CHALLENGES ASSOCIATED WITH IMPLEMENTATION OF E-PROCUREMENT SYSTEM: A CASE OF BERKELEY ELECTRICAL LTD

By
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A Research paper submitted in partial fulfillment of the requirements for the award of Master’s Degree of Procurement and Supplies Chain Management at Mzumbe University

2013
CERTIFICATION

We the undersigned certify that we have read and hereby recommend for acceptance by Mzumbe University, the Dissertation entitled “Challenges Associated with the implementation of e-procurement system: A case of Berkeley Electrical Ltd” in partial fulfillment of the Requirements for the award of Masters Degree of Procurement and Supplies Chain Management.

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My heartfelt thanks are also to my family, friends and my beloved relatives in Jesus’ name. To mention especially my beloved daughter Faith, young sisters Jackline and Heaven, my dear brother Deo, friends Nyagawani Kikaro, and Mchungaji Anna for assisting me in different ways and for their moral and tireless support, love and prayer through my academic life, I owe you all greatly.

Lastly I would like to exonerate different workers in different sectors for their supports, any liability for errors and omissions, should it occur in this report. Thanks you and May God bless you all.
DEDICATION

Very special thanks are to my Almighty God, the farther for everything in the name of our Lord Jesus Christ for giving me the strength, power and brave thinking.

This work is dedicated to my late parents Mr. and Mrs. CALLIST ASSENGA, I thank you for making me what I am today, ‘MAY LORD REST YOU IN PEACE’. Also great thanks go to my supervisor Dr. Adolphine Kateka for the research methodologies skills he gave me that enabled me to accomplish my research successfully. May God bless her. Also to my husband and daughter for their endless love and special care shaped me into what I am now.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AIC</td>
<td>Arusha International Conference</td>
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<tr>
<td>AQRB</td>
<td>Architecture &amp; Quantity surveyor Registration Board</td>
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<tr>
<td>BEL</td>
<td>Berkeley Electrical Ltd</td>
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<td>B2B</td>
<td>Business to Business</td>
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<td>Depts</td>
<td>Departments</td>
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<td>ICT</td>
<td>Information Communication Technology</td>
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<td>IT</td>
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<td>IOS</td>
<td>Inter-Organizational Systems</td>
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<tr>
<td>MIS</td>
<td>Management Information Technology</td>
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<tr>
<td>PMU</td>
<td>Procurement Management Unit</td>
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<tr>
<td>SCM</td>
<td>Supply Chain Management</td>
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<td>VOIP</td>
<td>Voice Over Internet Protocol</td>
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ABSTRACT

The study was about the challenges associated with the implementation of e-procurement system based on one of the Private sector located in Dar es Salaam Tanzania, the study carried out against the background that, procurement management is one of the most valuable parts in private and public sectors. The study aimed at looking factors that limit the applicability of e-procurement system despite of its necessity to the business. Electronic Procurement is significantly important in almost all organizations. Therefore managers and procurement staff members concerned in the process of e-procurement need to be familiar with all aspect of the goals, technical procedures and effect of electronic procurement.

The study guided the following objectives; to find out a room possible to make e-procurement possible and success in its implementation and online dispute resolutions, to identify critical challenges facing the performance of the implementation of e-procurement, To analyze other challenges facing the performance of the implementation of e-procurement and to examine the performance of procurement function in private sectors currently.

The study employed a case study approach and the research design involved 40 respondents from the selected private organization of BEL. It involved such department as Procurement, Stores, IT, Finance and Administration. Both primary and secondary data were collected. The results were presented using frequency distribution tables. The data were collected through questionnaire survey and through interviews conducted by the researcher from respondents also company documents were used as well.

A total sample of 22 respondents was chosen. Both qualitative and quantitative techniques were used in collecting and analyzing data.

The results from analysis revealed that not all challenges facing other countries also facing Tanzania private sectors nevertheless it has been revealed that majority of limitations facing 3rd world countries have been manifested. Also there have been challenges arising from Tanzania’s private sectors which were not thought or spoken
of, like the absence of law and act that govern the system and this is in both private and public organization. Also include power supply, digital signatures for online contract, cost associated with hardware and software, technological setbacks, poor management support from top managers as well as bureaucratic related issues.

It was concluded that there are yet lessons to be learned out of the path that most of the developing countries have gone through in the course of application of e-procurement from its inception to its full application. There have indeed been several challenges that are facing 3rd world countries, yet there are fellows who have strongly endured the course and penetrated the electronic world successfully.

The study recommends that Tanzania is the one of the 3rd world country can pursue the same course and make it to the top. Tanzanian government should make the act and its regulation present so that the system should be implemented.
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CHAPTER ONE
OVERVIEW OF THE STUDY

1.0 Introduction
This study is about a brief discussion on the implementation of electronic procurement and how far it is performed based in private sectors. This chapter covers the overview of the study, the background information to the problem, statement of the problem, research questions and objectives which guide the researcher, significance of the study and the scope/organization of the study.

1.1 Background information to the study
This study assessed the implementation associated with electronic procurement in building construction industry based in private sectors and I took Berkeley Electrical Ltd as a case study. In recent years, there has been a high demand of building construction which goes together with the need of attaining a certain level regarded as international standard. As part of procurement practice, locating or searching for various sources of material crosses the borders to go electronically.

In the short span of the decade, Berkeley Electrical Ltd has come a long way as a name Synonymous with quality construction in Tanzania. It is the company which was founded by the Minters Building Group in the United Kingdom. They opened a branch in Dar es Salaam, Tanzania since 1953 to carryout electrical, air conditioning contracting. It is the company which has become truly a ‘one stop engineering service company’ capable of undertaking any type of electrical and air conditioning project on an engineering, procurement and construction basis.

The company concerning with the whole process of supply chain management including logistics, transportation, operations management, materials ordering and distribution management, marketing, purchasing Information Technology as well as electronic procurement activities.
The term electronic procurement has been defined variously by different authors. According to PPA (2004), procurement means buying, purchasing, renting, leasing or otherwise acquiring any good or works or services by a procuring entity spending public funds on behalf of a ministry, department or regional administration of the government or public body and include all pertain to the obtaining of any goods or works or services including description of requirements, selection and invitation of tenders and preparation and award or contract electronically. In this case the term electronic procurement means performing procurement via software such as computer basis.

E-Procurement sometimes known as supplier exchange, is a business to business or business to consumer or business to government/private purchase and sale of suppliers, works and services through internet, information and networking systems such as electronic Data Interchange and Enterprise Resource Planning. E-procurement software make possible to automate some buying and selling. Many private companies participating expect to be able to control parts of inventories more effectively, reducing purchasing agent overhead also improve manufacturing cycles. E-procurement has been identified as an area of B2B e-commerce where information systems (IS), enabled transformations of business process and practices are likely to yield significant benefits. It has been touted as revolutionizing the supply chain and offering organizations a vast number of advantages to focus on the supply function to a greater extent. Davila, Gupta and Palmer, (2003). The development business of e-procurement has bought many evolutionary changes in the business industry with regards to the procurement process and practices.

Growth of business-to-business e-commerce remains strong as information and communications technologies continue to transform organizations interactions with their suppliers and customers. Supply-side activities such as electronic procurement (e-procurement) have been identified as a key area where information systems (IS) enabled innovations is likely to yield significant benefits for organizations. Davila, Gupta and Palmer, (2003).
E-procurement implementations have broadened in reach and deepened in scope, more organizations have fully operational systems that span the whole enterprise. Davila, Gupta and Palmer, (2003).

E-procurement viewed as “the value added application of e-commerce solutions to facilitate, integrate and streamline the entire procurement process- all the way from initial strategy development through contract placement to payment”( Davila, Gupta and Palmer, (2003).

The system touted as revolutionizing the supply chain and offering organization a vast number of advantages. Such hype caused business to focus on the supply functions to a greater extent than previously thus many private companies needed to make these savings to stay competitive, Davila, Gupta and Palmer, (2003).

East Africa Community (EAC) member speed up the implementation of e-procurement for improving transparency and efficiency in the process due to the reasons that e-procurement played a crucial role in improving efficiency and transparency as well as saving resources and time.

Five years since the first release of the browser in 1995 the fear of electronic transactions by the general public has began to dissipate. The original novelty of internet shopping and e-business is also wearing off. Aimless surfing has decreased and people have become more selective in how they spend their time on the internet. The signs for the general maturing of the community and the impact of the internet will have on the lives of the ordinary people are becoming clearer. Despite billions of dollars in investment, firms are still struggling to find the best way to complement traditional activities and develop new electronic lines of business and services. Baily, (1998) has identified no less than eleven distinct e-business models that have been tested in the marketplace. He suggests that many managers are so focused on the trees of technological change that fail to see the forest of underlying principles that determine success and failure.
Previously, the procurement systems in most organizations were not computerized. There were many ways of communications such as paper based, telephone, telex, face to face. But due to globalization of trade and introduction of computer-internet technologies which lead to cost reduction, competition and market expansion, Baily, (1998) contested that organizations found the need to have a computerized system that would enable the procurement procedures to be performed and operated smoothly example, data related to suppliers, order processing and so forth that could be sorted easily with electronic database.

A 2001 Study on barriers associated to E-Procurement implementation conducted by the conference Board in Washington, pointed out the problem in the implementation side and concluded that organizations are finding e-procurement implementation more complex, more expensive and more time consuming than they are originally envisioned and that consultants have been widely criticized for overstating the business case for e-procurement.

Tanzania is the one of the poor developing countries despite its endowment of various natural resources such as a large arable land, minerals, water bodies and variety of tourism attractions. As IT is the key subject based on e-procurement, if e-procurement is properly deployed, Tanzania can attain a lot of benefits, but Tanzania is lagging behind in this technology due to some various barriers which obstacle the better performance of e-procurement.

