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COLLEGE OF ART AND BUILT ENVIRONMENT
DEPARTMENT OF BUILDING TECHNOLOGY,**

**EXPLORING THE CONCEPT OF VALUE FOR MONEY ASSESSMENT IN
SIERRA LEONE'S PUBLIC PROCUREMENT SYSTEM**

**BY
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**A THESIS SUBMITTED TO THE DEPARTMENT OF BUILDING TECHNOLOGY,
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THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY IN
PROCUREMENT MANAGEMENT**

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DECLARATION

I hereby declare that this research work is my independent work towards the Master of Philosophy Procurement Management and that, to the best of my Knowledge, it contains no material beforehand published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

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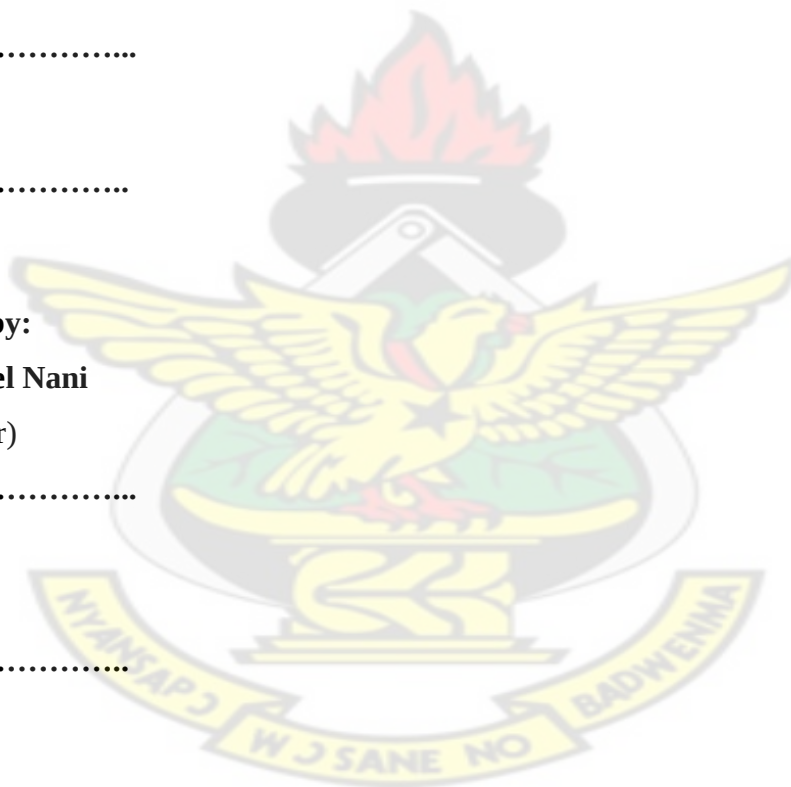
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ABSTRACT

Procurement is a key consideration in the management of public funds, and this function accounts for roughly 70% of the yearly total budget of Sierra Leone. Though procurement has not neglected its statutory responsibility of providing for the logistics needs of the government, it is well noting that it has not contributed Value for Money (VFM) to the projects delivered. Basically, VFM is the optimum combination of the whole life cost, benefits, risks, quantity and quality of the goods, works and services provided embracing the facilities management and environmental impact factors to achieve the desired outcome.

On this note, the aim of this research is to understand the Value for Money assessment concept in the public procurement system of Sierra Leone. To achieve the aim of the research, the researcher formulated four (4) research objectives which includes: defining Value for Money in the context of Sierra Leone's public procurement system; identifying the methods used in conducting VFM assessment; determining the relationships between the methods and the VFM they assess; and determining the procurement stages for optimal application of these methods.

Value for Money assessment focuses on measuring economy, efficiency and effectiveness, considering the different options available for the delivery of projects. Furthermore, it takes account of adeptness in design, delivery, the use and management of the delivered project. This process (if thoroughly) executed helps government to decide on the project(s) which contribute(s) best value to its citizens.

The choice of the research was mixed methods and deductive in nature. Data was collected using both questionnaires and semi-structured interviews. The questionnaire survey targeted the procurement and finance officers in the twenty-five (25) ministries situated in Freetown;

whereas the interviews were targeted at procurement experts who have successfully delivered procurement projects to understand the VFM assessment concept.

The study revealed that practitioners in Sierra Leone defined Value for Money as the lowest evaluated responsive bid which meets the specification of the user department, environmental and social benefits, taking into account economy, efficiency, effectiveness and the whole life cost of the procurement project. In addition, it was evidenced that practitioners considered economy, efficiency and effectiveness in their VFM assessment. The methods mostly used in VFM assessments are prior review, post review, contract monitoring, audit, national competitive bidding, international competitive bidding, restricted bidding, request for quotations and cost utility analysis. Findings revealed positively weak associations between cost utility analysis, cost efficiency analysis and social return on investment analysis and the three (3) elements of economy, efficiency and effectiveness. Also, the findings indicated weak positive associations between the pre-contract stage, contracting and contract management stage and post contract stage and the VFM methods. The study recommended that authorities institutionalise the VFM assessment concept, adopt the methods, provide VFM assessment training to enhance the capacity of practitioners to contribute VFM to public contracts and include VFM assessment concept in the procurement act.

Key words: Public Sector Procurement, Value for Money assessment, Value for Money elements, Value for Money audit, Value for Money methods, Value for Money culture

DEDICATION

I dedicate this research work to my caring and loving wife Deborah Knedrew Orsino-Massaquoi, our dear children and the rest of the extended family for their prayers, encouragement, support and sacrifices made during the course of my studies. May God richly bless them.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter establishes the basis of the research. It provides the outline which explains the background, problem statement, significance of the research, the research aim, the research questions, the research objectives, the research scope, the research limitations, a brief description of the research methodology, and the organisation of the chapters.

1.2 Background

Most governments across the world are faced with the responsibility of providing the much needed infrastructure to stimulate economic growth (Ameyaw et al., 2015). Achieving this task has resulted in countries increasing their debt stock. In the case of Sierra Leone, fixing this infrastructure gap has contributed to its debt stock of US\$1.53 billion (International Monetary Fund and the World Bank, 2017, Ameyaw et al., 2015).

Subsequently, the report of the Auditor-General and their probing by the public accounts committee yearly, continuously tempt public attention and receive extensive media reporting (Audit Service Sierra Leone, 2014;2013). The citizens have high expectation on the process, and the conduct of Value for Money assessment has been seen as a way to monitor the performance of the ministries together with the departments and agencies they supervise (Barutha, 2016).

Value for Money is the fundamental tenet of Public procurement (Raymond, 2008). This concept can be traced back to the days of the barter trade. Today, VFM has been more prominent because of the increasing expectations of the taxpayers. VFM focuses on creating

the right balance between economy, efficiency and effectiveness, and not solely restricted to the initial procurement cost (Jackson, 2012; Ameyaw et al. 2015).

Value for Money assessment is an ultimate requirement for public procurement (Ismail et al., 2012). It is the process organisations employ to compare the procurement of different project delivery methods and assess the ability of potential bidders to significantly contribute VFM to the activity (Barutha, 2016; Ismail et al., 2012). The assessment process combines both the financial and non-financial aspects of the delivery method and the potential bidders (Barutha, 2016; Takim et al., 2011).

Achieving Value for Money in public procurement is a statutory legal obligation; hence it is of vital importance in the successful delivery of projects and the prudent management of the public purse (Akbiyikli and Eaton, 2006).

In Sierra Leone, Audit Service Sierra Leone – the statutory body charged with this responsibility has made strives to bring to the attention of public officials that, Value for Money has not been achieved in public contract (Audit Service Sierra Leone, 2014;2013). However, it is sad to note that the efforts made by this body have not yielded the desired results as the same issues keep reappearing yearly (Audit Service Sierra Leone, 2015).

The audit report for the financial year ended 31st December 2010 revealed that procurement inefficiencies is partly responsible for a cash loss of US\$2,836,455 (Audit Service Sierra Leone, 2010). Also, a special report on the audit of procurement activities in selected entities reported that overpricing in the Ministry of Defence accounts for a loss of over US\$12.5 million, and irregular pricing in the Ministry of Agriculture, Forestry and Food Security accounts for US\$774,000 (Audit Service Sierra Leone, 2015).

1.3 Problem Statement

Value for Money assessment is crucial and has been used to promote financial discipline in both the central and local government across the globe (Takim et al., 2011; Johnsen et al., 2001). The process focuses on measuring economy, efficiency and effectiveness whilst ensuring that practitioners account for cost incurred and savings made during the execution of the project (Muniaín, 2005). Unfortunately, this process has not received enough support from officials in the public sector as is evident in the lack of transparency and procurement inefficiencies (Eyaa and Oluka, 2011; Osei-Tutu et al., 2010). Furthermore, Emmi et al., 2011 opined that, institutions have placed more focus on improving the process (monitoring and evaluation system, financial reporting, contract monitoring, etc.) rather than the final product. With this development, the process has largely ignored effectiveness and placed more emphasis on achieving economy and efficiency (Emmi et al., 2011).

The procurement audit report of selected ministries which covered the period January to October 2015 revealed that, Value for Money was not achieved. The report recorded a loss of over US\$12.5 million in the ministry of defence, and a loss of US\$774,000 in the ministry of agriculture, forestry and food security (Audit Service Sierra Leone, 2015). This inefficiency was attributed to irregular pricing, overpricing, inappropriate use of the procurement methods, and failure to implement the audit recommendation. Also, the report noted that the procurement staff who are the custodians of funds owned by the state have not benefited from professional training since the establishment of the procurement cadre (Audit Service Sierra Leone, 2015).

Some researchers have indicated that, effective VFM-focused culture is low in the public sector. In addition, entities do not focus strongly enough on delivering VFM improvements public contracts. Unfortunately, this has resulted in the misuse of state funds, and non-

compliance with the policies and procedures of the public procurement system (Prowle et al. 2016; Hui et al. 2011).

These weaknesses have culminated into wide criticism from various stakeholders on the poor quality and the excessive delays or abandonment of procurement projects by contractors (Ren et al. 2012).

Hence, these procurement inefficiencies (Audit Service Sierra Leone, 2015), the absence of standardized methods to determine cost in VFM assessments and the disregard for effectiveness in conducting Vfm assessments (Emmi et al., 2011; Tumeh et al. 2005) have prompted the need to explore the concept of Value for Money assessment in the public procurement system of Sierra Leone.

1.4 Research Questions

- i. How is Value for Money defined in Sierra Leone?
- ii. What methods are used for Value for Money assessment?
- iii. In which of the procurement stages do these methods apply?
- iv. What does each of these methods assess?

1.5 Aim of the Research

The aim of the research is to understand the Value for Money assessment concept in the public procurement system of Sierra Leone.

1.6 Objectives of the study

- i. To define Value for Money in the context of Sierra Leone public procurement
- ii. To identify the methods used in conducting Value for Money assessment
- iii. To determine the relationships between the methods and the Value for Money elements;
and

- iv. To determine the procurement stages for optimal application of these methods.

1.7 Research Methodology

The researcher adopted the mixed research design in carrying out the study. Mixed methods comprise the gathering and analysing of both quantitative and qualitative data in a single research, wherein data are concurrently collated embracing the fusion of data at various stages in the study process (Christensen et al., 2015; McClave et al., 2014). The snowball sampling technique was adopted to locate the experts for the interview; whereas, the ministries were selected on census. Snowball sampling was useful since the experts were difficult to locate. A census is a type of survey which studies every unit in the population. The population was drawn from the database received from the National Public Procurement Authority in Sierra Leone. The reason for selecting these ministries was based on the fact that they were better resourced to meaningfully contribute to the study. Survey data was analysed with the aid of the Predictive Analytics Software; whereas, the interviews were transcribed into a word processor. Descriptive statistics and inferential statistics were used to summarise and display the findings, which were presented with the aid of tables. Specifically, frequency distribution, mean, correlation and one-sample t-test were employed to show the reliability of the questionnaire responses. A time frame not exceeding two weeks was allowed for the collection of the primary data. Secondary data were collected from both published and unpublished sources over the entire period of the study.

1.8 Significance of the Study

In Sierra Leone, the procurement function continues to manage approximately 70% of the total budget (Audit Service Sierra Leone, 2014). However, the citizens and other stakeholders have often bashed public officials for making little or no effort in honouring their responsibility of contributing Value for Money to public contracts (ASSL Report, 2016; Shu

Hui et al., 2011; Staples and Dalrymple 2011). Given this and other concerns, it is important that this research be undertaken to discover the methods used in Value for Money assessment.

The outcome of this study would:

- Act as a reference to stakeholders who may be interested in the crusade for the improvement of Value for Money in public contracts or academicians who may like to undertake further studies on VfM assessment concept;
- Serve a guide to policy makers in the formulation of Value for Money assessment policies for ministries, departments and agencies;
- Introduce procurement officers and finance officers to the VfM assessment concept and equip them with the methods used to assess Value for Money;
- Help practitioners to decide on the appropriate method to apply to assess each of the VfM elements; and
- Help practitioners to determine the procurement stage in which each of the methods could be applied.

1.9 Scope of the Research

The data collected for this study focused only on the central government. This decision was based on the fact that, they are high spending institutions, better resourced with appropriate personnel and provided better data compared to the challenges expected at the local government level. The target audience for the study were procurement officers and finance officers. The finance officers were considered due to their role in making funds available, and ensuring payments (to contractors) are processed on time. Failure to process payments on time defeats the purpose of VFM as it creates room for the abuse of the procurement system. The institutions include the Ministry of Works, Housing and Infrastructural Development, Ministry of Finance and Economic Development, Ministry of Trade and Industry, Ministry of Agriculture, Forestry and Food Security, Ministry of Local Government and Rural

Development, Ministry of Defence, Ministry of Health and Sanitation, Ministry of Social Welfare, Gender and Children's Affairs, Ministry of Energy, Ministry of Foreign Affairs and International Co-operation, Ministry of Internal Affairs, Ministry of Justice and Attorney-General, Ministry of Water Resources, Ministry of Information and Communication, Ministry of Mines and Mineral Resources, Ministry of Lands, Country Planning and Environment, Ministry of Fisheries/Marine Resources, Ministry of Tourism and Culture, Ministry of Labour and Social Security, Ministry of Education, Science and Technology, Ministry of Sports, Ministry of Youth Affairs, Ministry of Transport and Aviation, Ministry of Political and Public Affairs, Office of the President, and Office of the Vice President.

1.10 Research Limitations

The research encountered some challenges due to the setup of the procuring entities, which the researcher has meticulously presented as follows:

- Some of the procurement officers could not honour the request to participate in the survey. Largely, this was due to the fact that their knowledge of the subject matter was limited.
- Most of the finance officers complained that, the questions were centred on procurement, which according to them does not fall under their responsibility. This is possibly due to the bureaucracy in the public sector and the fact that procurement is regulated by the public procurement act.

1.11 Thesis Structure

The thesis has been arranged into five (5) chapters. The first chapter focused on the background, problem statement, research methods, significance of the research, the research aim, the research questions, the research objectives, the scope of the research, and the limitations. The second chapter comprises the appropriate literature review, which brings

clarity to public sector procurement, procurement structure, public sector financing, Value for Money (VFM), VFM assessment, VFM methods, VFM criteria and VFM focused-culture. The third chapter identified and brought together the methodology of the research. The fourth chapter reported on the results of the data collected from both the interviews and the survey. It concluded with the triangulation of the two (2) results. Lastly, the fifth chapter presented details on the summary of the findings, conclusion and recommendations.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The significance of Value for Money (VfM) in public procurement in any nation cannot be accentuated. It is important to note that, no government can deliver on its promises without the procurement function. As a public financial management function, public procurement accounts for 70% of the government's yearly budget. Therefore, the integrity of this function affects the level of trust that the taxpayers have in their government. The chapter aims to review literature on the concept of Value for Money assessment in the public sector of Sierra Leone. The key words in the literature include Public Sector Procurement, Value for Money assessment, Value for Money methods, Value for Money Culture and Value for Money Elements. These have been pencilled as the foundation for this research.

