

**IMPROVING PROCUREMENT PERFORMANCE IN THE PUBLIC SECTOR
WITH THE IMPLEMENTATION OF E-PROCUREMENT: A STUDY OF
SELECTED METROPOLITAN AND MUNICIPAL ASSEMBLIES IN THE
ASHANTI REGION OF GHANA**

BY

HANNAH BAINSON

(BSc. QUANTITY SURVEYING AND CONSTRUCTION ECONOMICS)

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MASTER OF SCIENCE IN PROCUREMENT MANAGEMENT

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DECLARATION

I hereby declare that this submission is my own work towards the award of a degree of Masters of Science in Procurement Management and to the best of my understanding; it contains no work published or accepted for an award of any degree of any other institution except for the referenced sources that has been clearly stated. This project report is the result of analysis conducted under the guidance of my supervisor.

HANNAH BAINSON (9215217)
(Student's Name / ID)

.....
Signature

.....
Date

Certified by:

DR. GABRIEL NANI
Supervisor

.....
Signature

.....
Date

Certified by:

PROF. B. K. BAIDEN
Head of Department

.....
Signature

.....
Date

ABSTRACT

Public procurement is the core activity for government in accomplishing its operations. It is the process whereby government obtain goods, works and services from third parties to undertake its operations which is based on the five 'rights' that is obtaining goods, works or services at the right price, in the right quantity, right quality, delivered at the right time and place and from the right source. Government procurement systems are fundamentally sound in terms of their basic organisation and procedures. Also, public procurement has over the years been carried out manually which is associated with corrupt practices. Again, there exist some weaknesses in their execution and all these affect their performance. The study sought to determine how procurement performance can be improved with the implementation of e-procurement in the public sector. Based on this, the specific objectives were; to identify the weaknesses in the existing practices, its effect on their performance and identify the weaknesses that can be eliminated or minimised with the application of e-procurement process. The methodology adopted for the study was more of quantitative approach and a well-structured close ended questionnaire was administered to respondents in the assemblies. Data received were analysed using frequencies, relative importance index and one sample t-test with the aid of Statistical Package for Social Sciences (SPSS version 23.0). The key findings of the study indicated that there are weaknesses in the existing procurement process and this weakness affect the way in which they execute their task effectively and efficiently. It also revealed that this weakness can be eliminated or minimised with the application of e-procurement tools. Thus, the application of e-procurement leads to improved procurement performance. Hence, it is recommended that experts who are well-informed in e-procurement should be engaged to help solve these challenges or weaknesses identified in the traditional (manual) practices.

Keywords: Procurement, Procurement Performance, E-procurement, Public Sector.

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DEDICATION

I dedicate this research work to my parents, Mr and Mrs Anthony Bainsan, my brother Dr Bernard O. Bainsan, my entire family and friends for their prayers and support throughout the period of my education.

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CHAPTER ONE

GENERAL INTRODUCTION

1.1 BACKGROUND TO THE RESEARCH

Procurement as defined by (Erridge, 2000) is the whole process of obtaining from a supplier which covers goods, services and turnkey projects. Osei Owusu (2013) also explains procurement as the process of obtaining goods, works or services at the right price, in the right quantity, right quality, delivered at the right time and place and from the right source for the benefits of the end user usually via a contract.

Procurement covers a greater portion of the organisation's expenditure therefore the processes involved in procuring goods, works and services must be handled properly according to the laws governing it. Currently, the government uses about seventy per cent (70%) of its budget annually on procurement of goods, works and services (Bokpe, 2014). The success of a procurement process depends on three things being made right: the product, the process and the location (Khanapuri, et al., 2011).

Public Procurement is essentially the purchase of goods, works and services by governments which includes a sequence of activities starting with the assessment of needs through awards to contract management and final payment which is backed by the law (Bhagat, 2017). Eadie et al., (2007) also defines public procurement as process which entails contracting between public institutions and the private sector.

According to Osei-Owusu et al, (2014) public procurement presents an enormous potential for corrupt activities and favouritism as well as outright bribery since it involves the

transformation of public funds into private funds. Ameyaw et al., (2012) cited by Dzuke & Naude (2017) identified some key weaknesses in the public procurement system. They include weak and out-dated procurement guidelines and processes, government procurement still remains an operational activity not a strategic activity, lack of accountability and transparency and engulfed in fraud and corruption.

Hawking et al., (2004) states that the procurement process has become a costly activity since the procedures and systematic processes for handling procurement activities are manual and slow over the years. To add up to this issue, the procurement officials were in charge of ordering, invoicing, payment and handling any errors in the process. All these were carried out manually which were often time consuming and costly (Khanapuri et al., 2011).

Due to these challenges, public procurement operations resulted in higher cost to the government and the public (tax payers) as a whole, delays in project implementation and poor execution of project and in the long run affect the procurement performance. Problems in procurement process also increases the extent of corruption, create more complaints and raise issues concerning the ethical code and integrity of the procurement process (Osei-Owusu et al, 2014).

Although the Public Procurement Law, 2003 (Act 663) was initiated to end the shortcomings, probable poor performance and weaknesses which were ingrained in public procurement in Ghana (Ameyaw, Mensah & Osei-Tutu, 2012), public procurement functions have still been characterized by issues of transparency and accountability (Rotich & Okello, 2015).

To address this issue, Rotich & Okello (2015) is of the view that the use of e-procurement will improve efficiency, effectiveness, transparency and accountability in public procurement. E-procurement will also results in cost savings in the procurement operations, provide suppliers with the ability to become more proactive in their operations, better control and more flexible ways of doing business (Yen & Ng, 2003). Some benefits of using e-procurement includes reduction in transaction cost resulting from less paperwork, few or less errors in order transmission and more efficient and reliable procurement process (Croom & Brandon-Jones,2007: Aazanlerigu & Akay, 2015).

E-procurement refers to an online technology (internet) designed to assist the procurement of goods, works and services by an organisation (Davila, Gupta, & Palmer, 2003). Corsi (2006) also outlines e-procurement as the use of electronic methods usually via the internet to carry out the transaction between the awarding authorities and the supplier encompassing all the stages of procurement: from initial need identification through tendering process, to award of contract, project execution, contract management and finally to payment.

With the advent of Internet technology, companies and public entities are gradually relocating their procurement processes onto the Internet (Yen & Ng, 2003). For example, Punjab Agricultural Department has developed an electronic technology, Procurement Management Information System (PMIS) to improve monitoring and evaluation of the procurement process and also cut down the work hours consumed in the procurement documentation. Again, PMIS also enhances performance, fairness, transparency, accountability, service delivery in public procurement and finally reduces associated cost and time taken to undertake procurement activities (Anon, 2018).

Public procurement in Ghana is one sector that has been seen as a problematic area since it offers an opportunity for officials to indulge in certain acts for their own benefits rather than the public interest (Ofori-Nuako, 2014) and this influence the performance negatively. The governing body of the Public Procurement in Ghana, that is Public Procurement Authority (PPA) as part of an e-Ghana project intends to adopt new techniques to enhance transparency and accountability in the award of government contracts (Bokpe, 2014). Thus, introducing electronic transaction into government procurement will ensure continuous monitoring of projects, enhance procurement performance and achieve value for money.

1.2 STATEMENT OF PROBLEM

In the past, procurement was carried out by visiting a store and then following the traditional procedures in purchasing, an order is placed for the item needed. Thus, the process of traditional procurement involved manual procedures which often made the transaction process very slow (Muriithi, Waiganjo, & Chepngetich, 2016).

Again, Bikshapathi & Raghuvveer (2003) indicates that the traditional systems of procurement in government sectors suffered from diverse problems such as delays in tender processing, voluminous paper work, physical threats to bidders, human interface at every stage, poor transparency, discretionary treatment in the entire tender process, difficulty in carrying out audit and corruption. Public procurement was also highly exposed to practices such as bid rigging, bid suppression and cartel formation which are some of the most malicious threats to competition in public procurement (Bhagat, 2017).

Many procurement activities in the public sector suffered from neglect, lack of direction, poor co-ordination, lack of open competition and transparency, corruption and not having a

group of trained and qualified procurement specialist who are competent to conduct and manage the procurement process in a professional, timely and in a cost effective manner (Karanu & Njeru, 2014). Neupane et al. (2012) established that corruption in public procurement leads to various problems such as lack of accountability and transparency, lack of auditing, weak professionalization of the bureaucracy and many more.

Again, inflexible and bureaucratic systems of procurement contributed to unacceptable contract delays, increased cost, the potential for manipulation of contract awards and unfair competition. All these influenced the procurement process and performance negatively (Karanu & Njeru, 2014).

Also, carrying out procurement manually has its associated risk of corruption and other challenges. With this high risk of corrupt practices in the traditional procurement, many organisations are in search of a more innovative means of procuring goods, works and services that will achieve value for money (Osei-Tutu et al., 2010). The various challenges that the traditional system of procurement suffers affect the procurement performance of the public sector. This is characterised by the provision of poor quality goods and services, shoddy works and uncompleted or abandoned projects.

Bokpe (2014) suggest e-procurement as an innovative means that will curb the problems associated with traditional procurement system by promoting transparency, accountability and reducing corruption practices which is as a result of human interface in the public procurement process. E-procurement is carried out using the internet hence with the emergence of internet, companies are moving their procurement activities unto the internet

since it has been proven to be beneficial to them if all procurement processes are carried out correctly and properly (Mahdillou & Akbary, 2014).

Consequently, this study is being undertaken to establish how procurement performance can be improved with the implementation of e-procurement in the public sectors and also identify the challenges that can be eliminated or minimised with the application of e-procurement. Since Procurement Ministry of Ghana also intends to roll out unto the electronic procurement (e-procurement) platform (Syme, 2018), this study will enable experts in e-procurement to put in place measures that will eliminate these weaknesses and improve procurement performance in public procurement system.

1.3 AIMS

This study aims to ascertain how public sector procurement can be improved with the implementation of e-procurement.

1.4 OBJECTIVES

The study intends to achieve the following objectives;

- To assess the weaknesses in existing procurement practices in the assemblies.
- To determine the effect of the weaknesses on the performance of the assemblies.
- To identify the weaknesses that may be eliminated or minimised by the application of e-procurement process.

1.5 RESEARCH QUESTIONS

To be able to determine how to improve procurement performance in the public sectors, the study sought to find solutions to the following questions;

- What are the weaknesses in existing procurement practices in the assemblies?
- What are the effects of the weaknesses on procurement performance of the assemblies?
- What weaknesses may be eliminated or minimised by the application of e-procurement process?

1.6 SCOPE AND LIMITATION OF THE RESEARCH

This study is directed towards establishing factors of e-procurement that will improve procurement performance in the public sectors. The study covers procurement practiced by the Metropolitan and Municipal Assemblies in the country. However, due to the limited time for conducting the study, the researcher limited the study to Kumasi Metropolitan Assembly and other selected Municipal Assemblies in the Ashanti region. The assembly is responsible for the overall development of the district, providing infrastructures and ensuring improvement in the quality of life of the people.

The study is limited to the departments/sections directly involved in the procurement activities in the assembly. Since it is focused on some selected metropolitan and municipal assemblies, the findings from the study can also be generalized to other assemblies that were not covered in the region but cannot be generalised for the whole country since it may not essentially give the right replica of all metropolitan and municipal assemblies in the country,

1.7 SIGNIFICANCE OF RESEARCH

The study is being carried out to identify the existing procurement processes being carried out in the assemblies, its associated problems or weaknesses and its effect on their performance. It will also discover the weaknesses that can be eliminated or minimised with the application of e-procurement in the assemblies.

Again, as e-procurement project is now part of an e-Ghana project the study will also provide more information including the benefits to be encountered whiles implementing e-procurement in the public sectors.

Further, the study will enable procurement practitioners to devise solutions to the current challenges faced whiles using the manual procedures in the various procurement units and also formulate policies that will enhance procurement performance.