According to Mrope and Mayage (2002), uneven distribution of natural resources around the world and differences in geographical and climatic conditions are the fundamental reasons for international trade which focused in electronic business.

1.2 Statement of the problem.
The study focused into the challenges associated with the implementation of electronic procurement at Berkeley Electrical Ltd. Electronic Procurement is significantly important in almost all organizations. Therefore managers and procurement staff members concerned in the process of e-procurement need to be
familiar with all aspect of the goals, technical procedures and effect of electronic procurement.

According to Baily (2005) the continuous internationally of trade doing business electronically can no longer be regarded as exceptional activity in commercial purchasing. It would be difficult to find any organization today that did not acquire at least a proportional of its requirements from foreign source which automatically rely on electronic purchasing. For this reasons a special consideration must be given objected to why it may be necessary or preferable to implement electronic procurement and consider those challenges associated to it.

It come a time Tanzanian private sectors to comprehend the importance of e-procurement to effectively and efficiently deliver required services to the community timely and economically. The efforts of private sectors to trade with public are deterred due to the fact that their major customer (the government) is not yet ready for it. Researchers done on e-procurement have focused much on how should it be implemented while very little is done on the challenges and possible solutions to overcome such challenges. Yet for the advantages promised the adoption of e-procurement system in most of organizations, its performance in implementation has become a crucial problem which most of the organizations have gone through.

The researcher tried to look at one of the private sector which has made step ahead to implement e-procurement system, a lesson that is expected to be learned out by practitioners to pave their way toward full implementation of e-procurement system.

1.3 Research Questions

1.3.1 General research question

Why there is no room possible to make fully implementation of electronic procurement successfully performed despite of its necessity in supply chain management.
1.3.2 Specific research questions
The study was guided by the following specific research questions:

(i) What are the critical challenges on implementation of electronic procurement in private sector in Tanzania?

(ii) What other challenges facing the performance of the implementation of e-procurement?

(iii) To what extent does e-procurement performed in private sectors in Tanzania?

1.4 Objective of the study

1.4.1 General objective
The main objective of this study is to find out a room possible to make electronic procurement possible and success in its implementation and online dispute resolution in Tanzania private sector.

1.4.2 Specific objectives

(i) To identify critical challenges facing Tanzania private sector on implementation of e-procurement.

(ii) To analyze other challenges facing the performance of the implementation of e-procurement.

(iii) To examine the performance of procurement function in private sectors currently.

1.5 Significance of the study
The topic is one of the vital aspects of the country’s development. The use of electronic procurement will not only simplify the process of acquisition, but also increase in speed, efficiency and effectively, hence value for money procurement.
Comparative study has been made, and the challenges identified, the conclusions and recommendation so far made for private as well as public sectors will benefit from it. There is hope that the challenges in the process that makes it hard for private organizations top practice e-procurement with its associated solutions will help them improve their performance.

Moreover the followings are also some of the significant concerning the study as follows:-

- The study is significant because findings may be used to improve the performance of e-procurement which in-turn improves our economy.
- The study would stimulate the need of e-procurement to private sectors.
- The study would come up with the actual strength of the suppliers current resources capabilities to facilitate the implementation of e-procurement.
- The study would serve as guide for future reference for other researchers who will be interested to work on e-procurement research.
- The study would provide contribution to further knowledge.

1.6 Limitation of the study
During the process of the study, the researcher faced the following limitation:

(i) Nature of the Study
The nature of the study required the researcher to obtain data from more than one department. This created some inconvenience with the employer as the researcher had to seek permission.

(ii) Time constraint:
The time kept by the institute for research study is limited and not enough for the entire study especially taking into consideration that the researcher only is allowed to
undertake the research only after working hours. So the researcher had to use extra efforts to ensure that this study becomes a success without jeopardizing its equality.

(iii) Accessibility of data
At Berkeley electrical some of the information is very secretive such that the researcher would not have an access on them also some of important document in this report regarded as confidential but much effort were applied to get those documents from the management. For example, it took the researcher all the time until the deadline for submission of this research paper was at hand, the respondents didn’t wanted long answers or critical/deep explanations they just wanted short answers such as no/yes and the like.

(iv) Financial constraints
This would under the provision of insufficient financial support provided by the researcher’s sponsor while most of the research activities were not carried out successfully. The researcher has been sponsoring herself throughout this study, thus being unable to cover a wider area than that covered by this study.

(v) Responses
Some of the respondents seemed to doubt the questions and others could not return the questionnaires back. Those who returned them back did not do on the expected time. The researcher believes that despite these problems, the study has met the intended objectives.

1.7 Delimitation of the study.
The delimitation of the study is a study by geographic location, age, sex, population traits, population size or other similar considerations. Delimitation used to make study better and more feasible and not just for the interest of the researcher. It also identifies the constraints or weaknesses of your study which are not within the control of the researcher.
1.8 Scope of the study
This report mainly based on private sector located in Dar es Salaam city a case study at Berkeley Electrical Ltd where by the company located at Pugu road in which the implementation of e-procurement is not totally full in terms of operation due to the stated problem. I did not involve public sectors in particular; this is due to various reasons out of researcher’s control such as finance, strict deadlines and the like.

1.9 Organization of the study
He study is organized systematically with well-arranged topics and paragraphs with its related contents. This has been strictly in conjunction with Mzumbe University’s required outline of the proposal and its ultimate research paper. The research is divided into five chapters;

Chapter one is an introduction, which presents background information and an overview of purchasing process, research problem, research questions and objectives, significance of the study scope, limitations and delimitation of the study.

Chapter two discusses both theoretical and empirical literature on electronic procurement worldwide concerning the study.

Chapter three consists of research methodology, research design, sampling techniques and simple size, data collection methods and approach, types of data, ethical issues, reliability of data and validity and managing and analysis of data. This chapter extensively covers the methodological of the study, which includes sample and sampling procedures.

Chapter four consist the data analysis and interpretation based on the research questions, objectives collected and it go further by analyzing the facts and findings and discussion f the study.

Chapter five consist of introduction, summary of the study, conclusion about the objective, synthesis from the findings, recommendation and area of the further study.
1.10 Concluding remark
This report aim at studying the challenges associated with the implementation of e-procurement within private sector based at Berkeley electrical as a case study. The background information, problem statement, objectives and the scope of this study have clearly stated in this chapter in order to give clear view before proceeding further to the following chapters.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction
Literature review is a critical and in depth evaluation of previous research. It is a summary of a particular area of research, allowing anybody reading the paper to establish why some is pursuing a particular research. The aim of this chapter was to review related literatures and theories in the area with the objective of adding knowledge and familiarize the researcher with what was going to be studied. It comprised the definition of various concepts dealing with implementation of electronic procurement in private sector. It discussed the theoretical bases of the study, review of empirical studies (looking on related literature in order to see what other researchers on the same study have done).

2.1 Theoretical Literature Review
In this category, the researcher looked at the ideological part of implementation of e-procurement in various areas in the world as a general view. Various literatures both internal and external have tried to highlight conceptual definitions about e-procurement concerning to the study as follows;

2.1.1 E-procurement
E-procurement is the abbreviation of the phrase ‘electronic procurement’. A number of definitions of e-procurement exist, According to PPA, 2004 The term procurement refers to the function responsible for purchase, lease or otherwise legal means of acquisition of the goods, works and services required to satisfy certain needs at right time, from right supplies or service provider, at right quantities and at right price.

Min and Galles (2003), define electronic procurement as business to business purchasing practices that utilize electronic commerce to identify potential sources of supply, to purchase goods and services, to transfer payment, and to interact with
suppliers. They illustrate three e-procurement models namely one-to-many, many-to-many and many-to-one. Nevertheless, e-procurement involves general email, electronic fax, voice communications or non internet/web based approaches, which are regarded as partial traditional e-procurement solutions. As one of the core enablers of an e-business supply chain, e-procurement is conceptualized as a subset of e-commerce.

2.1.2 E-Commerce
This is simply a transaction conducted electronically; e-procurement is the automation of many procurement processes via electronic systems, especially the internet. Therefore e-procurement in its definition should in a nutshell touch the following areas to accommodate variety of definitions by scholars; associated with the use of electronic devices in its implementations such as telephones, computers etc. it comprises communications both audio/verbal, visual and in written, it is an integral part of e-business and or e-commerce.

2.1.3 Implementation
Implementation can simply be synonymic to application. As with e-procurement, implementation has been defined in different ways. In this context, the terms will be used interchangeably but with common meaning. A typical general definition from the information Systems (IS) literature, states that implementation is “an effort beginning with the first thought of developing a system and not ending until the project is completed or abandoned” (Ginsberg, 1979).

Chan and Swatman (1998), however state that IS implementation is best described as a process of organizational change that extends over a considerable period of time. More recent definitions of the term stem from the diffusion-based models of innovation adoption in relation to e-commerce/e-business. Cooper and Zmud (1990), propose a five-stage framework which are; initiation, adoption, acceptance, routinization and infusion explaining how can IT solution is implemented in organizations, which with the exception of infusion, forms the framework of this
analysis. Infusion is the stage at which the e-procurement solution is used within the organization to its full potential. As most e-procurement initiatives are in their infancy, this sort of approach has been used as a guide to selection of some e-procurement initiatives in the private sector and identifies the most relevant Critical Success Factors for a particular purpose.