2.2 Public Sector Procurement

Procurement is the function that supports ministries, departments and agencies to deliver on the projects planned for the citizens of Sierra Leone. Ellmers (2011) describes public procurement as a public policy tool which has translated development finance in several countries into actual and social outcomes (Eyaa and Oluka, 2011). According to Public Procurement Act of Sierra Leone, 2016 (Act No. 1), public procurement is the process through which goods, works, services (consulting and non-consulting) are acquired and contracts entered into for public use. Lindskog et al. (2013) explains that "Public procurement not only meets purely utilitarian and economic goals, but also political goals that can involve societal, environmental or other political issues." Debates in literature have viewed public procurement as not only a mechanism for purchasing infrastructure, but also an instrument for achieving or promoting policy goals such as "agenda for prosperity" (Storsjö and Kachali 2017).

In the quest to “accomplish a variety of policy objectives”, public authorities through public procurement have brought financial and monetary opportunities to industries and contractors; hence, “the potential that public procurement holds to solve current and future problems cannot be exaggerated” (Storsjö and Kachali, 2017; Rolfstam, 2009). To harness these opportunities, Chamberland (2005) concluded that efforts should be made by all to understand the laws (Public Procurement Act, Regulations and guidelines, Financial Regulations, Anti-corruption Act, etc.) regulating public procurement (Raymond, 2011).

2.2.1 Regulation of Public Sector Procurement

Public sector procurement incorporates the values of procurement for central, state and local governments which, when harnessed can influence the achievement of a government’s policy objective (OECD, 2015; Payne, 2012). Therefore, spending in the public sector must comply with detailed legal regulations, and all spending decisions are subject to detailed scrutiny.

- Setting budgets for public spending with the minister of finance and economic development (MOFED), who sets overall revenue-raising and spending priorities. The budget of the public sector organisations must be set within the framework that this provides;
- Scrutiny of expenditure is carried out by the Audit Service Sierra Leone (which deals with government ministries, departments, agencies and the local councils); and
- The Public Procurement Authority of Sierra Leone and the Anti-Corruption Commission pay attention to the details and more especially the cost effectiveness of the transactions.

2.2.2 The impact of regulation on public sector procurement

The impact of regulation on public sector procurement is, broadly:

- To ensure that bought-in materials, goods and services comply with defined public standards and specifications;
- To ensure that all procurement exercises are compliant with public policies, standing orders and statutory procedures, with the general aim of securing competitive supply, Value for Money and ethical procurement;
- To ensure that all supply chain operations are compliant with the law, regulation and standards in areas such as health and safety (eg in regard to manual handling or transportation of hazardous goods); environmental sustainability (eg in regard to carbon emissions); employment rights (eg in regard to equal opportunity or employment protection); data protection and freedom of information;
- Public procurement act, enacted in 2004 and now revised in 2016;
- National Pharmaceutical Procurement law, which is responsible for the procurement, storage, distribution and management of drugs and medical supplies, for and on behalf of public health facilities (The National Pharmaceutical Procurement Unit Act, 2012);
- Appropriation act, which authorises expenditure to carry on the provision of goods, infrastructure and services for the use of the government (eg The Appropriation Act, 2009);
- The Anti- Corruption Law of Sierra Leone prohibits any act(s) which could have the power to influence, or be seen to influence the decision outcomes of public officials (eg Anti-Corruption Act, 2008);
- Review by the Audit Service Sierra Leone (central government and local government), whose job is to review public spending, efficiency and standards and publish reports

and recommendations which when acted on will improve the performance of the public sector organisations (eg The Audit Service Act, 2014); and

- Freedom of information law (eg The Right to Access Information Act, 2013) notes that the electorate have the right to access information in the custody of public authorities, except it is established that the information has been withheld to secure the public peace. The law indicates that the requested information should be released within 15 days.

2.2.3 Key Principles of Public Sector Procurement

The promotion of unfailing good practice in public procurement characteristically involves the development and application of a range of decision rules, processes and procedures, and principles that are designed to help those engaged in the procurement function to achieve the optimum mix of the five (5) rights. Neglecting the principles sustaining public procurement will lead to the abuse (through collusion and corruption) of public resources for selfish gains and “political party financing, as well” (OECD 2005). Subsequently, this section will discuss these fundamental principles of public procurement and how they are applied in the procurement process.

2.2.3.1 Competition

The key issue in the public sector is to ensure that contractors are selected not on the grounds of political expediency, socio-economic goals, favouritism or fraud, but by competition. Competitive tendering is a process through which works and services are acquired. The process which includes advertising and calling for tenders, gives all eligible contractors an equal opportunity to participate. Following, tenders are received, opened in the presence of the bidders or their representative and an evaluation panel is set-up to assess whether tenders

met the minimum technical requirements as specified in the tender document. (Raymond 2011). Competition plays a pivotal role in ensuring quality and achieving Value for Money.

2.2.3.2 Accountability

Accountability is the process of holding an individual(s) or an organisation fully responsible for all aspects of the procurement process over which they exert authority. Being an important principle of public procurement, accountability requires that authorities record the reasons for all decisions; procurement officials to declare any personal interests in procurement decisions; avoid conflict of interest; secure proper authorisations; and continuously monitor and manage fraud risk (Hui et al. 2011; Raymond 2011). Clear roles and responsibilities ensure that public servants engaged in the procurement function follow the right procedures and rules (Ren et al. 2012). Accountability does not only strengthen the perception of transparency and fairness but creates a risk avoidance culture among public sector officials thereby reducing corruption and contributing Value for Money to public contracts (OECD 2016).

2.2.3.3 Ethics

Another important principle of public sector procurement is ethics. Oliver et al. (2006) defines ethics as “the branch of philosophy that investigates morality and the ways of thinking that guide human behaviour.” In actual sense, ethics scans the moral standards of community, evaluates their reasonableness or not, and weighs the effect of these standards upon the lives of folks (Salah 2016). Ray et al (1999) presents ethical issues into two categories: personal ethics; professional and corporate/organisational ethics. Public servants involved in public contracts must be guided by sound ethical standards so as it improves productivity, builds inter-organisational relationships (clarifies the rights and obligations of all parties), affects long-term business dealings, and influences quality, time and costs (Ntayi et al. 2013; Raymond 2011). To address unethical influences in the public sector and take advantage of

the benefits of practice, public authorities managing the procurement function should ensure they establish ethical standards at the commencement of the procurement process – providing an ethical platform for the project life cycle and the relationship between employer and contractors (Simangunsong et al. 2016; Public Procurement Manual of Sierra Leone, 2006). A high level of work ethics is what government procurement needs to operate amidst the commercial interests of numerous tendering participants.

2.2.3.4 Transparency

Taxpayers, civil society organisations, and other stakeholders across developed and developing countries are calling on their governments for more transparency in public sector procurement (Munzhedzi 2015; OECD 2005). Transparency refers to openness and it creates a platform for governments and citizens to engage and for right holders and duty bearers to both deliver on their commitments (OECD 2016; Raymond 2011). In the public sector, transparency is about access to key information which assures the public and foreign investors that contracts will be awarded in a fair manner. Transparency does not only provide access to information, it also promotes accountability and serves as a catalyst in creating a level field for businesses and allowing small and medium enterprises to compete on an equal footing (OECD 2016; Hui et al. 2011). However, in the absence of a transparent system, funds acquired through the mode of government procurement exposes state resources to corruption and mismanagement (Munzhedzi 2015). Pauw et al. (2002) believes transparency in procurement is more likely when the public officials are allowed to make independent and informed decisions regarding best procurement route, product choices, better services from suppliers, and receipt of Value for Money (Munzhedzi, 2015; Hui et al., 2011).

2.2.3.5 Value for Money

Value for Money is the optimum combination of whole-life cost and quality to meet the customers' requirements (Office of the Auditor General of Canada 2000). The objective of Value for Money is to ensure that the resources of the state are efficiently and effectively managed (Ameyaw, Adjei-Kumi and Owusu-Manu 2015).

2.2.4 Procurement Structures in the Public Sector

According to Mathonsi and Thwala (2012), public procurement structures are established by the entity for the execution of the procurement and its related function. These organisational structures create the pre-conditions through which the public agencies successfully achieve their objectives (Williams-Elegbe, 2013; Mathonsi and Thwala, 2012). Procurement structure is a contemporary term that is known to many practitioners and academicians of the procurement and supply chain business as procurement strategy, procurement methods, procurement vehicle, and logistics strategy (Tadelis, S. 2012; Mathonsi and Thwala, 2012).

A procurement structure governs the acquisition and supply processes of procurement projects in diverse ways and is critical in determining the outcome of any intervention. In contrast, researchers have commented that, these structures have received considerable attention in continents such as Asia, Americas and Europe; though the African continent is not yet there, significant efforts have been made to setup the structure (Bergman and Lundberg, 2013; Mathonsi and Thwala 2012; Ambe and Badenhorst-Weiss, 2012; Onsongo et al., 2012).

In Sierra Leone there are procurement structures that oversee procurement activities at both the national and entity levels. An essential element of the role of the procurement structure in a government entity is the placement of procurement authority (Public Procurement Act of Sierra Leone, 2016; Williams-Elegbe, 2013; Thai, 2008). Although the procurement laws

make provision for the delegation of this authority, officials should note that such delegations must be done by means of specific letters or memoranda to those receiving the delegated powers (Thai, 2008). The Public Procurement Act of Sierra Leone, 2016 provides guidance for the setting up of these procurement structures; and the delegation and control requirements are covered in subsequent clause of the same Act.

2.2.4.1 National Public Procurement Authority

According to Ntayi (2009), the procurement structures in African have not been delivering efficiently and effectively. As a result, a country procurement assessment report was launched, which called for procurement reforms in Africa and recommended that the central tender board be abolished. Following these recommendations, these countries established a body which they charged with the responsibility to regulate their procurement activities in the public sector. The institution was to direct and develop procedures, provide training opportunities to officials, provide clarification on the procurement law and assess procurement process and ensure Value for Money is contributed to public project among others (Ameyaw et al., 2012; Eyaa and Oluka, 2011). In Sierra Leone, the national public procurement authority (NPPA) was established as a corporate body to oversee and rebrand the operations of public procurement (Public Procurement Act of Sierra Leone, 2016; 2004). The authority develops guidelines and regulations and ensures that all procurement committees act in accordance with these documents (Public Procurement Act, 2016; Eyaa and Oluka, 2011). However, in Sierra Leone, the public procurement acts (2016; 2004) indicates the responsibilities of the NPPA as follows:

- Coordinate, direct and develop public procurement practices and procedures;
- Support the professional development and training of officials involved in the management of public sector procurement to ensure compliance with the regulatory instruments;

- Evaluate the operations of government procurement processes and make suggestions for possible improvements;
- Develop and propose a procedure for selecting, appointing, and terminating the employment of procurement practitioners
- Distribute all standard forms for mandatory use by all public entities;
- Offer clarification on the procurement act and other instruments guiding the procurement process;
- Prepare and publish in both print and electronic media price norms and data on suppliers, contractors, consultants to support procurement practitioners;
- Investigate and suspend contractors, consultants and suppliers who have abandoned their responsibilities the agreement, and issue the list of those suspended to all procuring entities;
- Prepare and submit a yearly procurement report to the cabinet and to the ministry of finance for the attention of parliament;
- Disseminate information and collaborate with other ministries, departments and agencies to accelerate the implementation of public policies; and
- Conduct reviews at all stages of the procurement process.

2.2.4.2 Independent Procurement review panel

The appropriate use of funds to procure projects for the ordinary taxpayer across the world has been an issue of serious controversy due to the unfair dissemination of critical information to certain suppliers, the acceptance of kickbacks by government officials and the circumventing of procedures to award contracts. These interferences by officials coupled with the delays in seeking redress from the courts of law called for the setting up of a structure (with a legal background) to look into issues which may significantly frustrated the motivation

to contribute Value for Money to public contracts (Poulton and Macartney, 2012; Bowen et al., 2012; Hanrahan, 2010). In confirmation of this statement, Bowen et al., (2012) noted that VFM can only be achieved when sound leadership is provided by the government and professionals. The procurement reforms in Sierra Leone brought to existence the Independent Procurement Review Panel (IPRP) to conduct administrative reviews of procurement complaints brought to it by aggrieved parties with the aim to amicably resolve those disputes which would eventually contribute to VFM. The IPRP has a total membership, which includes the chairman and two other members (appointed by the Minister, the Attorney-General and Minister of Justice and the Executive Secretary of the Sierra Leone Chamber of Commerce, Industry and Agriculture. Whilst the quorum for any hearing must be three (3) members, the structure has the authority to order the re-assessment or re-advertise of any of the disputed public contract (Public Procurement Act of Sierra Leone, 2016; 2004; Public Procurement Act of Ghana 2003; 2016).

2.2.4.3 Procurement Committee

Hunja (2003) explained that the reforms in public procurement in most developing countries were targeted at encouraging completion, ensuring accountability, improving on financial transparency and contributing Value for Money to projects delivered. Also, a legal framework was provided to ensure that public procurement is thoroughly regulated. So far, there has been a serious debate over the political will to fully implement the procurement act (Audit Service Sierra Leone, 2014; 2015; Dza et al., 2013). In spite of this challenge, it is important to acknowledge that a well-structured public procurement and the full implementation of the procurement act could directly contribute to the economic position of developing countries (Dza et al., 2013; Bowen et al., 2012). Considering these benefits, most governments in Africa have realised that creating effective procurement structures to improve on the gains made through procurement (Dza et al., 2013). At the entity level, one such structure is the

procurement committee. The procurement committee is a structure authorised by the procurement act to provide oversight to the procurement unit in the acquisition of goods, works and services and ensure that these projects contribute VFM to the citizens (Bowen et al., 2012; Procurement Act of Ghana, 2003). Similarly, in Sierra Leone, the procurement committee has been established in each procuring entity with the mandate to supervise the activities of the procurement unit in a manner that contributes VFM to the state (Public Procurement Act of Sierra Leone, 2016; 2004). The responsibilities of this committee includes: review procurement plans, check and approve bidding documents, review and approve bid evaluation reports, award contracts beyond the authorised limits, reject proposals which are deemed not successful and prepare annual records of prices and update the database of service providers for publication. The committee consists of five (5) members, which must be approved by the Head of the procuring entity. The membership includes: the vote controller (Entity Head), a senior official of the entity, head of finance, a representative of the user-department and the head of procurement who will serve as secretary to the committee (Public Procurement Act of Sierra Leone, 2016; 2004). Correspondingly, the committee may co-opt additional members with specific skills to adequately inform the committee's decision making process, though these members will have no voting rights (Public Procurement Act of Ghana, 2016; Public Procurement Act of Sierra Leone, 2016). Following these deliberations, the decision to award contracts is made by the procurement committee with at least three (3) members including the chairman. However, it is worth noting that, the decision to award contracts may be delegated to the procurement unit as and when the committee deems it necessary and this decision must be stated in the minutes of the committee (Public Procurement Act of Sierra Leone, 2016; 2004).