It will also serve as a source of motivation to other institutions who intends to practise e-procurement since the study will make available information on the significance of e-procurement on their performance.

1.8 RESEARCH METHODS

The study is intended to identify the weaknesses in the current procurement process carried out in the Kumasi Metropolitan Assembly, Sub-Metros and other Municipal Assemblies in the Ashanti Region. The methodology adopted for the study is more of quantitative approach and a well-structured close ended questionnaire were administered to respondents in the assemblies.

The study focuses on public officials involved in procurement activities in the assemblies. The questionnaires were self-administered to the respondents and further explanation about the research work was given to respondents before administering the questionnaire. Statistical Package for Social Science (SPSS version 23.0) was the tool used in analysing the data collected from the respondents.

1.9 ORGANISATION OF THE RESEARCH

This research has been divided to five (5) chapters. They are; first chapter which also known as chapter one gives an introduction to the research and it basically consist of background of the research, problem statement, aims and objectives, research questions, scope of the study, significance of the study and the methodology to be applied in the research. Chapter two is focused on reviewing existing literature relevant to the subject area. It entails literature from books, journals, thesis, internet etc.

Chapter three looked at the research methodology that was chosen for this study. It includes research design, sampling frame and population, method of data collection and many more. The fourth chapter is data analysis. It deals with examining the data collected from chapter three and the presentation of the results. Chapter five which is the final chapter summarises the findings from the data analysis and gives a conclusion to the study. It also gives a recommendation for further research work.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter basically creates an understanding of the subject area by reviewing and discussing previous study undertaken on the research area. The literature about this research was obtained from both primary and secondary sources. These include; reports, thesis/dissertation, books, journals, newspaper, internet etc. The information obtained relates to issues concerning public procurement and e-procurement.

This chapter start with reviewing the procurement practices carried out in the public sector organisations thus the traditional system of procurement and it weaknesses. It also gives an overview of public procurement and how it is being carried out.

Again, it also seeks to review concepts, theories and other framework relating to the implementation of electronic procurement (e-procurement) considering some common definitions, forms, benefits and it impact on procurement performance. Thus, a number of relevant literatures linking to the impact of e-procurement implementation on public procurement performance are reviewed to enable the researcher find solutions to the research problem.

2.2 CONCEPT OF PROCUREMENT

Procurement is defined as the process of obtaining goods, works or services. The term Procurement and Purchasing are mostly used interchangeably in many organisations. Procurement is a wider scope than 'purchasing. Procurement involves strategic activities such

as sourcing, negotiating with suppliers, and coordination with product development (Tai, Ho, & Wu, 2010).

There are various activities involved in the procurement process. These include a number of processes designed to ensure that the preferred goods or works are properly described, ordered and supplied when and where required and conforms to the specified quality and performance criteria (Lester, 2017). Kidd (2005) is also of the view that procurement does not consist of a single activity but rather encompasses a series of activities starting from need identification for goods, works or services through to its disposal or termination. Hence he defined *procurement as a business management function that ensures identification, sourcing, access and management of external resources that an organisation requires in fulfilling its strategic goals.*

Procurement process includes various activities ranging from need identification through to award of contract and management. To be able to identify the weaknesses associated with procurement process, it will be necessary to review these processes. The procurement process is captured in the diagram (Figure 2.1) and explained as follows:

- **Procurement Planning:** The procurement cycle starts with procurement planning which essentially involves need identification. Thus, the procurement process begins with determination of requirements (goods, works and services) which could be for the whole year (Shonhe & Bayat, 2017).
- **Setting up Procurement and Solicitation:** This stage is the setting up of the individual procurement and solicitation of tenderers. In other words, this stage is the process of

coming up with product or service specifications. Developing specifications enables the entity to communicate what they need and outlines the appropriate method of procurement suitable for project execution (Shaw, 2010). This stage also involves identifying the source of funds and the budget estimation for each project.

- **Soliciting Suppliers:** a publication of an advert is made inviting prospective bidders to tender for the project. Bidders are allowed sufficient time to complete and submit their bids. The criteria for evaluation of the bids are clearly defined in the tender documents.
- **Bid Evaluation:** tenders are opened immediately at the predetermined date and time and subsequently an evaluation is carried out based on criteria already spelt out. This is a crucial part of the procurement process since it involves critical examination to select a suitable supplier/contractor.
- **Documenting, Selection and Negotiation:** after the evaluation a brief report is prepared for record keeping and based on their judgement a supplier/contractor with the least evaluated bid is selected for the award (Shaw, 2010). When a contract is formed the least evaluated bidder is called upon for negotiation prior to commencement of project.
- **Preparation of Contract:** a contract is formed between the entity and the successful bidder. Contract document prepared clearly defines the right and obligations of each party. An individual is selected to manage the contract, thus to ensure that the objective of the procurement process is achieved.

- **Delivery, Inspection and Acceptance:** upon delivery of the goods/works, the contract manager inspects the items to know if it conforms to the specifications given. He then receives the goods/works and hands it over to the user department.
- **Verification and Payment:** goods/works received are verified and a payment order is made to the supplier/contractor.
- **Evaluation and Filing:** the last phase of the procurement process is to review the performance of the process and assess whether the process was carried out efficiently and effectively. Documents are filed for auditing purposes.

In simple terms, Croom & Brandon-Jones (2005) also explained the procurement process as encompassing identification of need and description of item needed by users, searching and soliciting for suppliers, negotiation of contracts, order placement and post-supply evaluation. Under the manual procurement process, procurement performance in terms of achieving procurement goals (objectives) was poor since entities do not adhere to proper processes and procedures (Kakwezi & Nyeko, n.d).

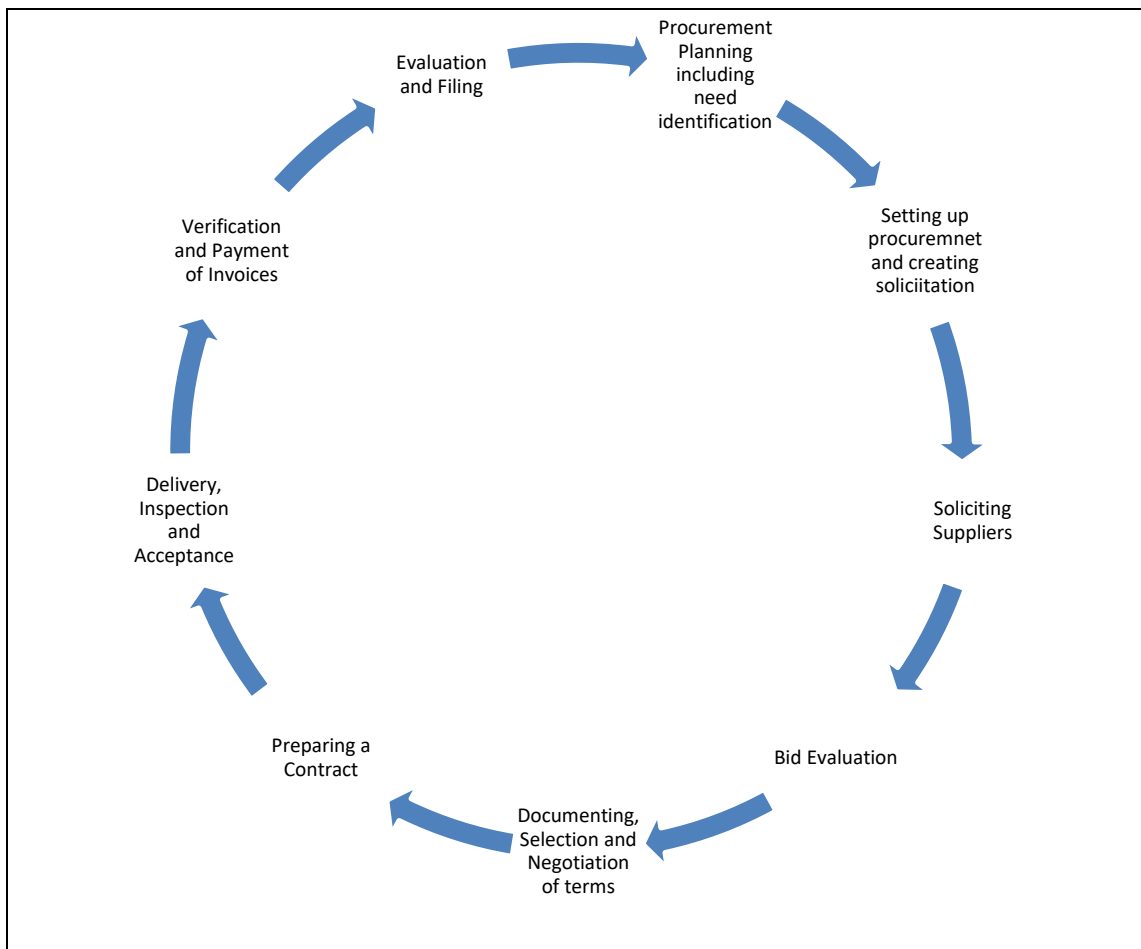
Although procurement process should be open and transparent (Neupane et al., (2012), there is a risk of corruption at every stage of procurement process which brings about some weaknesses in the various stages of the procurement process. Public officials at the planning stage may plan project not for society needs but rather for their own private benefits (Osei-Tutu et al., 2010).

During the solicitation of suppliers and bid evaluation stage, officials may alter the specifications in favour of a particular supplier they would like to win the tender. They may

also call on a supplier to purchase all the documents for the contract especially during request for quotation. In the project execution phase, officials do not conduct any monitoring activities or they pay little attention to monitoring hence suppliers end up delivering inferior materials or substandard works (Shaw, 2010). Evaluation and audit are also not carried out regularly and systematically hence they are unable to detect any weaknesses in the process (Neupane et al., 2012).

Mambo et al., (2015) states that public e-procurement in the public sector can play an important role in addressing these issues. In public e-procurement, officials and bidders will be able to view and monitor all the processes on the web portal. Thus, there will be greater transparency in procurement process since tender notices, contract awards, specifications and all other related information will be published online. When this happen public officials will not be able to alter or hide any confidential information for their own benefits.

Figure 2.1: Procurement Process



Source: (Shonhe & Bayat, 2017).

2.3 WEAKNESSES IN PROCUREMENT PROCESS

Public procurement acts as a vital function in the provision of goods, works and services and performance of government department and public entities (Dzuke & Naude, 2015). Many government procurement systems are fundamentally sound in terms of their basic organisation and procedures. However, there exist some weaknesses in their execution, such as compliance, monitoring, and enforcement of existing regulations (Heggstad & Frøystad, 2011). For this reason various researches have been undertaken to identify these weaknesses or key challenges in the public procurement system.

Traditionally, procurement process involves manual procedures (working with the hands) and this makes the transaction process very slow (Muriithi, Waiganjo, & Chepngetich, 2016). That is, in traditional procurement system employees need to put together huge amounts of paperwork which includes purchase orders, supplier responses, invoices, receiving documents, account payable vouchers and supplier payments and account reconciliation reports. This made the procurement process slow, tedious and time-consuming (Bakar et al., 2016).

According to Dza et al., (2013), the procurement processes in most African countries are compounded with challenges. An example is political interference; some politicians are of the opinion that they have the power to interfere in the process since they are the custodians of public funds. They manipulate the procurement procedures and sometimes insist that a contract is awarded to specific individuals or companies of their choice. Thus, there is no fairness and transparency in the process being carried out. This leads to capricious procurement decisions which affect the success of the procurement process.

Ameyaw et al., (2012), also commented on some weakness existing in the current procurement practices in Ghana. They include;

- The absence of clearly defined roles and responsibilities for procurement entities: Procurement professionals are in charge of conducting the procurement for goods, works and services for their entity. With the absence of clearly defined task, professionals may manipulate the process or plan unwanted project for their own benefits (Neupane et al., 2012).

