KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

TOPIC:

POTENTIAL CHALLENGES IN E-GOVERNMENT PROCUREMENT IMPLEMENTATION IN MMDAs IN GREATER ACCRA REGION
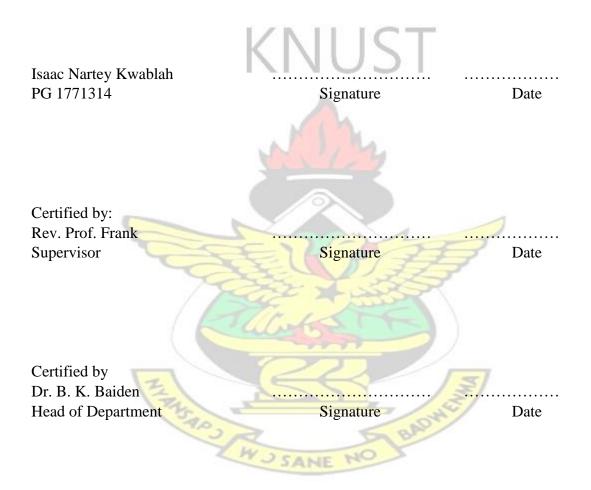
BY

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MASTERS OF SCIENCE IN PROCUREMENT MANAGEMENT

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DECLARATION

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

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ABSTRACT

Procurement is a necessary part of government business which cannot be underemphasized. In recent times, Electronic Government Procurement (e-GP) has turned out to be a paradigm shift from the traditional manual approaches to procurement in many countries. In Ghana, government has started putting structures and systems in place to support the introduction and implementation of e-Government

Procurement meant to enhance the country's procurement processes and block the financial loopholes in the already established manual system of procurement. It is however an undeniable fact that with the introduction of this new technological novelty in Ghana, there might be potential challenges which can profoundly affect the success of the implementation if not handled properly. As a prelude to the full roll out of the new system, there has been an urgent need to carry out a lot of background preparation towards its introduction and adoption. With emphasis on the critical success factors to the implementation of e-procurement, this study explored ways to overcome the potential challenges that might rear their head during the implementation in the MMDAs in the Greater Accra Region (GAR) of Ghana. There are sixteen (16)

MMDAs in GAR comprising two (2) Metropolitan Assemblies, nine (9) Municipal Assemblies and five (5) District Assemblies. The study is exploratory in nature and makes use of both primary and secondary data. The Census method was employed in collecting data from the various MMDAs. Generally the study concludes that for electronic procurement implementation to be successful in Ghana, human resource and technological logistics, change management programme, top management support, security, user uptake and training among others must be critically looked at and the shortfalls addressed.

DEDICATION

This work is dedicated to the two loving women in my life, my mum Diana Lanni Kwablah and my wife Pearl Emefa Kwablah for the immeasurable support and the can-do-it spirit they gave me when the going got tough. It is also equally dedicated to my sons Kayden and Jaiden Kwablah habouring the hope and the belief that the divine Lord will give them the grace to do more to surpass this work.

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To my close friend – Edward Asafo-Adjei for your immense assistance towards research work in this area of study.

Finally to God Almighty for his assured love and faithfulness towards me. God, I pledge my allegiance.

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LIST OF ACRONYMS/ABBREVIATIONS

PPA - Public Procurement Authority

E-GP – Electronic Government Procurement

MMDAs – Metropolitan, Municipal and District Assemblies

AMA – Accra Metropolitan Assembly

TMA – Tema Metropolitan Assembly

GaCMA - Ga Central Municipal Assembly

AdMA - Adentan Municipal Assembly

GaWMA - Ga West Municipal Assembly

GaEMA - Ga East Municipal Assembly

GaSMA - Ga South Municipal Assembly

LEKMA - Ledzokuku-Krowor Municipal Assembly

LaDMA - La Dade-Kotopong Municipal Assembly

LaNMA - La Nkwantanang-Madina Municipal Assembly

AshMA - Ashaiman Municipal Assembly

KKDA - Kpone Katamanso District Assembly

SODA - Shai Osudoku District Assembly

AEDA – Ada East District Assembly

AWDA – Ada West District Assembly

NiPDA – Ningo Prampram District Assembly

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Background to the study

With the revolution of using ICT to make available services by government, egovernment is gradually being embraced by governments and citizens all over the world. E-governance, which has become a global electronic transformation, has come to replace in many cases the traditional setting of public administration by employing electronic means of providing services of government as well as information to the public. According to (Brown, 2005), this innovative change has resulted in the provision of improved services to clients and the populace. It has clearly steered improvements in the governance process resulting in; savings in time as a result of the delivery of services through a distinct window, enhanced workplace as well as data management, increasing transparency and reduction in corrupt practices; plus, better outlook and improved behaviour in task control capability of industry workforces (Monga, 2008).

The use of the Internet, digital connectivity in providing enterprise platforms resulting in the elimination of many physical barriers is exposing many corporate establishments and organization to new frontiers in the e-commerce and e-business arena. Most public organisations have been jolted into rethinking and reengineering hierarchical, bureaucratic organizational models so as to remain competitively relevant. Indeed, many public organisations are confronted with the difficulties of introducing revolutionary concepts to rapidly deliver government businesses as well as offering a resourceful and profitable services info and understanding in government operations.

A visit to most government ministries, departments and agencies in Ghana is frustrating; it is associated with much paperwork, extensive backlogs, long bureaucratic

administrative processes, unrefreshing and small office spaces and many hindrances. It is encouraging however that, recent changes in governance policies in Ghana has brought in its wake many potentials due to information Communication Technology (ICT) as well as e-business prototypes resulting in the re-engineering of processes and procedures to fit with the goals and aspirations of the populace by providing goods, services as well as improved organisational competencies.

Of the several e-government models, it is worth noting that e-procurement has become very popular to implement in both government and private enterprises. It has been recognised that the upsurge of e-commerce globally to USD 12.8 trillion in 2006, has more or less pushed countries to adopt e-government procurement (e-GP) in transforming the existing procurement systems (PPAE-Bulletin 2013 Vol. 4).

According to Moon (2005), e-procurement involves acquisition of goods or services through electronic means. The wide-ranging procedures in which governments adopt IT methods and internet connectivity to formally acquire goods or services is referred to as e-government procurement (e-GP) (PPAE-Bulletin 2013).

When e-procurement are effectively deployed in enterprises and organisations, several benefits including the following are realised:

- Reduction or elimination of ad hoc purchases
- Reduction of transaction costs
- Improved process efficiency
- Improvement in contract administration and management
- Reduction in cycle durations
- Savings in inventory costs

In reality, e-procurement can transform business delivery to the end-beneficiaries and users thereby releasing staffs along the value chain for planned value-creation tasks, solutions to facilitate, integrate and streamline the whole procurement practices – from preliminary growth through contract execution to payment" (Laub, 2001).

In Ghana, public procurement is carried out employing the old-style approach involving the use of paper. Procurement professionals, coming from donor organisations, have passionately expressed serious reservations about the gargantuan corruptions that characterize the use of the existing procurement system in Ghana. In recent times however, they have resigned and limited comments to the fact that, Ghana's procurement system can only be cleaned if an electronic procurement system modelled on limiting humans involvements to the barest minimum is considered. Certainly, Ghana has been and still is one of the most corrupt countries in the world according to the yearly Corruption Perceptions Index (CPI) published by Transparency International (Transparency International, 2014). Although corruption is believed to be existing in all facet of human activities (Sahr, 1998), Lengwiler and Wolfstetter (2006) quoted in Ameyaw, et al. (2012) espoused that the substantial cash leaking from government operations through corruption in public procurement is projected between $390-400 billion per annum worldwide. Though it is projected that corruption in Sub-Saharan constitute close to 70% of all government contracts and contributes to about 20-30% increase in the cost of projects (Ameyaw *et al.,* 2012). Mawenya (2008), estimates that the cost of corruption in the whole of Africa is $148 billion a year. This is very frightening at the same time disheartening considering the numerous developmental challenges Africa as a continent is confronted with.