2.2.4.4 Procurement Unit

The establishment of new structures such as the procurement unit was the effect of the procurement reforms in the continent of Africa (Eyaa and Oluka, 2011). The main aim of the procurement reformers was to see procurement formalised and its performance improved on (Dza et al., 2013; Gordon Murray et al., 2008; Wittig, 1999). Ahuja (2000) explains that governments in countries like Ghana, Uganda, Kenya, Nigeria (among others) have set up the procurement unit to increase the citizens' confidence in the public sector while promising sensible public spending (Dza et al., 2013). Researchers in the procurement and supply industry have opined that the best leadership, this structure has the ability to strategically manage cost, effectively plan, improve on the processes and creatively source and manage contracts (Dza et al., 2013; Bowen et al., 2012; Basheka, 2009; Gordon Murray et al., 2008; Wittig, 1999). Mamiro (2010) confirms that the critical ingredient to the structure of the procurement unit is the skills of the procurement staff to effectively and more efficiently manage the procurement process of the procuring entities (Kiage, 2013). In Sierra Leone, the procurement unit was established to provide technical support to the procurement committee, cater for the entities business needs, encourage the true participation of qualified suppliers, contractors and consultants, maintain a competitive bidding process and secures the records of all proceedings (Public Procurement Act of Sierra Leone, 2016; 2004). The roles of the procurement include: planning the procurement needs, preparing procurement notices and bidding documents, establishing the source of the needs, soliciting bids, receiving and securing bid, conducting bid openings, evaluating bids, monitoring of contracts, keeping of records and closing of contract (Procurement Act of Sierra Leone, 2016; Eyaa and Oluka 2011; Procurement Act of Ghana, 2003). Despite these critical roles, the citizens have repeatedly lashed the government for not doing much to achieve Value for Money in projects delivered to date (Audit Service Sierra Leone, 2014; 2015)

2.2.4.5 Evaluation Committee

The evaluation process is a critical component in the procurement cycle and contributes significantly to the achievement of Value for Money (Eriksson and Westerberg, 2011; Eyaa and Oluka, 2011). This process ensures that proposals are assessed against the technical and financial criteria printed in the bidding document issued to the public and recommendations proffered to inform the decision of the procuring entity. This makes the work of the evaluation committee crucial to the attainment of VFM. For this reason, the evaluation committee should be resourced with persons drawn from different professional backgrounds, with dissimilar views about the worth of the preferences been analysed to talk their standpoints so as to create a common understanding of the important issues, and application, together with their expert judgements for the purpose of agreeing on the best bid (Padhi and Mohapatra; 2010; e Costa et al., 2002; Collins and Gini, 2001; Mustafa and Ryan, 1990). By the same token, in Sierra Leone, the evaluation committee is set up to assist the procurement unit with the assessment of bids and communicate the outcome to the procurement committee for their consideration and subsequent approval. The membership of this committee comprises persons with expert knowledge in different field (Procurement Act of Sierra Leone, 2016; Procurement Act of Ghana, 2003; e Costa et al., 2002). The functions of the committee include: examining bids for arithmetic errors, checking for compliance with the specifications and contract terms, analysing financial bids, checking for commercial compliance, seeking clarification on bids from bidders and preparing the evaluation report and recommendation for the contract award (Procurement Act of Sierra Leone, 2016; Padhi and Mohapatra; 2010).

2.2.4.6 Bid opening Committee

The public opening of bids became a serious concern during the procurement reforms due to the suspicion that, bids opened in private were tampered with, which gave an undue advantage to some favoured suppliers (Bowen et al., 2012; Enshassi and Modough, 2012; Eyaa and

Oluka, 2011). The institutionalisation of this process has increased fairness in the procurement process by according civil society organisations, the anti-corruption commission, national public procurement authority and bidders or their representatives, the opportunity to witness at first-hand, the public opening of the bids submitted (Procurement Act of Sierra Leone, 2016; Ambe and Badenhorst-Weiss, 2012; Eyaa and Oluka, 2011). It has been significantly acknowledged that this process exposes late proposals and excludes these bids from the process (Enshassi and Modough, 2012; Tabish and Jha, 2011; Costantino et al., 2011). In Sierra Leone, the bid opening committee was set up to manage every bid opening meeting, prepare reports, record attendance of all present and properly authenticate all the documents generated during the process. Most bid opening sessions are managed by the procurement unit; however, procurement activities with financial thresholds exceeding the limits of the procurement unit are managed by the procurement committee (Procurement Act of Sierra Leone, 2016; Tabish and Jha, 2011).

2.2.5 Procurement Stages

Both academic literature and Expert reports have looked at the various stages in the procurement process, and at what happens during each stage (CIPS, 2012; Ameyaw et al., 2012). The procurement process comprises all the procurement activities that normally take place after the make or buy decision has been made. An official trained or qualified in procurement is the one that has the requisite skills to efficiently and effectively manage these activities and get the best outcome.

Previous studies have explained that the activities which characterise each procurement process include: identifying the business need; defining the business need; developing contract terms; sourcing the market; appraising suppliers, contractors and consultants; inviting bids; analysing and selecting most economically advantages bid or tender;

negotiating best value; awarding the contract; managing the supplier/contract; and disposal of assets (Public Procurement Act, 2016; Amo-Richmond, 2014). These activities have been grouped into three main stages – pre-contract stage; contracting and contract management stage; and post-contract stage (Ameyaw et al., 2012).

2.2.5.1 Pre-contract Stage

Ameyaw et al., 2012; and Osei-Tutu et al., 2010 have opined that, the rampant ineptitudes in the procurement processes has resulted to Value for Money not been achieved in the public sector. Unfortunately, these procurement inefficiencies are prevalent in all the procurement stages (Audit Service Sierra Leone 2015; Ameyaw et al., 2012) to date. At this stage, public officials interfere with information relevant to the procurement with the aim to put some favoured suppliers at an advantageous position for personal gains. Sadly, this act has windswept the trust which the contractors had in the procurement system (Edquist and Zabala-Iturriagagoitia, 2012; Ameyaw et al., 2012). It is acknowledged that the activities at this stage include; identifying the business needs, defining the need, reviewing needs for brand names, establish the funding source, review the scope of works, checking for authorised signature approvals, estimate the procurement need, select the procurement method, planning the procurement and prepare bidding document for approval by the procurement committee (Ngugi and Mugo, 2012; Ameyaw et al., 2012; Shu Hui et al., 2011).

2.2.5.2 Contracting and Contract Management Stage

Shakantu (2006) explained that, the contracting and contract management is critical to the attainment of Value for Money (Ameyaw et al., 2012). At this stage, lots of dubious activities (including bid rigging) are undertaken by the parties involved in the procurement process to rob the state of the resources required to improve on the environmental, social and economic needs of its citizens (Ngugi and Mugo, 2012; Ameyaw et al., 2012). Although state

institutions and researchers have repeatedly trumpeted these unethical deeds and their implication on the country as a whole, little or no effects have been made by governments to seriously punish the perpetrators (Ngugi and Mugo, 2012; Dza et al., 2013; Ameyaw et al., 2012; Shu Hui et al., 2011; Murphy et al., 2011; Wittig, 1999). The activities at this stage include: inviting bids, responding to clarifications from bidders, receiving bids, preparing for the opening of bids, managing the bid evaluation process, recommending the award of contract, issuing of award notification, preparing contract document for signing, releasing securities, responding to enquiries from unsuccessful bidders, checking progress of work and managing contract (Procurement Act of Sierra Leone, 2016; Dza et al., 2013; Ameyaw et al., 2012; Shu Hui et al., 2011; Murphy et al., 2011)

2.2.5.3 Post-contract Stage

According to Ngugi and Mugo (2012); and Bowen et al., 2012, financial abuses could be experienced at the post-contract stage through the influencing of decisions bothering on the mode of procurement, size of the supplies and the criteria used for selection which would eventually comprise the quality of the supplies. As a result, poorly delivered supplies have gone unnoticed (in some instances) and contract amounts overblown leaving communities with little or no impact (Audit Service Sierra Leone, 2014; Dza et al., 2013; Ameyaw et al., 2012; Bowen et al., 2012). The responsibilities of public officials include: effecting final changes to the contract, reviewing the delivery documents, inspecting the deliveries for compliance with the specification, reviewing and authoring the last payment, preparing the final account, ensuring all defects are corrected, releasing the retention to the contractor, reviewing claims emanating from the contract, issue final payment, releasing procurement securities and closing the contract file (Public Procurement Act of Sierra Leone, 2016; Hawkins et al., 2015; Ngugi and Mugo 2012; Ameyaw et al., 2012). For this reason and

others, it is recommended that government officials treat seriously the monitoring of the procurement processes to ensure VFM is achieved (Ameyaw et al., 2012).

2.3 Conceptualisation of the definition of Value for Money

One of the fundamental problems that have to be dealt with in defining Value for Money (VFM) is what makes up 'value', how it can be determined, whose responsibility is it to determine it and what it means for each interested party (White et al., 2013; Emmi et al., 2011). In most measurement systems, a strong focus has been placed on quantifiable outputs (e.g., number of bed nets delivered) rather than outcomes (e.g., improvement in the health situation) (White et al., 2013; Emmi et al., 2013). The challenges encountered in isolating certain contributions from project outcomes, makes value identification a complicated activity (Emmi et al., 2011). In measuring the value of a procurement project, it is important to both detach and assess accurately the specific contributions of a procurement project, ensuring that the association runs from the procurement project to the results (Emmi et al., 2011). To achieve this, the value of elements not supplied in the existing market system are established through monetisation. Value can be identified only if these issues are addressed adequately (Emmi et al., 2011).

2.3.1 Defining and Identifying Value

In the public sector, the responsibility of defining 'value' is not made straight, and there might be divergent understandings of what value is, or should be, and who have to define it. The development sector's interpretation of value can be revealed in Theory of Change (Emmi et al. 2011). According to authors, value is the fair price paid in exchange for an item received or the inputs to achieving a project's outcome and impacts (Emmi et al. 2011; Rutner and Langley, 2000). In contrast, McParland et al. (2000) doubts whether monetary value is the correct medium of worth and mentions three basic senses of value, namely: quantitative sense,

attributable sense and axiological sense. The outcome is recognised as the concluding leg following inputs (human, physical, financial), activities and outputs, and hence the assessment can be focused on both the output and the outcome (Emmi et al. 2011). Measuring these indicators continue to pose a challenge to practitioners, but also progressively revealing on the value of what the project is fixing. Conclusively, value is intangible and has no clear definition; however, if these senses are properly addressed, the value of a project can be ascertained (Emmi et al. 2011; McParland et al. 2000)

2.3.2 Defining Value for Money

According to (Baker et al. 2013), Value for Money has been in use in industries and trade sectors for some time and it is recently that some governments through the public financial management reforms (orchestrated by development partners) have begun using VFM concepts in their decision-making processes. Value for Money is the optimum combination of whole-life cost and quality to meet the customers' requirements (Office of the Auditor General of Canada 2000). The objective of Value for Money is to secure a judicious, economic and efficient use of state resources in public procurement (Ameyaw, Adjei-Kumi and Owusu-Manu 2015). Similarly, Value for Money (VFM) means providing enhanced public services at a realistic cost to the electorate (Siemiatycki and Farooqi, 2017). According to the HM Treasury, "Value for Money is the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user's requirement". In essence, VFM is dependent on other factors which include stakeholders' perception, and ensures that contracts are completed within the required timeframe and actual outcomes judged against those anticipated in the original business case (McKevitt 2015).

In the public sector, the procurement of goods, works and services is centered on Value for Money with due regard to suitability and reliability. McKevitt (2015) indicates that VFM is

not a fashion of undertaking business, but rather a series of spasmodic events which brings satisfaction to the ordinary taxpayer.

Baker et al. (2013) established that Value for Money is the “best use of resources to achieve intended sustainable outcomes and impact”. To achieve this, public entities are required to adjust to innovative ways to streamline procedures and eradicate uneconomical expenditure and inefficiency to stimulate the proper utilization of the state resources through procurement. The concept of Value for Money hinges on four critical elements, namely economy, efficiency, effectiveness and equity. Building on the works of other authors, and for the purpose of this study the researcher has defined VFM as:

the optimum combination of the whole life cost, benefits, risks, quantity and quality of the goods, works and services provided embracing the facilities management and environmental impact factors to achieve the desired outcome (Ismail et al., 2012; Takim et al., 2011; Takim et al., 2009).

2.4 Elements of Value for Money

2.4.1 Economy

Economy as an element of Value for Money relates to the price at which resources are acquired, while bearing in mind the right quantity, and quality (McKevitt 2015; Fleming 2013; Baker et al. 2013; White et al 2013). McKevitt et al (2016) opined that the likelihood for economy depends on examining the ratio of cost to quality, while Leenders et al (2008) posit that adjustments would be required to balance the quality and cost of inputs. In public procurement, economy is important in the acquisition of the three (3) categories of procurement (goods, works and services), and should be measured at the design stage, implementation stage and evaluation stage (White et al 2013).

2.4.2 Efficiency

It results in economy (Lam et al. 2015; Emmi et al. 2011). It refers to how well resources are translated to the output, while considering the cost and quality of the required logistics to achieve the project objectives (McKevitt 2015; Baker et al. 2013; Fleming 2013; White et al 2013). Efficiency is viewed as a ratio of output and input resources, including physical, time, human and administrative cost of delivering a procurement activity to the public (Zidane et al. 2017; Lam et al. 2015; White et al 2013). OECD (2011) recommends the design of the Most Economically Advantageous Tender (MEAT) which will require buyers to specify and communicate to the potential bidders in concrete terms the cost, quality and expected savings (McKevitt et al. 2016). Bidders are then invited to compete on these set criteria (McKevitt et al 2016); efficiency is measured in all stages of the procurement process (White et al 2013).

2.4.3 Effectiveness

Effectiveness is concerned with achieving the intended outcomes without negating equality in the procurement process (McKevitt et al. 2016; McKevitt 2015; Lam et al. 2015; Baker et al. 2013; White et al 2013; Fleming 2013). In procurement, effectiveness is viewed as ethical business practices, judicious use of taxpayers' money, and ensuring that outcomes respond to beneficiaries' needs (Zidane et al. 2017; McKevitt et al. 2016). It is measured in the design and evaluation stages of the procurement process (White et al 2013).

2.5 Value for Money Assessment

In the wake of the austerity, the public authorities across the globe are calling for Value for Money assessment to determine the implications of public investments on the ordinary taxpayer (Bidne et al. 2012). Value for Money assessment is a good management tool used to inform government's decision on whether to implement proposed projects as Public Private Partnership, or through Traditional Procurement (Baker et al. 2013; Mason and Tereraho

2016). It is considered an ultimate requirement for public procurement. VfM is the process organisations employ to compare the procurement of different project delivery methods and assess the ability of potential bidders to significantly contribute Value for Money to public contracts. This assessment process combines both the financial and non-financial aspects of the delivery method and the potential bidders (Barutha,2016; Takim et al., 2011).