2.1.4 Software
Refers to a set of computer programs, and associated documentations related to effective operation of data processing system. Software can be general or problem driven software, which have been designed to solve specific problem (Zachariah, 2007)

Refers to all programs which enable computer hardware to operate effectively. Software instructs the computer on what to do and how to do it. It follows therefore, that without software the computer can do nothing. The term software applies to those programs that are built within the computer. These programs, forming the software are supplied by the manufactures and are usually named as packages. (Saleemi, 2009)

2.1.5 Hardware
Refers to physical components of a computer system that someone may touch them. Hardware can be classified as input, output, processing and control device (Zacharia, 2007)

2.1.6 Concept of Information technology
Information technology defined as the study, design, development, implementation, support or management of computer-based information system, particularly software applications and computer hardware (Anderson, 1990)

IT includes all matters concerned with the furtherance of computer science and technology and with design, development, installation, and implementation of
information system and applications. Information technology architecture is an integrated framework for acquiring and evolving IT to achieve strategic goals. It has both logical and technical components. Logical component include mission, functional, and information requirements, system configurations, and information flows. Technical components include IT standards and rules that will be used to implement the logical architecture, (Rahul V.Altekar, 2006).

IT can be referred to as the study, design, development, implementation, support or management computer based information system, particularly software application and computer hardware. It is the combination of telecommunications and computing to obtain process, store, transmit and output information in the form of voice, picture, words and numbers. It incorporates a variety of discipline including telecommunication, information system, software development and database management system.

2.1.7 Information and Communication Technology
ICT (information and communication technology – is an umbrella term that includes any communication device or application, encompassing, radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video conferencing and distance learning. (Bajaj and Nag, 2005)

2.1.8 Management information system
MIS is defined as computer system usually based on mainframe or minicomputer, designed to provide management personnel with up to date information on an organization’s performance/business activities, e.g. inventory and sales. These systems output information in a form that is useable by managers at all levels of the organization.
2.1.9 Important of e-procurement.

Some of the noted benefits of e-procurement include increased collaboration between buyers and suppliers, reduced personnel requirements, improved coordination, reduced transaction costs, shorter requirement cycles, lower inventory levels and greater transparency. (Min and Galle 2003)

Giunipero and Saw chuck (2002) noted that the internet can be used as a research tool, allowing the purchasing professional to shop around and compare suppliers capabilities and to peruse online catalogs. The internet can be used to generate savings. It is an effective way to reduce otherwise high transaction costs for low-value items such as maintenance, repair and operating items. Internet- based procurement tools can be used not only to reduce transaction costs, but as a means of reducing prices paid for purchased goods/services. The buying firm can use the internet to solicit bids from a wider range of potential bidders than is possible using traditional methods. This could increase the firm’s chances of getting a better price.

Moreover the buying firm can use an e-marketplace and participate in online auctions, both reverse (where a buying firm makes its purchase needs known online). E-procurement can be used as part of an effort undertaken by the entire supply chain from the final customer back to firm’s suppliers.

The PREMnote 90 (2004) highlighted a few benefits of e-procurement Korea achieved as the Government made decision to buy in into e-procurement. The report provided the following benefits among others:- E-procurement system gives government agencies, private sectors also suppliers a single point of contract for registration and information. The system has also expanded the selection of products and standardized their classifications. Moreover, it involves simpler documents and faster payments. The system is linked to more than 30 procurement-related external agencies, including supplier certification agencies, financial clearing institutes, the ministry of Internal Affairs, the ministry of Finance, and e-guarantee and e0payment systems. Encryption technology and digital certification ensure secure transactions and project online information. The reform has transformed the Public Procurement Service from an agency that conducted the entire procurement process, from public/
private notification and specification review through final payment, into an information center, enabling government agencies and private sector to procure goods and services themselves. The manual system Tanzania has however transformed its procurement system from centralized into decentralized (PPA2004), indicating possibilities of the country’s ability to also decentralized manual into electronic one.

2.1.10 Basic concepts in e-procurement for supply chain management
As the world’s economy becomes increasingly competitive, sustaining competitiveness and the resulting profitability depends less on the ability to raise prices. Instead, firms need to compete on the basis of product innovation, higher quality, and faster response times, all of which must be delivered, in most cases simultaneously and always at the lowest costs attainable. Those competitive dimensions cannot be delivered without an effectively managed supply chain. Firms with the most competitive supply chains are and will continue to be the big winners in contemporary business. The supply chain encompasses all activities associated with the flow and transformation of goods from the raw materials stage through to the end user, as well as associated information flows. Supply Chain Management is the integration of these activities through improved supply chain relationships to achieve sustainable competitive advantage. (Handfield & Nichols Jr, 1999).

The definition suggests that all of the links in the supply chain must be strong and well integrated. However, it is argued here that the key link, the one that sets the foundation for the others, is supply management on the input end of the chain (Dobler & Burt, 1996).

It is the link in the supply chain that serves as the boundary-spanning activity on the input end of the business where the supplier base is built based on the suppliers’ ability to help the firm deliver on the competitive dimensions. It is where industrial marketers come face to face with the demands of the buying firm’s supply chain. The increasing emphasis on supply chain management has sharpened top management’s focus on the valued-added potential of supply management. A recent survey suggests
that 76% of CEOs expect supply management to contribute to shareholder value as firms continue to move toward more outsourcing (Dobler & Burt, 1996).

The potential impact on competitiveness and profitability is enormous because the average manufacturing firm spends about 50% of its sales revenue on the purchases of goods and services needed to produce its final product. It is at the supply end of the supply chain where most of the expenditures on supply chain activities exist. This increasing emphasis on supply management, rather than on the more traditional ‘‘purchasing,’’ requires that the professional supply manager move beyond the typical transaction focus of purchasing where price and availability were the key factors to be considered in the purchase decision. The new basics of supply management require that supply managers take a more strategic view of what they do. Those new basics include a comprehensive understanding of target costing, value engineering, supplier development, and electronic procurement (Dobler & Burt, 1996).

The first three are not really new, having existed as an implicit part of supply management for some time. It is more accurate to say they are being rediscovered. It is electronic procurement, the productive use of the Internet to improve the effectiveness and efficiency of the supply end of the supply chain that is new. Strategic supply management has the potential for significant value creation for the firm. Business professionals who have long been involved in supply management understand its power to create value. The emergence of e-procurement in the last few years is creating a higher profile for supply management, boosting its visibility to top management.

The challenge to those operating on the supply end of the supply chain is to make a convincing business case for what they do. Although CEOs expect supply management to contribute to shareholder value, effective supply managers need to get comfortable with the language of top management to communicate how that value is created. The move to e-procurement provides a unique opportunity for supply managers for two reasons. First, the application of technology to boost
competitiveness and profitability is on the agenda of any forward thinking CEO. Second, the application of technology to supply management, where firms spend most operating dollars, is focusing more top-management attention on that issue. A recent study by Deloitte Consulting of 200 global firms indicates that 30% have begun implementing at least a basic e-procurement solution whereas 61% are either planning or are considering an implementation (Whyte, 2000).

E-procurement is the linking and integration of inter-organizational business process and systems with the automation of the requisitioning, the approval purchase order management and accounting processes through and Internet-based protocol (Podlogar, 2007)

According to Kalakota & Robison (1999), the purchasing process is within the procurement process and refers to the actual buying of materials and those activities associated with the buying process. In the supply chain, the procurement process is important, because includes business partners as: suppliers, manufacturers, distributors and customers that use transactions to purchase, manufacture, assemble, or distribute products and services to the customers.

2.1.11 The Role of e-procurement in Integrating Supply Chains
The use of e-procurement provides the basis for supply chain integration by providing efficient, timely and transparent business information to the appropriate parties (Cagliano et al. 2003).

Some of the relevant types of information include operations, logistics, and strategic planning information. Sharing of this information enables multiple firms to engage in synchronous decision making and can lead to improvements in production, planning, inventory management, and distribution (Sanders 2005). Due to its ability to provide vital information to the appropriate parties, he dubbed IT the backbone of supply chain business structure.
Zeng and Pathak (2003) suggested that supply chains advance when they progressively integrate multiple functions into the process. This progression is driven by the development, advancement and implementation of e-procurement which allows coordination of activities and process between supply chain members. Authors assert that the greatest value associated with the use of e-procurement may be its ability to allow users to develop networks that reach beyond the borders of the individual firm.

2.1.12 Categorizing Types of E-procurement Applications
A number of researchers have developed classification schemes or taxonomies to categorize internet-based tools (e.g., DeBoer, Harink and Heijboer 2002; Brynjolfsson and Smith 2000). This categorize is necessary because e-procurement tools differ in many respects including costs, benefits, goals. Frohlich and Westbrook (2002) surveyed a sample of UK-based firms in order to investigate the extent to which they used internet-based technologies to integrate supply chain activities such as inventory planning, order taking and demand forecasting. The authors categorized the respondent’s usage into four groups:

- Web-based, low integration (Internet-enabled focus on the firm only)
- Web-based supply integration (Internet-enabled integration between the firm and its suppliers)
- Web-based demand integration (Internet-enabled integration between the firm and its customers)
- Web-based demand chain (Internet-enabled integration between the firm, its suppliers, and its customers)

Froehlich and Westbrook (2002) found that the majority of firms (63%) engaged in web-based, low integration. The web-based demand chain group was the smallest segment, with only 4% of the respondents.
Cagliano et al. (2003) conducted a study on the sample of European manufacturing firms and identified four clusters of respondents based on their use of internet-based technologies. The authors categorized the firms in the following manner: traditionalists 55% of the sample did not use Internet-based technologies within the supply chain, e-sellers (23% of the sample) used Internet-based technologies for sales and customer care only, e-purchasers (14% of the sample) employed Internet-based technologies extensively, but only for the purpose of making purchases from suppliers. Finally, e-integrators (7% of the sample) used Internet-based technologies in every aspect of their supply chain processes. This included use in internal operations, procurement, and sales.

