deviation	Ranking
Inadequate skilled personnel in the procurement sector	4.8000	.40684	1 st
Inadequate measures for monitoring and evaluation of the procurement policy to ensure VFM	4.7000	.46609	2 nd
Problem of non-compliance with the VFM objectives of the Institution	4.1667	.37905	3 rd
Lack of top management supports for VFM programme	4.1000	.30513	4 th
Lack of appropriate bidding or incorrect utilization of the limited bidding process	3.7667	.43018	5 th
Lack of accountability and transparency in procurement of goods and services at the Institution	3.2333	.43018	6 th

Source: Field Data

The results further revealed that ‘Inadequate skilled personnel in the procurement sector’, ‘Inadequate measures for monitoring and evaluation of the procurement policy to ensure VFM’,

‘Problem of non-compliance with the VFM objectives of the Institution’, ‘Lack of top management supports for VFM programme’ and ‘Lack of appropriate bidding or incorrect utilization of the limited bidding process’ were the major challenges in achieving value for money in public procurement. Table 4.2 shows that ‘lack of accountability and transparency in procurement of goods and services at the Institution’ is the least ranked challenge with a mean of 3.233.

The results confirm findings in literature, that lack of competent procurement workforce is one major challenge in public procurement (Nsugaba, 2006; Basheka, 2008; Thai, 2010). Also Thai, (2004) indicated that maintained forms and procedures may be convenient and useful tools, but adding value for effort will succeed only with the complete commitment and involvement of top management, along with appropriate personnel.

4.3.3 MEASURES TO ENHANCE VALUE FOR MONEY IN PROCUREMENT

On measures which would enhance value for money in public procurement entities in Ghana, mean scores of 8 measures investigated and their rankings are presented in Tables 4.3 for professional (administrators, finance officers and procurement officers) working at Koforidua Polytechnic. Mean scores of all the measures to enhance value for money in procurement are greater than the neutral value of 3.0, indicating that they are all importance.

From table 4.3 below, the highest ranked measure was ‘Procurement contract document should be stated in simple language devoid of different interpretations

requiring revisions and reviews’ with a mean value of 4.767 and Std. deviation of 0.430. This finding agrees with the study by Azeem (2003). The challenges include proper dissemination of the procurement law. The second ranked measure was ‘Regular procurement audits and monitoring for compliance with procurement activities’ with a mean value of 4.733. Already Kabaj (2003) indicated that regular monitoring and audit of procurement activities add value.

Other important measures to achieving value for money includes ‘Pre-disclose the selection criteria to bidders and to forbid the procurement entity to change them once the process has started’, ‘Strong or Consistent enforcement of the prevailing rules and regulations’, ‘Criteria for the selection of suppliers should be set and agreed by all the parties’ and ‘Punitive sanctions to procurement officials who fail to comply with the procurement’ in their order of ranking.