Furthermore, issues bordering on corruption, abuse of power and heightened bureaucracy in selecting alternative procurement methods can be partly mitigated when government agencies perform careful Value for Money assessment (Vives and Benavides 2007). Though Value for Money assessment plays an important role in many projects, countries like Latin America and the Caribbean are facing challenges in developing and implementing appropriate methodologies (World Bank Institute and Public-Private Infrastructure Advisory Facility 2013). Dafydd et al. (2012) suggests that Value for Money assessment might be carried out from either the viewpoint of the service user or from that of the contractor. Yescombe (2011) recommends that Value for Money assessment should be tied to a particular goal that is trying to be achieved; for example, the goal to construct a given infrastructure will be based on a total project cost (Bidne et al., 2012). There is a clear distinction between Value for Money for programmes and that of projects; hence a manager should not confuse the Value for Money of constructing a new health facility with the Value for Money of the provision of health related services since they are measuring different ideas (Bidne et al., 2012). World Bank Institute and Public-Private Infrastructure Advisory Facility (2013); and White et al., (2013) explain that the concept of VfM assessment can be conducted at all the procurement stages including the overall program level, at project inception, prior to launch of public procurement, prior to contract signature, contract management and at the post contract stage.

2.6 Value for Money Methods

According to Baker et al. (2013), the growing number of debates and publications on VfM has not in any way increased the VfM tools accessible to ‘humanitarian agencies’ for the assessment of Value for Money. In reaction to this developing debate on VfM, the use and performance of possible Value for Money methods have been talked about and examined (Emmi et al. 2011). Value for Money methods is an array of analytical tools employed in determining the best option (among the others) in terms of cost and value (Fleming 2013). Though drawn from economics, finance, management science, and psychology, these methods offer a means to exercise accountability for how taxpayers’ or donors’ moneys are spent (Arvidson et al. 2013; Anand 1988). Although these methods contrast across various facets of the procurement process (Emmi et al. 2011), measuring VfM should be imperious at every single stage of the decision making process so that costs are realistically minimised and benefits optimised (Takim et al. 2009; and White et al. 2013). Baker et al. (2013) concluded that while some of these methods are most useful for periodic assessment, others can only be appropriate for one-off reviews; and the burden of achieving VfM equally rests on the appropriateness of the methods selected.

2.6.1 Cost-Utility Analysis

Cost Utility Analysis (CUA) is a distinct economic method which seeks to assess two or more choices by comparing their utility against a number of deliverables (Fleming 2013; Coons et al. 2005; Birch 1999; Robinson 1993). The aim of the CUA is to compare the cost-effectiveness of an activity with others so that decisions on spending and resource allocation can be made (Fitzgerald et al. 2017; Robinson 1993; Richardson 1994). CUA is mostly used in the health sector; and its unit of measurement is the quality-adjusted life-years (QALY) which merges quantity and quality-of-life outcomes in the economic assessments (Landa et al. 2017; Fitzgerald et al. 2017; Fleming 2013; Busbee et al. 2003; Coons et al. 2005; Birch

1999; Robinson 1993). The QALY is computed by valuing the total life years gained from a procedure and weighting each year to reflect the quality of life in that year' (Robinson 1993). The pursuit to improve the quality of analysis and enhance comparability led to an endorsement of CUA by the Panel on Cost-Effectiveness in Health and Medicine (Holtgrave et al. 2013; Coons et al. 2005; Weinstein et al. 1996). CUA is more far-reaching than Cost effectiveness analysis in that it takes into account beneficiary or society perspectives in measuring utility and other outcomes which might be difficult to monetise (Fleming 2013; Weinstein et al. 1996).

2.6.2 Cost-Efficiency Analysis

Cost Efficiency Analysis (CEA) is an economic technique which focuses on the relationship between the administrative costs and the outputs of the project (Hsieh et al. 2014; White et al. 2013; Ansah-Adu et al 2011). Whilst the analysis tries to avoid measuring costs that are private or non-administrative, for public procurement it is viewed as the number of business needs delivered to the beneficiaries without unnecessarily increasing the financial burden of the procurer (White et al. 2013; Kelly 1995). However, these broader costs and benefits should be considered in interpreting the findings, since high administrative cost efficiency may cover weaknesses in the procurement function that negatively affect overall performance. Improving the match between the resources and the business needs requires a positive management of the procurement aspects of any intervention (Kelly 1995).

2.6.3 Social Return on Investment Analysis

King (2014) discoursed that Social Return On Investment (SROI) analysis was derived from the concept of “economic value”; and is viewed as an “approach towards identifying and appreciating value created” (Arvidson et al 2013). In contrast, Klemelä et al (2016) opined that SROI has been criticised for overstating the relationship between monetised benefits and

costs. The aim of the SROI analysis is to both prove and improve interventions by reviewing the inputs, outputs, outcomes and impacts created with the support of various stakeholders and attach monetary value on the social, economic and environmental benefits and costs attained by the entity (Klemelä et al 2016; King 2014; Arvidson et al 2013). Others authors have stated that SROI analysis is a method that assents to assess socio-economic values by comparing the net benefit of a project to the resources required to generate those benefits over a given time frame (Fleming 2013; Emerson et al. 2000). The net benefits comprise two cash flows, namely: net income and total net savings to the community and the financiers (Emerson et al. 2000). In calculating the SROI analysis, the assessor adds up all the benefits, subtracts any negatives and compares the results to the investment (Fleming 2013; Emerson et al. 2000). In the public sector, benefits such as travel time saved from a new high-speed train line, improved race relations, greater access to services, prosperity for the marginalised residents are often not easily converted into monetary terms (Arvidson et al. 2013; Emerson et al. 2000). Therefore, it is important to note that though the SROI analysis does not attempt to quantify and capture all the benefits that ensue from a successful project, it actually estimates the cost savings made by the organisation (Emerson et al. 2000). Critical to maintaining the integrity of the SROI analysis is the establishment of an accurate discount rate by both the financiers and the organisation (Arvidson et al. 2013; Emerson et al. 2000).

Table 2.6.1: Advantages and Disadvantages of the Value for Money Methods

Methods	Advantages	Disadvantages
Cost-efficiency Analysis	Cost-efficiency analysis is carried out at different cost levels, which makes it possible to determine at what level of cost the required impacts can be attained.	Difficulties in establishing the relevance of the several impact criteria to the attainment of social mission
	It evaluates preferences with regard to multiple criteria so as to identify the preferred choice.	Historical information about the outcomes is infrequently available
	With the limited funding, Cost-efficiency analysis supports both the planning and acquisition decisions	Undefined level of administrative costs
Social return on investment Analysis	Encourages stakeholder engagement and assist with the management of their expectations.	Costs of undertaking SROI can be expensive, especially for institutions with regulated budget.
	Strengthens accountability and the legitimacy of government funded services and this in turn can attract donor funding and political support	Risk of inconsistency in the approach given the limited expertise of the managers
	Develops a culture of continuous improvement given that it encourages managers to build an evidence base and improve data collection.	Inadequate evidence base and poor data collection systems
	Identifies the financial values of services where outcomes and impacts are difficult to quantify	It does not justify pre-existing values held by public officials in the entities
Cost-utility Analysis	Supports consensus building and participatory decision-making as stakeholders are invited to weigh their preferences for different outcomes	Results are difficult to replicate among different assessors due to the numerous and sometimes differing methodologies used to estimate important weights.
	The assessment can include a large number of possible outcomes	
	Makes cautious efforts to consider individual preferences	

(Source: Adapted from Fleming, 2013; White et al., 2013)

Table 2.6.2: Relationships between the Elements and the Value for Money Methods

VFM Elements	VFM Methods
Economy	Cost-Efficiency Analysis
Efficiency	Cost-Efficiency Analysis
Effectiveness	Cost-Utility Analysis
	Social Return On Investment Analysis

(Source: Adapted from Fleming, 2013; White et al., 2013)

Table 2.6.3: Value for Money Methods and the Circumstances in which they are used

VFM Elements	VFM Methods	When should it be measured	What to measure
Economy	Cost-efficiency Analysis	Assessed at every stage to ensure that the different procurement input costs are minimised and the right quality and quantity are achieved	Unit costs: cost per unit of output; cost per direct beneficiary per period
Efficiency	Cost-efficiency Analysis	Measured at every stage to ensure a realistic spending on the overall administrative costs of delivering the procurement activity to beneficiaries	Administrative costs: pre-tender costs, tender costs, post-tender costs, operational costs
Effectiveness	Cost-utility Analysis	Measured at the pre-contractual and post-contract stages, if the programme outcome or impact can be quantified but not necessarily in money terms	Value of outcome
	Social return on investment	Measured at the pre-contractual and post-contract stages, if the project outcome or impact can be expressed in monetary terms	Social, environmental and economic costs and benefits

(Source: Adapted from Fleming, 2013; White et al., 2013)

2.7 Value for Money Audit

Evidences of political involvement and insufficient oversight in the public service have lent prominence to Value for Money audits or performance audits (Morin and Morin 2013; Burrowes et al. 2007). The fundamental role of the Auditor General in the control environment of ministries, departments and agencies cannot be overemphasized. Fayol (1959) – a management theorist opined that, control consists in verifying whether everything occurs in conformity with the plan adopted, the instructions issued, and principles established. Its purpose is to bring out the weaknesses and errors in order to rectify them and prevent recurrence (Smith and Boyns 2005). According to the Office of the Auditor General of Canada (2000), Value for Money audit “is a systematic, purposeful, organised and objective examination of government activities.” This exercise which includes the examination of economy, efficiency, cost-effectiveness, equity and environmental effects of government activities furnishes both the citizenry and parliament with the right information and recommendations designed to protect public assets and improve public sector performance through effective control (Morin and Morin 2013; Office of the Auditor General of Canada 2000). Conversely, Morin and Morin (2013) explain that even though Value for Money audits have succeeded in exposing the misuse of public funds and resources, it is yet to assure the electorate of its capacity to improve the management of public affairs. Sterck (2007) suggests that Value for Money audits should not only have a preventive function, but should also lead to concrete actions to improve management practices. In the researcher’s view, Value for Money audit informs authorities of specific problems, sets up more reliable controls covenanting fairer and informed decisions, and serves as a surrogate whistle-blower for anti-corruption crusaders.

2.8 Value for Money-Focused Culture

Critical to the performance of an organisation is its organisational culture. Schein (2004) defines organisational culture as the basic rules and policies which explains how the organisation views itself and its external environment, and intuitively directs the operations of its members. These rules and policies are solutions to the problems of survival of a company in both its internal and external environment. Considering the ability of the assumptions and beliefs to solve problems now and again, organisations have endeavoured to let recruits be taught so as to correct their way of perceiving, thinking and feeling in relation to these problems. According to (Yu et al. 2015) organisational culture is “an exact product of organisation activity, an object of management, and a complicated multilevel system.” A scan of the literature shows that VfM-focused culture in the public sector organisations is surprisingly low and the focus on developing an organisational culture for delivering VfM improvements is weak – if not absent (Prowle et al. 2016). According to Prowle et al. (2016) reasons for this poor performance could be political interference (managers not allowed to manage), inadequate managerial skills and experience in influencing culture change, disagreement among managers, and lack of focus and leadership among senior managers in organisations. From the viewpoint of the researcher, improving the VFM-focused culture in the public service should be a priority for everyone.

2.9 Criteria in Value for Money Assessment

Previous studies have revealed that Value for Money is the main force which drives public procurement; however, there is no clear-cut route to achieve VfM. The reason is that, VfM has different definitions to different stakeholders and its measure has not been standardised (Burger and Hawkesworth, 2011). Governments across the world have considered VfM to be “an optimal combination of quantity, quality, features and price (i.e. cost), expected (sometimes, but not always, calculated) over the whole of the project’s lifetime” (Burger and

Hawkesworth, 2011). Murray (2006) espoused that, selecting the preferred supplier is the most critical decision the procuring agency would have to make for the successful delivery of a project. From this discuss, it is clear that, the criteria used to evaluate Value for Money might differ from one jurisdiction to the other. VfM assessment is enthused by the desire to achieve the project needs, through the selection of a competent contractor, and to ascertain whether the procurement activity has delivered Value for Money (Ismail et al. (2011). Zhang (2008) posits that, the most assured way to contribute VfM is to have a competent service provider equipped with the management skills, the financial resources and the commitment to deliver the needs of the procuring entity at an ideal cost. A total of ten criteria stand out from previous debates. HM Treasury (2006) and Takim et al. (2011) noted that, the various criteria employed in VfM assessment include the financial bid; innovation; whole life cost; incentive and monitoring; health, safety and environment; appropriate risk allocation; acquisition of facilities; management services; market interest; and compliance with the specification (cited in Ameyaw et al., 2015). Ismail et al. (2011), however, categorized the evaluation criteria into four principal components, namely: project operational and social benefit; managerial and financial; technical; and environmental (cited in Ameyaw et al. 2015). According to Yuan et al. (2009), these criteria can be presented into five, namely: Physical characteristic of projects; Financing and marketing; Innovation and learning; End-user satisfaction and Process indicator (cited in Ameyaw et al., 2015).

Therefore, the drive towards achieving VfM requires an operative assessment system which clarifies the key principles in the tendering process; the capability of the contractor to completely deliver results; and finally, a framework for the assessment of VfM (Ameyaw et al., 2015; Takim et al., 2011; Ismail et al., 2011).

2.10 Conceptual Framework for Value for Money Methods

The main idea that drives Value for Money assessments is that value obtained is critical to the procurement of public contracts. In order to establish VfM achieved, literature has identified various methods. These include: 1) Cost Utility Analysis, 2) Cost Efficiency Analysis and 3) Social Return On Investment Analysis. The conceptual framework explains the distinctive characteristics of each of the methods and the relationships. CUA, CEA and SROI Analysis are independent variables whereas assessment of VfM and VfM achieved are dependent variables. CUA measures costs against outcomes which are not possible to monetise, taking into account the perspectives of beneficiaries (satisfaction received) while CEA measures total cost or administrative cost against outputs. SROI Analysis measures social, environmental and economic costs and benefits of the procurement project so as achieve VfM.

VfM Methods

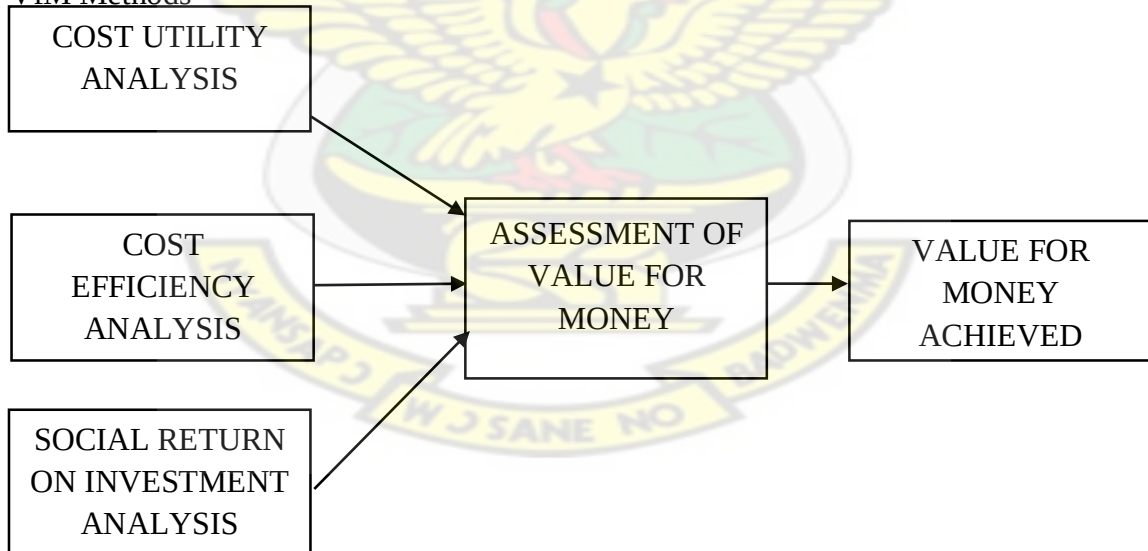


Figure 1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter entails the research methodology applied in answering the research questions of the study. The framework for the collection and analysis of data was explained. In addition, the techniques and instruments for data collection analysis are explored in this chapter.