Previous research has established that e-procurement tools can be classified on the basis of a number of characteristics, including an ability to facilitate integration. Based on the findings of Frohlich and Westbrook (2002) and Cagliano et al. (2003).

2.1.13 The Relationship between Firm Sector and the Use of E-procurement Applications

In an attempt to further understand e-procurement use, the authors examined previous research on the relationship between firm sector and the adoption of technology. The results of a multi-sample survey of Spanish firms operating in various sectors, which was conducted by Ortega, Martinez, and DeHoyos (2006), provided support for the premise that the sector in which a firm operates plays a role in the acceptance of technologies. Ortega et al. (2006) found there were factors that influenced technology adoption such as perceived ease of use and usefulness of the technology, but their effect was contingent upon the sector in which the firm operated. Specifically, the authors found that firms operating in the IT industry not only perceived on-line management applications (the technology in question) to be more
useful and easier to use; they also had higher adoption intentions and intensity of use than firms operating in the primary, industrial, and services sectors. While a number of studies suggest that firm sector plays a role in technology adoption, researcher has taken somewhat different approaches to explaining this relationship.

Ortega et al. (2006) noted that some industries are characterized by greater experience in technology use, which facilitates the adoption of additional technological applications (including e-commerce). Additional research suggests that industries that are more technological advanced promote greater and more effective use of the appropriate technologies. Dyer, Cho &Chu (1998)

Thatcher and Foster (2002) support this notion in their analysis of how e-procurement has involved in firms operating in various industries. The authors noted, for example that industries such as textiles tend to be less technologically advanced than other sectors such as electricity companies, which tend to be in the forefront of technology adoption.

Motiwalla, Khan and Xu (2005) undertook a study to identify the factors that impact the adoption/use of e-business across three different sectors. The researchers concluded that similarities in the level of e-procurement adoption were identified within sectors because engaging in a particular activity prompts firms to develop similar behavior patterns. This would explain why firms engaged in information-intensive activities are more likely to accept new technological innovations. These firms do so primarily because using advanced technologies provide greater strategic benefits for them Min and Galle (2003)

Dyer et al. (1998), found that firms operating in a particular sector require similar levels of efficiency of managed, which can be facilitated by various levels of
technology use. Similarly, Premkumar and Roberts (1999) examined the intensive of competitive pressure within the firms sector as a determining factor in the adoption of technologies.

The authors maintain that firms that engage in more competitive are driven to employ increasingly sophisticated tools. Consequently, the adoption of higher levels of technology has become strategically vital for firms belonging to sectors such as telecommunications or distribution

2.1.14 Barriers to a successful E-procurement Implementation

While various governments are encouraging public sector agencies to adopt e-Procurement, its implementation does not appear to have been smooth and the rate of e-Procurement implementation success has been less than spectacular, as supported by Premkumar and Roberts (1999) claim that “Government e-Procurement projects have been notoriously unsuccessful”. The development and implementation of e-Procurement has not been as easy as some of the solution providers have suggested, nor has it necessarily brought the anticipated savings.

Furthermore, engaging suppliers in the process - especially smaller organizations - is also proving to be difficult given the level of investment expected in terms of providing catalogue information to buyers, and marketplaces using different technologies, platforms and business languages Premkumar and Roberts (1999). Difficulties also seem to stem from the tension between Buy Local policies designed to promote a local economy, and the efficiencies to be achieved through volume purchasing from large suppliers Min and Galle (2003). Although a number of public sector agencies are actively pursuing e-Procurement, evidence from business press reveals that many of the efforts are not meeting original expectations. In fact, implementation rate of public procurement systems has been slow and many government agencies tend to overstate the degree to which they are involved in e-Procurement Min and Galle (2003)
Vaidya, et al. (2006) has explained the overall challenges so facing majority in implementation of e-procurement. They write; ‘the development and implementation of e-procurement has not been as easy as some of the solution providers have suggested, nor has it necessarily brought the anticipated savings. Furthermore, engaging suppliers in the process- especially smaller organizations- is also proving to be difficult given the level of investment expected in terms of providing catalogue information to buyers, and marketplaces using different technologies, platforms and business languages’.

They continued to say that ‘Difficulties also seem to stem from the tension between Buy Local policies designed to promote a local economy, and the efficiencies to be achieved through volume purchasing from large suppliers. Although a number a public agencies and private sectors are actively pursuing e-procurement, evidence from business press reveals that many of the efforts are not meeting original expectations. In fact, implementation rate of private/ public procurement systems has been slow and many private sectors and government agencies tend to overstate the degree to which they are involved in e-procurement’. Such success and failure stories imply that there is a need for a much better understanding of challenges facing Tanzania in comparison with the rest of the world.

2.1.15 E-procurement implementation perspectives and outcomes
E-Procurement solutions are seen as a way to address many public sector procurement requirements. It has become apparent that the more the procurement process is supported by Internet technology, the easier it will become to develop and implement e-Procurement.

The e-Procurement infrastructure and procedures can facilitate the achievement of the principles including transparency and accountability requirements of the public offices while enhancing efficiency, effectiveness, and flexibility in the procurement process Ortega et al. (2006). E-Procurement has the potential to promote operating efficiency in public sector procurement and provide significant cost savings. One of key logical advantages of electronic transaction management is that it frees
procurement staff for procurement evaluation and contract management roles. Furthermore, management information can be extracted from the e-Procurement system using standard reporting software Ortega et al. (2006). The transparent management information provided by e-Procurement also permits the monitoring of compliance with service level agreements and measurement of many other elements of supplier performance.

The implementation of e-Procurement initiatives should be seen as an effort to improve the procurement goals, which normally include quality; timeliness; cost; minimizing business, financial and technical risks; maximizing competition; and maintaining integrity Min and Galle (2003). In a similar vein, Ortega et al. (2006) has identified cost, quality, program management progress measures (on-time, on-budget, and issue management), process performance factors, and Return on Investment as the most relevant measurements. There remains, however, the challenge of controlling the range of variables required to reap the benefits of e-Procurement implementation. It should be remembered that because an e-Procurement initiative is expensive, demanding upon staff, and time consuming, it may take several years for public sector agencies to fully reap the strategic and operational benefits of e-Procurement

A successful e-Procurement implementation in the public sector, the business press has reported a number of failures of e-Procurement initiatives in a number of public sector agencies in the USA, UK and New Zealand in recent years. As observed by Min and Galle (2003). E-Procurement will result in large investments of time and money, without absolute certainty that its full potential will be achieved every time.

These views are supported by a number of cases reported in the business press. The US Government’s General Services Administration had been criticized following embarrassing revelations that it was unreliable and error-prone Min and Galle (2003). While the British government decided not to extend its pilot e-tendering system across Whitehall Ortega et al. (2006). In a similar vein, Ortega et al. (2006) report that the New Zealand Government’s Go Procure e-Procurement system has
proved more complex to develop than expected, while the UK Ministry of Defense is yet to achieve savings three years after its e-Procurement service first started running). According to them the State of South Carolina abandoned its e-Procurement system in June 2002 and pilot projects were shut down in 2002 in Massachusetts, Indiana, and Michigan. The Virginia state auditor reported only 1.5 percent of the state’s business was transacted through its state-of-the-art $USD14.9 million system Ortega et al. (2006).

There is, however, a view that the rumors of e-Procurement’s demise have been greatly exaggerated (Harris, 2002). For example, Davila, Gupta and Palmer (2003), using a survey of 168 US public and private sector organizations, indicate that e-Procurement technologies will become an important part of supply chain management and that the rate of adoption will accelerate as the adopters share their experiences of success factors and perceptions of low risk. Similarly, they identified e-Procurement as the element of e-business most contributory towards the e-Business operational excellence of large corporations. Such success and failure stories imply that there is a need for a much better understanding of CSFs in regards to the e-Procurement implementations and use in the public and private sectors.

2.2 Empirical Literature Review
The popularity of the Internet had significantly influenced organizations’ intentions to use new inter-organizational systems (IOS) technologies such as e-Procurement. While researchers from Information Systems (IS) and management disciplines have studied the implementation issues of the traditional IOS in the private sector from various perspectives, there have been few implementation studies on Internet/Web-based IOS, especially on e-Procurement in the public sector.
Furthermore, while there have been some academic studies conducted on the value of B2B e-Procurement (Subramanian & Shaw, 2002), the e-Commerce procurement process Min and Galle (2003, the classification of e-Procurement transactional structures Premkumar and Roberts (1999), and the impact of e-Procurement on buyer-seller relationships), there appear to be relatively few detailed empirical studies on e-Procurement implementation Premkumar and Roberts (1999).
Building on the traditional IOS implementations, e-Procurement research has included a variety of constructs and measures in understanding and predicting implementation success. Premkumar and Roberts (1999) has confirmed that a significant portion of the initial value proposition is often not ultimately delivered due to problems related to technology, business process, and/or people/organizational issues.

### 2.2.1 Abroad Case

Most of third world countries are still lagging the procurement initiatives. Only recently has the public sector come to recognize the potential importance of ICT and e-business models as a means of improving the quality and responsivenes of the services they provide to their citizens, expanding the reach and accessibility of their services and public infrastructure and allowing citizens to experience a faster and more transparent form of access to private and government services. However majority of these countries have not fully been able to implement e-procurement notwithstanding the advantages it brings.