The news item from the Ghana Web News (2015) reports that e-government procurement (e-GP) is meant to transform and improve the procurement processes in Ghana by blocking the many financial loopholes, as well as providing improved competitiveness by enabling efficient service provisions to end-uptakers commenced as a pilot in January 2014. The start of the adoption of the electronic procurement system in Ghana is anticipated to bring respites to suppliers who are regularly denied the chance of getting contracts because of the activities of corrupt individuals in the procurement value chain.

The Implementation of (IT)-enabled processes will take Ghana's procurement activities into unchartered waters. The huge successes to be tapped rest on the acceptance and adoption of the many transformations that will be unleashed coupled with the difficulties that will come in the wake of phasing out the traditionally diehard paper system end-user. Alshawi (2007) and Nitithamyong and Skibniewski (2007), suggested that government as well as organizations must rapidly familiarize and discover new ways of doing things in this global village to remain economically resourceful and relevant.

Although, several prospects exist for improvements, most industry players are very apprehensive in sanctioning the roll-out of electronic technologies in their respective organisations (Zheng et al., 2004). According to Dias (2002), accepting electronic means in facilitating businesses operations opens many doors which demand special attention. Likewise, Venkatesh et al. (2003) advocated that high-tech revolutions need to be embraced and really used. In fact, issues on user behaviour has occasion in theories such as the Technology Acceptance Model (TAM) focusing on the end-user acceptance of high-tech innovations, of which electronic procurement is an example.

1.2 Problem statement

In the pursuit of implementing electronic government procurement (eGP), it has become necessary for the Government of Ghana to put in place a collaborative enabling environment and design architecture capable of offering adequate capacity in supporting the new system to be introduced. From the Country Assessment Report of Ghana, as cited by Ameyaw et al. (2012), the human resource and infrastructure deficit in the various MMDAs has been a major bottleneck which has plagued the introduction and implementation of the existing manual/traditional procurement system. The greater fear for most stakeholders is that, the implementation of the e-GP might suffer similar fate if the required procurement infrastructure, systems and human resource

requirement are not put in place. Further, very little exist of empirical research into the factors that promotes successful implementation of e-procurement in Ghana which might act has learning curve in the takeoff of the e-GP.

The introduction of this novelty procurement system coupled with the several issues surrounding its successful implementation in Ghana – particularly in MMDAs –has led to the desire to carry out a study in the light to explore the potential challenges to be encountered in e-GP and explore the potential of implementing e-government procurement in MMDAs.

1.3 Research questions

The study is guided by the following research questions:

1. What factors have been identified in previous research and literature as essential for the successful application of e-procurement

2. Do the MMDAs have the infrastructure and human resource to support effective application of e-procurement?

3. What are the infrastructure and human resource deficit to be filled for the adoption of e-procurement?

4. What are the success factors available at the MMDAs that can be adopted during e-GP implementation

1.4 Aim of the study

The aim of the study is to explore the potential of implementing e-government procurement in MMDAs.

1.5 Objectives of the Study

The following research objectives were set in order to achieve the aim

1. Review from literature and previous research, critical factors that promote successful e-procurement

2. Identify the infrastructure and human resource (HR) available at MMDAs for eprocurement

3. Determine the gaps in the infrastructure and HR needed to be filled for adoption of e-procurement

4. Identify the factors within the MMDAs that can impact the adoption of eprocurement.

1.6 Significance of the study

The research has a number of benefits. Generally, there is information that public electronic procurement will be fully operational very soon in Ghana following the

ongoing pilot. e-GP will open so many doors to limitless opportunities in the area of governance and business in the MMDAs; hence, the study which principally seeks to explore the challenges to its implementation and the factors necessary to the successful implementation. The study is of immense importance because it serves as an exercise to provide bottom up information which will aid in the implementation of the e-GP in the MMDAs.

The study seeks responses to four study questions all of which are significant. To begin, the study ascertains from previous research and literature factors key to the effective implementation of e-GP. Secondly, the research finds out if human resource capacity as well as logistics are vital to the successful implementation of eprocurement. Hence, finding out if MMDAs have requisite human resources capacity plus logistics is important in the sense that it provides information as to how ready they are for the e-procurement adoption. Again, finding out the infrastructure and human resource deficit in the MMDAs will reawaken them to fill the gaps and adequately position themselves for its implementation. Lastly the study finds out the success factors available at the MMDAs that can be adopted during e-GP implementation. The outcome of the study serves as empirical support to existing studies on eprocurement implementation. Again, it serves as a source reference to other works.

1.7 Scope of the study

The study explores the challenges with respect to the implementation of e-government procurement in MMDAs in Ghana. There are several ways in which the successful eprocurement implementation in Ghana could be explored. However, this study only concentrates on the MMDAs and suppliers as end users and focuses on ascertaining whether the MMDAs have the key human capital as well as logistics; examining the

opinions of principal players in the MMDAs with respects to the successful implementation of e-procurement.

1.8 Research Methodology

The methods of data collection, type of data collected and methods of data analysis are discussed under this section. The use of quantitative and qualitative methodological approaches and research techniques were discussed in this study, especially in the data collection of data.

The research is explorative in nature which seeks to explore the challenges to the implementation of e-government procurement in MMDAs in Greater Accra Region. The target respondents for the study are the lead procurement officers in the MMDAs in Greater Accra Region. All the above respondents, who were selected using Census method, constituted the target for the study because; they were directly involved in the subject under investigation and provided very useful information to achieve the objectives of the study. Both primary and secondary data were used in this study. To obtain primary data, a research questionnaire were designed and administered on the respondents. The questionnaires were closed ended questions framed in a simple language so that the required responses will be elicited. The Statistical Package for the Social Sciences (S.P.S.S) version 17 will be used to analyze information from respondents.

1.9 Research Outline and Organisation

This study was organized into five chapters as follows:

Chapter One introduced the main aim and objectives of research, statement of the problem, the research questions, the aim and objectives of the study and scope of the research.

Chapter Two will encompass the review of literature. These literatures shall be reviewed and attempt made to tie them together. It will focus on the conceptual to theoretical aspect of e-procurement in the public Sector.

Chapter Three showed the research methodology employed for this research in order to achieve the required objectives. Chapter three also covered the study area, the study population, the sampling procedure, data sources, instrumentation and data analysis.

Chapter Four showed analysis, description and discussion of research results. The appropriate relevant statistics used in analyzing and interpreting the collected data was discussed in this chapter.

Chapter Five summarized the conclusions and recommendations of the research.

1.10 Limitation to the study

A number of factors serve as weaknesses to the study. These are

1. Many of the participants felt unwilling to avail themselves to provide responses to questions throughout questionnaire administration.

2. The research used a close-ended questionnaire for data collection and this has a weakness of limiting the amount of data collected. There is likelihood that relevant data may not have been captured because of the use of the close-ended questionnaire

3. The research covers MMDAs in the Greater Accra Region. However, the analysis and findings are related to other MMDAs across the country. Selecting and contacting only MMDAs in the Greater Accra Region may not be a true representation of the views of all the MMDAs in Ghana

To overcome the restrictions, the respondents were guaranteed that the information were exclusively used for academic exercise.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction to the chapter

The study explores the challenges in e-GP implementation in MMDAs in Ghana. e-GP is yet to be fully operational in the procurement processes in Ghana. In view of this, the chapter seeks to review published literature with respect to the implementation of e-GP by extensively looking at definitions and relevant concepts on the subject matter. The review examines electronic procurement, human capital and high-tech logistic required for implementing e-procurement, as well as the potential challenges to be encountered with the implementation of e-procurement. In addition, it will look at the security and legal issues which impacts on the implementation of e-procurement.

2.2 Procurement

Procurement has many different definitions based on the perspective from which one looks at it, although there are numerous parallels in the meaning in relation to the content. Some of the challenges encountered in defining 'procurement' is that it is not associated with a distinct activity or procedure. It covers a comprehensive array of proceedings from the documentation of a necessity for service or good to its removal or ending. Procurement covers happenings prior to and after the execution of the contract by parties

to the contract as well as activities in the ratifications and amendments of agreements and the overall contract management and administrations activities (Anonymous, n.d), defines procurement simply as the acquisition of services, works or goods from outside sources by a buying institution within an accepted legal framework.