3.2 Scope of Study

The geographical scope of this study is Sierra Leone. Specifically, the Freetown Municipality was explored for this study. The purpose of the research was to understand the concept of Value for Money (VfM) assessment in the public procurement system of Sierra Leone. To achieve this, the study focused on defining Value for Money in public procurement, establishing the methods used in conducting Value for Money assessment, as well as determining the associations between the elements and these methods. Furthermore, it determines the procurement stages for the optimal application of these methods.

3.3 Research Strategy

Research strategy is the general orientation by which this study was carried out. It provides the resources required to complete the study on time, ensures the design of the study is appropriate to achieve the research objectives and makes sure that the appropriate software to manage and analyse the data is available (Bryman, 2016). This study is exploratory and interpretative in nature. The mixed method approach, specifically, the “concurrent triangulation design” was applied (Creswell, et al., 2003). Mixed methods comprise the gathering and analysing of both quantitative and qualitative data in a single research, wherein data are concurrently collated embracing the fusion of data at various stages in the study

process (Christensen et al., 2015; McClave et al., 2014). This approach is adopted to understand the subjective meanings and individual perceptions held by actors in the public procurement space of Sierra Leone ((Bryman, 2016). This strategy further facilitated in-depth data collection for this research (Hay 2010; Babbie 2012).

3.4 Research Design

A research design provides a framework for the collection and analysis of data. It reflects decisions about priorities given to the dimensions of the research process (Bryman, 2016). The cross-sectional study was adopted. The collection of data was done on more than one case (Public procurement practitioners and Accountants) at a single point in time, to understand the concept of Value for Money assessment in the context of the public procurement system in Sierra Leone. This study design permits the use of probability and non-probability sampling technique; hence, the selected sample was representative of the study population to a known degree of precision. In addition, this design allows the use of other instruments other than questionnaires in the data collection process.

3.5 Sampling Techniques

3.5.1 Sample selection

The study employed both probability and non-probability sampling methods. Specifically, the study adopted the snowball sampling techniques to identify and select the pertinent research participants (key experts) for the semi-structured interviews. The key experts were drawn from the public sector. They are procurement practitioners who have managed complex teams on to the successful delivery of public contracts. Snowball sampling was useful since the key experts who were relevant to the research were difficult to locate (Bryman, 2016). Also, the study conducted a census of Procurement Officers and Finance Officers from the twenty-five (25) ministries sampled from the database of the National Public Procurement Authority in

Sierra Leone. The census survey was appropriate since every member on the list can be reached for feedback. The survey distributed questionnaires to every procurement officer and finance officer during the data collection period, and the completed forms were collected thereafter.

3.5.2 Study Population

The population of this study consisted of officials in charge of procurement and finance at the Ministry of Works, Housing and Infrastructural Development, Ministry of Finance and Economic Development, Ministry of Trade and Industry, Ministry of Agriculture, Forestry and Food Security, Ministry of Local Government and Rural Development, Ministry of Defence, Ministry of Health and Sanitation, Ministry of Social Welfare, Gender and Children's Affairs, Ministry of Energy, Ministry of Foreign Affairs and International Co-operation, Ministry of Internal Affairs, Ministry of Justice and Attorney-General, Ministry of Water Resources, Ministry of Information and Communication, Ministry of Mines and Mineral Resources, Ministry of Lands, Country Planning and Environment, Ministry of Fisheries/Marine Resources, Ministry of Tourism and Culture, Ministry of Labour and Social Security, Ministry of Education, Science and Technology, Ministry of Sports, Ministry of Youth Affairs, Ministry of Transport and Aviation, Ministry of Political and Public Affairs, Office of the President, and Office of the Vice President.

3.5.3 Sample Size

A sample size is the number of respondents from whom the researcher obtained the required information for the study (Kumar, 2011). The sample size for these ministries was selected on census. Simply, a census is a type of survey which accords the researcher the opportunity to gather information from every member in the population. The population of the study was the twenty-five (25) ministries located in Freetown. The list of the ministries, which was

secured from the National Public Procurement Authority (NPPA) had a population of one hundred (100) members. The ministries were chosen due to the fact they are high spending institutions and were better resourced with the appropriate personnel to meaningfully contribute to the research.

3.6 Data Collection

3.6.1 Sources of Data and Information

Both primary data and secondary information were gathered for the study. Primary data was gathered directly from Procurement Officers and Accountants of all the ministries in the Freetown municipality and key experts. The data to be gathered was centred on the understanding of Value for Money in public procurement, identifying the methods used in Value for Money assessment, as well as determining the associations between the elements and these methods, and also determining the procurement stages for optimal application of these methods. In order to understand the concept and its contribution to the attainment of VFM, secondary information was also gathered from institutional repositories, reports, archives, documents, articles, journals, text books, internet sources etc. The secondary information included the procurement laws, audit reports, institutions and success stories of achieving Value for Money from local, national and international perspectives. These include Value for Money concept, elements of Value for Money, Value for Money culture, Value for Money audit, Value for Money analysis, Value for Money methods, investment appraisal for managers, measuring and maximising Value for Money, value creation, and value engineering.

3.6.2 Methods and Instruments for Data Collection

The study would employ multiple methods and instruments in gathering the required data. These multiple methods enabled the researcher to solicit different types of data and provide

cross-data validity checks. Expressly, primary data for this study was gathered through questionnaire administration and experts' interviews. The data collection instruments used were questionnaire and interview guide. The questionnaire prepared included both pre-coded open ended and closed ended questions. The study made use of the questionnaire because they are cost effective, save time, cover a large number of respondents and minimise bias on the part of the researcher as well as the respondents. The questions were categorised into three (3) parts and were related to the decision-maker's profile, understanding and impact of Value for Money on the public procurement sector, and the Value for Money assessment methods.

Part one (1) requested information on the decision-maker's personal background, educational level, position in the organisation, professional background, professional membership, and the number of years of experience in procurement.

The part (2) sought to understand the Value for Money in the context of Sierra Leone, the impact of this understanding of VFM on public procurement structures and the application of the elements of Value for Money in the assessment process. This survey asked practitioners about their understanding of Value for Money, how has their definition of Value for Money impacted on the procurement structures in their organisation, and whether practitioners considered the elements of Value for Money in their operations.

Part three (3) focused on the methods used for Value for Money assessments in the public procurement of goods, works and services (both consulting and non-consulting). Practitioners were asked about the various methods they used in Value for Money assessments, reasons for using the selected methods, their familiarity and frequency of use of the methods, the relationship between the methods and the elements of Value for Money, and which of the procurement stages are these methods applied. These questions were measured using a 5-Likert-type scale.

The interview guide included questions on the understanding of Value for Money and its impact on the procurement function, the methods used in Value for Money assessments, the elements considered in VFM assessment, the relationships between the elements and the methods, the reasons for the use of the selected methods, the frequency of use of the methods, the procurement stages in which these methods are applied, and the demographic information of the decision-maker.

3.7 Data Analysis

The study used questionnaire and interview to concurrently collect data. The primary data collected from the survey was edited, coded and analysed using both quantitative and qualitative techniques. Data gathered using closed-ended questions was analysed quantitatively with the aid of the Predictive Analytics Software. Descriptive Statistics and inferential statistics were employed to summarize and display the findings of the study which were presented with the aid of tables. Specifically, frequency distribution, mean, correlation and one-sample t-test were employed to show the reliability of the questionnaire responses. As a member of the t-test family, one-sample t-test compares the mean score of a single variable. Its application tests a variable against a pre-set value. The one-sample t-test analyses whether the mean score of a single variable differs from a specified constant value (Ameyaw et al., 2012; Anderson et al., 2011). A correlation analysis was applied to examine the strength of the associations between the variables. Christensen et al (2015) explained that the direction of each relationship is determined by the sign (+ or -), while the absolute size of the number shows the strength of the correlation. It was noted that the endpoints (+1.00 and -1.00) mean perfect correlation. So, the distant the relationship moves from zero in either direction, the stronger the relationship becomes; conversely, the closer the relationship to the zero, the weaker the correlation becomes (Christensen et al., 2015; McClave et al., 2014; Eyaa and Oluka, 2011). The qualitative aspect of the data was transcribed by the researcher into a word

processor. Though it is a tedious process, the researcher was motivated by the few number of interviews conducted. The transcript was done on a respondent-by-respondent basis, capturing the statements which are relevant to the questions posed and paraphrasing into grammatically correct English, where necessary (McClave et al., 2014; Babbie, 2012). Comprehensive scanning and detailed analysis of relevant literature, including audit reports, parliamentary oversight reports, and policies among others were obtained and perused. The findings of each report was presented according to the objectives. After the analysis of the survey findings was completed, the next stage was the analysis of the interview findings. The interview was conducted to validate and verify the two sets of data so as to obtain more inputs from various participants on the findings.

3.8 Ethical Consideration

The study considered some broad ethical areas including voluntary participation, informed consent, confidentiality and anonymity. The participants from whom the data was gathered were not coerced or put under any form of pressure to participate in the study. Informed consent stating who the researcher is, what the study is all about and the desired outcomes and potential risk for being part of the study was obtained from the participants either in writing or verbally. To ensure anonymity, the identity of participants will not be required neither will any clue be given in the presentation of the results to reveal the identity of any participant. This was to ensure the confidentiality of each participant.

3.9 Conclusion

This chapter emphasises the research methodology used to gather data on the concept of Value for Money assessment in the public procurement system of Sierra Leone. A survey research was undertaken guided by the study objectives. The researcher constructed a self-administered questionnaire composed of closed-ended questions; the purpose is to ensure the

collection of detailed information on the VfM assessment concept. A face to face semi-structured interview was conducted with procurement experts to adequately inform the research.

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CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The intent of this research was to understand the concept of Value for Money assessment in the public procurement system of Sierra Leone. In this chapter the respondents' characteristics, and their understanding of Value for Money in the Sierra Leonean context were discussed; bringing out the various methods used in conducting Value for Money assessment in the public sector. Also, the chapter discussed the associations between the VfM elements and the VfM methods, and the procurement stages for the optimal application of these methods. The methodology used for the data collection and analysis was discussed in the previous chapter.

A census of every Procurement Officer and Finance Officer in the twenty-five (25) ministries was conducted. The list obtained from the National Public Procurement Authority (NPPA) had a total population of one hundred (100) members. A census survey was appropriate since every member can be reached for feedback.

In the study, data was concurrently collected through multiple approaches. These include questionnaires and semi-structured interviews to ensure that results obtained are consistent and adequately addressed the research problem. In analysing the findings, the researcher triangulated results from the expert interviews with questionnaire survey and relating them to previous findings from published research literature.

Data gathered provided a basis to respond to the research questions and underscored the contributions of the research in form of conclusions

4.2 Analysis of Survey Results

4.2.1 Part 1: Decision-Makers' Profile

This section was meant to provide key information on the respondents in areas such as current position, educational level, professional background, experience in public procurement and procurement decision-making experience.

4.2.1.1 Response Rate

A total of one hundred (100) questionnaires were sent out to the twenty-five (25) ministries in Sierra Leone. However, fifty (50) questionnaires representing fifty percent (50%) were retrieved. The high rate of response could be attributed to the persistent follow ups made by the researcher.

4.2.1.2 Current Positions of the Respondents

The information gathered on the current positions held by the respondents in various organisations at the time of the study, are presented in Table 4.1.

Table 4.1: Current Positions of Respondents

Current Positions	Frequency (N=50)	Percent (%)
Procurement Director	1	2.0
Finance Director	3	6.0
Assistant Procurement Director	2	4.0
Senior Procurement Officer	16	32.0
Senior Accountant	2	4.0
Procurement Officer	18	36.0
Accountant	3	6.0
Procurement Monitoring and Evaluation Officer	2	4.0
Senior Procurement Monitoring and Evaluation Officer	1	2.0
Assistant To Senior Procurement Officer	1	2.0
Assistant Finance Officer	1	2.0

Source: Researcher's Field Data (2018)

Table 4.1 above indicated that amid the respondents covered in this study, eighteen (i.e. 36.0%) of the respondents were procurement officers; followed by Senior Procurement Officers with a representation of sixteen (i.e. 32.0%); three (i.e. 6.0%) of the respondents were Finance Directors; three (i.e. 6.0%) of the respondents were Accountants; two (i.e. 4.0%) served as Senior Accountants; two (i.e. 4.0%) of the respondents were Assistant Procurement Directors; two (i.e. 4.0%) held the position of Procurement Monitoring and Evaluation Officers; one (i.e. 2.0%) served as Senior Procurement Monitoring and Evaluation Officer; one (i.e. 2.0%) was an Assistant to the Senior Procurement Officer; and one (i.e. 2.0%) held the position of Assistant Finance Officer. The levels of authority represented in the study indicated that the respondents are in the positions which make it plausible for them to provide the needed information for the research; hence, the credibility of the data has been improved.

4.2.1.3 Educational Level of Respondent

The information gathered on the academic qualifications of the respondents in various organisations at the time of the study, are presented in Table 4.2.

Table 4.2: Educational Levels of the Respondents

Educational Levels	Frequency (N=50)	Percent (%)
Chartered Accountant	2	4.0
Masters Degree	25	50.0
First Degree	18	36.0
Diploma	4	8.0
Higher National Diploma	1	2.0

Source: Researcher's Field Data (2018)

The study established that twenty-five (i.e. 50.0%) of the respondents had masters degree; eighteen (i.e. 36.0%) had first degree; four (i.e. 8.0%) of the participants recorded diploma; two (i.e. 4.0%) were Chartered Accountants; and one (i.e. 2.0%) had Higher National

Diploma. These findings revealed that a greater number of the participants were qualified which gives them the comfort to provide the information required for the research.

4.2.1.4 Professional Backgrounds of Respondents

The information gathered on the professional background of the respondents in various organisations at the time of the study are presented in Table 4.3.

Table 4.3: Respondents' Professional Background

Professional Backgrounds	Frequency (N=50)	Percent (%)
Procurement and Supply Management	20	40.0
Business Administration	10	20.0
Accounting	10	20.0
Financial Management	4	8.0
Engineer	3	6.0
Logistics	1	2.0
Educational Measurement and Evaluation	1	2.0
Statistician	1	2.0

Source: Researcher's Field Data (2018)

From the analysis, it was deduced that twenty (i.e. 40.0%) of the participants had procurement and supply chain management background; ten (i.e. 20.0%) of the respondents entered practice with a background in business administration; another ten (i.e. 20.0%) came into practice with an accounting background; four (i.e. 8.0%) studied financial management; three (i.e. 6.0%) came from the engineering field; and one (i.e. 2.0%) had logistics background; another one (i.e. 2.0%) joined the procurement practice with a background in educational measurement and evaluation; and final one (i.e. 2.0%) had statistics background. Despite their professional backgrounds, the participants have attended several trainings on procurement of goods, works and services at the Ghana Institute of Management and Public

Administration (GIMPA), the United States of America, South Africa, and Crown Agents in the United Kingdom. The findings indicated that the participants had adequate training in procurement whilst also versed in other fields of their original study; hence, the credibility of the data has been enhanced.

4.2.1.5 Experience of Respondents

The findings on the years of experience of participants in the procurement function have been detailed in table 4.4 below.