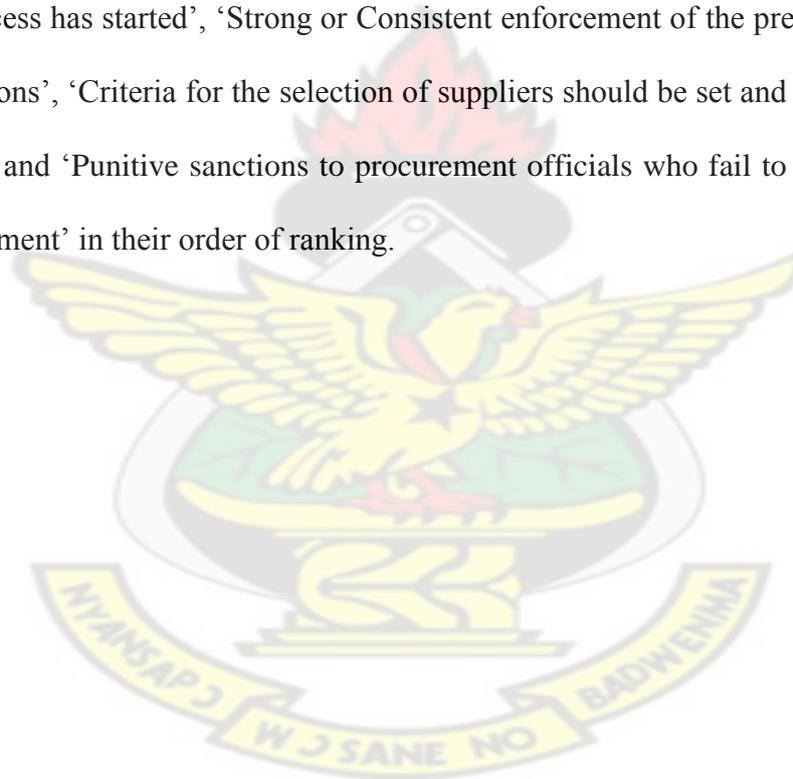


Table 4.3 Measures to enhance value for money in procurement

VFM Measures	Mean	Std. Deviation	Ranking
Procurement contract document should be stated in simple language devoid of different interpretations requiring revisions and reviews	4.7667	.43018	1 st
Regular procurement audits and monitoring for compliance with procurement activities in the Polytechnic	4.7333	.44978	2 nd
Pre-disclose the selection criteria to bidders and to forbid the procurement entity to change them once the process has started	4.6667	.47946	3 rd
Strong or Consistent enforcement of the prevailing rules and regulations	4.1667	.37905	4 th
Criteria for the selection of suppliers should be set and agreed by all the parties	3.8333	.37905	5 th
Punitive sanctions to procurement officials who fail to comply with the procurement activities in the Polytechnic	3.7667	.43018	6 th
Supplier/Contractors/Consultant who attempts to influence procurement process should be sanction and debarment from government of Ghana contract.	3.1667	.37905	7 th
Mechanisms of enforcement should not become a barrier so as to make the system insufficient, bureaucratic and costly	3.010	.50742	8 th

Source: Field Data

4.4 CHAPTER SUMMARY

This chapter was devoted to the analysis and discussions of the results obtained from the questionnaire survey. It began with a brief discussion of the survey questionnaires and descriptive statistics of the results obtained from the field. The study adopted the use of mean score and standard deviation to analyse the results of the survey. Lastly a discussion of the factors ensuring value for money, challenges and measures in achieving value for money in public procurement where discussed.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This study has sought to assess ways of ensuring value for money in procurement by practitioners in Koforidua polytechnic. Review of literature led to the identification of factors ensuring value of money and challenges. Adopting the quantitative research approach a questionnaire survey was employed to assess measures used by procurement practitioners. The previous chapter analysed and discuss the results of the study. This chapter presents the findings of the study in relation to the laid out objectives of the study. Recommendations from the study are put forth. The study limitations and directions for future research are also presented. The objectives to the study include:

- To assess the factors ensuring value for money in public procurement
- To identify the challenges in ensuring value for money in the procurement of goods, works and services.
- To examine the measures put in place to ensure value for money in the procurement of goods, works and services.

These research objectives served as guidelines in achieving the stated aim of the study. The research results are discussed in relation to the objectives of the study.

5.2 Review of aim and objectives

The main aim of this research was to assess ways of ensuring value for money in procurement in Koforidua polytechnic. Research objectives were subsequently developed in order to achieve the stated aim. Here, the research objectives are highlighted to the extent to which they were accomplished through the various phases of the research. The study employed the use of mean score and standard deviation in the analysis.