Fang, (2002) comments that ‘the initiatives of government agencies and departments to use ICT tools and applications, internet and mobile devices to support good governance, strengthen existing relationships and build new partnerships within civil society, are known as e-government initiatives. As with e-commerce, e-government represents the introduction of a great wave of technological innovation as well as government reinvention. It represents a tremendous impetus to move forward in the 21st century with higher quality, cost effective government services and a better relationship between citizens and government’, as he was trying to elaborate on the importance of e-procurement in the developing countries. Graham and Aurigi, (1997) on the other hand says that ‘many government agencies in developed countries have taken progressive steps toward the web and ICT use, adding coherence to all local activities on the internet, widening local access and skills, opening up interactive services for local debates, and increasing the participation of citizens on promotion and management of the territory’.
Discussing on the challenges African continent faces on the implementation of e-procurement, Opoku, and his associates in their presentation made at the world summit on information society took place in 2003 and 2005, Geneva and Tunis respectively, pinpointed the challenges African continent face on the way to implementing e-procurement states ‘the challenges may be too general for the whole Africa, while we believe that each country is unique, the problems experienced in South Africa may not be the same as challenges experienced in Tanzania, there is indeed a need to find out more specifically the challenges facing Tanzanians in the implementation of e-procurement’.

During an ECA/IDRC study in 2001-1, it was found that the North African countries of Egypt, Morocco and Tunisia were adopting e-commerce. The report notes; “all these countries have recognized the important role of private and government in setting up the conditions within which e-commerce (e-procurement) can be developed, and appear to be moving both to amend necessary legislation and provide a demonstration effect by launching pilot projects”. The same survey covered three countries in Southern Africa (Mozambique, Namibia and South Africa) and found that e-commerce had a “high profile in only one of the three countries surveyed at this time, although processes are under way in the other two which could lead to more attention to the issues involved”.

South Africa’s Green Paper on e-commerce is one of the continent’s most although analyses of what needs to be done. In its report, it highlighted one of the major problems of development of e-procurement in developing countries as particularly in Africa, is that ‘there is not an overall policy framework (with the exception of the five countries mentioned) covering aspects such as technical, economic and political’.

EJISDC (2004) has stated that the potential for e-government in developing countries however remains largely unexploited, even though. ICT is believed to offer considerable potential for the sustainable development of e-government. Different
human, organizational and technological factors issues and problems pertain in these countries, requiring focused studies and appropriate approaches.

ICT, in general, is referred to as an “enabler”, but on the other hand it should also be regarded as a challenge and a peril in itself.

The organizations, private or public, which ignore the potential value and use of ICT, may suffer pivotal competitive disadvantages. Nevertheless, some e-Government initiatives have flourished in developing countries too, e.g. Brazil, India, Chile. What has been experienced in these countries shows that governments in the developing world can effectively exploit and appropriate the benefits of ICT, but e-Government success entails the accommodation of certain unique conditions, needs and obstacles. The adaptive challenges of e-government go far beyond technology; they call for organizational structures and skills, new forms of leadership, transformation of public-private partnership. (Allen et al, 2001)

In the publication titled ‘E-procurement for Good Governance and Development in Italy, North Africa and middle East’, edited by Fiore et al, the challenges limiting implementation of e-procurement were intensely discussed. The article discusses variety of challenges facing these countries in particular. A few of these countries are discussed here below;

**Middle East countries:**

The study done in Middle East countries reveals that e-procurement, as an initiative in itself, is not very effective; it should be part of a broader framework of administrative reform through e-government. However, governance is an important challenge to e-procurement, including the overall system of all actors involved (suppliers and local, central, national and international administrations). In addition to technical issues, any e-procurement launch plan must from the outset address the organizational/ management aspect, and within that, the front-office/ back office relationship. The diffusion and exchange of information and experiences with other authorities could be very useful for administrations entering this phase. Another
challenge, tying in with governance and organizational issues, is the political process required to introduce a system of e-procurement integrated with e-government and governance process. It is therefore vivid that in majority of Arab world, major challenge of e-procurement is seen as government system and support. This is an issue in many areas of developing countries. It should be pointed out majority of Arab world are currently trying to reform their political situations with or without pressure from outsiders, while others are negotiating framework agreements with the rest of the world. For example, Morocco and Jordan have established a contract of free exchange with the United States. These agreements will clearly have effects on actions and behaviors at the national level that would probably give a green light towards establishment of e-government and eventually e-procurement.

**Algeria:**
Abdel Razak Henni, Ministry of Justice wrote; the development of e-government in Algeria does not yet include digital signature or any real of e-procurement. However, the assembly should soon examine a commission-approved decree on these issues. The general process for public contracts proceeds as follows. The case for digital signatures has also appeared in other successfully countries such as United Arab Emirates.

**Tunisia:**
In Tunisia, online contracts are not yet possible even though there is still an ongoing process of improvement on the side of public e-procurement. However, the private sector seems to excel on the matter. Elarbi, (of the National Observatory of Public Contracts) wrote; ‘the National Observatory of Public Contracts is the body appointed to implement e-procurement in the Tunisia administration. The general normative framework for e-public procurement in this country is about to change; at the moment online contracts are not possible. In the private sector, however the law on e-commerce has already altered the general legal picture. In 2002, the issue of e-procurement was put on the agenda of the broader process of change in the Code for public contracts. For now, administrations can go as far as publishing invitations to tender and associates contracts on the internet on an official Web site’. This is how
far the most developing countries have gone, there is a lot of tender advertisement online but still no contract is signed over the internet. The World Bank and the Gateway Foundation are currently collaborating closely in the preparation of a Tunisia E-Procurement Action Plan. The presentation of this plan has been postponed.

**Bahrain:**
Elham Saleh wrote; in Bahrain, the government has launched an e-government project that is quite advanced, given the country’s general context. Administrative instruments and procedures have been modified. A law on electronic transactions will introduce the use of digital signatures; structural investments have been made. With technical and normative preparations already complete, work will soon begin on an online services portal, the main challenge Bahrain seems to encounter is that bureaucracy, despite all the efforts to get e-procurement running.

**The World Bank:**
The introduction of e-procurement has been a subject of analysis and evaluation even before the implementation phase. Each country’s case is reviewed generally, without reference to specific aspects such as the normative framework or electronic signatures. Instead, attention is focused on a series of innovations and implementations: the provisioning plan, the spheres covered by e-procurement procedures, the provisioning of specific, key sectors (Defense, Security, Healthy), the identification of criteria that can tender a country fit to enter the electronic market, internal e-procurement procedures, such as; the rules for invitations to tender; levels of security for the resubmission of online tenders; payments, technical specifications of goods/services to be purchased; the presentation, opening and evaluation of offers; adjudication of contracts; accounts, integration of national e-procurement systems with general and supranational normative framework and implementing mechanisms.

However the World Bank did try to put together the technical challenges that face most of the third world countries.
In the same article namely ‘E-procurement for Good Governance and Development in Italy, North Africa and middle east’, the World Bank states that, E-Procurement depends on a level of trust between buyers and sellers. The internet presents the following challenges:

1. Proving to buyers that sellers are who they say they are.
2. Proving to buyers that their personal information will remain confidential.
3. Proving to buyers that sellers will not be able to refute the occurrence of a valid transaction.

Some of the most important challenges which have been referred to as ‘risks’ associated with the use of internet in electronic based transactions according to World Bank are;

**Confidentiality:**
Within the business environment potential consumers are, rightly, concerned about providing unknown vendors with personal- sometimes sensitive- information. Their concerns include the possible theft of credit card information from the vendor following a purchase, connecting to the internet via a browser and running software on computer that has been developed by someone unknown to the organization, and using an online broadcast network which routs information over wide-ranging and essentially uncontrolled paths. Though the risks have been pronounced low in P2B as the private tends to use less of the known contracts/ renderers. However, the transfer of information across the internet remains a risk.

**Integrity:**
Data both in transit and in storage could be susceptible to unauthorized alteration or deletion through hacking or viruses. The e-business system itself could also have design or configuration problems.

**Availability:**
The internet holds the promise of allowing business transactions on 24-hours, seven-day-a-week basis. Availability of is therefore important- any system failure would
become immediately apparent to business partners and might result in delays and or contingents costs.

**Authentication and non-repudiation:**
The parties on an electronic transaction should be in relationship that involves a high degree of familiarity and trust, and should prove their respective identities before executing the transaction to prevent man-in-the-middle attacks (i.e. preventing an impostor from posing as the seller). After transaction, there should be measures to ensure that the transacting parties cannot deny the transaction and to confirm the terms on which it was completed.

**2.2.2 Tanzania case.**
Many Tanzanians seems to have difficulties in understanding, what exactly is the reason for in-implementation of e-procurement in private organizations. In one of the occasions, when visiting the Private Procurement Regulatory Authority’s (PPRA) website, (2011) the researcher was able to capture and follow up on the conversation of several stake holders of e-procurement in Tanzania.

While one of them tried to explain that the country is ‘ready’ to embark on e-procurement, on the other hand, he tried to put blame on the ‘system’, meaning the infrastructures that could support implementation that they were not ready to support e-procurement. He gave an example of procurement of common used items by GPSA, that the idea is good but little was thought in terms of its implementation particularly the geography of the country with its related infrastructures. The person meanwhile failed to provide strong evidence to support his view. That means he could not prove that the system is a really a challenge to the effective implementation of e-procurement in Tanzania.

However, he insisted that ICT need stable infrastructure, like reliable power, while we know that our power country wise is unstable, and that one cannot preach e-procurement, e-commerce, e-business in the system which its power to generate and support the preached system is unreliable. In other words the stake holder’s argument
is more based on the infrastructures particularly power rationing which enables users to only access to power during daytime only about less than a week.

Another view based in implementation of e-procurement was to seek the political will and make reliability of electricity and other infrastructures to support e-procurement first and other will follow the argument which did not consider several other factors such as e-government launch.