The use of the word 'acquisition' for most authors covers conceptualization, commencement, plan, expansion, examination, contracting, construction, distribution, Logistics Support (LS), alteration, and removal. Kidd (2006) however lays emphasis on the commerce sides of procurement and defines it as the business management function that include documentation, sourcing, access and management of the outside resources that an organization wants or might want to buy to achieve its planned specific objectives. The Public Procurement Authority, Ghana delineates procurement as the practice of acquiring works, services and goods and it also covers purchases from third parties. Kidd (2006) as cited by Mulch (2009) defines procurement as a "formal process by which many organizations obtain goods and services".

2.2.1 Public Sector Procurement

Thai (2001) noted that Public sector procurement is a function which government can do without. In public sector procurement, government departments, agencies and local administrative authorities buys goods, services and works from the private sector, creating an important market expansion and development. Public sector procurement is huge and multifaceted and contributes to between 20 and 30 percent of GDP (Thai & Grimm, 2000). Public sector procurement operates within a formal regulatory legal framework as well as rules recognized to achieve social (Tether, 1977) and financial (OCIO, 2000), economic audit requirements. Public procurement normally involves goods, works, services contract in the public sector as well as supply contracts. The European Union Procurement procedures, the Commonwealth Procurement Procedures

as well as the United Nations Procurement Procedures offer guidelines to be followed in procurement so as not to be entangled in the web of procurement malfeasance. Government procurement is justly so skewed towards near attainment of value-formoney. The procurement processes in the public sector generally consist of eight main steps comprising planning, sourcing (soliciting and evaluation of tenders), contracting, contract management, utilization (inventory control and management), maintenance, disposal and evaluation (review of the performance of the procurement function). The procurement procedures are deliberate such that it does not lead to conferring the contract on the tenderer with the lowest price or best offer but also measures and considers the comparative risk of the offer.

2.2.2 Legal Framework of Public Procurement

The Public Procurement Law, 2003 (Act 663) is an all-inclusive regulation intended to eradicate the inadequacies as well as the administrative weaknesses which has characterized procurement in Ghana. The Act dwells on the five elementary pillars on which most public procurement is founded (World Bank, 2003). These are: transparent and standardized procurement procedures; transparent legal and institutional framework; standard tender contract documentations; independent controlled system, skilled procurement workforce; and anti-corruption measures. The Public Procurement Board draws its authority from the Public Procurement Act of Ghana, Act 633 which duly establishes it and mandates it to see to the full administration of public procurement in Ghana.

Public procurement in Ghana is administered by the following legal framework.

• The Public Procurement Act (Act 663 of 2003)

• Public Procurement manual;

• Public Procurement regulations,

- Guidelines to assist public procurement practitioners and

- Standard tender documents

All the above complements each other in the use of public procurement, though the Public Procurement Act 663 overrides the other four parts of the framework. As a result, whenever there are conflicts in the use of the other parts of the structure, the Act is consulted.

The Public Procurement Act 663 in addition to establishing the Public Procurement Board (PPB) also establishes Entity Tender Committees (ETCs) and Tender Review Boards (TRBs). It indicates in unambiguous terms the applicable section of the Act to be employed when seeking clarification in procurement methods and thresholds, procedures, appeals and complaints resolution procedures and disposal of stores.
[Source: PPA Regulations (2003)]

2.3 Electronic (E) Procurement

The word e-procurement, from Du (2007) has been extensively used. Nevertheless its proper meaning has not been correctly appreciated since no electronic procurement method completely imitates or reflects each stage of the traditional procurement procedure.

Mitchell (2000) as cited by Andersen (2004), defines e-procurement as the procedure by which electronic means are employed in acquiring services and goods required for an organisation. Przymus (2003) however defines procurement as the acquisition of services and goods without employing paper means. In Przmus's definition, emphasis is placed on the non-usage of paper processes but no mention is made of the use of information communication technology. Minahan and Degan (2001), stressed the fact that e-

procurement is not an approach; however it employs electronic medium to carry out procurement processes.

E-procurement offers a medium for business interactions as well as providing avenues for businesses who might want to improve the efficiency of their business processes by cutting cost in the delivery of client focused services. In electronic government procurement (e-GP), the e-GP structure offers an on-line medium to carry out procurement activities by the Agencies. The e-GP structure is a distinct web gateway from where procurement agencies and procurement entities are able to undertake procurement activities employing internet enabled web platforms.

2.4 Critical Success Factors (CSFs) of e-Procurement Implementation

Butler & Fitzgerald (1999) mentions that, critical Success Factors (CFSs) denotes actions that guarantees improved performance delivery of an organization. Electronic government procurement (e-GP) has presently become one of the topical issues in several discussions on e-Governance. Short of a set of CSFs, it appears difficult to catalogue study growth and successes chalked in the arena of e-procurement especially in the public sector. Ten (10) critical success factors are identified and discussed as follows

2.4.1 End-User Uptake and Training

E-procurement is a novelty in the Ghanaian Public procurement field involving the introduction and implementation of innovative technologies in a bid to modify or replace the manual procurement system. The World Bank (2003), makes reference to the essence of developing the skills and knowledge base of the procurement practitioners in procurement and the use of several procurement tools and softwares critical to smooth operation of e-Procurement implementation. As mentioned by Consortium for Global Electronic Commerce (CGEC) (2002), end-users can understand the instant benefits of

the e-Procurement system when they appreciate the working functionalities. The lack of skills to effectively use e-GP systems has been specifically acknowledged as a serious problem by various researchers (e.g. Heeks, 1999; Ho, 2002) affecting the adoption of e-GP. The success of the implementation of e-GP does not only depend on the type of technology being introduced but also is contingent on end-users.

2.4.2 Supplier Adoption

The degree and early involvement of suppliers in e-Procurement application is directly connected to the success of the process. Birks et al., (2001) points to the fact that, engaging the suppliers in a demonstration and discussion of the changes that might occur during the implementation is very important. According to the OSD (2001), creating a feedback system for suppliers will permit the procurement entities to track some areas for special attention as well as regulate such areas appropriately. The early involvement of the suppliers will remove the perception mostly haboured that the introduction of eGP is to force down prices since they are uncertain about the gains to be realised (ECOM, 2002).

2.4.3 Compliance with Best Practice

Planned benefits can only be attained in e-procurement if the users and buyers resolve to work according to best industry and professional practice. Birks et al. (2001) recommend that the industry case procedures for e-Procurement must contain identification of drivers, understanding the starting point, benefits, approaches, affordability, risks, and benefit realization. To make sure that the reasons for going electronic is attained, the implementation of the e-procurement system should conform to best industry standards and tailored to suit the business case.

2.4.4 System Integration

According to Dawes (1996) Information system integration, offers several opportunities to organisations to interconnect to share information and resources drawn from different sources to make well-meaning decisions. Gil-García et al. (2005) also opined that the sharing of information as well as information system (IS) incorporation permits executives to work with similar info drawn from manifold dissimilar sources. KPMG (2001), further explains that determining the degree of e-procurement solutions with existing IS is very important.

2.4.5 Security and Authentication

Businesses require a secure environment through dependable high-tech solutions to function properly in the delivery of their business functions. Mwakalinga and Yngström (2004) advocated that the electronic delivery of services is the key objective of most establishments. In such an open and competitive environment access control and authentications mechanisms are essential for the success of IS. According to Signore et al., (2005), the main problem in applying any e-government (e-Gov) system is the concern for confidentiality and privacy of the information on the system. Because of the sensitivity of the government data and the legal nature of orders and payments, security of data is critical in e-Procurement systems. The safety of information is very critical in any e-Procurement systems. The system requires to have instruments for classifying and validating the operator who initiates the directive so that suppliers are not disturbed about the authenticity of the request.

2.4.6 Re-engineering the Process

Considerable successes have been chalked from e-procurement on the bedrock of reengineering the commerce solutions like procurement business processes as well as succeeding reforms in worker performance and relations with suppliers (Attaran and

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Attaran, 2002). e-Gov projects and thus e-procurement have a cumulative effect on how business processes evolve. E-Procurement ought to be viewed as a supportive system to make the process of procurement more efficient (ECOM, 2002). In situations where the current procurement process may oppose the objectives and purposes of the new system, the adoption of e-Procurement will need the re-engineering of current procuring processes (KPMG, 2001).