5.2.1 Factors Ensuring Value for Money (VFM) in Procurement

In an attempt to assess the factors ensuring value for money in procurement, fourteen factors were identified from literature. From the analysis the mean score for the following factors were above 4.0, 'procurement entity liaises with Public Procurement Authority always for timely and required procurement information', 'procurement activities of the institution are assessed annually by the Public Procurement Authority', 'management supports VFM objectives', 'institution plans annual procurement spending to ensure VFM', 'institution's procurement activities are established through competitive process and negotiation' and 'VFM ensures that the institution links its budgets to procurement activities' are key to enduring value for money. The standard deviation for all the variables identified was below 1 showing a high degree of agreement within the respondents.

5.2.2 Challenges in Achieving Value for Money in Procurement

To achieve objective two the respondents were asked to rate using the likert scale the challenges in achieving value for money. It was realized from the study that procurement practitioners in Koforidua polytechnic are faced with several challenges in their aim to achieve value for money in procurement process. The result from the

study revealed that ‘inadequate skilled personnel in the procurement sector’, ‘inadequate measures for monitoring and evaluation of the procurement policy to ensure VFM’, ‘problem of non-compliance with the VFM objectives of the institution’ and ‘lack of top management supports for VFM programme’ were the major challenges to VFM achievement.

5.2.3 Measures to enhance value for Money in procurement

From the study of extant literature various measures were identified. The respondents to the survey were asked to rate the level of agreement with these measures to enhance value for money in public procurement.

Eight measures were identified. The results further revealed that all the measures are key to ensuring value for money in public procurement since their mean values are above the neutral rating of 3.0. The findings from the study show that among all the measures procurement contract document should be stated in simple language devoid of different interpretations requiring revisions and reviews is key in ensuring value for money. The survey results show that ‘regular procurement audits and monitoring for compliance with procurement activities’, ‘pre-disclose the selection criteria to bidders and to forbid the procurement entity to change them once the process has started’, ‘strong or consistent enforcement of the prevailing rules and regulation’ and ‘criteria for the selection of suppliers should be set and agreed by all the parties’ were the other key measures to ensuring VFM of procurement.

5.3 Conclusion

Value for money is therefore not a choice of goods or services which is based on the lowest bid price but a choice based on the whole life costs of the project or service. Given the limited resources available to government, ensuring VFM in procurement is

key to ensuring the optimum utilisation of scarce budgetary resources. VFM is the primary driver for procurement.

The primary aim of this research is to assess ways of ensuring value for money in procurement in Koforidua Polytechnic in the Eastern Region of Ghana. It has been observed from the results that the necessity of a well-functioning public procurement system is critical for the improved delivery of decentralized goods, works and services. The findings from the study informs on conclusion to be put forward. From the study the following conclusions are made:

- Procurement regulatory authorities (Public Procurement Authority) in collaboration with public entities (tertiary institution) must ensure compliance through rigorous monitoring and evaluation of the procurement policy to ensure VFM.
- Stakeholders of public entities should also invest in training their staff on achieving value for money in their procurement activities. This is also supported by the position of (Nsugaba, 2006; Basheka, 2008; Thai, 2010) that major challenges in public procurement is lack of competent procurement workforce.
- Management supports for VFM programme at all level of administration should be encouraged. This is supported by the position of Thai, (2004) indicated that maintained forms and procedures may be convenient and useful tools, but the adding value for effort will succeed only with the complete commitment and involvement of top management, along with appropriate personnel.

5.4 Limitations of the research

Limitations stemming from the nature of the topic being investigated are acknowledged. In the first place the geographic focus of the study due to time constraints limited the study to only one region and public entity (tertiary institution). This impacted the study population and the consequent sample size. The findings are a first step towards the achieving value for money in public procurement. The study findings were only from Koforidua polytechnic and did not explore the views of other tertiary institutions.

5.5 Recommendation for future research

This study limitation exposes a number of areas, which need further research attention. The following recommendations are therefore made for future research:

- The study limitation of a smaller area should be widened to increase the applicability of the research findings.
- A study on measures to be adopted to achieve value for money and the impact of such measures on the procurement activities.