Table 4.4: Respondents' Experience (Years)

Experience in Procurement	Frequency (N=50)	Percent (%)
1 - 5 years	24	48.0
6 - 10 years	23	46.0
11 - 15 years	3	6.0
16 - 20 years	0	0
>20 years	0	0

Source: Researcher's Field Data (2018)

In the table above, it was noted that twenty-four (i.e. 48.0%) out of the fifty-one participants have been involved in procurement practice between the period 1 to 5 years. Twenty-three (i.e.46.0%) of the respondents had between 6 to 10 years' experience. Finally, three (i.e. 6.0%) participants recorded that they have practiced procurement for a period between 11 to 15 years. The result revealed that most of the participants were versed in the management of procurement, and had the capacity to contribute meaningfully to the study.

4.2.1.6 Experience in Procurement Decision-Making Process

The information gathered on the experience of the respondents in making procurement decisions in various organisations at the time of the study, are presented in Table 4.5 below.

Table 4.5: Respondents' Decision-Making Experience

Procurement Decision-Making Experience	Frequency (N= 50)	Percent (%)
1 - 5 years	27	54.0
6 - 10 years	20	40.0
11 - 15 years	3	6.0
16 - 20 years	0	0
>20 years	0	0

Source: Researcher's Field Data (2018)

The results disclosed that, twenty-seven (i.e. 54.0%) of the participants have had between 1 to 5 years buying decision-making experience. Twenty (i.e. 40.0%) had between 6 to 10 years' experience in procurement decision-making process. Out of 50 respondents, three (i.e. 6.0%) were between 11 to 15 years' experience. Experience brackets 16 to 20 years and above 20 years did not record any respondents. The result indicated that most of the practitioners who have been making procurement decisions fall between the experience brackets 1 to 5 years and 6 to 10 years; consequently, the credibility of the data collected has been enhanced.

4.2.2 Value for Money in the Context of Sierra Leone

This section presents results on the understanding of Value for Money and the elements that procurement officers and finance officers consider in their Value for Money assessments. The analysis presented was centred on the understanding expressed by the respondents at the time of the study. The following areas formed the focus of the analysis of the results:

- Definition of Value for Money
- Elements practitioners considered in Value for Money assessments

4.2.2.1 Definition of Value for Money

The information collected from both the procurement officers and the finance officers on the definition of Value for Money in the context of Sierra Leone at the time of the study, are presented in Tables 4.6, 4.7 and 4.8.

Table 4.6: Results of T-test showing One-Sample Statistics

Variables	N	Mean	Std. Deviation	Std. Error Mean
DVFM1- Lowest price tendered for goods, works and services	50	3.22	1.404	.199
DVFM2- Achieving project deadlines at any cost	50	2.70	1.359	.192
DVFM3- Compliance with specification of the user-department	50	3.78	.910	.129
DVFM4- Optimum combination of whole life costs, benefits, risks and quality at the lowest possible price	50	3.52	1.199	.170
DVFM5- Lowest evaluated responsive bid	50	4.10	1.216	.172

Source: Researcher's Field Data (2018)

Table 4.7: One-Sample T-Test

Variables	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DVFM1	-1.410	49	.165	-.280	-.68	.12
DVFM2	-4.162	49	.000	-.800	-1.19	-.41
DVFM3	2.176	49	.034	.280	.02	.54
DVFM4	.118	49	.907	.020	-.32	.36
DVFM5	3.488	49	.001	.600	.25	.95

Source: Researcher's Field Data (2018)

Table 4.8: Summary of T-Test showing Rankings

Variables	Mean	Std. Deviation	Ranking	Sig. (1-tailed)
DVFM5	4.10	1.216	1	0.0005
DVFM3	3.78	.910	2	0.0170
DVFM4	3.52	1.199	3	0.4535
DVFM1	3.22	1.404	4	0.0825
DVFM2	2.70	1.359	5	0.0000

Source: Researcher's Field Data (2018)

A one-sample t-test was carried out to determine the population considered a specific attribute to be critical or otherwise. Moreover, the mean ranking of each attribute was tabulated to provide a clear picture of the consensus reached by the respondents. The mean for each attribute including the associated standard deviation and standard error is presented in Table 4.6. Ling (2002) noted that for each attribute, the null hypothesis was that the attribute was unimportant ($H_0: U=U_0$) and the alternative hypothesis was that the attribute was important ($H_a: U>U_0$), where U_0 is the population mean (U_0 was fixed at 3.5 (cited in Ahadzie et al., 2008). Colen (1992), set the significance level at 95% based on conventional risk levels (cited in Ahadzie et al., 2008; and Ling, 2002). Hence, using a Likert rating scale of five-point, a definition of Value for Money with a mean score of 3.5 or greater was considered important. From the table above, the standard error is a measure of how representative a sample is likely to be to the population and it is the standard deviation of the sample means. A higher standard error indicates significant irregularity between the means of different samples; whilst a low standard error indicates that majority of the sample means are similar to the population mean. This shows that, the sample is likely to be a perfect representation of the entire population. The standard error of all the means was comparatively closed to zero which indicates that the

sample selected is a true representation of the population in Table 4.6. Also, given that the standard deviation of most of the means are above 1.0 proposes that the data veers off the mean and the disagreement among the respondents is high.

Conversely, it is imperative that attention is drawn to variables DVFM1, DVFM2, DVFM4, and DVFM5 as they had a standard deviation more than 1.0 indicating that the data veers off the mean score and there was disagreement among the respondents on the variables. Moreover, discussion on the t-test offers probable explanations for this situation. Table 4.7 above displayed a significance (i.e. p-value) which is two-tailed, indicating that the test has allotted 0.025 to each tail of the distribution. In order to test the likelihood of the association in one (1) direction, one-tailed test (i.e. $U > U_0$) was required. The main aim of this test is to examine whether the statistical significance of the rating is greater or less than 0.05. For this reason, Table 4.8 was created to help the researcher conclude on whether to reject or accept the null hypothesis (Anderson et al., 2011).

Also, Table 4.8 indicates that DVFM5 emerged as the most favoured definition for Value for Money in the Sierra Leonean context with p-value = 0.0005; whereas, DVFM2 emerged as the least considered definition. The possible reason for this favoured definition (DVFM5) is because of the country's dependence on donor financing – for example the World Bank, African development bank, Islamic Development Bank, and the Global Fund etc. Generally, the results agreed with the standard understanding of Value for Money in terms of price (output cost), specification, risks and benefits. Conversely, it is worth noting that whilst DVFM3 was ranked 2nd with p-value = 0.0170 to DVFM5, DVFM4 – optimum combination of whole life costs, benefits, risks and quality at the lowest possible price with p-value of $0.4535 > 0.05$ emerged as non-significant. Though DVFM1 – lowest price tendered for goods, works and services was ranked 4th, it is important to note that previous studies have not

considered it significant as definition for Value for Money (McKevitt, and Davis, 2016; lo, 2014; MacDonald et al., 2012).

In effect, Value for Money may be defined in Sierra Leone based on DVFM5 and DVFM3 as:

The lowest evaluated responsive bid which meets the specifications of the user department.

It may there for be necessary for procurement practitioners to modify procurement requirements in the bidding document to place considerable emphasis on meeting the specifications of the user departments.

4.2.2.2 Elements of Value for Money

The information collected on the elements considered by practitioners in conducting Value for Money assessments at the time of the study are presented in Table 4.9.

Table 4.9: Results of Descriptive Statistics Showing Rankings

Variables	Mean	Std. Deviation	Ranking
Economy	3.98	1.020	1
Effectiveness	3.92	.966	2
Efficiency	3.52	.931	3

Source: Researcher's Field Data (2018)

Previous studies on VFM have widely acknowledged that economy, efficiency and effectiveness are critical considerations in the assessment of VFM. Following this acknowledgement, the researcher has judged it unnecessary to conduct a t-test on the data. This section of the questionnaire asked respondents to give their opinion as to which of the VFM elements they considered in their VFM assessment in the public sector. Conversely, it is worth noting that, the variable economy had a standard deviation of 1.02 which proposes

that there was disagreement among the respondents on the variable. However, the study revealed that economy was the most frequently considered element in the VFM assessments in Sierra Leone consistent with previous (Amo-Richmond, 2014). Subsequently, there was a strong consensus among practitioners that effectiveness was considered followed by efficiency in their VFM assessments.

4.2.3 Value for Money Assessment Methods

Respondents surveyed were asked to indicate the methods used in conducting VFM assessments in the public sector of Sierra Leone and the findings are presented in Tables 4.10, 4.11, 4.12.

Table 4.10: Results of T-test showing One-Sample Statistics

Variables	Mean	Std. Deviation	Std. Error Mean
Cost-Efficiency Analysis	3.40	1.143	.162
Cost-Utility Analysis	3.60	1.050	.148
Social Return On Investment Analysis	3.18	1.320	.187

Source: Researcher's Field Data (2018)

Table 4.11: One-Sample T-test Results

Variables	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Cost-Efficiency Analysis	-.619	49	.539	-.100	-.42	.22
Cost-Utility Analysis	.674	49	.504	.100	-.20	.40
Social Return On Investment Analysis	-1.714	49	.093	-.320	-.70	.06

Source: Researcher's Field Data (2018)

Table 4.12: Summary of T-test Showing Rankings

Variables	Mean	Std. Deviation	Ranking	Sig. (1-tailed)
Cost-Utility Analysis	3.60	1.050	1	.252
Cost-Efficiency Analysis	3.40	1.143	2	.270
Social Return On Investment Analysis	3.18	1.320	3	.047

Source: Researcher's Field Data (2018)

Table 4.10 reveals that the standard error of all the means was comparatively close to zero, meaning the sample selected is a true representation of the population. Also, the standard deviation of all the means are above one (1.0) suggesting that the data deviates from the mean score and the disagreement among the respondents is high.

The t-test offers probable explanations for this situation. Table 4.11 displays a significance (i.e. p-value) which is two-tailed, indicating that the test has been plotted in two directions of the distribution. In order to test the likelihood of the association in one (1) direction, one-tailed test (i.e. $U > U_0$) was required. The main aim of this test is to examine whether the statistical significance of the rating is greater or less than 0.05. For this reason, Table 4.12 was created to help the researcher conclude on whether to reject or accept the null hypothesis (Anderson et al., 2011).

Table 4.12 shows that cost-utility analysis (CUA), which was ranked first emerged as non-significant with a p-value of $0.252 > 0.05$. In effect, the findings indicated that the methods are entire new to practitioners, and have not been applied in conducting value for money assessment in the public sector of Sierra Leone.

4.2.4 Relationship between the Methods and Elements

Table 4.11 explains the association between the methods and the elements of Value for Money.

Table 4.13: Pearson Correlation Coefficient Test between the methods and the elements

Value for Money Methods		Value for Money Elements		
		Economy	Efficiency	Effectiveness
Cost-Efficiency Analysis	Pearson Correlation	.462	.414	.270
	Sig. (2-tailed)	.001	.003	.058
	N	50	50	50
Cost-Utility Analysis	Pearson Correlation	.316	.217	.230
	Sig. (2-tailed)	.025	.130	.109
	N	50	50	50
Social Return On Investment Analysis	Pearson Correlation	-.043	.337	.300
	Sig. (2-tailed)	.768	.017	.034
	N	50	50	50

A Pearson correlation coefficient was calculated to assess the strength and the direction of the linear relationship between the methods and the elements of Value for Money. Moreover, the correlation coefficient was calculated to present a clear image of the agreement reached by the respondents. The correlation coefficient for the variables together with their significance level are shown in Table 4.11. The results of Pearson's correlation revealed a positively correlated relationship between cost-efficiency analysis as a method and the elements – economy and efficiency though not significant. This finding is consistent with previous research conducted in sub-Saharan Africa and South Asia on measuring and maximising Value for Money by the Department for International Development (White et al., 2013). The relationship between cost-utility analysis and economy is positive with a significance level of 0.025 but not significant. This finding is inconsistent with previous research conducted on measuring and maximising VFM by Department for International Development (White et al., 2013). Social return on investment analysis proved to have positive relationship with both

efficiency and effectiveness, but not significant. Though the latter of the methods had a correlation consistent with previous study (White et al., 2013), the relationship between efficiency and social return on investment analysis is inconsistent with previous study (White et al., 2013). In effect, this contrast in views and the relatively high standard deviations indicated that the methods used in conducting VFM assessment were not well understood.

4.2.5 Associations between the Value for Money Methods and the Procurement Stages

Table 4.12 explains the association between the procurement stages and the Value for Money methods.

Table 4.14: Relationships between the Methods and the Procurement Stages

Value for Money Methods		Procurement Stages		
		Pre-Contract	Contracting And Contract Management	Post Contract
Cost-Efficiency Analysis (CEA)	Pearson Correlation	.332	.212	.333
	Sig. (2-tailed)	.018	.139	.018
	N	50	50	50
Cost-Utility Analysis (CUA)	Pearson Correlation	.312	.570	.552
	Sig. (2-tailed)	.028	.000	.000
	N	50	50	50
Social Return On Investment (SROI) Analysis	Pearson Correlation	.203	.135	.238
	Sig. (2-tailed)	.158	.351	.096
	N	50	50	50

Source: Researcher's Field Data (2018)

The finding revealed that CEA can be applied at the pre-contract, the contracting and contract management and the post contract stages. This is consistent with a study conducted in sub-Saharan African and South Asia, which states that, CEA should be applied at all the procurement stages (White et al., 2013). Survey results show that, CUA can be applied at the

pre-contract, the contracting and contract management and the post contract stages, whereas literature states that, CUA should be applied at the pre-contract and post-contract stages only (White et al., 2013). The respondents surveyed indicated that, SROI Analysis can be applied at the pre-contract, the contracting and contract management and the post contract stages, whereas literature states that, SROI Analysis should be applied at the pre-contract and post-contract stages only (White et al., 2013). The contrast in the views of the respondents indicates that the concept is new and respondents are not well versed in the application of these methods at various the procurement stages.

4.3 Triangulation of Data: Analysis of Qualitative Results

4.3.1 Background of Respondents

4.3.1.1 Response Rate

The study conducted series of eleven (11) public sector procurement expert interviews with ‘informed persons’ concerning their understanding of the Value for Money assessment concept. On the hand, fifty (50) respondents participated in the survey. The purpose of the interview was meant to validate and verify the results of the survey. The content of the interviews was recorded and transcribed using word processor; while survey results were analysed with the aid of the Predictive Analytics Software. The census survey and the interview gave the research a total response rate of sixty-one percent (61%). The high rate of response was credited to the persistent follow ups made by the researcher.

4.3.1.2 Current position of the respondents

The purpose of interview was to explore the perspective of key procurement experts on the Value for Money assessment concept. These interviews focused only on procurement experts who had led complex teams on to the successful delivery of procurement project. On the other hand, the survey covered all the Procurement Officers and Finance Officers in the ministries.

Out of the 11 participants, one (1) held the position of Director, Procurement Monitoring and Evaluation, one (1) served as Director, Procurement Capacity Building, two (2) were Assistant Procurement Directors, one (1) was an Acting Procurement Director, One (1) Senior Procurement Specialist, three (3) procurement specialists and two (2) Procurement Officers. Conversely, the current position of the respondents surveyed included procurement director, finance director, assistant procurement director, senior procurement officer, senior accountant, procurement officer, accountant, procurement monitoring and evaluation officer, senior procurement monitoring and evaluation officer, assistant to senior procurement officer, assistant finance officer. Both respondents represented a high level of authority, which makes it possible for them to freely provide the information required for the research; hence, the credibility of the data has been enhanced.