2.4.7 Performance Measurement

Continuous improvement of the key business processes is essential to the successful delivery of projects. Measurement defines positive behaviour and effecting changes contributing to success (Birks et al., 2001). CGEC (2002), advocated that an inadequate measurement capacity results in only limited tools for organisational assessments. It is significant to name key performance indicators (KPIs) at the beginning of every project so as to ensure that they are monitored and throughout delivery phase.

2.4.8 Top Management Support

For every organisation, the role of top management cannot be underestimated and it is a major pillar in the success story of the company. Indeed for e-procurement implementation, the involvement of senior management is likewise very critical (AGV, 2003). In this respect, a clear directions and monitoring is needed from top management to ensure that the procurement reforms being introduced in the organization are well appreciated (S&A, 2003). Additionally, the senior management must be setting the agenda in rallying and bringing and directing all energies towards embracing the change process.

2.4.9 Change Management Programme

Change management programme is key in handling and accommodating the behavorial and psychological differences that might rear its head during the e-GP implementation. When change processes are not meticulously planned and managed the implementation process will be fraught with problems leading to the depletion of the scarce resources and the reduction of workers morale. The World Bank (2006) has contended that the overall benefits from e-GP will only be appreciated when the changes in the public procurement processes sits in. According to Kalakotaetal (1999), the establishment and execution of an e-business scheme is inseparably connected to change management". The issues surrounding institutional and organisational changes can hardly be understood within public sector organisations (UNDP, 2006). Organisational leaders with responsibilities to manage changes are engaged in "a great venture of exploration, risk, discovery, and change, without any comprehensive maps for guidance" (Senge, 1999).

2.4.10 e-Procurement Implementation Strategy

The implementation processes in terms of e-procurement have been severally defined.

For most IS literatures, a typical definition of implementation is "an effort beginning with the first thought of developing a system and not ending until the project is completed or abandoned" (Ginzberg, 1979:408). Though, Chan and Swatman (1998) consider that implementation of IS is appropriately defined as the process of administering organisational change.

The making of standard approaches preceding the placement of the e-Procurement key to an imperative CSF (Neef, 2001). The Asian-Pacific Economic Cooperation (APEC) (2003) advocated numerous application frameworks, with simple steps but requiring committed teams to accomplish.

2.5 Technological Logistics for Participation in e-Procurement

The facilities necessary for the effective implementation of e-procurement method might be divided into three distinct groups: software, hardware and internet facilities.

From Seah (2004), hardware facilities required to provide support to e-procurement comprises computer systems as well as a devoted server that accomplishes all client computers on the internet, admission control as well as managing of information transfer. The softwares regularly desired comprise the operating system of the server, the user operating system, as well as other business propriety software suitable for experts in the fulfillment of their functions.

Together, the added software services needed may comprise information encryption structure, an electronic autograph capture and bulk software mailing. According to Oyediran and Akintola (2011), connection of internet is a crucial necessity required to give the e-procurement web gateway, the device also offers interdepartmental collaboration. The features of the internet link has to be such that it is quick, secured as well as dependable to present an efficient electronic procurement process. The type of connections obtainable includes (a) Radio connection (b) Dial-up networking (c) VSAT.

2.6 The Metropolitan, Municipal And District Assemblies(MMDAs)

The Metropolitan, Municipal and District Assemblies are the highest political authorities in the geographical areas of their respective jurisdiction where they exercise deliberative, legislative and executive powers. The MMDAs were set up by a legislative Instrument (L.I. 1906, 2007) to superintend the decentralization through the effective local Governance Administration. There are currently a total of two hundred and sixteen (216) MMDAs in Ghana with the mandate to champion development in the various metropolis, municipalities and districts.

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The MMDAs have a mission and responsibility to improve the quality of the people through sustainable development. To achieve this mission, the MMDAs have for their objectives: To make easy the efficient performance of local administration in the

MMDAs

- To facilitate the effective functioning of local government administration in the MMDAs
- To ensure efficiency and effectiveness in the use of resources of the MMDAs and the Decentralized Departments in the MMDAs
- To monitor, co-ordinate and harmonize the implementation of development plans and activities in the MMDAs.
- To facilitate the provision of basic social and economic infrastructure and services in the MMDAs

2.6.1 Functions of MMDAs

The role of the MMDAs are basically derived from the legislative Instruments, Local Government Act, Act 462. These role that are largely meant at accomplishing the purposes furthermore satisfying the assignment of advancing the excellence of existence of its individuals are to:

- Be responsible for the overall development of the MMDs and ensures the preparation and submission of development plans and budget to the relevant Central Government Agency/Ministry through the Regional Co-coordinating Council (RCC).
- Formulate and executive plans, programmes and strategies for the effective mobilization of the resources necessary for the overall development of the

MMDs.

- Initiate programmes for the development of basic infrastructure and provide Municipal works and services in the Municipality

2.4.2 MMDAs in Greater Accra Region (GAR)

There are sixteen (16) MMDAs in the Greater Accra Region comprising Tema Metropolitan Assembly, Accra Metropolitan Assembly, Ashaiman Municipal Assembly, La Dade-Kotopon Municipal Assembly, Ledzokuku-Krowor Municipal Assembly, Adentan Municipal Assembly Ga East Municipal Assembly, Ga West Municipal Assembly, Ga Central Municipal Assembly and La Nkwatanang-Madina. The rest are Kpone-Katamanso District Assembly, Ada East District Assembly, Ada West District Assembly, Ningo/Prampram District Assembly and Shai Osudoku District Assembly.

2.6.3 Organizational Structure

The MMDAs generally comprise the Chief Executive (MCEs/DCEs), 38 Assembly members of which 27 are selected by universal adult suffrage and 11 are appointed by the President in consultation with chiefs and interest groups in the MMDs. The Assembly sitting is presided by a Presiding Member (PM) chosen from among members of the Assembly.

When it comes to procurement, the MCE/DCE is the leader of procurement entity in the MMDAs whiles the Co-coordinating Director is the secretary with the other supporting staff who make relevant input in procurement decisions. (Complete fact obtainable @ Ghanadistricts.com)

2.7 Challenges and Risks Associated with the Adoption of e-Procurement

Several reasons exist for the low acceptance of e-procurement in emerging economies. There are quite a number of impediments that thrives in emerging economies impeding the embracement of e-procurement. Accessibility to the e-procurement system remains the key bottleneck to its adoption by developing countries. This is due to the fact that it is very difficult for buyers and suppliers to access the e-procurement platforms from their remote locations (Seah, 2004).

Oyediran and Akintola (2011) suggested that several reasons exist why the gains that exist in e-procurement have not been taken advantage of by emerging economies. Issues such as security, legal, intellectual property and trust remains the major obstacles to the adoption. (Pasupathinathan and Pieprzyk, 2008).

Oyediran and Akintola (2011) highlighted other issues like the insufficiency of the required human capital, government bureaucratic setups plus the auxiliary systems for e-procurement. Rezgui et al (2004), as well pinpointed out as the major problem in developing the skills and building the capacity of the human resource required for operating the system. Another reason is the impression created that top managers hold back in embracing new technologies thereby preventing them from deriving useful gains which can be tapped into by their respective organisations (Rezgui et al, 2004).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Research methodology is an essential aspect of any research and involves the capturing of the data in the actual study. This section covers matters like the study design, the

sample population, sample selection, data analysis procedure, analysis of data as well as the presentation of the results

3.3 Study Design

Mixed research design was adopted. This was based on the fact that, it permits adoption of both the quantitative and qualitative technique. In the research, it is shown in the area of Instrumentation as well as data analysis. The research involve collection of both qualitative and quantitative data by means of structured and semi-structured questionnaires.

3.3.1 Study Type

Exploratory study was adopted since it is good to be used in investigating subjects that have received less attention. It helps researchers to gain insight into issues on which they have little knowledge. It is carried out using group discussions, questionnaires and interviews.