In reply to this, another stakeholder commented Tanzania is absolutely ready as a country to embark on electronic procurement, as he argues that e-procurement provides for opportunities to improve procurement practices in all levels and that it should be encourage and promoted. The stakeholder particularly argued basing on the benefits brought about by e-procurement in the country. He commented that it is evident that e-procurement does not make life convenient but more importantly makes business profitable by cutting down cost and saving time. Proper e-procurement project planning is required taking into account the identified critical success factors before embarking on the initiative. Equally important is the realization of barriers to e-procurement. It is important to know before, the challenges one many reasonably expect to encounter and design countermeasures to diffuse them.

Some of the stakeholders did not agree with the thoughts above, that the country first need to first stabilize power then embark on e-procurement. To them it seems that power has nothing to do with effective implementation of e-procurement, due to the introduction or invention of technology of laptops, mobile phones and utility power (generators) this is no longer a critical problem in ICT infrastructure. That the use of backup power in business and other operations such as banks where one can make electronic transfer, power rationing cannot be a big barrier in embarking on e-procurement, especially where on considers the cost saving from e-procurement. He then argued that, Procurement Professionals need to put in place a mechanism for promoting and regulating e-procurement in the country; the government being the
biggest stakeholder should take the lead in introducing and practicing e-procurement, and removing all barriers to e-procurement.

The other one comments that; since I am the one who posted the topic I am not ready to jump in and give my comments. But the points you raise interesting and we are happy that you are part of the forum.

An extract from Tanzania’s Knowledge Networks, 2011 September, an article titled “Improving Public Service Delivery and Citizens Engagement through E-Government” comments that ‘New technologies are driving and reshaping Government throughout the world by improving public services delivery and engaging citizens. Despite significant progress Tanzania has made in using information and communication technology (ICT), Tanzania has yet to fully utilize ICT services due to a number of factors, including inadequate infrastructures, human capacity, and legal framework.

The same article continues that the Government recognizes the value of Electronic-Government (e-government) in promoting and improving efficiency in public services delivery and strengthening citizen’s participation and engagement. However responding to the demand for government requires a cross-sectoral approach, as well as interdepartmental collaboration and multiple dissemination channels. The tremendous increase of mobile ownership provide a stronger case for leveraging e-government to significantly improve access to public services and in transforming government, making it easy accessible to the citizens. Government can share information with citizens through mobile messaging and micro-blogging services. Example of e-government services includes e-procurement, payment of bills and taxes, licensing, downloading of government forms, online services, public information, and business opportunities.
2.3 Concluding Remark.
From the above chapter of literature reviews the concept definitions, empirical review are the ideas of different authors from different sources as it is referenced concerning the study about the implementation of e-procurement. The sources include books; journals conference papers periodicals and information from internet. These materials were used for background reading to obtain full understanding about the problem, objectives and to gather information needed for discussion and analysis in the research.

From what has been found out by the researcher through literature review, the following limitations have been noted from majority of developing countries on implementation of e-procurement related program; digital signatures, lack of technical knowledge; availability of both Computer software and Hardware with its related cost; uncertainties in electric supply; lack of management support, poor level of technology applied in most of the countries; bureaucracy and conservatism, confidentiality integrity, availability of the system, law /policy that govern the e-procurement systems, authentication and non repudiation issues as well as absence of e-procurement policies legislation among others. Basing on these grounds therefore, the researcher interest will be to find out if the said limitations of e-procurement implementation also affect the effective and efficient application of the same in Tanzania’s private sectors.
CHAPTER THREE

RESEARCH METHODOLOGY AND PROCEDURES

3.0 Introduction
This section introduced the methodological aspects of the research in terms of the area of the study, research design, sampling techniques and sample size methods of data collection and data analysis.

Research methodology is a systematic approach through which research is undertaken. The research methodology consists of research design, data collection methods, sampling and sample size, sampling procedure, study area, reliability and validity, data management and analysis

3.1 Area of the study
The study was conducted at Berkeley Electrical a private organization located in Dar es Salaam, Tanzania. The choice of the area is purposive because the organization is located around the researcher’s destination, therefore easy accessible.
BEL is legally mandated to provide Construction and supplies services.

The company concerned with the whole process of supply chain management including logistics, transportation, operations management, materials ordering and distribution management, marketing, purchasing Information Technology as well as electronic procurement activities. As stated earlier, Berkeley Electrical Ltd has come a long way as a name Synonymous with quality construction in Tanzania. It is the company which was founded by the Minters Building Group in the United Kingdom. They opened a branch in Dar es Salaam, Tanzania since 1953 to carryout electrical, air conditioning contracting. It is the company which has become truly a ‘one stop engineering service company’ capable of undertaking any type of electrical and air conditioning project on an engineering, procurement and construction basis.

The company concerning with the whole process of supply chain management including logistics, transportation, operations management, materials ordering and
distribution management, marketing, purchasing Information Technology as well as electronic procurement activities.

**Company History:**
BEL was founded by the Minters Building Group, in the United Kingdom. They opened a branch in Dar es Salaam, Tanzania in 1953 to carry out electrical contracting.

The company was brought out by the William Steward Group in 1978 which was then, United Kingdom’s largest electrical contracting company. In 1997, the internationally acclaimed ABB purchased the company and in the same year, Berkeley Electrical initiated its air conditioning division.

In the year 2004, Terry Dickens and Peter King successfully negotiated a management buy out which then effectively resulted in the incorporation of the present day company of Berkeley Electrical Limited.

Over the years, Berkeley Electrical has offered high quality professional services to discerning clients in both construction and industrial sectors. The company’s project involvements include hotels, banks, hospitals, commercial developments, industrial compounds and residential constructions.

Berkeley Electrical Ltd has become truly a ‘One stop engineering service company’ capable of undertaking any type of electrical and air conditioning project on an engineering, procurement and construction basis.

Berkeley Electrical Ltd is the supplier of high quality electrical and air conditioning installations. They are capable of taking on the biggest projects and delivering safety and on time. It has the experience and a resource to meet today’s sophisticated installation needs. Their commitment is to keeping up to date with the most recent technological advances helps them to provide rapid and efficient solutions to all types of Electrical and Air Conditioning challenges.
Vision and Mission of the company:
With the government policy of economic liberalization and privatization, investors are now searching for quality, competent professional services at competitive prices. Berkeley electrical are capable of providing all the above.

It is important that we recruit and maintain the right people with appropriate skills, enthusiasm and integrity. Berkeley Electrical Ltd’s objective is to ensure that their employees are of the highest caliber and can add value to business.

With regards to health and safety, Berkeley electrical Ltd recognizes the need to maintain high standards as this is integral to the success of our business performance and objectives. With the company theme, ‘We make buildings work’ to the confident that our business model will continue to respond to the needs of our clients.

As a responsible company, it take action to achieve a number of environmental objectives as indicated below:-

- Communicate Berkeley Electrical environment protection policy to all our staff, clients and in some case consultants.
- Comply with appropriate environmental laws mainly the Montreal protocol requirements and incorporate them into our company’s business practices.
- Minimize the environmental impact of our offices and actively pursue practical initiatives.
- Integrating environmental elements into our business plans.
- Promote awareness and review environmental documentation

3.2 Research Design
This study titled “challenges associated with implementation of e-procurement in private organisation in Tanzania” a comparative study, is a qualitative research that attempted to find out the critical challenges in implementing e-procurement system and see if there is a room possible for e-procurement to be implemented in private sectors.
Trochim (2006) stated that a way point in doing qualitative research is to investigate and become more experienced with particular phenomenon’s of researchers interests in order to deliver a detailed descriptions

Kothari (2004, pp.99) defined research design as a program that guides the investigator in the process of collecting, analyzing and interpreting observations. Or is the blue print that enables the investigator to come up with solution to the problem and guides him or her in various stages of the research.

This sort of design was all about studying and collecting information within one particular social setting or an organization and hence concentrates on one unit only. However, case study design allows the interplay of various techniques of data collection and analysis. It was preferred because of the benefits it had over survey in terms of time, resources and flexibility.

According to this study the researcher designed to collect data from a sample size of population using sampling techniques, and different types of data collections such as interviews, structured and unstructured interview (questionnaires) and documentation review qualitatively. The researcher would utilize both descriptive research methods in the conduct of the study where current status of the electronic procurement implementation was to be obtained. The research made use of this experience in procurement, and come up with personal description of the answers to the research problem basing on what was found from data collected.

The research was limited to procuring entities, but further, this was a case study for generalization. In this context, the PE’s selected as a case, represented all PE,s in the country including the ministry offices, Executive agencies, Parastatals, Private Organizations, local government authorities, embassies and other Autonomous bodies as defined by PPA, 2004. The case study of Berkeley Electrical Ltd a private organization was done instead of two cases as planned.

The researcher contacted the minimum of 40 persons from the case study, particularly those performing the procurement activities, and its related functions.
The department will involve Administration, Information Technology (IT), Procurement Management Unit (PMU) and Stores. Researcher also designed to collect data from different respondents basing on age, gender, and position hold in the company together all the information needed to the study.

3.3 Sampling Techniques and Sample Size

Sample
Sample is reflected to as portion of population that is chosen to represent the Entire population in the study, since the population is very large and resources are so scarce to reach or include the whole of it in the research then that is why the researchers preferred to use sample instead of population (Saunders at el, 2000)

3.3.1 Sampling techniques
This is the process of selecting a sample from population (Saunders at el, 2000)
The researcher use random sampling techniques in the collection of data. In this technical variety of approaches can be done such as simple random sampling, systematic sampling, stratified sampling and cluster sampling. The researcher intends to use simple random sampling because each unit in population has an equal chance of being selected and it is free from bias.

Sample frame or population
Refers to the totality of the object or elements under investigation, also refer as the entire group of people, events or interest that the researcher wishes to investigate. Under this study targeted research population from which sample were selected are procurement, store, accounts, MIS, and as the user department as a sample frame from the sample were selected. Researcher prefers that sample frame because such departments are one’s that are more related with the topic under the study.