4.3.1.3 Educational Level of Respondent

The data collected from the interviews revealed that ten (10) out of the eleven (11) participants had masters degree in various fields, and one (1) had first degree. On the other hand, the surveyed respondents' educational level included chartered accountant, masters degree, first degrees, diplomas and higher national diploma. The results revealed that the participants were educated and well informed to contribute meaningfully to the research; therefore, the credibility of the data collected has been improved.

4.3.1.4 Professional Background of the Respondents

The procurement experts interviewed had seven (7) professional backgrounds. Conversely, the respondents surveyed had a total of eight (8) professional backgrounds. The interview results revealed that two (2) had procurement background, three (3) had financial services background, one (1) had liberal art (majoring in political science), two (2) had economics background, social science background one (1), education background one (1), and

management one (1). Conversely, the professional background of the respondents surveyed included procurement and supply management, business administration, accounting, financial management, engineering, logistics, educational measurement and evaluation, and statistics. The professional backgrounds show that the respondents were in position to contribute meaningfully to the understanding of Value for Money assessment; hence, the credibility of the data has been enhanced.

4.3.1.5 Experience of Respondents

Findings from the interview revealed that three (3) respondents had 15 years' experience, another three (3) respondents had 10 years, one (1) respondent had 23 years, another one (1) had 20 years, one (1) had 14 years, one (1) 7 years' experience, one (1) had practiced procurement for 6 years. Whereas, the survey revealed that twenty-four (24) respondents had 1 to 5 years' experience, twenty-three (23) respondents had 6 to 10 years' experience and three (3) respondents had 11 to 15 years' experience. However, it should be noted that the experience brackets 16 to 20 years and above 20 years recorded zero (0). The result indicated that participants are well versed in procurement management and had the capacity to contribute to the study.

4.3.1.6 Experience in Procurement Decision-Making Process

The result of the interviews revealed that one (1) participant had 23 years' experience, whereas one (1) has been involved in making buying decisions for the past 20 years in both government and donor financed projects – serving in various sectors including the health and energy sectors. Three (3) had 15 years' experience. Another three (3) of the respondents had 10 years' experience in decision-making. One (1) had 14 years' experience. One (1) had 7 years' experience. One (1) recorded 6 years' experience. Whereas, the survey revealed twenty-seven (27) respondents had 1 to 5 years' experience, twenty (20) respondents had 6 to

10 years' experience and three (3) respondents had 11 to 15 years' experience. However, it should be noted that, the experience brackets 16 to 20 years and above 20 years recorded zero (0). The result found that both respondents had wealth of experience in making procurement decisions which placed them in the position to contribute meaningfully to the study.

4.3.2 Definition of Value for Money in Sierra Leone

The interview revealed a strong consensus among the procurement experts that Value for Money is defined as: economy, efficiency and effectiveness; optimum combination of whole life cost, social and environmental benefits; the most economically advantageous tender (MEAT); cost savings; and the lowest evaluated bid. Whereas, this definition bears some resemblance to the definition obtained from the analysis of questionnaire survey in that it considered lowest evaluated bid, there are some differences in the fact that their definition considered compliance with the specification of the user-department. The survey results accepted the definition of Value for Money as the lowest evaluated responsive bid which complies with the specifications of the user-department. However, the experts expressed their dissatisfaction over the continuous delay in the processing of payments to suppliers, contractors and consultants meaning that the purpose of the concept is misdirected sometimes at the expense of long-term VFM improvements.

The experts interviewed strongly supported this views as the themes developed from the transcribed interviews include: economy, efficiency and effectiveness; optimum combination of whole life cost, social and environment benefits; cost saving; and most economically advantageous tender. Considering the respondents' three (3) critical variables and the themes developed from the experts' interviews, one will conclude that the definition of VFM is consistent with the definition developed for the purpose of the study: the optimum combination of whole life costs, benefit, risks, quantity and quality of goods, works and

services provided embracing the facilities management and environmental impact factors to achieve the desired outcome at the lowest possible price (Baker et al., 2013; Ismail et al., 2012; Takim et al., 2011; Takim et al., 2009)

From the two reports, it can be concluded that, Value for Money is defined in the Sierra Leonean context as:

The lowest evaluated responsive bid which meets the specifications of the user-department, the environmental and social benefits, taking into account economy, efficiency, effectiveness and the whole life costs of the procurement project.

This finding is consistent with previous studies conducted on Value for Money (Baker et al., 2013; Ismail et al., 2012; Takim et al., 2011; Takim et al., 2009).

4.3.2.1 Elements of Value for Money

The views of the key experts interviewed conveyed that economy, efficiency and effectiveness are key considerations in their VFM assessments. This view was strongly supported by the survey results which indicated that economy is considered as the most element with a mean score of 3.98, followed by effectiveness which had a mean score of 3.92 and efficiency with a mean score of 3.52. This finding is a confirmation of previous studies conducted on Value for Money which concluded that economy, efficiency and effectiveness should be considered all VFM assessments (McKevitt and Davis 2016; McKevitt, 2015; Lam and Gale, 2015). Therefore, in assessing Value for Money there must be a lot of emphasis on these factors, especially economy and efficiency. Though effectiveness is not strongly rated, it is also very relevant considering the mean rating of 3.52.

4.3.3 Value for Money Assessment methods

Experts were interviewed on the methods applied in conducting VfM assessment in their procuring entities. The interview results revealed that the experts did not use cost-utility analysis (CUA), cost-efficiency analysis (CEA) nor social return on investment (SROI) analysis but rather, they used contract monitoring, audit, prior review, post review, national competitive bidding, international competitive bidding, restricted bidding and request for quotations to conduct VfM assessments. Though the methods mentioned by the experts are not VfM methods rather, they are processes when effectively executed provide the information needed to support the VfM assessment process (Emmi et al., 2011). The interview findings were strongly supported by the results of the survey, which indicates that, the methods are new and have not been applied in conducting VFM assessments in the public procurement system of Sierra Leone.

4.3.4 Relationship between the Methods and Elements

The experts interviewed were asked for their perception on which of the methods used to assess economy, efficiency, and effectiveness. The results indicated that, they did not use the cost-efficiency analysis (CEA), cost-utility analysis (CUA) nor social return on investment (SROI) analysis, but rather they used contract monitoring, audit, prior review, post review, national competitive bidding, international competitive bidding and request for quotations to assess economy, efficiency and effectiveness. However, the respondents surveyed indicated weak positive relationships between CUA, CEA and SROI Analysis and the three (3) elements of economy, efficiency and effectiveness. This contrast in the views of both the procurement experts and surveyed respondents indicated that the methods used to assess the VFM elements were not well understood; therefore, the finding is inconsistent with previous studies on the methods used to assess each of the VFM elements (e.g. White et al., 2013).

4.3.5 Value for Money Methods and the Procurement Stages

The result of the series of interviews indicated that the procurement experts did not use social return on investment analysis, cost-efficiency analysis nor cost-utility analysis at these procurement stages, but rather they applied prior review, post review, audit, contracting monitoring, national competitive bidding, international competitive bidding, and restricted bidding at the pre-contract stage, contracting and contract management stage and post contract stage. Nonetheless, it is important to note that, the methods mentioned by the experts are processes used to source the information needed to support the VfM assessment process. Whereas, the survey results revealed that, CEA can be applied at the pre-contract, contracting and contract management, and post contract stages, consistent with previous study (White et al., 2013). CUA can be applied at the pre-contract, contracting and contract management, and post-contract stages, inconsistent with literature studied (White et al., 2013). SROI can be applied at the pre-contract stage, contracting and contract management stage, and the post contract-stage, inconsistent with previous study (White et al., 2013). This contrast in the views of both the procurement experts and survey respondents indicates that the applications of the VfM methods at the various procurement stages are not well understood in the public procurement system of Sierra Leone.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The focus of this chapter is to discuss the summary of the results of the data analysed in chapter four and draw conclusions to make reasonable recommendations based on the findings, to improve on the progress in achieving VFM in sierra Leone, to provide inputs to the policy makers on issues to be included in the policies.

5.2 Summary of Main Findings

5.2.1 General information about the Decision-Makers

The volume of procurement activities undertaken by the sample cohort of both procurement and finance professionals involves huge capital, complex in nature and aimed at delivering outcomes that contribute VFM to the ordinary taxpayer. The results of the profile of the questionnaire respondents show that, senior procurement officers and procurement officers are the dominant positions with a representation of sixteen (16) (i.e. 32%) and eighteen (18) (i.e. 36%) respectively; whereas, all of the experts interviewed had managed very complex procurement processes. Also, the results reveal that, twenty-five (25) (i.e. 50%) of the questionnaire respondents had masters degree; while, ten (10) of the experts interviewed had masters degree. Therefore, it would seem that the sample cohort for this study were suitably qualified to make Value for Money decisions and to use suitable methods to assess Value for Money. Looking at the participants' professional backgrounds, the results have indicated that thirty (30) (i.e. 60%) of the questionnaire respondents making procurement decisions in the public sector were from different professional backgrounds; whereas, most of the experts interviewed had no procurement and supply management background. Despite their professional backgrounds, the participants have attended several trainings on procurement of

goods, works and services at the Ghana Institute of Management and Public Administration (GIMPA), the United States of America, South Africa, and Crown Agents in the United Kingdom. Majority of the questionnaire respondents had experience in procurement ranging between 1-5 years and 6-10 years; whereas, all the experts in the public sector are very experienced. Also, questionnaire respondents between the experience ranges 1-5 years and 6-10 years have had experience in procurement decision-making, whilst all the experts interviewed are very experienced and have made critical procurement decisions since they joined the profession. These officials charged with the responsibility to do procurement have spent a great part of their careers working in the civil service.

5.2.2 Definition of Value for Money

The questionnaire respondents were asked to define Value for Money in the context of Sierra Leone. It was found that DVFM5 (lowest evaluated responsive bid) emerged as the first ranked, the second ranked was DVFM3 (compliance with specification of the user-department), and DVFM4 (optimum combination of whole life costs, benefits, risks and quality at the lowest possible price) was ranked third. The result from chapter four indicates that majority of the respondents disagreed with DVFM1 (lowest price tendered for goods, works and services) and DVFM2 (achieving project deadlines at any cost). The reason was that, the mean scores of DVFM1 and DVFM2 were below the mean score of 3.5 limit and as such, were not deemed critical to the definition of Value for Money. In effect Value for Money is defined in Sierra Leone as:

The lowest evaluated responsive bid which meets the specifications of the user-department, the environmental and social benefits, taking into account economy, efficiency, effectiveness and the whole life costs of the procurement project.

Focusing on the elements considered in VFM assessments, the respondents ranked economy first, efficiency was ranked second, and effectiveness ranked was third. It is important to note that economy is the most considered element in VFM assessment.

Both the questionnaire respondents and the experts expressed the view that, VFM was a key consideration in their day-to-day procurement operations. There was also a general consensus that, the lowest price tendered for goods, works and services does not necessarily mean VFM.

5.2.3 Value for Money Methods

Based on the results of the respondents who participated in the questionnaire survey, it was revealed that, they did not use cost-utility analysis (CUA), cost-efficiency analysis (CEA) nor social return on investment analysis (SROI) when conducting VFM assessments in the procuring entities. On the other hand, the experts interviewed indicated that, they used prior review, post review, audits, contract monitoring, national competitive bidding, international competitive bidding, restricted bidding, request for quotation and sole source to conduct VFM assessment. Both reports indicated that, the methods used in conducting VfM assessment are new to experts, procurement officers and finance officers in the public sector of Sierra Leone.

5.2.3.1 Methods obtained from Scientific Literature on Value for Money Assessment

Value for Money assessment has been seen as an important exercise which supports procurement and finance professionals in making procurement decisions with the aim of obtaining the best value for the available state resources. The VfM assessment process involves the comparison of both the financial and non-financial aspects of bids, so as to identify the bid that best meets the needs of the End-user. In order to accomplish this objective, both the procurement and finance professionals are supposed to be equipped with the various methods and at the same time been able to select the appropriate method which will deliver sound results. The methods identified in the literature are: cost-utility analysis

(CUA), cost-efficiency analysis (CEA) and social return on investment analysis (SROI). While these methods can be used to conduct VFM assessment in public procurement, the literature has revealed that each of these methods have their strengths and weaknesses, assess specific VFM elements, and used at specific procurement stages which have to be considered by management when planning to use a particular method.

5.2.4 Relationship between Value for Money Methods and VfM Elements

The quantitative data revealed some relationships between the VfM methods and the VfM elements. Based on the results, respondents indicated that, there is a statistically significant correlation between cost-efficiency analysis and economy and efficiency; and a weak positive relationship between social return on investment analysis (SROI) and effectiveness. This result is consistent with previous study (White et al., 2013). Although, relationship exists between cost-utility analysis and economy, and SROI analysis and efficiency, they are not supported by previous study. Whilst, the qualitative data revealed that, the experts interviewed could not establish a clear relationship between the methods and the VFM elements. The contrast in the views of the two (2) groups indicates that, the VfM assessment concept is new in Sierra Leone.

5.2.5 Relationship between the VFM Methods and the Procurement Stages

The literature studied has provided the procurement stages where these VfM methods can be applied. It said that, CEA is applied at pre-contract stage, contracting and contract management stage and post-contract stage. CUA and social SROI are used to assess VFM at both the pre-contract and post-contract stages for each procurement activity. Based on the results of the respondents surveyed, CEA has a positive weak relationship with the pre-contract stage, the contracting and contract management stage and the post-contract stage, but consistent with literature (White et al., 2013). CUA has a positive weak relationship with the

pre-contract stage, the contracting and contract management stage and the post-contract stage, though not consistent with literature (White et al., 2013). SROI has a positive weak relationship with the pre-contract stage, the contracting and contract management stage and the post-contract stage, though not consistent with literature (White et al., 2013). On the other hand, the experts interviewed could not clearly establish the procurement stages for the optimal application of these methods.

5.3 Conclusions

Ideally, Value for Money assessment is conducted to ascertain whether the procurement decision has delivered best value. At the procurement level, the assessment of VFM should consider in more details, all the specific aspects and characteristics of the project (Ismail et al., 2012). VFM assessment starts at the pre-contract stage and it is continued throughout to the post-contract stage. Thus, it is important that the VFM assessment process captures both financial and non-financial aspects. On this note, this research has revealed that, the experts, the procurement officers and the finance officers understand what VFM is all about. However, the evidence collected suggests that, the concept of Value for Money assessment is new in the public procurement system of Sierra Leone and not every expert, procurement officer and finance officer can be assumed to be implementing it to the fullest.

The methods identified for VFM assessment are of great importance to both the experts, the procurement officers and the finance officers because it scientifically considers strategic factors which have been largely overlooked by the current methods. The processes used by practitioners to assess VFM are prior review, post review, audits, national competitive bidding, international competitive bidding, and restricted bidding.

Finally, the identified relationships between the methods, the elements and the procurement stages will ensure that the cost of VFM assessment is reasonably kept low.

5.4 Recommendations

Considering the results of both the quantitative and qualitative data presentation and discussions held, the researcher has deemed it necessary to proffer some recommendations regarding the VFM assessment concept in Sierra Leone. The recommendation offered here will not only support procurement officers and finance officers to make sound VFM decisions, but it will reduce the friction between them and the auditors which will, in turn lead to serious VFM improvements in Sierra Leone.

5.4.1 Support the institutionalisation of the Value for Money Assessment Concept

In order to realise VFM improvements, policy makers in the public sector should support the institutionalisation of the VFM assessment concept and demand full cooperation from all stakeholders. In this regard, this study can be a useful working document for policy makers.