3.3.2 Sample Population

Population of the study is defined as the people from whom data is gathered for the research purpose. The population comprises sixteen (16) lead procurement officers at the various MMDAs.

There are sixteen (16) MMDAs in the Greater Accra Region comprising two (2) Metropolitan Assemblies, Nine (9) Municipal Assemblies and five (5) District Assemblies.

3.3.3 Sample Size

A census unlike sampling requires that the entire population is studied. That is, each element in the population is selected as respondents without necessary selecting a section

of the population using a sampling technique. A census was considered on the rationale that the total population size is small. In view of this, all the 16 lead procurement officers from the various MMDAs were considered as respondents to the study.

3.4 Data Collection Methods

The study will make use of primary data, and support it with secondary data. Primary data were obtained from interviews and questionnaire administration. The secondary data for the study were also obtained from reports from statutory organisations, published thesis and dissertations, articles, journals, as well as other information from the internet. A questionnaire and the structured interview schedule were the instruments used to collect the primary data. The structured interview was administered using the face - to-face method. The rationale was to enable the researcher the chance to be personally involved in the data collection process. The questionnaire was administered using both the face - to - face method and through telephone.

3.5 Data Analysis and presentation method

Data from the questionnaire have been analysed using simple percentage descriptions, and also discussed. Tables are used to aid presentation of results.

CHAPTER FOUR

DATA PRESENTATION AND DATA ANALYSIS

4.1 Introduction

This section presents data from the research instrument administered. All the data from

the study were entered into the Statistical Package for Social Science (S.P.S.S) version

17 to help in the analysis. Data have been presented in conformity with the objectives in

the research instruments, and discussed or analysed appropriately. The data from the

questionnaire were to enable the researcher to ascertain the infrastructure and human

resource available at the MMDAs; to find out the deficit in infrastructure and human

resource to be filled for eGP implementation in the MMDAs; to analyse the views of the

respondents as regards the procurement factors within the MMDAs that can impact the

adoption of E-Procurement

The presentations are done with the aid of tables. Percentage analysis and discussions are

made

4.2 Demographic characteristic of respondents

Data were collected from the lead procurement officers from the various MMDAs in the Greater Accra Region of Ghana. It was determined from the data collected from the research instrument administered that all the lead procurement officers at the various MMDAs are designated procurement officers.

KNUST

Table 4.1: Respondents experience in procurement

Years of experience	Respondents	Percent	Cumulative Percent
<3YRS	4	25.0	25.0
3-5YRS	6	37.5	62.5
6-8YRS	4	25.0	87.5
9-12YRS	2	12.5	100.0
Total	16	100.0	

The years of procurement related experience greatly impacted on the responses given by the respondents to the questionnaire administered.

From Figure 4.1 above, the majority of the respondents representing 37.5% have procurement related experience of 3-5 years, 25% each have procurement related

experience less than three years and of between 6-8years. 12.5% have between 9-12 years of experience in procurement. This implies that most of the respondents had relatively high level of experience in procurement and therefore are conversant with the various issues of procurement practices in Ghana

4.3 Human Resource and Infrastructure for Procurement in the MMDAs

Table 4.2: Respondents views on number of procurement-related staffs and their qualification

Qualification	MMDAs	Number of Staffs
MSc. Procurement Management	2	2
BSc. Procurement/ Supply Chain Management	12	16
Diploma in Procurement	8	10
Others(Architecture, surveying , engineering, legal)	16	42

Table 4.3: Respondents views on the degree of IT literacy level

	IT Literacy	Frequency	Percent	Cumulative Percent
Valid	Weak	13	81.3	81.3
	Adequate	2	12.5	93.8
	Strong	1	6.3	100.0
	Total	16	100.0	

Human resource is essential towards the attainment of an efficient e-GP implementation (Moon, 2002). The procurement personnel should be trained, confident and have the skill sets in the processes employed in procurement. From the table above, two MMDAs have two personnel with MSc. in Procurement Management, whiles 12

MMDAs have 16 personnel with qualification in BSc. Procurement/Supply Chain Management. 10 MMDAs have 8 personnel with relevant Diploma in procurement and in all the 16 MMDAs, there are 42 personnel with qualifications across a wide range of professions ranging from architecture, surveying, engineering, legal who makes meaningful inputs during the procurement processes.

This implies that most of the MMDAs have personnel with relatively high level of professional qualification necessary for understanding and steering the procurement processes in the various MMDAs. It is however worth noting from Table 4.4 that a cumulative 93.8% of the MMDAs have staff with weak literacy level in information technology key to supporting the implementation of an e-GP solution. In addition, all the MMDAs answered that they lack personnel with the sufficient skills to manage a procurement portal within the Assembly.

The lack of skill to effectively use e-GP systems has been specifically acknowledged as serious problem by numerous academics (e.g. Heeks, 1999; Ho, 2002) hampering the implementation of e-GP.

Table 4.4: Respondents views on the availability of logistics for e-GP

IT Infrastructure	MMDAs	Number
Computer Hardwares	16	96

Internet Connectivity/ facilities	11	11
Suitable Softwares	8	10
Secured IT Room	5	5

The facilities required for e-GP adoption may be categorized into software, hardware, and internet/network services. The basic hardware facilities required to participate in eGP include computer systems as well as a devoted server that which manages the entire regulars Computers on the system, dedicated server (Seah 2004).

The respondents were made to answer questions on basic logistics such as secured IT Room, softwares, computers and internet connectivity required for eGP. All the respondents held that the MMDAs had some computers. However, 4 out of 16 MMDAs representing a little above 30% of the respondent's answered that their respective MMDAs did not have internet connections. e-GP require internet for it to construct for one to propel as well as take delivery of electronic processes. This clearly demonstrates signs of non-alertness for electronic procurement by the affected MMDAs. This therefore requires that those MMDAs initiate the processes to get connected to the internet. It is worth noting also that out of the 16 Assemblies under reference, it is only 5 MMDAs representing about 31.25% that can boast of a secured IT room. This is very critical because according to (Signore et al., 2005), the key obstruction in establishing any e-Gov system is the concern for confidentiality and privacy of the data on the system.

4.4 Success Factors to the Implementation of E-Procurement

4.4.1 Views on procurement plans and strategies

Table 4.5: Respondent Views on procurement plans and strategies

		Views on procurement plans and strategies					
		Don't Know	No happens	Yes this happens occasionally	Yes this usually happens	This is integral part of our culture	Questions Total
Does the Assembly prepare a formal procurement plan or strategy	Number of respondent	1		4	5	6	16
	percentage	6.2		25	31.3	37.5	100
Do you periodically review and update your plan or strategy	Number of respondent	1		6	4	5	16
	percentage	6.2		37.5	25	31.3	100
Does the Assembly have a clearly documented supplier management policy	Number of respondent	2	4	2	4	4	16
	percentage	12.5	25	12.5	25	25	100

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According to Neef (2001), the creation of documented and executable strategies prior to the deployment of the e-Procurement solution is an important CSF. Here, the researcher wanted to find out whether the Assemblies have imbibed the preparation of procurement plans and strategies. 37.5% of the respondents agreed that the MMDAs prepare formal procurement plan or strategy, whiles 31.3% of the respondents said that the MMDAs usually prepare procurement plan or strategy. More so, 25% of the respondents held that occasionally the MMDAs prepared the formal procurement plan, whereas 6.2% of respondent held that they have no knowledge of the preparation of a formal procurement plan or strategy. On whether there are periodic reviews and updates on the procurement plan or strategy, 37.5% of the respondents answered that the MMDAs occasionally updates their procurement plan and strategies whiles 31.3% of the respondents answered that reviews and updates of the procurement plans and strategies are an integral part of their culture and operations. For 25% of the respondents, the reviews and updates of procurement plans and strategies at the MMDAs usually happens and for 6.2% of the respondents, they have no idea as to whether they happens or not. Finally, when it came to whether the MMDAs have a clearly documented supplier management policy, 25% of the respondents answered that, the MMDAs have embraced it as part of their culture and operations to have a supplier management policy. Again, 25% of respondents held that having a supplier management policy usually happens and on the contrary another 25% of respondents representing 4 out of the 16 respondents held that they don't have a supplier management policy. 12.5% of respondents were of the view that having a supplier management policy by the MMDAs happens occasionally and similarly 12.5% of the respondents claims that they don't know as to whether the MMDAs have a supplier management policy.