- Lack of accountability and transparency: there is lack of openness and limited access to information in the traditional procurement practices. Thus, the procurement process is marred with lack of open competition and transparency (Okong'o & Muturi, 2017). Some confidential information is hidden to others in order for their favourite bidder to get the award. This doesn't make the process fair and transparent. Again, proper records are not taken hence officials are unable to give account of their activities.
- Lack of central body with the technical expertise (procurement knowledge and skill): the procurement system does not have competent staffs that are equipped with the procurement knowledge and skills to carry out the procurement activities. Shaw (2010) supports the view that procurement staff must possess the ability to efficiently execute and participate in each stage of the procurement process.
- Procurement process being embedded with fraud and corruption: many studies have revealed that the procurement process is enveloped with fraud and corrupt activities. Osei Tutu et al., (2010) affirm that corruption can be found in all the stages of procurement processes. To satisfy their own desires or for their own private gain, public officials or political influencers receive either monetary or non-monetary offers to improperly influence the procurement process like paying bribe to alter the implementation of rules and regulation or to secure procurement contracts (Hellman et al., 2000).

He clearly pointed out that these areas in the public procurement system require urgent attention.

Again, Bikshapati & Raghuveer (2007) also claimed that the traditional systems of procurement carried out in the public sectors are affected by some problems which include:

- Excessive delays (approximately 4 to 6 months) in tender/order processing and vast amount of paper work: the procurement process consumes a lot of time since it is carried out manually and it involves a whole lot of procedures to be followed.
- Multi-level scrutiny and bureaucratic nature of the system that consumes a lot of time: Okong'o & Muturi (2017) argues that procurement is associated with a lot of bureaucracy which makes the process slow and cumbersome and each stage of the process is subjected to scrutiny before the next stage can proceed.
- Bid suppression by the contractors / suppliers to prevent competition: in order to control the competition, bidders form groups to rig bids either by increasing prices or reducing the quality of goods, works or services offered to the public
- Human interface at every stage: in traditional procurement, all the procedures carried at each stage require parties to interact with each other. This interaction between bidders and public official creates a cordial relation between them which might compromise the personal judgement and in the long run affect their decision making.

All these render the traditional (manual) procurement inefficient which result in poor procurement performance within the procurement entity. The emergence of e-procurement system was as a result of minimising these weaknesses in the traditional procurement processes and enhancing transparency, better quality of work, fair competition (Muriithi et al., 2016).

2.4 OVERVIEW OF PUBLIC PROCUREMENT

Public procurement also known as Government procurement is the purchasing of goods and services on behalf of a public authority, such as a government agency (Mukhopadhyay, 2011). In other words, Public procurement has been defined as acquisition for public consumption using public funds (Weiss, 1993:Erridge & Mcilroy, 2002).

In Ghana, public funds comprise of consolidated fund, contingency fund and such other funds enacted by or under the Act of Parliament (Article 175 of Constitution of the Republic of Ghana). This represents all revenues received or raised on behalf of the government. It can also be defined as monies collected from the general public such as taxes and hence it must be used in a transparent and accountable manner (Hui *et al.* 2011: Dzuke & Naude, 2015).

Arrowsmith (2010) also defined *public procurement as government's activity of acquiring goods and services which it needs to undertake its operations*. He further explained that public procurement process is in three phases. These include;

- Procurement planning / need assessment: the process of determining which goods, works or services that is needed and when.
- The second phase includes the process of choosing a supplier, contractor or consultant to execute the project and also defines the terms and condition of the contract formed and
- Lastly, contract management which is the process of supervising the contract to ensure that project is executed or performed effectively.

Public Procurement basically involves purchasing of goods, works and services by the public sector organisations which is backed by a regulatory body. The public sector is usually made

up of government departments and public entities, such as a roads and transport amenities, communication systems, healthcare facilities and many more (Dzuke & Naude, 2015).

Public procurement is characterised by some basic principles: value for money, transparency, accountability, competitiveness, efficiency and effectiveness. Hence a regulatory body is set aside to furnish the various entities with rules, procedures and regulations which are aimed at enhancing transparency, accountability, open competition and achieving best value for money on all procurements (Shonhe & Bayat, 2017).

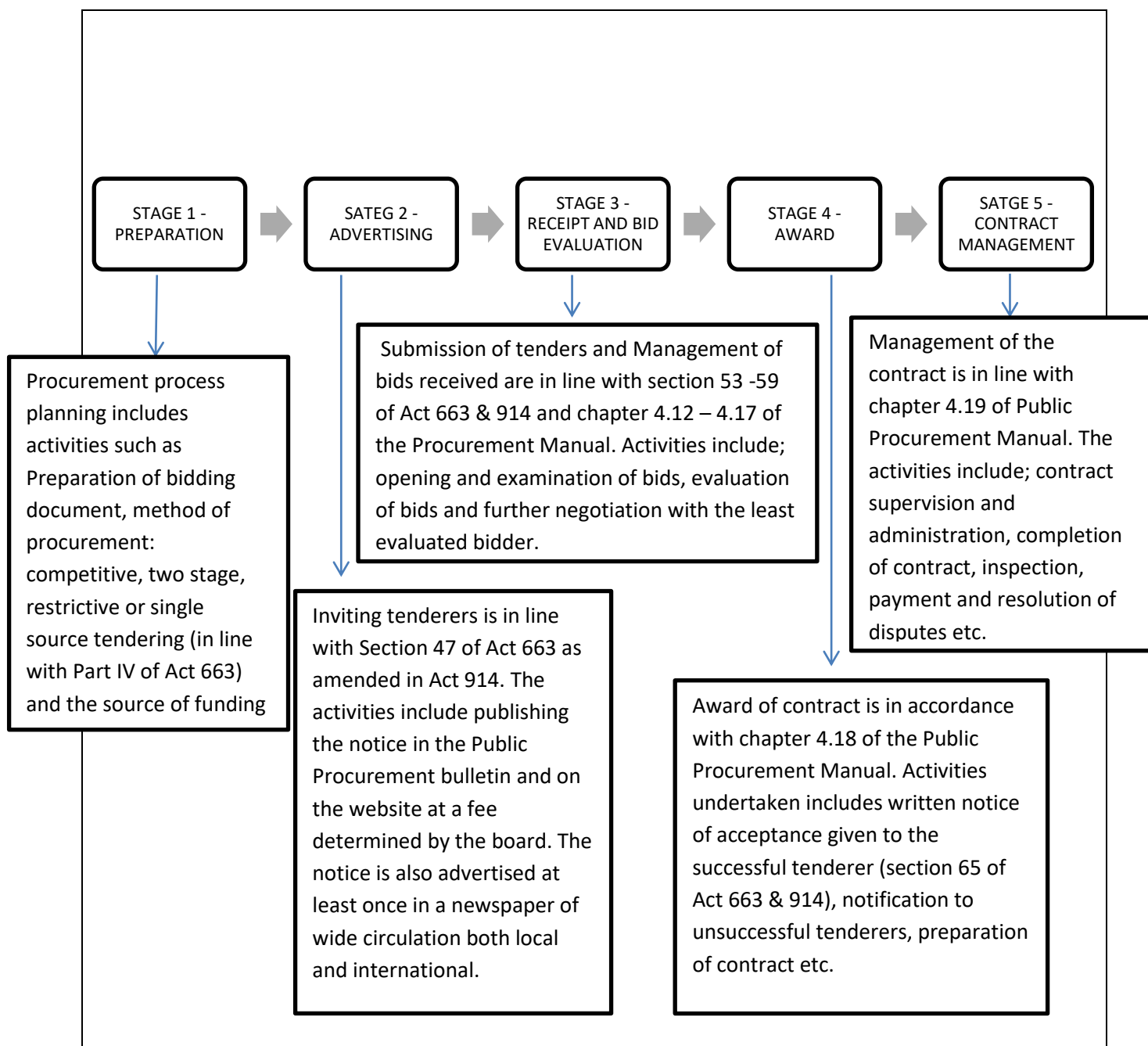
According to Lynch (2013), public procurement aims at awarding contract to qualified contractors, suppliers and consultant for the provision of goods, works and services at the right price and delivered at the appropriate time to support the operations of government. These should be carried out in line with the principles and procedures stipulated in the public procurement laws.

The public procurement process is controlled by rules and regulations and it differs from one country to another (Dzuke & Naude, 2017). Public procurement in Ghana is regulated by the Public Procurement Act, Act 663 as Amended by Act 914 and other regulatory framework such as the Public Procurement Manual. The aim of public procurement is to harmonise the procurement processes in the public service to secure a judicious, economic and efficient use of state resources and to ensure that the process is carried out in a fair and transparent manner and non-discriminatory environmentally and socially sustainable manner (Public Procurement Act, 2003 (Act 663) and Public Procurement Amendment Act, 2016 (Act 914). Thus, the main goal of public procurement is to promote transparency, accountability, fairness, safeguard public funds and practise a sustainable procurement.

Government procurement is estimated to cover a greater portion of the global economy. In the developed countries for instance, it covers about 10 to 15 per cent of a country's gross domestic product (GDP) and for the developing countries it about 20 per cent (Mukhopadhyay, 2011). Since this involves public resources which are usually limited in nature, it is important to improve efficiency of procurement and achieve value for money (Bhagat, 2017).

Government entities usually contract private sector enterprises to provide a particular goods, works or services at a cost based on agreed terms and conditions outlined in the contract (Osei-Owusu et al., 2014). These product or services provided does not only benefit the procuring entities but the society at large. Some of the services they provide include; the provision of educational facilities, healthcare systems, provision of utilities and distribution (water, electricity, telephone, gas etc.) amongst others (Dzuke & Naude, 2015). Fig. 2.2 gives a summary of the various stages government entities go through to contract a private entity to provide goods and services for public consumption.

Figure 2.2: Stages of Public Procurement Process in Ghana



Source: Author’s representation, adopted from Public Procurement Act 663 as amended in Act 914 and Public Procurement Manual of Ghana (Dzuke & Naude, 2017).

2.5 PROCUREMENT PERFORMANCE

According to Van Weele (2010) cited in Hovius (2016), procurement performance can be defined as the extent to which the procurement function can achieve its predetermined goals with the organisation's scarce resources. Thus it includes, how effectively and efficiently one can reach the wanted results or achieve desired results with little waste in the procurement process (Mouzas, 2011).

Patrucco et al. (2016) also explains performance as seeking answers to the fundamental question of whether the procurement system is ultimately delivering according to its aim. The attainment of the procurement goal/objective is affected by internal and external forces. The internal forces include; the number of qualified staff / professionals, structure of the entity and the budget resource available, rules and regulations and the external forces on the other hand includes, political influence / pressures, market conditions, etc. (Kim et al., 2013; Karanu & Njeru, 2014).

Again, Gwahula (2013) defines performance as a function of efficiency and effectiveness. He went on to further explain the terms: efficiency is doing things right whereas effectiveness is doing the right thing. Gardenal (2008) also explains efficiency as a measure of the usage of resource whereas effectiveness means comparing goals with results. Hence to achieve higher performance in an organization, officials should ensure that they carry out the process using the right resources to achieve the predetermined goals.

In summary, Ombaka (2003) in Wanyonyi & Muturi (2015) stated that procurement process can be effective and efficient when an attempt is made to ensure the process is transparent, free from any corrupt activities and the good practices are being undertaken. Adhering to

these practices and complying with the regulations will go a long way to improve procurement performance.

2.5.1 IMPACT OF WEAKNESSES IN PROCUREMENT PROCESS ON PERFORMANCE

Procurement performance is a crucial driver that defines the capability of an organisation to achieve its objectives (Patrucco et al., 2016). Thus, it assesses how well public entities undertake their procurement activities in order to achieve their procurement objectives. An entity is seen as functioning properly or performing soundly if the procurement process is effective and efficient.

However, an organisation may experience inefficiencies in its procurement process due to certain weaknesses existing in their procurement process. Thai (2008) argues that the inefficiencies arise due to ineffectiveness of one or all of the pillars of procurement. He defined these pillars as procurement rules and regulations, procurement personnel, procurement process and methods and procurement organization.