5.4.2 Adoption and use of the methods in conducting Value for Money Assessment

The VFM methods discussed in this study have been widely used in development projects, health, water, and education sectors. They have been accredited for their ability to adequately assess both the financial and non-financial aspects of every procurement process. Ministries, Departments and Agencies should adopt and make use of the methods (cost-utility analysis, cost-efficiency analysis and social return on investment analysis) on all procurement projects especially when the activity is capital intensive. Also, these methods can be applied on small volume procurement activities as long as their failure could put the organisation into a serious financial disaster.

5.4.3 Training on Value for Money Assessment

It is recommended that, experts, procurement officers, finance officers and all those involved in procurement operations such as members of the procurement committee and procurement monitoring and evaluation officers, should have adequate understanding of the Value for

Money assessment concept and the methods which apply therein. Thus, it is necessary for colleges to include this concept in their procurement courses, to equip practitioners. Also, the colleges should introduce short courses which will cater for members of the procurement committee, evaluation committee and contract management teams so as to widen their knowledge.

5.4.4 Policy implications

The study revealed that, for VFM assessment to be understood, institutionalised and treated seriously, it should be supported by the law which governs public procurement. As it is, the procurement manual of 2006 and public procurement act of 2016 (revised) only provided general details on Value for Money with no directives as to how VFM assessment should be conducted and the methods to be used in the exercise. Unfortunately, both procurement and finance officers have had to face challenges when it comes to making Value for Money decisions; hence, the need for an adequate legal support covering the conduct of VFM assessment in the public procurement act.

5.5 Further Research

Generally, this research has focused on exploring the concept of Value for Money assessment in Sierra Leone. It is worth noting that, some academicians have carried out similar studies on VFM assessment on public private partnership projects and their findings have indicated that, the parties are making progress in improving VFM but not much progress has been made in developing methods to determine cost. Therefore, it is recommended that more studies be done on the methods to determine costs used in VFM assessments.

Also, this study only focused on the twenty-five (25) ministries leaving out the local councils. It is suggested further study may be conducted on the local councils to evaluate the methods used to conduct Value for Money assessments.

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APPENDICES

APPENDIX A

To whom it may concern Dear Sir/Madam,

Invitation to participate in a research on exploring the concept of Value for Money assessment in Sierra Leone

I write to request your assistance as experienced practitioners with substantial knowledge in public procurement in Sierra Leone to complete the attached questionnaire. I am undertaking a Master of Philosophy (MPhil) in Procurement Management at the Department of Building Technology, Kwame Nkrumah University of Science and Technology (KNUST). My supervisor for this research exercise is Dr Gabriel Nani. This research is entitled “**Exploring the Concept of Value for Money Assessment in Sierra Leone’s Public Procurement System**”.

This research aims to understand the concept of Value for Money assessment in the public procurement system of Sierra Leone. As a result, your expert knowledge and experience will be extremely valuable for this research in identifying these methods with some reasons for using them in the public sector procurement.

The questionnaire will take 15 to 20 minutes. All your responses will be treated with strict confidentiality and used for academic purpose only. Your views are priceless for the success of this research. After the research, we are willing to share a summary of the findings with practitioners in Sierra Leone. For any enquiries, please contact Barbar Orsino Massaquoi (Tel.: **076411052**; and email: orsinomassaquoi@gmail.com).

I would be grateful if you could contribute by completing the attached questionnaire within **one week**. Please the completed questionnaire will be collected in person by the researcher or his assistant. Thank you again for your kind consideration.

Sincerely,

Barbar Orsino Massaquoi, MPhil Student

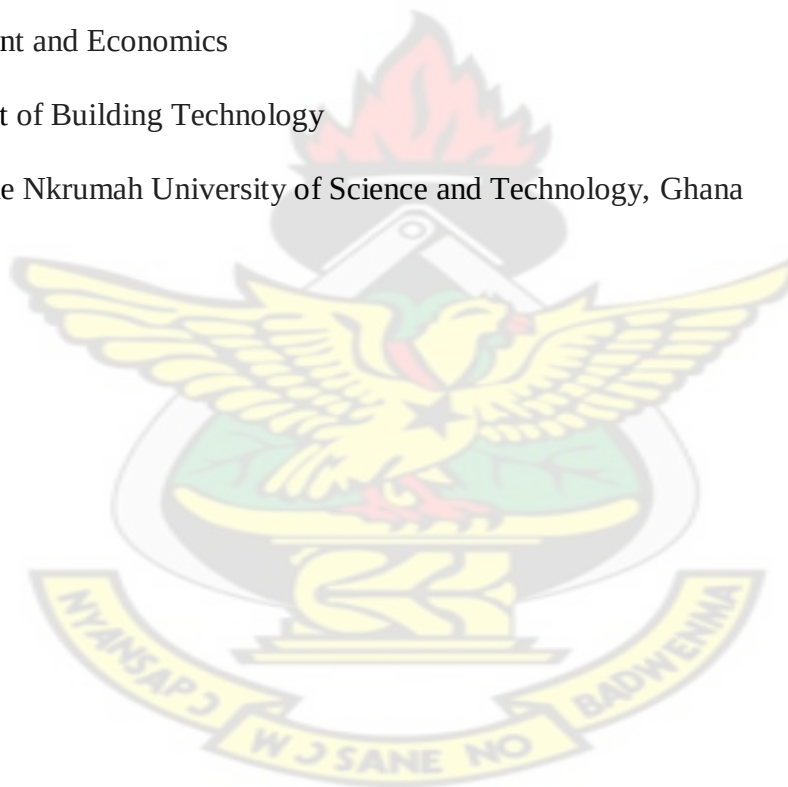
Dr. Gabriel Nani, Supervisor

Doctor of Construction

Management and Economics

Department of Building Technology

The Kwame Nkrumah University of Science and Technology, Ghana



EXPLORING THE CONCEPT OF VALUE FOR MONEY ASSESSMENT IN SIERRA LEONE'S PUBLIC PROCUREMENT SYSTEM

Questionnaire Survey

Important Instructions:

1. Please duly fill this questionnaire with reference to your experience in public procurement.
2. Please answer the questions by ticking {such as “✓”}
3. If you wish to have a copy of the report on the research findings, please provide your email address:-
4. For any queries, please contact me on mobile: 076411052 or email:
orsinomassaquoi@gmail.com

Part 1: Decision-maker Profile

Q1. What is your current position in the organisation?

Procurement Director ☐; Finance Director ☐; Assistant

Procurement Director ☐; Deputy Finance Director ☐; Senior

Procurement Officer ☐; Senior Accountant ☐; Procurement Officer ☐;

Accountant ☐; Other: _____

Q2. Can you please specify your educational level?

Chartered Procurer ☐; Chartered Accountant ☐; Masters Degree ☐;

First Degree ☐; Diploma ☐; PHD ☐; Other: _____

Q3. What is your professional background?

Procurement and Supply Management ☐;

Business Administration ☐;

Accounting ☐; Financial Management ☐; Engineer ☐; Economics ☐; Logistics

☐; Other: _____

Q4. How long have you been practicing procurement in the public sector?

1 – 5years ☐; 6 – 10 years ☐; 11 – 15 years ☐; 16 – 20 ☐; Above

20 years ☐;

Q5. For how long have you been involved in procurement decision-making processes?

1 – 5years ☐; 6 – 10 years ☐; 11 – 15 years ☐; 16 – 20 ☐; Above

20 years ☐;

Part 2: Definition and impact of Value for Money on Public Procurement Sector

The table below provides definitions of Value for Money and impact on the procurement structures. Your response to the questions under this section should be based on your role in the procurement structure.

Q1: **Definition.** Considering your experience in procurement, which of the following statements define Value for Money in Sierra Leone? Please indicate your level of agreement with your choice of definition. **1 = Strongly Disagree; 2**

= Disagree; 3 = Moderately Agree; 4 = Agree; 5= Strongly Agree

Q2. **Impact** What influence has your definition of Value for Money had on the decision outcomes of the procurement structures at both national and organisational levels? Please indicate your level of influence with respect to your choice of definition. **1= Not at all Influential; 2= Slightly Influential; 3= Moderately Influential; 4= Influential; 5= Very Influential**

No.	Definition of Value for Money	Level of Agreement [Q1]	Level of Influence [Q2]
		Low<<<.....>>>High	Low<<<.....>>>High
Effect on National Public Procurement Authority			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Effect on Independent Procurement Review Panel			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Effect on Procurement Committee			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

Effect on Procurement Unit			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Effect on Evaluation Committee			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Effect on Bid Opening Committee			
1	Lowest price tendered for goods, works and services	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Is achieving project deadlines at any cost	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Compliance with the specifications of the user department	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Optimum combination of whole life costs, benefit, risks and quality at the lowest possible price	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
5	The lowest evaluated responsive bid	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

Q3. Which of the following elements do you consider in Value for Money assessments in your organisation? Please indicate your level of agreement with respect to each of the elements. **1 = Strongly Disagree; 2 = Disagree;**

3 = Moderately Agree; 4 = Agree; 5= Strongly Agree

“Note”

- ☐ **Economy** refers to the acquisition of supplies in the right quantity and quality
- ☐ **Efficiency** is delivering the same level of service for minimum input of costs
- ☐ **Effectiveness** focuses on the achievement of the intended outcomes

No.	Elements of Value for Money	Level of Agreement [Q3]
		Low<<<.....>>>High
1	Economy	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Efficiency	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Effectiveness	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

Part 3: Value for Money Assessment methods

Value for Money methods are analytical tools employed in determining the best option (among the others) in relation to cost and value.

“Note”

- ☐ **Cost-efficiency analysis** examines the relationship between the inputs and output
- ☐ **Cost-utility analysis** assesses the value obtained for the money spent taking into consideration beneficiary perspectives
- ☐ **Social return on investment analysis** measures the value of social, economic and environmental returns in relation to the relative costs of achieving those benefits

Q1. Which of the following Value for Money methods (s) are used in your organisation for the assessment of Value for Money? Please indicate your level of agreement with respect to the methods. **1 = Strongly Disagree;**

2= Disagree; 3 = Moderately Agree; 4 = Agree; 5= Strongly Agree

No.	Methods of Value for Money Assessment	Level of Agreement [Q3]
		Low<<<.....>>>High
1	Cost-efficiency Analysis	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Cost-utility Analysis	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Social Return on Investment	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
4	Others_____	

Q2. Please specify the reason for using the selected method (s), indicate the reason for each selected method:

Q3. How familiar are you with the following methods used in value or money assessments? Please indicate your level of familiarity with respect to the methods. **1= Not at all familiar; 2= Slightly Familiar; 3= Moderately Familiar; 4= Familiar; 5= Very Familiar**

Q4. How often do you use the following methods of Value for Money assessment? Please indicate your level of frequency of use with respect to the methods. **1= Never; 2= Rarely; 3= Sometimes; 4= Most of the Time; 5= Always**

No.	Value for Money Methods	Level of Familiarity [Q3]	Level of frequency [Q4]
		Low<<<.....>>>High	Low<<<.....>>>High
1	Cost-efficiency Analysis	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Cost-utility Analysis	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Social return on investment Analysis	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

Q5. Which of these methods, measure the following elements of Value for Money? Please indicate your level of agreement with respect to the elements listed under each method.

1 = Strongly Disagree; 2= Disagree;

3 = Moderately Agree; 4 = Agree; 5= Strongly Agree

No.	Value for Money Methods	Level of Appropriateness [Q1]
		Low<<<.....>>>High
Cost-efficiency Analysis		
1	Economy	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Efficiency	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Effectiveness	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Cost-utility Analysis		
1	Economy	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Efficiency	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Effectiveness	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Social return on investment Analysis		
1	Economy	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Efficiency	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Effectiveness	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

Q6. How appropriate are the methods of Value for Money assessment in the following procurement stages? Please indicate the appropriateness of these methods for the stages under which they are listed. **1= Absolutely Inappropriate; 2= Inappropriate; 3= slightly appropriate; 4= Appropriate; 5; Absolutely Appropriate**

No.	Value for Money Methods	Level of Appropriateness [Q1]
		Low<<<.....>>>High
Cost-efficiency Analysis		
1	Pre-contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Contracting and Contract Management	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Post –contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Cost-utility Analysis		
1	Pre-contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Contracting and Contract Management	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Post -contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
Social return on investment Analysis		
1	Pre-contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
2	Contracting and Contract Management	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5
3	Post -contract	☐ 1; ☐ 2; ☐ 3; ☐ 4; ☐ 5

APPENDIX B

To whom it may concern Dear Sir/Madam,

Invitation to participate in a research on exploring the concept of Value for Money assessment Sierra Leone's Public Procurement System

I write to request your assistance as experienced practitioners with substantial knowledge in public procurement in Sierra Leone to complete the attached questionnaire. I am undertaking a Master of Philosophy (MPhil) in Procurement Management at the Department of Building Technology, Kwame Nkrumah University of Science and Technology (KNUST). My supervisor for this research exercise is Dr Gabriel Nani. This research is entitled **“Exploring the Concept of Value for Money Assessment in Sierra Leone's Public Procurement System”**.

This research aims to understand the concept of Value for Money assessment in the public procurement system of Sierra Leone. As a result, your expert knowledge and experience will be extremely valuable for this research in identifying these methods with some reasons for using them in the public sector procurement.

The interview will take 45 minutes. All your responses will be treated with strict confidentiality and used for academic purpose only. Your views are priceless for the success of this research. After the research, we are willing to share a summary of the findings with practitioners in Sierra Leone. For any enquiries, please contact Barbar Orsino Massaquoi (Tel.: **076411052**; and email: orsinomassaquoi@gmail.com).

I would be grateful if you could contribute by completing the attached questionnaire within **two weeks**. Please the completed questionnaire will be collected in person by the researcher or his assistant. Thank you again for your kind consideration.

Sincerely,

Barbar Orsino Massaquoi, MPhil Student

Dr. Gabriel Nani, Supervisor

Doctor of Construction Management and Economics

Department of Building Technology

The Kwame Nkrumah University of Science and Technology, Ghana



EXPLORING THE CONCEPT OF VALUE FOR MONEY ASSESSMENT IN SIERRA LEONE'S PUBLIC PROCUREMENT SYSTEM

SEMI-STRUCTURED INTERVIEW PROTOCOL

1. Introduction: Value for Money Assessment methods
2. Informed Consent: Signoff

Interview:

To begin, I was wondering if you could tell a little bit about your background and experience in procurement.

Value for Money Assessment:

1. Would you tell me a bit about Value for Money and how that relates to your work?
2. Has your understanding of Value for Money had any impact on the performance of the procurement structures in your organization?
3. Do you consider economy, efficiency and effectiveness in your Value for Money assessment?
4. Which methods are available to you for Value for Money assessment?
5. Which of the methods do you employ in Value for Money assessments in your organization?
6. Why do you choose to use the selected Value for Money methods?
7. Which of the methods do you use to assess economy?
8. Which of the methods do you use to assess efficiency?
9. Which of the methods do you use to assess effectiveness?
10. In which stage (s) of the procurement processes are each of these methods used?

Demographic information about informant

1. What is your position in the organisation?

2. What educational background do you have?
3. Can you please tell me your professional background?
4. How long have you practiced procurement as a career?
5. For how have you been practicing procurement in the public sector?
6. Age range: 1) 35; 2) 35 – 49; 3) > 50
7. Are you a member of any professional body (s)?

KNUST