From the table and the discussions above, it is obvious that for most of the MMDAs, the preparation of formal procurement plans and strategies are usually done. There are also regular reviews and updates on the plans and strategies. On whether there is a clearly documented supplier management policy, it can be generally deduced from the responses of the lead procurement officers that a little over half of the MMDAs in reference have been maintaining a supplier management policy. Confidently therefore it can be expected that once e-GP is implemented there will be a norm that can be adopted

4.4.2 Views on end-user uptake and training

Table 4.6: Respondent Views on end-user uptake and training

Questions		Views on end-user uptake and training					
		Don't Know	No	Yes this happens occasionally	Yes this usually happens	This is integral part of our culture	Total
Does the Assembly plan recruiting and training people with the right procurement skills	Number of respondent	6	10				16
	percentage	37.5	62.5				100
Do staffs have a clearly defined procurement related objectives and performance measure	Number of respondent	1	2	2	4	7	16
	percentage	6.2	12.5	12.5	25	43.8	100

Are staff encouraged to develop their own procurementrelated skills	Number of respondent	1	7	4	2	2	16
and expertise	percentage	6.2	43.8	25	12.5	12.5	100

The success of the implementation of e-GP does not only depend on the type of technology being introduced but also depends on users and buyers making use of the new process and system as propounded in the technological acceptance model by Davis (1989). In this regard, the respondents were questioned as to whether the MMDAs plan for recruiting and training people with right and current procurement skills. 37.5% of the respondents were of the view that they don't know whether the MMDAs plan recruiting training people whiles 62.5% of the respondents said that the MMDAs doesn't recruit and train people in procurement. With respect to whether staffs at the MMDAs have clearly defined procurement-related objective and performance measures, 43.8% of the respondents held that having a clearly defined procurement related objectives and performance measure is an integral part of their culture and operation. Aside the above, 25% of respondent were also of the view that MMDAs usually have a clearly defined procurement-related objectives and performance measures whiles 12.5% held that this occasionally happens at their respective

Assemblies. Additionally, for 12.5% of the respondents, they held the view that the MMDAs doesn't have a clearly defined procurement-related objective and performance measures whereas 6.2% of respondents are of the view that they don't know. On whether staffs are encouraged to develop their own, 43.8% of the respondents answered that the MMDAs don't do that whiles 25% of the respondents answered that staffs are occasionally encouraged to develop their own procurement related skills and expertise.

For 12.5% of the respondents, the encouragement of staff to develop their own procurement-related skills and expertise is an integral part of their culture and similarly for 12.5% of the respondents, it is usually the case. Finally, 6.2% of respondents were of the view that they don't know whether staffs at the MMDAs are encouraged to develop their own procurement-related skills and expertise.

From the discussions above, The researcher wanted to ascertain how well the various MMDAs manages and develops procurement-related skills of its staffs in readiness for the uptake of new technologies and current trends in the industry. It is obvious that the MMDAs don't invest in the training of staffs who undertakes procurement. However, looking at the general overview a little above 50% of respondents said that staffs are encouraged to develop their own procurement-related skills. Generally for the end-user to uptake and embrace new technology, they must have the requisite skills, confidence level and feel at ease working with it as postulated by Davis, 1999 in the Technological Acceptance Model. This can easily be acquired through skills development and training. Most of the MMDAs have not positioned themselves to offer this training platforms to its procurement-related staffs to make them expand their knowledge horizons in readiness to easily adopt to current trends in the industry.

4.4.3 Views on Supplier Adoption

Table 4.7: Respondent Views on supplier adoption

Questions	Response	Views on supplier adoption					
		Don't Know	No	Yes this happens occasionally	Yes this usually happens	This is integral part of our culture	Total
Does the Assembly develop and manage its relationships with the suppliers to mutual benefit			7	3	2	4	16
	Number of respondent percentage		43.7	18.8	12.5	25	100
Does the Assembly train and build the capacity of its suppliers	Number of respondent		8	4	2	2	16
	percentage		50	25	12.5	12.5	100

The respondents were asked whether the MMDAs develop and manage relationships with the suppliers to mutual benefits. 43.7% of the respondents were of the view that this doesn't happen whiles 25% of the respondents answered that it is an integral part of the existing culture to develop and manage relationships with the suppliers for mutual benefit. More so, 18.8% of the respondents said that the MMDAs occasionally develop and manage relationships with the suppliers for mutual benefit whiles 12.5% of respondents said it is usually not the case to develop and manage such relationships. With respect to whether the MMDAs train and build the capacity of its suppliers, 50% of the

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respondents held that this doesn't happen, whereas 25% of respondents were of the view that happens occasionally. Aside the above, 12.5% of respondent answered that the MMDAs usually train and build the capacity of its respective suppliers and a similar 12.5% held that it is an integral part of the culture within the Assembly to train and build the capacity of its suppliers.

From the table and analysis, almost half of the MMDAs don't create, manage and build the capacity of their respective suppliers. The relationship between buyers and suppliers is key to the success of any procurement system implemented. A Supplier-Buyer relationship management system will create a feedback system for mutual benefit as mentioned by OSD (2001) and will make procurement less complicated and cumbersome (especially on the part of the suppliers)

4.4.4 Views on procurement processes

Table 4.8: Respondent Views on the procurement processes

		Views on procurement processes					
		Don't Know happens part	No happens	Yes this usually	Yes this This integral	This is Questions occasionally	Response culture	Total
Do you measure the effectiveness of procurement performance	Number of respondent	2	8	3	3			16
	percentage	12.5	50	18.75	18.75			100
Is responsibility for improving procurement results and processes clearly defined	Number of respondent				5	11		16
	percentage				31.25	68.75		100
Do you benchmark your procurement efficiency and effectiveness	Number of respondent			2	6	8		16
	percentage			12.5	37.5	50%		100

The respondents were questioned as to whether the MMDAs measures the effectiveness of procurement performance. 50% of respondents held that it does not happen whiles 18.75% of the respondents respectively were of the view that this usually happens and occasionally occurs. Aside the above 12.5% of the respondents answered that they don't know whether the MMDAs do measure the effectiveness of procurement performance.

As regards whether responsibility for improving procurement results and processes clearly defined, 68.75% of the respondents held that this is an integral part of the culture and operation in the MMDAs and performance measure is an integral part of their culture and operation whiles 31.25 of respondent were of the view that MMDAs usually have a clearly defined responsibility for improving procurement results and processes.. On whether MMDAs benchmark procurement efficiency and effectiveness, 43.8% of the respondents answered that the MMDAs don't do that whiles 50% of the respondents answered that benchmarking of the processes forms an integral part of the culture and operations whiles 37.5% held that this usually happens. For 12.5% of the respondents, they were of the view that benchmarking procurement efficiency and effectiveness occasionally happens at the MMDAs.

From the discussion, it can be concluded clear responsibilities for procurement activities are assigned to procurement officers in all the MMDAs. It is also obvious that all the procurement processes are benchmarked for efficiency and effectiveness in all the MMDAs. However, it can be generally deduced that, most of the MMDAs in question do not measure the effectiveness of the procurement processes employed. Thus it beholds on most of the MMDAs not to just benchmark their procurement efficiency and effectiveness but to go a step further to measure whether the procurement method or process adopted has been effective.