Under procurement laws and regulations, the laws governing the process may be too rigid or it may not clearly define the responsibilities of the procurement personnel. Procurement workforce may also not have competent personnel who are equipped with the knowledge and skills of procurement administration. The procurement process and methods also has major flaws such as excessive delays in the process, lack of transparency & accountability that affect procurement performance. Lastly, the procurement organisation may be too decentralized or too centralized (Thai, 2008).

As a result of these weaknesses, the procurement entity is unable to perform their procurement function efficiently and effectively. Some of these effects can be seen as;

- The entity is not able to fully utilize the funds effectively since they are unable to properly allocate their resources towards the attainment of their goals. Thus, misappropriation of public resource results in poor procurement performance. For example, Meenanak (2018) established that public sectors are not able to fully utilize their annual budget as a result of disorder in procurement activities thereby losing millions of dollars annually.
- They are unable to achieve value for money since there is no competition in the process because professionals tend to break bulk in order to avoid competition. Hence, public procurement is unable to provide better services and facilities to the community (Raymond, 2008).
- End-user or client satisfaction is not improved since goods, works or services procured may not be fit for its intended purpose. In Chimwani et al., (2014), it is believed that the working principle of procurement system is to enhance customer satisfaction at the point of receipt of goods, works or services procured. Thus, poor procurement performance results in stakeholders or end-users complaining about poor service delivery.
- High operation cost: operational cost of public procurement rises due to the inefficient and ineffective procurement process being carried out. These leads to loss of scarce resources.

Hence, for a better procurement performance or to achieve the goals of the procurement function, the procedures stipulated in the regulations must be followed with proper

management and monitoring. This will terminate any chance of poor performance (Wanyonyi & Muturi ,2015).

2.6 OVERVIEW OF E-PROCUREMENT

Currently, one of the key areas in e-Government is e-procurement. Some organisations are in the process of adopting it but they require some guidance on how to proceed with this new technology (Vaidya et al., 2006). Many researchers have tried to find a precise definition for the term ‘e-procurement ‘. The most common meaning derived for the term is that e-procurement involves carrying out the procurement process electronically via the internet.

For instance, Croom & Brandon-Jones (2005) defines *e-procurement as a term addressing the use of internet systems and wide area (commonly web-based) network communication systems in part or all of the purchasing process*. E-Procurement has also been defined as *the process of automating the procurement processes electronically, especially the internet which integrates and streamlines the procurement processes throughout the organization* (Vaidya et al., 2006).

In a similar way, Oliveira & Amorim (2001) also defined e-procurement as the method used by organisation to purchase their goods and services needed for its operations electronically. In generalizing the definitions, e-procurement is the application of internet systems in the procurement practise which makes it more transparent, efficient and effective.

In its most simplest definition, e-procurement streamlines the procurement processes by eliminating the manual paper-based documents such as purchase orders and requisition forms (Teo, Lin, & Lai, 2009). In this regard, e-procurement provides a greater opportunity to cut down costs, reduce time for conducting business and enhance customer service. It also offers

significant opportunities such as efficiency and transparency in government procurement activities and by that ensures public procurement (contract) is awarded to the tenderer offering best value for money (Oliveira & Amorim, 2001).

Electronic procurement (e-procurement) came about in the late 1990s and now many organizations intends to roll unto platform arena since it integrates and makes the procurement processes simple and well organised (Vaidya et al., 2006). It has also been understood as a platform which acts as a centre where information needed in planning and making business decision can be retrieved. It also improves performance of activities such as transaction processing, monitoring and also enable management to prepare their report with much ease (Khanapuri et al., 2011).

According to Neef (2001), e-procurement came about as an upgrade of Electronic Data Interchange (EDI) technologies and as a way to undertake the procurement process over the internet to reduce cost and eliminate bottlenecks. Thus, e-procurement system enables employees to have direct access to their suppliers' system to check technical specifications, product prices, images and detailed description (Teo et al., 2009).

With regard to the various definitions e-procurement is not simply transferring the traditional procurement practices unto a computer (internet) but rather the goal is to allow monitoring of procurement practices within the company and also ensure that the process is carried out in an efficient and transparent manner (Allal-chérif & Babai, 2017).

2.6.1 ELECTRONIC PROCUREMENT PROCESS

Electronic procurement (e-procurement) is basically seen as performing the traditional procurement process electronically. The traditional procurement process over the years has been seen as an overpriced activity for organisations because it involves slow labour-intensive procedures and even slower organised processes in handling procurement operations. Since it was carried out manually, there was always a possibility of encountering errors in the transactions and procuring officials were often mandated to handle these mistakes which usually occurred during ordering, invoicing and payment. Handling these errors were often time consuming and expensive to trace (Hawking et al., 2014).

Earlier researchers have commented on the various impact e-procurement has on the organisation's performance. Costa et al., (2013) argues that successfully practising e-procurement eliminates the problems encountered in the traditional procurement methods and rather supports more united and straight forward process. Another researcher also remarked that e-procurement helps government to save money and also offer a more efficient and quicker way of handling procurement process (Gunasekaran & Ngai, 2008). Hence, Osir (2016) in his study suggested e-procurement system as a way of improving procurement performance.

The entire procurement process under e-procurement is handled online thus companies make purchases of the various goods (including raw materials) and services using the internet system (Piera, Roberto, Giuseppe, & Teresa, 2014). E-procurement involves the automation of manual procurement process such as procurement planning (preparation), sourcing (advertising, invitation & bid submission), contracting (evaluation of bids & notification of award), contract management, storage & distribution, disposal & evaluation of the process.

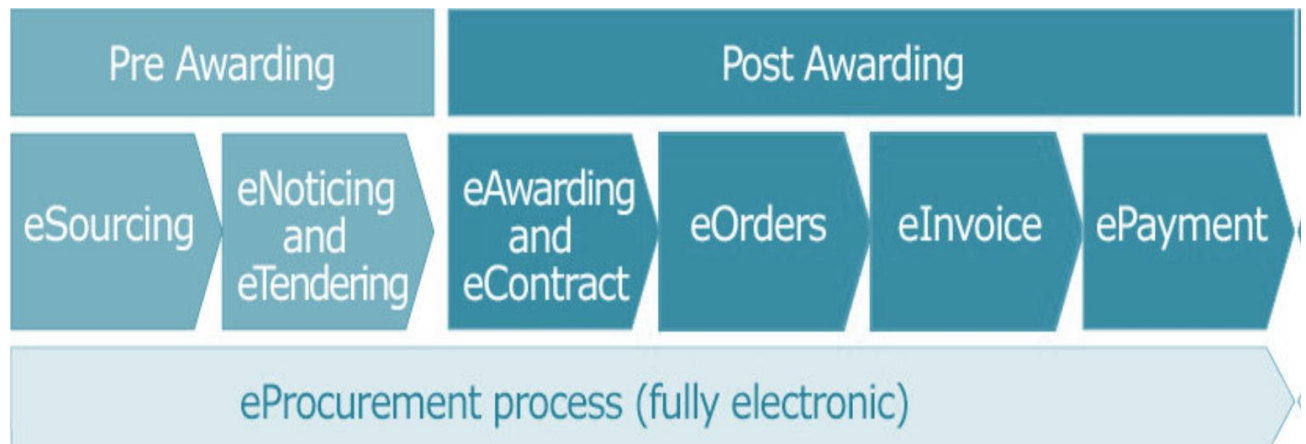
In summary, Sonntagbauer & Bodiroza (2009) defines e-procurement process to include e-sourcing, e-noticing, e-tendering, e-awarding, e-contract, e-orders, e-invoicing and e-payment. He further grouped these processes under two broad phases namely, Pre Awarding and Post Awarding. Pre Awarding phase involves all the activities that take place before the contract award and Post Awarding phase refers to all the activities after the contract has been initiated. This is illustrated in Fig 2.3 below.

In the pre award phase, the process consists of e-sourcing (e-requisitioning), e-noticing (e-advertisement) and e-tendering. Here, organisation post advert on their website and also notify potential suppliers/contractors of an upcoming tendering process hence inviting them to submit a proposal. This is usually carried out through online notification system. Interested suppliers/contractors then submit their tenders via an online receipt system. Fundamentally, this process entails sending request for proposals to prospective suppliers/contractors and receiving proposals through the internet.

In addition, the post award phase includes activities such as e-awarding, e-contract, e-orders, e-invoicing and e-payment. After receipt of bids, the bid that were submitted by the closing date and time are opened and an evaluation is carried out electronically to check if each tender complies with all the qualification criteria stated in the tender documents (Tavares, 2011). The bidder with the least evaluated bid which offers value for money is given the award for the contract. An agreement is then formed via internet between the supplier/contractor and the buyer which is known as e-contracting. The client raises an order with the use of internet on the agreed contract to the supplier. The supplier then sends an invoice electronically to client. Upon receipt of goods, the client inspects and approves for

payment which is also done electronically. During the e-contract phase in works procurement, a contract manager is appointed to supervise or monitor the works contract. On completion, an inspection is carried out and a final payment certificate is raised to authorise payment for work done.

Fig 2.3: E-procurement Process



Source: Sonntagbauer & Bodiroza (2009)

2.6.2 FORMS OF E-PROCUREMENT

The practise of e-procurement by some organisation has made other organisations to change the ways in which they obtain goods, works and services. It usage varies from applying ordinarily existing tools such as web browsers or e-mails or fax to the use of refined e-procurement systems such as e-information systems among organisation (Hassan et al., 2014). These tools allow companies to reduce the cost and time of their procurement process (Piera et al., 2014).

The e-procurement forms also involve series of activities that facilitates certain aspects of the procurement process executed by employees. de Boer et al., (2002) describes the forms of e-procurement applications that are often used to include; e-sourcing, e-tendering, e-reverse

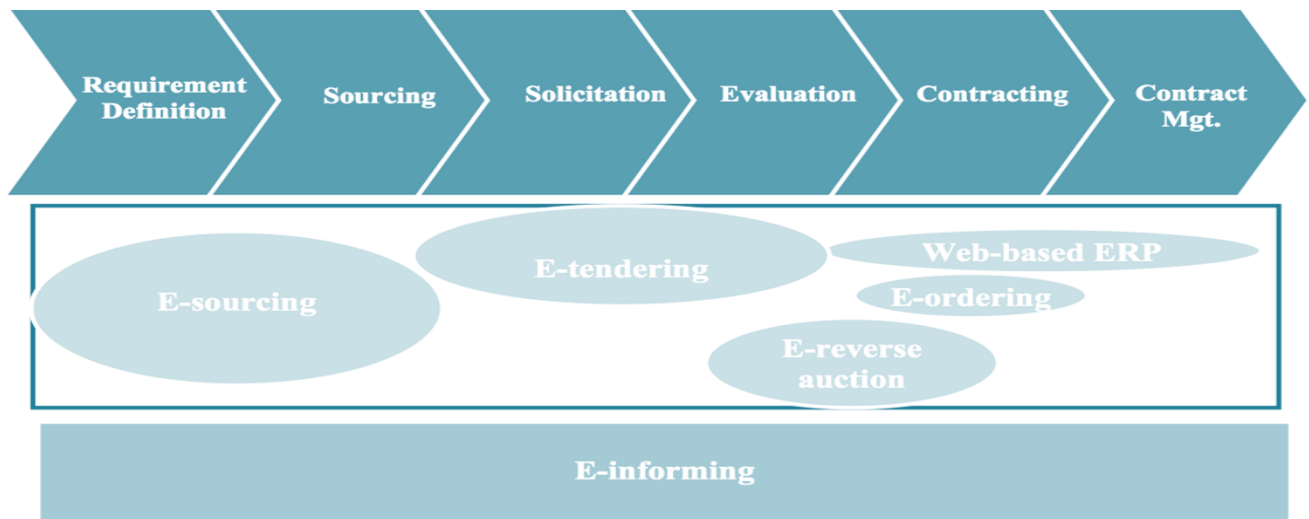
auction, e-MRO, web-based ERP and e-information. Fig 2.4 depicts how the forms of e-procurement act as a support in the procurement process.