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APPENDICES

QUESTIONNAIRE FOR RESPONDENT

Dear respondents:

This is a questionnaire designed to collect data on ensuring value for money in public procurement in tertiary institutions in Ghana: a case study of Koforidua polytechnic which will be used as an input for a dissertation in a partial fulfillment of Master of Science in Procurement. Your objective response will be solely used for academic purpose and the data will be treated with utmost confidentiality. Therefore, your kind cooperation is appreciated in advance.

SECTION A: Demographic Data of Respondent

Please tick [] the appropriate box that corresponds to your response.

1. Gender :
 - a. Male []
 - b. Female []

2. Age:
 - a. 18 – 25 []
 - b. 26 – 33 []
 - c. 34 – 41 []
 - d. 42 – 49 []
 - e. 50 years and above []

3. What is your level of education?
 - a. Diploma / Professional Certificate []
 - b. Bachelor's degree []
 - c. Masters / Postgraduate degree []

4. State the number of years you have worked with the Koforidua Polytechnic

a. 6 months - 1 year [] b. 2 – 3 years []

c. 4 - 5 years [] d. Above 5 years []

5. Indicate your occupational status

.....

SECTION B: Factors ensuring value for money in procurement of goods and services at the Koforidua Polytechnic

Indicate your level of awareness of these factors in ensuring value for money in procurement of goods and services. The following are keys for the responses:

1: Highly unaware; 2: Unaware; 3: Neither aware or unaware 4: Aware 5: Highly aware

Factors ensuring value for money (VFM) in procurement	1	2	3	4	5
6. The Institution has a policy on VFM for procurement activities					
7. The management supports VFM objectives of the Polytechnic					
8. VFM ensures that the Institution links its budgets to procurement activities					
9. the VFM in the Institution serves as a check against unplanned procurement activities					
10. The Institution plans annual procurement spending to ensure VFM					

11. The procurement activities of the Institution aims at achieving VFM					
12. VFM has reduced corruption and improved service delivery in procurement activities of the Institution					
13. The management regularly appraise its procurement activities to ensure VFM					
14. The Institution's procurement activities are established through competitive process and negotiation					
15. Procurement activities of the Institution are assessed annually by the Public Procurement Authority					
16. Procurement Entity liaises with Public Procurement Authority always for timely and required procurement information					
17. The Institution applies fair and transparent rules for the selection of tenderers					
18. Procurement activities in the Institution are simple and timely resulting in VFM					
19. The Procurement officials of the Polytechnic are professionals and experienced in the field					

SECTION C: Challenges facing Koforidua Polytechnic in achieving value for money in procurement

Challenges in achieving value for money in procurement	1	2	3	4	5
20. Inadequate skilled personnel in the procurement sector					
21. Lack of top management supports for VFM programme					
22. Problem of non-compliance with the VFM objectives of the Institution					
23. Lack of appropriate bidding or incorrect utilization of the limited bidding process					
24. Lack of accountability and transparency in procurement of goods and services at the Institution					
25. Inadequate measures for monitoring and evaluation of the procurement policy to ensure VFM					

SECTION D: Measures employed to enhance value for money in the procurement

Measures to enhance value for money in procurement	1	2	3	4	5
26. Regular procurement audits and monitoring for compliance with procurement activities in the Polytechnic					
27. Punitive sanctions to procurement officials who fail to comply with the procurement activities in the					

Polytechnic					
28. Tenderer, Supplier, contractors or consultant who attempts to influence procurement process should be sanction and debarment from government of Ghana contract.					
29. Weak or inconsistent enforcement of the prevailing rules and regulations					
30. procurement contract document should be stated in simple language devoid of different interpretations requiring revisions and reviews					
31. Mechanisms of enforcement should not become a barrier so as to make the system insufficient, bureaucratic and costly					
32. Criteria for the selection of suppliers should be set and agreed by all the parties					
33. Pre-disclose the selection criteria to bidders and to forbid the procurement entity to change them once the process has started					