4.4.5 Compliance with best practice
Table 4.10: Respondent views on compliance with best practice

Questions	Response	Views on compliance with best practice				
		Don't Know	No	Yes this happens occasionally	Yes this usually happens	This is integral part of our culture	Total

Are contracts and policies followed and enforced	Number of respondent				16	16
	percentage				100	100
	Number of					
Are there systems and processes in place to monitor and control the departmental procurement related operating costs and use of resources	respondent	9		2	5	16
	percentage	56.25		12.5	31.25	100
	Number of					
Does the Assembly carry out and contribute to risk assessment on capital expenditure and programme of procurement	respondent	10	3	2	1	16
	percentage	62.5	18.75	12.5	6.25	100
Does the Assembly periodically carry out procurement audit	Number of respondent	6	4	2	4	16
	percentage	37.5	25	12.5	25	100

The respondents were questioned as to whether contracts and policies are followed in the MMDAs. All the respondents were of view that the MMDAs usually follows through contracts and policies. On whether there exist systems and processes to monitor and control the departmental procurement related operating costs and use of resources,

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56.25% of the respondents said that the MMDAs don't have systems and processes as described whiles 31.25% of the respondent answered that there exist such systems and processes as integral part of the culture to monitor and control departmental expenditure and resources. In addition, 12.5% of the respondents held that MMDAs usually have systems and processes in place to monitor and control procurement related operating cost and use of resources. With respect to whether MMDAs carry out and contribute to risk assessment on capital expenditure and programme of procurement, 62.5% of the respondents representing over half of the

MMDAs held that they don't adhere to such programme as describe above whereas 18.75% of the respondent said that for them such assessments are occasionally undertaken. 12.5% of the respondents were also of the view that risk assessment as described above are usually carried out by the MMDAs. On whether the MMDAs periodically carry out procurement audits, 37.5% of the respondents answered that the MMDAs don't do that whiles 25% of the respondents answered that occasionally, procurement audit are carried out in the Assembly. Similarly, 25% of respondents held that the MMDAs has embraced it as part of the culture and operations to carry out procurement audits whereas for 12.5% of the respondents, it is usually the case

MMDAs to carry out procurement audit.

From the above analysis discussions, it is obvious that most of the MMDAs comply with making sure that contracts agreement are well executed by parties to the contract and the contracts are well administered during the project implementation. This bodes well for any e-procurement system to be introduced since it can be assured that

MMDAs will follow through with good contract management and administration.

However when it came to risk assessment of capital expenditure and programme of procurement, most of the MMDAs don't comply with it. It is also clear that most of the MMDAs in question don't subject their procurement activities to periodic procurement audit. These activities are essential component and a measure of compliance to best standards all over the world. Planned benefits can only be attained in e-procurement if the users and buyers resolve to work according to best industry and professional practice.

4.4.6 Top Management Support

Table 4.11: Respondent views on top management support

Questions	Response	Views on top management support					
		Don't Know	No	Yes this happens occasionally	Yes this usually happens	This is integral part of our culture	Total
Are top management in the Assembly personally involved in the way that procurement operates	Number of respondent				12	4	16
	percentage				75	25	100
Are top management actively involved in contract management	Number of respondent			4	10	2	16
	percentage			25	62.5	12.5	100
Are top management of Assembly involved in establishing contracts	Number of respondent				1	15	16
	percentage				6.25	93.75	100

The respondents were asked as to whether top managements in the MMDAs are

personally involved in the way that procurement operates. 75% of respondents held that

top management throughout the departments in the MMDAs are usually involved with the way procurement is carried out whiles 25% of the respondents held that with their respective assembly it is an integral part of their culture and operation for top management to be involved. On whether top management are actively involved in contract management in the MMDAs, 62.5% of the respondents were of the view that, that is usually what plays out whiles 25% of the respondents held that occasionally top management becomes involve during contract management. With 12.5% of the respondents, they answered that, as part of their operations and culture, top management are plays active role in contract management. With respect to whether top management across MMDAs are involved in establishing contracts, 93.75% of respondents answered that, their operation and culture demands that they get involve in the establishment of contracts. In addition 6.25% of the respondents also held that it usually happen at the various MMDAs that top management plays active role in the establishing contracts.

A high level of top management support is positively associated with the organisation and management implementation of any e-Procurement initiative. Here we were looking at whether top management demonstrate the role and importance of procurement and lead by example in the current procurement type being administered in the MMDAs.

From the above analysis and discussions, it can be confidently be deduced that yes the MMDAs have top management support on procurement operations, contract establishment and executions and in most cases play active role in contract management and administration.

4.4.7 Change Management

Table 4.12: Respondent views on change management

		Views on change management			
Questions	Response	Don't Know	No	Yes we can show steady improvement	Total
Can the assembly demonstrate improvements due to efficient change management process	Number of respondent			16	16
	percentage			100	100
Is there evidence to show that positive change management process has contributed to improvements in the processes and systems resulting in better performance results	Number of respondent			16	16
	percentage			100	100

The respondents who would be the key end-users of electronic procurement had their views collected as regards change management in the MMDAs. This will help in deducing whether they will be able to manage the change than will likely spring forth as a result of the e-GP implementation.

The respondents were asked as to whether the MMDAs can demonstrate improvements due to efficient change management process. All the respondents held that, the MMDAs can demonstrate efficient change management processes. On whether there is evidence to suggest that positive change management process has contributed to improvements in the processes and systems resulting in better performance, all the respondents affirmed so. Here we were attempting to ascertain how well the MMDAs manage changes within its establishment. According to Archer, 2005, a carefully designed change management

process can produce significant benefits. The World Bank (2006) has also added that the full benefits resulting from e-GP will only be realized through effective change management process.

From the analysis and discussion above, all the MMDAs can demonstrate improvements due to efficient change management process undertaken and that there are ample evidence that positive change management process has contributed to improvements in the processes leading to better performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of the findings as presented, and analysed.

Conclusions are drawn based on the findings, and recommendations are made.

5.2 Summary

E-Government Procurement (e-GP) project is to be fully rolled out soon. This is meant to improve the nation's procurement systems. The study explored ways to overcoming the potential challenges in e-GP implementation by examining some of the critical success factors. The study aimed at achieving four main objectives. These include ascertaining from literature and previous research, critical success factors that promote successful e-procurement. It also looks at investigating the infrastructure and human resource availability at the MMDAs for e-procurement. Aside the above, the study further examined the gaps in infrastructure and human resource needed to be filled prior to the implementation of e-procurement by analysing the views of lead procurement officers within the MMDAs. It also examines the underlying procurement factors within the MMDAs that can impact the acceptance of E-Procurement

In view of the above, the following findings have been made,

5.2.1 Critical Success Factors (CSFs) from Literature and Previous Research

The critical factors identified from literature and previous research essential for the successful implementation of e-GP are

- End-User Uptake and Training
- Top Management Support
- Supplier Adoption
- Compliance with Best Practice

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- Supplier Integration

- Security and Authentication

- Re-Engineering the Procurement Business Processes

- Performance Measurement

- Change Management Programme

- Electronic Procurement Implementation Strategy

5.2.2 Infrastructure and Human Resource Available and the Gaps to be Filled at the MMDAs

On the issue of the availability of technology, the researcher observed the following

The MMDAs (AMA, TMA, LEKMA, LaDMA, ADMA, GaCMA, AshMA, GaSMA, GaEMA, GaWMA and LaNMA) have enough computers, internet connectivity and facilities and to add to the above the following MMDAs had a secured IT room (AMA, TMA, LEKMA, LaDMA, ADMA, GaCMA, AshMA, GaSMA). The DAs (KKDA, SODA, AEDA, AWDA, NiPDA) had no internet connectivity and thus had no secured IT room. It was clearly revealed that, all the District Assemblies (DAs) lack the simplest form of IT infrastructure to support any e-GP implementation.

With respect to the human resource availability, most of the MMDAs can boast of procurement officers with the requisite qualification however, where they lack so much is the IT professionals with the sophistication or skills to handle e-procurement solutions and portal (Table 4.4)

5.2.3 Factors that can impact the adoption of e-GP

- Procurement Plans and Strategies

Most of the MMDAs amply demonstrates that they have the strategies and plans periodically reviewed and updated which they comply with in their operations and is

supported by a legal framework. This culture and norm can be relied and built on during e-GP implementation.

• Supplier Adoption

It can be inferred that most of the MMDAs don't have clear objectives in developing and managing supplier-buyer relationship as well as developing their capacity. This behaviour will not augur well for e-GP implementation until there is a conscious effort to change that behaviour.

• End-user uptake and Training

The MMDAs are not in charge of the recruitment and training of procurement related staffs. Most of the MMDAs in question don't encourage staffs to take up skill developments in procurement. This can negatively impact e-GP implementation since the MMDAs will with time become deficient in the expertise necessary to become abreast with current trends in the industry.