- e- Sourcing – this is the method whereby companies solicit for possible new suppliers using the internet technology. This helps the company to avoid supply risk associated with the process. This tool is used during the requirement definitions and the sourcing for suppliers/contractors phase in the procurement process.
- e- Tendering – this tool deals with the method of sending out requests for quotation and information to suppliers and getting the feedback from suppliers using Internet technology. E-Tendering facilitates the solicitation aspect of the procurement process which includes request for proposals, invitation to tender etc. and also used in evaluating the bids received.
- e- reverse auction – this is the process whereby bidders (known/unknown) through internet technology bid against each other by lowering the prices of their offer till no further reduction in prices. This tool enables procurement officials to award contract to successful bidder.
- e-MRO- this is the process whereby companies generate and approve request for purchasing, place an order and obtain goods and services by using an internet based software. This tool is basically used in procuring goods and services which are intended for maintenance, repair and operating (MRO) i.e. indirect items such as computers, staplers, office furniture etc. These kinds of goods usually do not result directly in finished goods (Neef, 2001). It supports the contract management phase of the procurement process.

- Web-based ERP (enterprise resource planning) – this is comparable to the e- MRO tool only that the goods and services procured are product related. Thus, the good and services are directly related to the production of finished goods (Neef, 2001). It supports the contract management phase of the procurement process.
- e- informing – is the process of using the internet to gather and distribute data/information relating to procurement among the parties involved in the process.

These tools affect the procurement process by reducing transaction cost, saving time, less labour, improving efficiency as the process is carried out in real time (sometimes the whole bidding process does not take more than an hour)(Knudsen, 2003).

Fig 2.4: Procurement Process with Forms of E-procurement



Source: UN Practitioner’s Handbook (2006)

2.7 IMPROVING PROCUREMENT PERFORMANCE IN PUBLIC PROCUREMENT

Procurement performance is all about how effectively and efficiently the procurement process is carried out so that the set goals can be achieved. Hence in order to enhance or increase performance in the public sector procurement, the efficiency and effectiveness of the procurement process must be improved (Hovius, 2016).

Performance can also be defined as the process whereby the workers with their skills and knowledge perform their assignment effectively to attain their objectives (Osmani & Maliqi, 2012). This implies that for an organisation to achieve best result, the employees must orient all their effort towards efficiency in their work.

To constantly achieve success or increased performance in the organisation's procurement process, there is the need to advance all phases of the procurement system. The advent of internet and the constant changes in technology has also brought about the need for organisations to become innovative and adopt other means of achieving quality in their work.

According to Chimwani et al., (2014), improvement in procurement performance can be achieved by acquiring and using modern technology, improving motivation in the organisation, keeping a spotlight on staff training and using the appropriate procedures of the procurement process.

Another study carried out by Hovius, (2016) defines certain activities needed to be done in order to improve performance. He states that there should be continuous learning and training program for workers to update their skills. He also argues that the procedures and guidelines that support the procurement process should be clear, sustainable and up to date. Thus, procurement officials should critically review and update the existing procedures from time

to time so as to eliminate all the bottlenecks that hinder the performance of procurement process.

2.8 IMPACT OF E-PROCUREMENT ON PROCUREMENT PERFORMANCE

Public procurement is the central instrument government employs to acquire goods, works and services for public use. The basic principle is to obtain the right product / service in the right quantity and quality at the right time, delivered at the right place and least total cost. Since it uses state fund, the procurement process should be carried out in an effective and efficient manner. Research has shown that public procurement has been infiltrated with corrupt activities which have negative impact on the process. Such effects include lack of transparency, accountability, limited access to information etc. (Neupane et al., 2012). To address these issues which affect procurement performance it is perceived that e-procurement is the viable tool to employ.

E-procurement has now become a new trend due to the benefits some companies have derived from it. Thus, the use of internet technologies in conducting the procurement process has brought about a tremendous improvement in the company's performance. This has motivated other companies who have not implemented it to also move their procurement activities onto the internet. Earlier research have been undertaken to promote these benefits linked with the use of e-procurement.

According to Tai et al., (2010), e-procurement is more than uploading procurement decisions onto the internet; it also serves as a platform that links supplier/contractors and clients/buyers into a network. This reliable link created enables feedback, complaints and responses relating

to the procurement process to be seen and dealt with as soon as possible. This link also eliminates any form of bidder's cartel formation to influence the process. E-procurement provides customers with variety, quality products and more importantly ensures faster and reliable delivery of goods, works and services (Altayyar & Beaumont-kerridge, 2016).

Yen & Ng (2003) also established the outcome of using e-procurement in their study. They revealed that there is greater control and flexibility in the procurement operations and it coupled with cost savings and also provides suppliers with the capacity of becoming more active in the way they carry out their procurement process. Thus, e-procurement enables both procurement officials and bidders to see and monitor the procurement operations on the internet. All the necessary information relating to the activities can be assessed on the website and no official can influence or hide any information hence ensuring a transparent procurement process and eliminating political interference.

Moon (2005) also proposes that the application of e-procurement in government procurement allows government to save money and also provide a more efficient and a quicker way of managing the procurement activities. E-procurement process also reduces paper work (paperless environment), production cost and transaction times (Gunasekaran & Ngai, 2008) which result in streamlining and automating the labour-intensive procurement process (Teo et al., 2009).

Doherty et al., (2013) also argues that introducing e-procurement will help the organisation achieve better value for money for their procurement operation. Thus they will be able to manage their tendering process effectively which will enable them reduces the transaction cost. Again, the use of e-procurement system helps strengthen search ability, i.e. it makes it

easier to discover new supplier thereby increasing the supplier database which also result in an increase in competition. It also enables parties to quickly get access to more information relating to the process at any time. This will also pave way for procurement audit to be carried out frequently thereby increasing accountability and transparency(Tai, Ho, & Wu, 2010).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter defines the method that was employed in the study to identify the challenges in the current procurement practices carried out and identify those challenges that can be eliminated by the application of e-procurement. The main focus of this chapter is to describe how the relevant data for the study was obtained, the design used for the study, the population of the study, the sample size and techniques used for sampling.

Again, this chapter discusses the procedure used in data collection and the instruments used in analysing the data collected. Basically, this chapter talks about the methods that will enable us achieve the objectives of the research.

3.2 RESEARCH DESIGN

Research design defines the procedures used by the researcher to obtain information in achieving the stated objectives of the study. Thus, it is the framework within which the collection, measurement and analysis of data for the research is conducted (Kothari, 2004).

A descriptive research design was adopted to address the weaknesses in the current procurement practices and how the procurement performance can be improved with the implementation of e-procurement in the Kumasi metropolitan assembly and some selected municipal assemblies all in the Ashanti Region. The study adopted the descriptive design since it aids the researcher to study the population in their natural environment without necessarily influencing the elements under study (Mose et al., 2013).

Basically, the quantitative approach of research was chosen for the study and a set of close-ended questionnaire were distributed to public officials involved in the procurement activities of the assemblies to generate data for analysis.

3.3 SOURCES OF DATA

Data collection is a crucial part of the research design as it aids the researcher to find answers to the research questions. The sources of information employed in this study were both from the primary and secondary sources. The primary source was gathered from the responses obtained from the public officials involved in the procurement activities. The secondary source of information was also gathered from books, journals and online all relating to the subject matter of the study.

3.4 POPULATION OF THE STUDY

Population refers to people, objects or units that are considered relevant for the analysis of the study. The chosen population assist the researcher in finding answers to the research question. The target population chosen for this study consist of public officials in charge of the procurement process in the metropolitan and municipal assemblies in the country. It consists of officials from procurement unit, finance/budget, administrator/director and engineers.

According to Frempon- Ntiamoah (n.d.) (ISD), Ghana has a total number of 254 Metropolitan, Municipal and District Assemblies (MMDAs). The target population included only metropolitan and municipal assemblies which constitute about 74 out the total number of MMDAs. However, due to convenience and limited time for the study the researcher

selected Kumasi Metropolitan assembly with it 2 Sub-Metros (Bantama and Nhyiaeso) and 7 other municipal assemblies (Kwadaso, Oforikrom, Asokwa, Suame, Tafo, Ejisu and Juaben) all in the Ashanti region as it sample.

3.5 SAMPLE SIZE AND SAMPLING TECHNIQUE

Usually the population for research study is large and also the cost and timeframe involved is huge making it difficult since it will require more resources. This has therefore brought about the need for selection of only a few items in the population. The selection of the few items to represent the total population is known as a sample. The process of selecting a sample of the population is known as sampling technique. Sample size also refers to the number of items chosen to form the sample (Kothari, 2004).

The sample size for the study was made up of all public officials including engineers, procurement officers, budget/finance officers, administrator/director in charge of procurement activities in the selected metropolitan, sub metros and municipal assemblies. The sampling technique adopted for the study is the non-probability or purposive sampling. This type of sampling technique allows the researcher based on her judgement select a sample that is related to the subject area or best suitable for the study. This will enable the researcher to find respondents who can produce the required information to find solutions to the research questions. The table below gives a summary of the sample size

Table 3.1: Summary of sample size

Name of Metropolitan, Sub Metro and Municipal Assembly	No. of Procurement Officers, Engineer, Budget/Finance and Administrator
Kumasi Metropolitan Assembly	7
Bantama Sub Metro	3
Nhyiaeso Sub Metro	3
Kwadaso Municipal	5
Oforikrom Municipal	5
Asokwa Municipal	3
Suame Municipal	5
Tafo Municipal	4
Ejisu Municipal	6
Juaben Municipal	4
Total	45

3.6 METHOD OF DATA COLLECTION AND DATA ANALYSIS

Data for the study as indicated earlier was from both the primary and secondary source. The latter was collected from previous data that has been analysed by others. These were obtained from books, journals, report, thesis, published and unpublished bibliographies. These helped the researcher to review relevant literature relating to the study.

The primary data was gathered using a well-structured questionnaire consisting of both closed and open-ended questions. In the former type of questionnaire, respondents were given one or more alternatives to choose while in the later respondent were given the opportunity to express their opinions on issues pertaining to the study.

The researcher distributed the questionnaire to the selected workers in the assemblies. The questionnaire was designed in way that will enable the researcher to achieve the objectives of the research. It consisted of the following four main sections:

- Section A: Demographic Data
- Section B: Weaknesses in existing Procurement Practices
- Section C: Effects of the weaknesses on Procurement Performance
- Section D: Impact of E-Procurement on Procurement Process

After the data collection, the research data was processed by editing and coding so that they can be responsive to the analysis. The received data were further entered into a software known as Statistical Package for Social Sciences (SPSS) on a computer to analyse and draw conclusions on the study.

In the data analysis, the study employed one sample t-test, relative importance index and descriptive statistical tool including frequencies, percentages and standard deviations. The results were then presented by tables and graphs such as pie chart, tables and bar chart.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSION AND PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter of the research work focuses on the analysis, discussion and presentation of the results obtained from data received from respondents through the administration of questionnaire. This chapter is arranged in four main parts.

The first section (Section A) is about demographic characteristics of respondents. It is centred on information about the respondents and the assembly in which they work. Thus, it talks about the gender, educational level, name of the assembly, position held and their experience in procurement activities. The second section (Section B) covers the weaknesses experienced in the current procurement practices. Section C which is the third section deals with the consequences (effects) of these weaknesses on the performance of the assembly. Lastly, section four (Section D) dwells on identifying those weaknesses that can be minimised or eliminated using e-procurement.

4.2 DEMOGRAPHIC CHARACTERISTICS

This section basically sought to address the background information of the public officials selected for the study. It consists of their gender, position held, level of education and years of experience. They include procurement officers, engineers, administrators, directors and finance/budget officers. The total number of workers sampled for the study is 45. Table 4.1a, Figure 4.1b & Table 4.1c below gives a summary of the information gathered about the respondents.