3.3.2 Sample size
According to Kothari (2004, pp.56), defined sample size as refers to the number of items to be selected from the universe to constitute a sample. The size of the sample
should neither be excessively large nor too small. It should be optimum; an optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility.

Moreover the exact number of elements selected from a population to present others is what called a sample size.

Though it is recommended to use a large sample size in order to be able to make generalization of the research findings, but there is a trade–off as the large sample size undertaken will also mean more resources in term of money and time required (Saunders et al 2000

A researcher selected a sample size of 22 respondents this proposed study because it was self-evident. The study of sample rather than the entire population was also sometimes likely to produce more reliable results. This was mostly because fatigues were reduced and less error would therefore resulted in collecting data.

The sample size of 22 respondents which is approximately 75% of the entire targeted population was enough to give good value of the data to be collected in the field leading to relevant research findings of the study.

Table3. 1. Sample size selected from the targeted population

<table>
<thead>
<tr>
<th>Departments</th>
<th>Targeted population</th>
<th>Sample size</th>
<th>% of sample selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>16</td>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>5</td>
<td>3</td>
<td>75%</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>8</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td>IT</td>
<td>5</td>
<td>3</td>
<td>60%</td>
</tr>
<tr>
<td>STORES</td>
<td>6</td>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>22</strong></td>
<td><strong>75%</strong></td>
</tr>
</tbody>
</table>
In explanation of the above table, the researcher decided to select only five departments as stated in the table because they are the ones performing the procurement activities, and its related functions. According to the number of the respondents in each department are the total number employed in the company for each department.

For that case only twenty (22) respondents from various department were selected to form a sample instead of undertaken the entire sampling frame, because the researcher had not sufficient fund and time to invest in collecting, checking and analyzing the data.

3.4 Sampling procedure
Sampling procedure is the way of choosing a sample in the study.

**Non – probability sampling.**
Is a biased sampling procedure in that it does not provide any basis for estimating the probability that each item in the population has no equal chance of being included in the sample. There is no guarantee that every element in the population has a chance of being included in the sample (Adam and Kamuzore, 2008)

In this study the researcher used the non-probability sampling procedure technique under accidental and Purposive sampling since those approaches are less expensive and enable researcher to collect a sample to collect a sample very quickly. Whereby;

- Accidental sampling involves selecting respondents primarily on the basis of their availability and willingness to respond, while
- Purposive sampling, is the approach under which the decision with regard to which element should be included or excluded in the sample rests on the researcher’s judgment and intuition, (Adam and Kamuzuro, 2008)

3.5 Data Collection Methods
Data collection methods refer to gathering specific information aimed at providing some facts According to Kothari (2004, pp.59), Three sources will be used to collect data for the study. Techniques which are used in data collection include questionnaires, interview and documentary review.

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Several data collection techniques are adopted by the researcher in collecting the data so as to avoid the inherent weakness of using a single method of collecting data in getting reliable and realistic findings. Hence such combination helped to supplement the weakness of one another.

The following are the methods of data collection employed in the process of collecting relevant and appropriate data concerning the implementation of electronic procurement in private sectors. These methods are the collection of both secondary and primary data:

3.5.1 Primary Data Collection
The primary data are those which are collected afresh and for the first time (Kothari; 2005), these are the sources of information on the dependent as well as independent variables in the study. Primary data are those data which are collected afresh and for the first time and thus happened to be original in character (Kothari, 2002)

This study required first-hand information from the respondents under the study; primary methods of data collection are used. This was done through conducting interviews and distributing questionnaires to the respondents selected. This was important because the researcher obtained relevant information within a short time.

3.5.1.1 Interviews
Kothari (2004, pp.97) define Interview as a method of collecting data that involves presentation of oral-verbal stimuli and reply in terms of oral-verbal responses.

In this study interview method of data collection was employed, where there was face to face interaction between a respondent and the researcher. The use of interviews helped the researcher together valid and reliable data that are relevant to the research questions and objectives.
Mainly structured interviews method are used as the method guided the researcher to collect standard information because questions were asked the same to each person within the sample, although where important unstructured interview method were employed to get more and important data for the research in hand.

According to Kothari (1990). Structured, unstructured, open-ended and closed ended questions are adopted during the time of conducting the interview. The interview was conducted at respondent area of work. The reason as to why the researcher used this method include flexibility, direct observing of non-verbal behaviors, control over the environment and avoidance of cheating as it was a face to face interaction.

**3.5.1.2 Structured Interview (Questionnaires)**

A questionnaire is the schedule of questions in which the respondents fill in answers without the researcher intervention. A series of questions will be prepared and printed on papers, distributed to the selected sample to be answered. The questionnaire included both open and closed questions. (Saunders et al; 2007)

The task took two-three weeks to be accomplished; respondents were allowed to go with the questionnaire at their homes. In this study the questionnaire was the main instrument for data collection. The researcher adopted the questionnaire because it was fast, cheap; thus gave the respondents enough time to reflect on the questions. Since each respondent was asked to respond to the same set of questions, it provided an efficient way of collecting responses from a large sample prior to qualitative analysis. The questionnaire for this study was attached as appendix 1 in this report.

Selected questions (closed questions) but also a few open ended, which were designed and prepared by the researcher, were used to collect relevant data and information from staff and management. A set of 17 questions were prepared for the purpose of this study.

**3.5.2 Secondary Data Collection**

Secondary data are data that are already available and refer to data that have already been collected and analyzed by someone else (Kothari; 2005). Secondary data will be obtained through documentary review, which will include published and unpublished
documents and reports. Are those data which have been collected by someone else and which have already been passed through the statistical process (Kothari, 2006)

The researcher went through the documents which are related to the study on hand reports, facts and figures which were done by other scholars on the same study which helped the researcher to get relevant information concerning the study. This helped the researcher to understand the whole perspective of the implementation of e-procurement within an organization.

3.5.2.1 Documentation Review

Saunders, et al. (2000) explained that documents are secondary form of data collected and stored by organizations or governments so as to be used by externals who are interested with those data to use in any relevant area to which can fit, these includes articles, income statements of the organizations, government manuals, reports etc.

Basing on this method, the documents of the organization such as records showing assets, policy used by the organization for asset disposal, assets which have had already been disposed by the organization and the procedures used for the same will be utilized to see the past performance.

In this report documentation review method for data collection were employed on documents available at the organization with reference to the organization network system. The researcher passed through different documents which are found in the organization to gather relevant information.

The document contained information about both hardware and software of the organization to this study. These provided secondary data on things like interaction of the system between procurement and MIS, security mechanisms, techniques data privacy policies and how the system worked in general and how the system managed. However depending on their level of confidentiality some of the documentation were restricted from disclosure.
3.6 Data Management, Processing and Analysis

3.6.1. Data Management
Data management is systematically organizing mass of raw data collected in a manner that will facilitate analysis of data.
In this research, data and information was organized into forms that are relevant to the study in relation to implementation of e-procurement in private sector based at BEL.

3.6.2. Data Processing and Analysis
This involved analysis of data collected in relation to the particular research objectives and questions to find out whether the findings gave the results of the research study. The researcher processed the collected data through editing, coding, classifying and tabulating. The processed data were analyzed using both qualitative and quantitative approach. The data collected was both qualitative and quantitative in nature, so it was important for the researcher to analyze and processed the data so as to make it useful and understandable.

Data were collected and tabulated and then analyzed using percentages and frequencies. Data analysis was entail applied statistical and logical techniques to describe and illustrate, condense, summarize and evaluate data. The process of data collection in qualitative study occurred simultaneously, that is why analysis was very important. The researcher used the SPSS software to examine the relationship between the dependent and independent variables and test the statistical hypothesis.

3.7 Ethical Issues
There are several ethical issues which the researcher faced during design and gaining access, during data collection, and ethical issues associated with data processing and storage. The researcher tackled these issues through good planning to conduct the research project in line with ethical principles of not causing harm and by adapted choice of methods wherever appropriate.
3.8 Accuracy/validity and Reliability of data

3.8.1 Reliability of Data
Saunders (2007, pp.609), defined reliability as the extent to which data collection technique yield consistent findings. It is the degree to which an instrument measures the same way each time under the same condition. The researcher tested and estimated the reliability of information collected from different departments at Berkeley Electrical Ltd through grouping questions in a questionnaire in two groups of respondents being given exactly the same questions of the same concept each group and then found if the two groups brought the same answer under similar conditions.

The data collected was edited for accuracy and completeness before they are used for analysis. Reliability is the extent to which data will be collected techniques or analysis procedures will yield consistent findings. The reliability of a measure indicates the extent to which it is without bias (error free) and hence ensure consistent instrument in other words the reliability of a measure is in indication of the stability and consistency with which the instrument measure.

3.8.2. Validity of data
This is the most critical criterion and indicates the degree to which an instrument measures what is supposed to measure (Kothari, 2004).

The researcher assured high degree of accuracy of this report through selecting the sample from a true representative of population and used the current documents ensured the validity of information collected.

3.9 Concluding Remark
This chapter explain about the overall methods and procedures of obtaining all the information and data needed to answers the research question and the specific questions and obtaining the needed objectives.
CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS

4.0 Introduction
This chapter aims at presenting and discussing the findings and analysis of data found at Berkeley Electrical Ltd by the researcher as far as the challenges associated with the implementation of e-procurement is concerned. The data were collected through questionnaire survey and through interviews conducted by the researcher from respondents also company documents were used as well. The research findings focused on the objectives of the study that were:

- To find out a room possible to make e-procurement possible and success in its implementation and online dispute resolutions
- To identify critical challenges facing the performance of the implementation of e-procurement
- To analyze other challenges facing the performance of the implementation of e-procurement
- To examine the performance of procurement function in private sectors currently.