• Procurement Processes

Although most of the MMDAs don't measure the effectiveness of the procurement processes adopted, majority of them demonstrates that they benchmark their procurement efficiency and effectiveness and they have an assigned officer with the clear responsibility of improving procurement results and process. This should be built upon and adopted by the MMDAs during implementation of the e-GP.

• Compliance with Best Practice

Most of the MMDAs comply with contracts and its provisions. However, most of them don't have systems and processes in monitoring and controlling departmental procurement related operating costs and use of resources. In addition, risk assessment on capital expenditure and programme of procurement are not complied with.

• Top Management Support

Top management in all the MMDAs support and play key roles in procurement activities and operations. Their involvement in the e-GP is equally necessary if success is to be achieved. It therefore beholds on the implementers to ensure that top management embrace the concept and need to implement the system.

• Change Management

All the MMDAs can demonstrate that they are very conversant in change management. This inures to the benefit of the implementers of the e-GP since they can be assured that the change management process can be properly handled.

5.3 Conclusions

Generally the study concludes that electronic procurement implementation will encounter several difficulties that must be looked into. The following conclusions are also drawn.

1. The majority of the MMDAs are deficient in e-procurement infrastructure such as a secured IT room and the appropriate IT professional with the sophistication required to oversee the management of e-procurement system and portal

2. The implementers of the e-GP must also pay critical look to these critical factors; change management programme, compliance to best standards, supplier adoption, top management support, security, user uptake and training among others and the shortfalls addressed

5.4 Recommendations

To address the potential challenges and make way for the successful implementation e-GP implementation in MMDAs in Ghana,   the following recommendations have to be considered.

1. MMDAs must be encouraged and supported to develop human capital for electronic procurement

2. Suppliers ought to be encouraged and supported to develop the human capital and acquire the necessary infrastructure for electronic procurement.

3. Workshops and training seminars must be organised for procurement practitioners and suppliers on electronic procurement.

4. The government must put in place the required regulatory framework for e-GP.

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APPENDIX

APPENDIX 1: QUESTIONNAIRE

KWAME UNIVERSITY OF SCIENCE AND TECHNOLOGY

MASTER OF SCIENCE IN PROCUREMENT MANAGEMENT

TOPIC: THE POTENTIAL CHALLENGES IN E-GOVERNMENT PROCUREMENT IMPLEMENTATION IN MMDAs IN GREATER ACCRA REGION

The researcher is a post-graduate student at the Kwame Nkrumah University of Science

and Technology. The research is an academic exercise for the award of Master of Science

in procurement Management.

This questionnaire has been designed to collect further information on procurement

across the MMDAs in Greater Accra Region. The document seeks to gather data on

human resource and logistics for e-procurement implementation; to ascertain the

challenges they may face when adopting e-procurement; and determine CSFs in the

current procurement operations in the MMDAs applicable to e-GP.

You are assured that any information provided would be treated as confidential.

PART A (DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS) Please answer or tick (√) where appropriate
   1. **Name of the Assembly?**

   ..………………………………...

..……………………………...

2. **What is your official designation in the Assembly**

(a)Procurement Officer [   ]   (b) Budget Officer [   ]   (c) Finance

Officer [   ]   (d) Planning Officer [   ]

(e) Others [   ]

3. **How many years of procurement related experience do you have as the lead procurement officer in the Assembly**

(a) Up to 3yrs [   ]   (b) 3-5yrs [   ]   (c) 6-8yrs [   ] (d) 9-12yrs [   ]   (d) Above 12yrs [   ]

PART   B - CURRENT STATE OF HUMAN RESOURCE AND INFRASTRUCTURE FOR PROCUREMENT IN THE ASSEMBLY

4. **What Information Technology Infrastructure do you have in place at the Assembly? Please indicate which of the following options applies (tick more than one if necessary)**

IT infrastructure	Please Tick
None	
Computers	
Internet connectivity	
Suitable ERP Software	
Secured IT Room	
Others (please specify)	

5. **Please identify the number of people within the Assembly that spend more than 50% of their time on procurement (this would include involvement with any part of the procurement process such as market analysis, drawing up the specification, managing the contract etc)**

Total Number of Staff	Tick one
1-2	
3-5	

6-10	
11-20	
>20	

6. **Please identify the number of people within the Assembly that spend more than 10% - 50% of their time on procurement** (this would include involvement with any part of the procurement process such as market analysis, drawing up the specification, managing the contract etc)

Total Number of Staff	Tick one
1-2	
3-5	
6-10	
11-20	
>20	

7. **How many staff involved in procurement hold the relevant qualifications? (insert the number of staff against relevant qualification)**

Qualification	Number of Staff (insert)
MSc Procurement Management	
BSc Procurement Management	
Diploma in Procurement	
CIPS Certificate	
Others(architecture, surveying, engineering, legal)	

8. **Are staff within the assembly IT literate to support the implementation of an e-procurement solution involving the acquisition of goods, services and works? Please tick the box that characterizes the existing level of IT related skills**

	Tick one box
Weak	
Adequate	
Strong	
Very Strong	

9. **Are there sufficient skills within the Assembly to manage a procurement portal?**

	Tick one box
Yes	
No	

PART C- FACTORS AFFECTING E-PROCUREMENT

10 Policy, plan and Strategy – What are your procurement objectives and how are they developed?

	1	2	3	4	5
	Don't Know	No this doesn't happen	yes this happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
11.1 Does the Assembly plan for recruiting and training people with the right procurement skills?					
11.2 Do staffs have clearly defined procurement-related objectives and performance measures?					
11.3 Are staff encouraged to develop their own procurement-related skills and expertise?					

11 End-User Uptake and Training – How well does your Assembly manage and develop procurement skills

	1	2	3	4	5
	Don't Know	No this doesn't happen	yes this happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
10.1 Does the Assembly have a formal procurement plan, strategy and policy					
10.2 Do you periodically review and update your plan, policy or strategy?					
10.3 Does the Assembly have a clearly documented supplier management policy?					
10.4 Does the assembly have a technical strategy which may impact e-procurement project (e.g. moving towards a single operating system or database technology across the council)?					

12 Supplier Adoption-How well does the Assembly create, manage and build the capacity of their suppliers for mutual benefit

	1	2	3	4	5

	Don't Know	No this doesn't happen	yes this happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
12.1 Does the Assembly develop and manage its relationships with the suppliers to mutual benefit?					
12.2 Does the Assembly train and build the capacity of the its suppliers					

13 Processes – How effectively do you do things in your Assembly?

	1	2	3	4	5
	Don't Know	No this doesn't happen	yes this happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
13.1 Do you measure the effectiveness of procurement performance?					
13.3 Is responsibility for improving procurement results and processes clearly defined?					
13.4 Do you benchmark your procurement efficiency and effectiveness?					

14 Compliance with Best Practice– How well does the Assembly comply with best practice

	1	2	3	4	5

	Don't Know	No this doesn't happen	yes this happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
14.1 Are contracts and policies followed and enforced					
14.2 Are there systems and processes in place to monitor and control the departmental procurement related operating costs and use of resources?					
14.3 Does the Assembly carry out and contribute to risk assessment on capital expenditure and programme of procurement					
14.4 Does the Assembly periodically carry out procurement audit					

15 Top Management Support – Do top management demonstrate the role and importance of procurement and lead by example?

	1	2	3	4	5
	Don't Know	No this doesn't happen	This happens occasionally but there is no consistency	Yes this usually happens but it could be improved	This is an integral part of our culture and operation and can be regarded as best practice
15.1 Are top managers throughout the department personally involved in the way that procurement operates					
15.2 Are top management actively involved in contract management					
15.3 Are top management of the Assembly involved in establishing contracts					

16 Change Management : How well does the assembly manage changes within its establishment

	1	2	3	4
	Don't Know	No	yes	Yes we can show excellent performance
16.1 can the assembly demonstrate improvements due to efficient change management process				
16.2 is there evidence to show that positive change management process has contributed to improvements in the processes and systems resulting in better performance results				