Table 4.1a: Demographic Characteristics I

CHARACTERISTICS	FREQUENCY	PERCENTAGE
GENDER		
Male	33	73.3
Female	12	26.7

Source: Field Survey (2018)

Public procurement is seen as a male-dominated field and not well known to most women. This is evident in the findings presented in the table above (Table 4.1a) where majority of the public officials comprise of male with a percentage of 73.3% and females constituting 26.7%. The study also shows the category of public officials involved in public procurement.

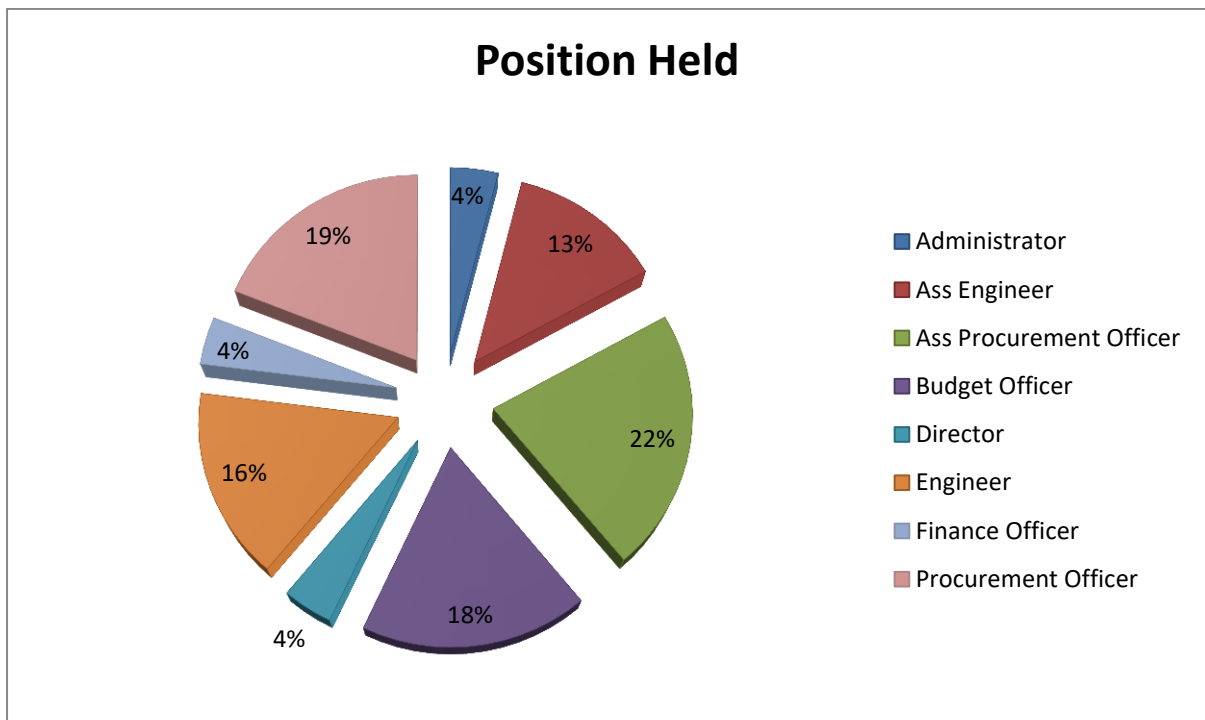


Figure 4.1b: Demographic Characteristics II [Source: Field Study (2018)]

From figure 4.1b, the study tried to find out the various position held by respondents. It was discovered that 22% and 18% were procurement officers, 16% and 13% were Engineers, Budgets Officers were 19%, Finance Officers, Administrators and Director each represents 4%. This indicates that majority of public officials in charge of procurement activities are the procurement officers with their assistants. The other professionals also support the procurement activities in one way or the other. This implies that respondents are well informed and will be able to give precise information needed for the study.

Table 4.1c: Demographic Characteristics III

LEVEL OF EDUCATION	FREQUENCY	PERCENTAGE
MSc	16	35.6
BSc	21	26.7
HND	8	17.8
YEARS OF EXPERIENCE		
Less than 5 years	12	26.7
6-10 years	14	31.1
11-15 years	15	33.3
More than 15 years	4	8.9
TOTAL	45	100

Source: Field Survey (2018)

Regarding the educational level of the respondents, most of the respondents have MSc degrees holders (35.6%) followed by BSc degree holders representing 26.7% and HND holders with 17.8%. This is an indication that all the respondents have obtained a higher level of education which makes them well equipped with the public procurement practices. On the subject of years of experience in procurement practice, 15 respondents (33.3%) had 11-15 years of experience, 14 respondents (31.1%) had 6- 10 years of experience, 12 respondents (26.7%) had less than 5 years while 4 respondents (8.9%) had more than 15 years of experience. This suggests that the respondents have been in the procurement practice for fairly a long time hence they are in a good position to offer relevant information regarding the study.

4.3 WEAKNESSES IN EXISTING PROCUREMENT PRACTICES

In order to ascertain the weaknesses existing in the current procurement practices, the study sought to find out how the respondents viewed procurement in their assembly. As indicated in the table below (Table 4.2), 35 respondents representing 77.8% said procurement refers to purchasing goods, works and services, acquiring stationery or asset and inviting suppliers and awarding contracts. 6 respondents (13.3%) understood procurement as acquiring stationery and asset for the assembly whereas 4 people (8.9%) referred procurement to be purchasing goods, works and services. This indicates that respondents have a fair idea of what procurement entails. Kid (2005) explains procurement as purchasing goods, works and services which encompass several activities ranging from identifying a need, inviting tenderers through to its disposal. Thus, it includes activities before and after signing of contract.

From the table, all 45 respondents representing 100% agreed that they adhere to the rules stated in the Public Procurement Act in their procurement practice. This is evident as 37 respondents (82.2%) often use competitive tendering with the reason being that the Act governing the procurement requires all procurement to be carried out in competition unless in special circumstances. 8 respondents (17.8%) also selected Request for Quotation because of the nature of goods procured and the value of the contract. Nevertheless, respondents indicated that they use the other forms of tendering depending on the circumstance surrounding the procurement activity.

Again, studies have shown that the procurement process contributes to the effective and efficient means of achieving the organisation's predetermined goals (Marius, 2017). Therefore, the respondents were asked to rank how significantly these processes contribute to service delivery. *Need identification* was ranked 1st with an RII of 0.970 indicating that for a procurement process to achieve its function effectively and efficiently it needs to first carry out a need assessment. This was followed by *Contract Award and Negotiation* with an RII of 0.960 since this phase is critical to the achievement of the contract goals. Hence, to improve performance (attainment of contract goals); contract should be awarded to qualified supplier/contractor with the necessary negotiations carried out.

Also *Bid Evaluation* and *Bid Submission and Opening* were ranked 3rd and 4th respectively with an RII of 0.955 and 0.940. *Contract Management* was 5th with RII of 0.925 and *Determining the procurement method to use* was 6th with an RII of 0.885. Last but not least *Solicitation documents preparation and publication* was ranked 7th with RII of 0.835 and lastly, *Evaluation of the process* was ranked last (8th) with RII of 0.810.

Table 4.2a: Procurement process

Definition of Procurement	Frequency	Percentage
Purchasing goods, works and services	4	8.9
Acquiring stationery or asset for the assembly	6	13.3
Purchasing goods, works and services, Acquiring stationery or asset for the assembly and Inviting suppliers and awarding contracts	36	77.8

Method of Procurement		
Competitive	37	82.2
Request for Quotation	8	17.8

PPA Application		
Yes	45	100
No	0	0

Procurement Process	Mean	(ΣW)	RII	Rank
Need Identification	4.31	194	0.970	1 st
Contract Award and Negotiation	4.27	192	0.960	2 nd

Bid Evaluation	4.24	191	0.955	3 rd
Bid Submission and Opening	4.18	188	0.940	4 th
Contract Management	4.11	185	0.925	5 th
Determining procurement method	3.93	177	0.885	6 th
Solicitation documents preparation and publication	3.71	167	0.835	7 th
Evaluation of the process	3.60	162	0.810	8 th

Source: Field Survey (2018)

Table 4.2b: Weaknesses in Existing Practices

Do you experience any weakness in the current procurement practice	Frequency	Percent
Yes	32	71.1
No	13	28.9

Source: Field Survey (2018)

The section sought to identify the weaknesses encountered using the traditional procurement system. 32 respondent representing 71.1% agreed that there are weaknesses in the current process whereas 13 respondents (28.9%) disagreed. This is shown in table 4.2b

Also, the study listed some of these weaknesses and respondents were requested to scale their level of agreement and how significant it is on a five point Likert scale. One sample t-test was used to test these weaknesses to determine their significance to the study. One sample t-test is used to compare the mean of a sample to a population mean in order to establish the relative significance of the various factors (Ross & Wilson, 2017). The result from the test is presented in table 4.2c below. The one-sample t-test depicts the mean value (test value) representing the population mean, t , thus the one-sample t-test, df , signifying the degree of

freedom, sig,(2-tailed) which show the significance of the difference (p-value). The p-value determines whether or not the sample mean is statistically significant or significantly different from the population mean, the value is often 0.05 (Ross & Wilson, 2017). Table 4.2c presents the first ten (10) weaknesses that were statistically significant, that is their p-value <0.05.

From Table 4.2c, *Too much paperwork* was ranked as the first weakness existing in the current procurement practice with a mean value of 4.49 and a significant value of 0.000. *Political Influence* with a mean score of 4.44 and a significant value of 0.000 was ranked 2nd. Ranking 3rd was *Slow transaction process/bureaucracy* and *Inadequate funding* with a mean value of 4.38 and a conforming significant value of 0.000. *Lack of monitoring mechanism* was ranked 5th with a mean value of 4.31 at 0.000 significance level. This findings support earlier research by McConnell (2009), who identified that traditional procurement system is immersed with weaknesses including, large volume of paperwork generated, excessive government intervention and slow manual processes leading to slow transacting process.

Again, these weaknesses were also ranked as being statistically significant: *Lack of transparency* in the procurement process (mean score of 4.13), *Lack of accountability* (mean score of 4.04), *Longer time taken to prepare bidding documents* (mean score of 3.60), *Splitting of contract into smaller packages* (mean score of 3.53) and *Poor selection of appropriate procurement method* (mean score of 3.49). Rotich & Okello, (2015) argues that procurement in public sector is characterised by lack of transparency and accountability. Sometimes to avoid using the competitive tendering, public officials tends to split up similar procurement works, goods or services into smaller units in order to reduce the value below the threshold for competitive tendering.

Table 4.2c One-sample test for Weaknesses I

Test Value =3						
Weaknesses in existing procurement practices	Mean	Std. Deviation	t	df	Sig. (2-tailed)	Rank
Too much paperwork	4.49	.75745	13.186	44	.000*	1 st
Political Interference	4.44	.69267	13.989	44	.000*	2 nd
Slow transaction process/ bureaucracy	4.38	.74739	12.366	44	.000*	3 rd
Inadequate funding	4.38	4.59391	2.012	44	.050	3 rd
Lack of monitoring mechanism	4.31	.63325	13.889	44	.000*	5 th
Lack of transparency in the procurement process	4.13	.84208	9.028	44	.000*	6 th
Lack of accountability	4.04	.90342	7.755	44	.000*	7 th
Longer time taken to prepare bidding documents	3.60	.93905	4.286	44	.000*	8 th
Splitting of contracts into smaller packages	3.53	.81464	4.392	44	.000*	9 th
Poor selection of appropriate procurement method	3.49	.81526	4.023	44	.000*	10 th

Source: Field Survey (2018) * depicts p-value <0.05.

4.4 EFFECTS OF THE WEAKNESSES ON PROCUREMENT PERFORMANCE

The second objective of the study sought to determine the effects of these weaknesses on the performance of the assembly. Respondents were asked whether their procurement unit was

functioning properly or whether they are able to achieve their objectives at the end of the process. A majority of the respondents (26) representing 57.8% selected ‘No’ whereas 19 respondents representing 42.2% selected ‘Yes’ (Table 4.3a). In order to establish the significance of this variable the one sample t-test was used. One sample t-test is used to compare a sample mean to a hypothesised mean to determine whether they are statistically significant. This is represented as: Ho (null hypothesis): $U = U_0$: the procurement unit is functioning properly (fairly good) and Ha (alternative hypothesis): $U <, > U_0$: the procurement unit is not functioning properly (not fairly good). With an assumed or hypothesised mean of 3 at a confidence interval of 95%, a statistical t-test was conducted to determine whether to accept or reject the null hypothesis. The result is presented in table 4.3 below.

Table 4.3 One sample t-test – Performance

Test Value = 3							
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	Lower	Upper
Is the procurement unit functioning properly or does it achieve its objective at the end of the process	-19.10	44	.000	-1.422	-1.572	-1.272	

Source: Field Survey (2018)

From the table, it is revealed that p-value (.000) is < 0.05 hence we reject the null hypothesis and accept the alternative hypothesis which state that the procurement unit is not functioning

properly (not fairly good). Thus, the procurement performance was not fairly good as a result of the weaknesses encountered in the process and it implies that it is statistically significant.

In order to analyse the performance of the procurement unit, procurement audit is carried out to ensure that the procurement processes are done in an effective and efficient manner (Etse & Asenso-Boakye, 2014). All the respondents agreed that their procurement unit undertake procurement audit. 22 respondents (48.9%) alleged to carry out procurement audit quarterly, 12 respondents (26.7) carry out audit yearly, 9 respondents (20.0%) carry out audit yearly whereas 2 respondents (4.4%) carry out audit monthly.

Table 4.3a: Procurement Performance I

	Frequency	Percent
Procurement Unit functioning properly		
Yes	19	42.2
No	26	57.8

Procurement Audit		
Yes	45	100
No	0	0

How often procurement audit is carried out		
Monthly	2	4.4
Quarterly	22	48.9

Bi-annually	9	20.0
Yearly	12	26.7

Source: Field Survey (2018)

Based on how efficiently and effectively procurement is carried out, respondents were asked to rank how significant these measures influence their performance. *Procurement of goods, works and service done within approved budget* was ranked 1st with an RII of 0.850, *Completion and Delivery within expected time* was 2nd with RII of 0.845, *Items procured conform to the specification* was 3rd with RII of 0.810 while *End-user satisfaction* was ranked 4th with RII of 0.755. This is presented in the table below. (Table 4.3b)

Table 4.3b: Procurement Performance II

Criteria for performance	Mean	(ΣW)	RII	Rank
Procurement of goods, works and service done within the approved budget	3.78	170	0.850	1 st
Completion and Delivery within expected time	3.76	169	0.845	2 nd
Items procured conform to the specifications	3.60	162	0.810	3 rd
End-user satisfaction	3.34	151	0.755	4 th

Source: Field Survey (2018)

Finally to assess the effects of weaknesses on procurement performance, participants were asked to show their level of agreement with the factors noted as consequences of the weaknesses on performance. Based on the one-sample statistics (4.3c), all the factors were regarded as being the effect of weaknesses on performance. Upon further test using the one sample t-test, the mean score obtained from the one-sample statistics was compared to a

hypothesised mean of 3.00 to test the significance of the factors. Here, all but one factor *End-user or Client Satisfaction* was agreed on as being consequences of the weaknesses.

From table 4.3d, *Project not completed on time or abandoned* was ranked the greatest consequences with a mean of 4.11, *High operational cost of procurement* was 2nd, *Untimely delivery of goods, works and services* was ranked 3rd, *Unable to utilize public funds efficiently* was ranked 4th while *Goods, Works or Services procured not fit for purpose* was ranked 5th. End-user or Client Satisfaction was regarded as not significant since its p-value >0.05. These findings are in line with earlier research undertaken by Ren et al., (2012) which state that most projects take longer periods to complete thus not completed within the contract period and others are not completed at all. They stress on the fact that the initial contract figures are also increased resulting in high operational cost and at the same time the quality of goods, works or services provided are not certain usually they do not fit its purpose. Meenanak, (2018) also supports that disorder in procurement activities result in government not being able to fully utilize their annual budget.

Table 4.3c: One Sample Statistics for Effects of Weakness

Consequences of weakness on procurement performance	N	Mean	Std. Deviation	Std. Error Mean
High operational cost of procurement	45	4.0889	.59628	.08889
End-user or Client dissatisfaction	45	4.1778	4.45834	.66461
Goods, Works or Services procured not fit for purpose	45	3.5556	.84087	.12535
Unable to utilize public funds efficiently	45	3.6000	.68755	.10249

Untimely delivery of goods, works or services	45	3.9111	.76343	.11381
Project not completed on time or abandoned	45	4.1111	.68165	.10161

Source: Field Survey (2018)

Table 4.3d: One-Sample Test for Effects of Weakness

Test Value = 3							
Consequences of weakness on procurement performance	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Rank
					Lower	Upper	
Project not completed on time or abandoned	10.94	44	.000	1.11	.9063	1.31	1st
High operational cost of procurement	12.25	44	.000	1.09	.9097	1.27	2nd
Untimely delivery of goods, works or services	8.01	44	.000	.911	.6818	1.14	3rd
Unable to utilize public funds efficiently	5.85	44	.000	.600	.3934	.807	4th
Goods, Works or Services procured not fit for purpose	4.43	44	.000	.556	.3029	.808	5th
End-user or Client dissatisfaction	1.77	44	.083**	1.18	-.1617	2.52	

Source: Field Survey (2018) Note ** depicts p-value >0.05 (not statistically significant)

4.5 IMPACT (EFFECT) OF E-PROCUREMENT ON PROCUREMENT PERFORMANCE

The section sought to answer the third objective which talks about identifying those weaknesses that can be eliminated or minimised with the application of e-procurement system.

Firstly, the study assessed the respondents based on their knowledge on e-procurement. Respondents were asked if they had any idea about e-procurement and also to select the form of e-procurement they have heard of or are familiar with. The table below (4.4a) shows the responses. 38 participants representing 84.4% agree to have heard about e-procurement especially e-sourcing and e-tendering each signifying 82.2% of the result. Most of the assemblies have website where they advertise to invite prospective bidders to tender for the project. This process is similar to e-sourcing and e-tendering.

Regarding e-Reverse Auction 24 respondents (53.3%) chose 'Yes' whereas 21 (46.7%) selected 'No'. 16 respondents (35.6%) selected 'Yes' and 29 respondents (64.4%) chose 'No' for e-MRO. With Web-based ERP, 21 respondents (46.7%) agreed to have an idea about it while 24 respondents (53.3%) didn't know about it. Concerning e-Information 80% (36 respondents) are familiar with this form of e-procurement whereas 20% (9 respondents) are not familiar with it.

Table 4.4a: e-Procurement

	Frequency		Percent	
Do you have any idea about e-procurement				
Yes	38		84.4	
No	7		15.6	
	Frequency		Percent	
Forms of e-procurement	Yes	No	Yes	No
e-Sourcing	37	8	82.2	17.8
e-Tendering	37	8	82.2	17.8
e-Reverse Auction	24	21	53.3	46.7
e-MRO	16	29	35.6	64.4
Web-based ERP	21	24	46.7	53.3
e-Information	36	9	80.0	20.0

Source: Field Survey (2018)

E-procurement is understood to offer a solution with the intention of automating and streamlining the procurement process in order to make it more efficient and effective. It also believed that the application of e-procurement leads to improved procurement performance (Mose et al., 2013). With the third objective of the study, we identified the weaknesses that can be minimised or eliminated while using e-procurement system. From table 4.4b, all the factors have mean above the test mean of 3.00, hence we can say that by using e-procurement we can eliminate or minimise these weaknesses in the procurement process. Table 4.4c represent the result from test of significance which was conducted to show whether the

difference between the sample mean and the hypothesised mean (population mean = 3) is statistically significant.

All the weaknesses were ranked as statistically significant except *Delays in evaluations of proposal* which had a p-value > 0.05. From the table, we can observe that *Too much paperwork* was ranked 1st with a mean value of 4.51 and a level of significance (p-value) of .000, this means it is statistically significant. E-procurement is believed (Gardenal, 2008) to deal with the too much paperwork associated with the traditional procurement practice by reducing the consumption of paper.

Lack of transparency was graded 2nd with a mean score of 4.22 and it was argued by Neupane et al., (2012) that e-procurement enhances transparency in public service as it helps disclose all the necessary information relating to the procurement to the parties involved. Ranking 3rd was *Slow transaction process* with a mean score of 4.18 with a p-value of .000 making it statistically significant. Hanna, (2010) affirms that e-procurement system greatly simplifies and makes the procurement process faster and easier.

Lack of proper documentation and record keeping was ranked 4th with a mean score of 4.04, *Lack of accountability* was 5th with a mean value of 4.2 while *Longer time taken in preparation of bidding documents* was ranked 6th with a significance level of .000. E-procurement (Rotich & Okello, 2015) enables electronic documentation of the bidding process thereby eliminating improper documentation and record keeping associated with the manual procurement process.

According to table 4.4d, respondents were asked to rate with reference to its importance to the assembly, how these benefits of e-procurement can enhance their performance. Respondents believe that adopting e-procurement will *Ensure a paperless environment* hence it was ranked as very important with an RII value of 0.995. Thus, e-procurement (Hashim et al., 2013) quickens the exchange of data through the internet thereby reducing paperwork indirectly and providing immediate responses.

Greater transparency was ranked 2nd with an RII of 0.985 while *Enhanced monitoring and tracking of applications* was ranked 3rd with an RII of 0.980. To add to this benefit, Neupane et al., (2012) attest that e-procurement enables bidders and public officials to monitor all the procurement process on an e-procurement web portal, which will disclose all the information related to the process. This ensures that the process is transparent and all parties can monitor and track all their applications.

Procurement cost reduction was ranked 4th with RII of 0.970 whereas *Improve accountability* was ranked 5th with RII of 0.965. E-Procurement system assures transaction cost reduction in public procurement and improved accountability since all transactions and outcomes are tracked (Hanna, 2010).

Table 4.4b: One Sample Statistics for Weaknesses

Weaknesses that can be eliminated or minimised whiles using e-procurement	N	Mean	Std. Deviation	Std. Error Mean
Lack of transparency	45	4.22	.79455	.11844
Lack of accountability	45	4.02	.78303	.11673
Longer time taken in preparation of bidding documents	45	3.78	.73512	.10959
Slow transaction process	45	4.18	.80591	.12014
Lack of proper documentation and record keeping	45	4.04	.73718	.10989
Delays in evaluations of proposal	45	4.64	6.19808	.92395
Too much paperwork	45	4.51	.54864	.08179

Source: Field Survey (2018)

Table 4.4c: One-Sample Test for Weaknesses

Test Value = 3							
Weaknesses that can be eliminated or minimised whiles using e-procurement	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference		Rank
					Lower	Upper	
Too much paperwork	18.48	44	.000	1.51111	1.3463	1.6759	1st
Lack of transparency	10.32	44	.000	1.22222	.9835	1.4609	2nd
Slow transaction process	9.80	44	.000	1.17778	.9357	1.4199	3rd

Lack of proper documentation and record keeping	9.50	44	.000	1.04444	.8230	1.2659	4th
Lack of accountability	8.75	44	.000	1.02222	.7870	1.2575	5th
Longer time taken in preparation of bidding documents	7.10	44	.000	.77778	.5569	.9986	6th
Delays in evaluations of proposal	1.78	44	.082**	1.64444	-.2177	3.5066	

Source: Field Survey (2018) Note ** depicts p-value >0.05 (not statistically significant)

Table 4.4d: Benefits of e-Procurement

Benefits of e-procurement	Mean	(ΣW)	RII	Rank
Ensures paperless environment	4.42	199	0.995	1 st
Greater transparency	4.38	197	0.985	2 nd
Enhanced monitoring and tracking of applications	4.36	196	0.980	3 rd
Procurement cost reduction	4.31	194	0.970	4 th
Improve accountability	4.29	193	0.965	5 th
Shortened procurement cycle times	4.27	192	0.960	6 th
Improve efficiency	4.09	184	0.920	7 th
Reduced human involvement in the bidding process	3.96	178	0.890	8 th
Reduction of errors in order transmission	3.89	175	0.875	9 th
Improved supplier sourcing	3.80	171	0.855	10 th

Source: Field Survey (2018)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The study aimed at establishing how public sector procurement can be improved with the implementation of e-procurement. It sought to identify the weaknesses encountered in the traditional procurement and how it can be eliminated or minimised with the application of e-procurement. This chapter encompasses the summary of the findings discussed in the previous chapter, provide a recommendation based on the results and a conclusion to the study.

5.2 SUMMARY OF FINDINGS

The aim of the study was to ascertain how procurement performance can be improved with the implementation of e-procurement. In order to realize this aim, three objectives were set out. The findings gathered on these objectives are outlined below.

The study revealed that the significant weaknesses in the existing procurement practices are *Too much paperwork* (mean score of 4.49), *Political Interference* (mean score of 4.44), *Slow transaction process/bureaucracy* (4.38), *Inadequate Funding* (mean score of 4.38) and *Lack of monitoring mechanism* (mean score of 4.31). Thus, traditional procurement involves lot of paper work which includes purchase orders, supplier responses, invoices, receiving documents. Public officials also manipulate the process in order to favour their preferred supplier/ contractor. The existing process is seen as being slow since it is carried out manually and every phase is subject to critical examination and approval. Public procurement does not have strategy in place to monitor the process.

Again, the study sought to identify the effects of these weaknesses on the performance. It was established that due to the flaws in the procurement process, procurement units are unable to perform their procurement function efficiently and effectively. These include; *Project not completed on time or abandoned* (mean score of 4.11), *High operational cost of procurement* (mean score of 4.09), *Untimely delivery of goods, works or services* (3.92), *Unable to utilize public funds efficiently* (3.60) and *Goods, works or services procured not fit for purpose* (3.56).

Also, it was observed that these weaknesses identified may be eliminated or minimised by the application of e-procurement process. The study indicated that *Too much paperwork, Lack of transparency, slow transaction process, Lack of proper documentation and record keeping, Lack of accountability* and *Longer time taken in preparation of bidding documents* are the significant flaws that can be eliminated or minimised with the use of e-procurement system.

In a nutshell, the study sought to identify how public procurement performance can be improved with the implementation of e-procurement. It was established that weaknesses in the current procurement practice affect the procurement performance significantly. It was also revealed that the application of e-procurement system can minimise or eliminate such weaknesses. Performance is seen as the process whereby organisations achieve their objectives effectively and efficiently. Implementation of e-Procurement is perceived to improve the way in which organisations achieve their goals at the end of the procurement process thereby improving their performance.

5.3 CONCLUSION

Public Procurement is the means by which government purchase the goods and services needed to carry out its function. The public procurement process has been seen as an area that needs critical attention since it is shrouded with flaws which hinder their performance thus; they are unable to achieve their goals. The study also revealed certain weaknesses that affect the performance of the assembly and it was realised that these weaknesses affect the way in which the assembly carries out it procurement efficiently and effectively.

E-procurement has been recognized as a means of eliminating or minimising the weaknesses encountered whiles using the traditional (manual) procurement. It ensures a paperless environment, greater transparency, accountability and also ensures the process is carried out in a fair and non-discriminatory manner. Thus, using e-procurement enables the assembly to fulfil the object of Public Procurement and also improve their performance.

Therefore, in order to achieve their goals e-procurement should be implemented along with a complete reform of the procurement process.

5.4 RECOMMENDATION

5.4.1

Regarding the findings obtained, the study recommends that e-procurement should be employed and experts in this area should be engaged to help solve or minimise these challenges or weaknesses identified in the study.

5.4.2

Also, since public procurement is a government activity the study recommends that the government should support the implementation of e-procurement as e-procurement promises to enhance procurement performance. The staff should also be given training accompanied with the necessary resources needed to undertake this course.

5.4.3

Further research can be undertaken to assess the readiness and challenges associated with the implementation of e-procurement in the public sector.

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APPENDICES

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

COLLEGE OF ART AND BUILT ENVIRONMENT

DEPARTMENT OF BUILDING TECHNOLOGY

Topic: **IMPROVING PROCUREMENT PERFORMANCE IN THE PUBLIC
SECTOR WITH THE IMPLEMENTATION OF E-PROCUREMENT**

RESEARCH QUESTIONNAIRE

This questionnaire seeks to ascertain how public sector procurement can be improved with the implementation of e-procurement: a case of Kumasi Metropolitan Assembly, Sub Metro and other Municipal Assemblies (Bantama, Nhyiaeso, Kwadaso, Oforikrom, Asokwa, Tafo, Suame, Ejisu and Juaben). The data collected shall be used strictly for academic purpose and all information would be kept confidential. The researcher would be much grateful if you could kindly provide answers to the questions to assist in the study. Thank you.

Please tick [] where appropriate and fill in the blank space where necessary.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Gender: Male [] Female []
2. Name of Assembly:
3. Position Held:
4. Please indicate your educational level:
MSc [] BSc [] HND [] Technician (CTC I, II and III) []
Others please specify
5. Please indicate your years of experience in the procurement practices:
Less than 5 years [] 6 – 10 years [] 11 – 15 years [] More than 15 years []

SECTION B: WEAKNESSES IN EXISTING PROCUREMENT PRACTICES

6. What is procurement all about in the assembly?
- i. Purchasing goods, works and services.
 - ii. Acquiring stationery or asset for the assembly
 - iii. Inviting suppliers and awarding contracts

- a. I only []
- b. II only []
- c. III only []
- d. I & II only []
- e. II & III only []
- f. All the above []

g. Others specify

7. What method of procurement does the entity often use?

- Competitive tendering []
- Restricted tendering []
- Two – stage tendering []
- Single source tendering []
- Request for quotation []

Others specify

8. Why do you use the method you chose in Q7 above?

.....
.....

9. Do you apply the rules and regulations defined in the Public Procurement Act in procuring goods, works and services for your assembly?

Yes [] No []

If No, what is/are the reason(s)?

It not easily accessible by the assembly []

Rules and regulations are not clear, consistent and comprehensive []

The laws may be too rigid []

All of the above []

Others, specify

10. Please indicate how often these procurement processes are used by the assembly for its procurement activities (goods, works and services), using a scale of 1-5, where 1-never, 2- rarely, 3- sometimes, 4- often and 5-always

Procurement Process	1	2	3	4	5
• Need Identification					
• Determining procurement method					
• Solicitation documents preparation and publication					
• Bid Submission and Opening					
• Bid Evaluation					
• Contract Award and Negotiation					
• Contract Management					
• Evaluation of the process					
Others please specify					

11. Do you experience any weaknesses in the current procurement practices?

Yes [] No []

12. If yes, what are some of the weaknesses you experience in your assembly?

.....

13. To what extent do you agree with the following statements as weaknesses associated with the traditional procurement process, please tick [√] using a scale of 1 – 5 where 1=strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree

Weaknesses associated with procurement practices	1	2	3	4	5
• Poor selection of appropriate procurement method					
• Lack of transparency in the procurement process					
• Political Interference					
• Lack of expertise in preparing bidding documents (lack of qualified procurement personnel)					
• Longer time taken to prepare bidding documents					
• Lack of need assessment(Poor procurement planning)					

• Slow transaction process/ bureaucracy					
• Poor selection criteria for evaluation panel members					
• Evaluation team members' lack of expertise in tender evaluation					
• Poor interpretation of evaluation criteria					
• Non- compliance with the regulations					
• Delay in project implementation					
• Lack of monitoring mechanism					
• Lack of accountability					
• Splitting of contracts into smaller packages					
• Difficulty in searching information from manually maintained and massive archives. (Poor records management)					
• Delays in evaluations of proposal					
• Sale of bidding documents to one supplier/contractor					
• Inadequate funding					
• Too much paperwork					
Others, please specify					

SECTION C: EFFECTS OF THE WEAKNESSES ON PROCUREMENT PERFORMANCE

14. Is the procurement unit functioning properly or does it achieve its objective at the end of the process?

Yes [] No []

15. How would you rate the assembly in performing its procurement efficiently and effectively? Please tick [√] using a scale of 1 –5, where 1= poor, 2= bad, 3= good, 4= very good and 5 = excellent.

Criteria for performance	1	2	3	4	5
• Procurement of goods, works and service done within the approved budget					
• Items procured conform to the specifications					
• End-user satisfaction					
• Completion and Delivery within expected time					

16. Does the assembly undertake procurement audit to assess its performance?

Yes [] No []

17. If yes, how often do you carry out the audit?

Weekly []
 Monthly []
 Quarterly []
 Bi-annually []
 Yearly []

Others, please specify

18. If no, why?

.....

19. To what extent do you agree that these factors are the consequences of weaknesses on the performance of the assembly, Please tick [√] using a scale of 1 – 5 where 1=strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

Consequences of weakness on procurement performance	1	2	3	4	5
• High operational cost of procurement					
• End-user or Client dissatisfaction					
• Goods, Works or Services procured not fit for purpose					
• Unable to utilize public funds efficiently					
• Untimely delivery of goods, works or services					
• Project not completed on time or abandoned					
•					
• Others, please specify					
•					
•					
•					

SECTION D: IMPACT OF E-PROCUREMENT ON PROCUREMENT PERFORMANCE

E-procurement basically involves carrying out the procurement process electronically by means of the internet. E-procurement is believed to offer a solution which aims at automating and streamlining the procurement process in order to make more it efficient and effective.

20. Do you have any idea about e-procurement?

Yes [] No []

21. If yes, which of these forms of e-procurement have you heard of or familiar with?

Forms of E-procurement	Yes	No
e-Sourcing - identifying new suppliers using Internet technology		
e-Tendering - sending requests for information and prices to suppliers and receiving the responses of suppliers using Internet technology.		
e-Reverse Auction - sellers bid for the offer by lowering their prices till no further reductions.		
e-MRO - this is the process whereby companies create and approve purchasing requisition, place an order and receive goods and services by using software based on the internet. It usually for indirect items such as computers, staplers, office furniture		
Web-based ERP - this is the process whereby companies create and approve purchasing requisition, place an order and receive goods and services by using software based on the internet. It used for good and services that are directly related to the production of finished goods.		
e-Information - gathering and distributing purchasing information both from and to internal and external parties using Internet technology).		

22. To what extent do you agree that these weaknesses can be minimised or eliminated with the application of e-procurement forms, please tick [√] using a scale of 1 – 5 where 1=strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

Weaknesses that can be minimised or eliminated whiles using e-procurement	1	2	3	4	5
• Lack of transparency					
• Lack of accountability					
• Longer time taken in preparation of bidding documents					
• Slow transaction process					
• Lack of proper documentation and record keeping					
• Delays in evaluations of proposal					
• Too much paperwork					
•					
•					

23. E-procurement promises to enhance procurement performance because of its ability to achieve the objectives of the procurement process. Below are some of these benefits, on a scale of 1-5 tick each item in reference to its importance to the assembly. 1- not important, 2- slightly important 3- moderately important, 4- important and 5- very important.

Benefits of E-procurement	1	2	3	4	5
• Greater transparency					
• Improve accountability					
• Improve efficiency					
• Shortened procurement cycle times					
• Procurement cost reduction					
• Enhanced monitoring and tracking of applications					
• Reduction of errors in order transmission					
• Improved supplier sourcing					
• Reduced human involvement in the bidding process					
• Ensures paperless environment					

24. Kindly put down any additional comments:

.....

.....

.....

Thank you for your participation.