4.1 Data presentation and analysis
The method of analyzing data and their interpretation that was used by the researcher indicated that some of the information was to be presented by using tables and charts whilst other information was presented through description after thorough interview and questionnaires of the respondents by the researcher. Hence information that was obtained from closed ended questions was presented quantitatively while that from open ended questions was presented qualitatively.

The research questions in the questionnaire were distributed in departments according to the position of the respondents, age range and gender. This implies that the researcher kept the employer/owner of the company out of the study because they
could possibly give wrong answers to mislead the findings as the research touched their business affairs.

Below shows the summarized information about the distribution and return of the duly questionnaires:

4.1.1 Demographic characteristics of the Respondents

4.1.1.1 Distribution of respondents by departments

Table 4.1: Sample Strength and respondents distribution

<table>
<thead>
<tr>
<th>Respondents &amp; Depts.</th>
<th>Sample size</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>IT</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>STORES</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Source: This Study, 2013

The table above explaining about distribution of the respondents by departments, thus each department respondents as the table shows.
4.1.1.2 Position of respondents

Table 4.2: Position respondents hold in the company

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>valid manager level</td>
<td>8</td>
<td>20.00</td>
</tr>
<tr>
<td>operational level</td>
<td>22</td>
<td>55.00</td>
</tr>
<tr>
<td>supervision level</td>
<td>10</td>
<td>25.00</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Field Data

The analysis of the questionnaire showed that, (20%) 8 out of 40 respondents were holding managerial position in the company, (55%) 22 out of 40 were in supervision level and (25%) 10 out of 40 respondents on operational level. This provides reliable data because these individuals are in the best position in the company to answer questionnaires as they are involved in everyday business activities of the company as far as procurement is concerned.

4.1.1.3 Respondents gender.

As far as the research questions was concerned, the researcher wanted to know how the gender distribution in the organization in regard to implementation of e-procurement in the company involvement.
Table 4.3: Gender of the respondents

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>percent</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>6</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: field data

The findings revealed that 15% are female and 85% of respondents are male. This showed domination of male in the industry. It gives challenges for woman to step up in the industry and offer their service.

4.1.1.4: Respondents age range.

As far as research questionnaires were concerned, the researcher wanted to know the strength of manpower in terms of age, which gives sustainability of performance.

Table 4.4: Age range of the respondents.

<table>
<thead>
<tr>
<th></th>
<th>Total number</th>
<th>percent</th>
<th>Valid percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>8</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td>23-30 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-45 years</td>
<td>20</td>
<td>50.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Above 45 years</td>
<td>12</td>
<td>30.0</td>
<td>30.00</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Research field work

None of respondents on range of 18-22 years, (20%) 8 out of 40 respondents on range of 23-30 years, (50%) 20 on range of 31-45 years and (30%) 12 out of 40 respondents are above 45 years.

It shows maturity of manpower for readiness to take responsibilities and accountability for benefit of the company.
4.2 Study findings about the room possible to make e-procurement possible and success in its implementation and online dispute resolution.

As far as the main objective is concerned, the researcher wanted to find out the possibility of any policy or legal validity for implementation of e-procurement system in private organization. In getting the proper answer in achieving this objective the researcher use question number 1,2,3,6,7,8,and 9 from the research questionnaires asked by researcher in the field data collection;-

4.2.1 Familiarity with electronic procurement practices

Table 4.5 Are you familiar with electronic procurement practices

<table>
<thead>
<tr>
<th>Respondents &amp;Depts.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Stores</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>IT</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Administration</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013

Familiarity of e-procurement is not 25 bad in this organization; it indicates that about 78% of the workers in those departments are familiar with practices of e-procurement, leaving only 22% as unfamiliar. The application here is that majority are familiar enough in so much that e-procurement application can be possible in the organization.

Interview carried on this question each department responded that they are familiar with e-procurement but not in practices. They just aware of the system but they did not practice it.
4.2.2 A need of implementing e-procurement system at Berkeley Electrical Ltd

Table 4.6: Is there any need of implementing e-procurement system?

<table>
<thead>
<tr>
<th>Respondents &amp; Depts.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Stores</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013

All respondents indicated that they do have a great need of implementing electronic procurement in all the process of procurement as far as the advantages of electronic procurement is concerned. 100 percent of the respondents had shown their great interest on it. Through interview the great concerned was shown on implementing e-procurement system especially PMU department as far as company’s contract, purchasing is concerned.

4.2.3 Efficient of electronic procurement system to procurement activities?

The researcher asked about, how e-procurement system is efficient to procurement activities. The findings revealed that procurement activities is all about operations logistics, requirement cycles, inventory activities such as ordering, stocktaking, purchasing process thus Electronic procurement simplifying all these procurement works, sharing procurement information thus enable firm to engaged in good decision making which can lead to improvement in production, planning, inventory management and distribution.

It also minimizes cost and time spent in the whole process of purchasing. (80%) 24 of the respondents, (12%) 10 respondents revealed that they don’t have such system in this organization. They did not give a clear answer and (8%) 6 respondents they hadn’t answer.
4.2.4 Law or policies governs the implementation of e-procurement

Table 4.7: Is there any law or policies govern the implementation of e-procurement?

<table>
<thead>
<tr>
<th>Respondents &amp; Depts.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Stores</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Total</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013

The findings revealed that 100% of the respondents responded that there is no e-procurement policies govern procurement activities in the organization as far as no law governs the system despite of the need of such system in the company.

4.2.5 Plans underway to establish policies to govern e-procurement

The researcher wanted to know if there are plans for establishing policies to govern e-procurement. In response to this, the findings revealed that, 22% equals to two individuals responded to the as yes. Signifying that there are plans underway to establish or launch e-procurement. The rest of respondents responded as no, meaning no plans are underway to establish policies governing e-procurement, while one of them was in disclaimer that no comment given in the table below;

Table 4.8: Are there any plans underway to establish policies to govern e-procurement?

<table>
<thead>
<tr>
<th>Department</th>
<th>YES</th>
<th>NO</th>
<th>Indifferent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>STORES</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>IT</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013
4.2.6 A need of law and regulation of e-procurement system
The researcher wanted to know if the company needs a law and regulation of e-procurement. 100% of the responded replied by saying YES, meaning that there is a great need of law, policy and regulation of e-procurement system as far as its advantageous is concerned for the betterment of the company such as transaction, production, purchasing, distribution, information gathering, cost and time lead minimization.

4.2.7 The use of digital signatures in approving or signing online contract

Table 4.9: Do you use digital signatures in approving or signing online contract?

<table>
<thead>
<tr>
<th>Respondents &amp; Depts.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Stores</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Total</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013
The findings revealed that all respondent responded as no, meaning that no digital signatures are used in authorizing purchases in the organization.

4.3 Study identifies the critical challenges of the implementation of e-procurement system
This objective was supported by the following questionnaire from the respondents on the field data collection as follows;

4.3.1 Strategy on the application of e-procurement in Supply Chain Management in the Organization
The researcher asked about what strategy the organization had on the application of e-procurement in Supply chain Management. In response to this, only few respondents of about 20%) 8 out of 40 respondent have been reported that the strategy is to keep insisting the government to make up policies which will make the applicability of e-procurement. This is done whenever firms meet for business cases
they also discuss about the applicability of e-procurement system, the company also send their opinions to AQRB to see if they can be helped on this matter.

Through interview no proper answer was given but respondents were insisting that there are some strategies followed by managerial level in making sure that e-procurement id applicable in their company.

4.4 Study analyzed the other challenges facing the performance of implementation of e-procurement system

This objective has been supported by the questions asked by the researcher on the data field collection through questionnaires and interviews given to the respondents as follows;

4.4.1 Challenge associated with implementation of e-procurement system at Berkeley Electrical Ltd

Table 4.10: Is there any challenge associated with implementation of e-procurement system?

<table>
<thead>
<tr>
<th>Respondents &amp; Depts.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Stores</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013

The findings from the respondents indicated yes that means there are some challenges associated in implementing electronic procurement system. 100 percent of the respondents had shown their response on this question.
Through interview a great challenges mentioned was no policy to govern the system, the issue of fund making the system applicable, technologies and support and awareness with other firms.

4.4.2 Other challenges on implementation of e-procurement system
Respondents revealed that there are other challenges on implementation of e-procurement as follows:-

(i) Power supply problem,
(ii) Fund problem as the package of e-procurement is very expensive and also operation casts are very high.

Awareness to the practitioners is little so more training and education is needed to arouse awareness.

4.5 Study findings on the performance of procurement functions in private sector currently.
This objective aimed at examining if the procurement function are well performed in private sectors currently as long as whenever procurement function perform well it will also stimulate e-procurement system be needed hence its implementation.

4.11: Performance of procurement function in private sector currently

<table>
<thead>
<tr>
<th>DEPTS</th>
<th>Very high performance</th>
<th>Medium performance</th>
<th>Low performance</th>
<th>No performance</th>
<th>indifferent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMU</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stores</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IT</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administration</td>
<td>4</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>4</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Questionnaire collected at Berkeley Electrical Ltd, 2013
The findings revealed that 18 respondents responded that there are very good performance of procurement functions that implies 56% of the respondents while only 4 respondents indicated that the performance of procurement function is in medium performance while only one respondent respond indifferent to this question. This implies that the performance of procurement function is of much good to stimulate the implementation of e-procurement system performing as well.

4.6 Discussion of research findings.
What had been found from the field will thoroughly be discussed in relation to research objectives stated at the beginning. The researcher discussed what had been found in the field and from analysis and then found out if the same problem found in other companies also new problems arising from Tanzania’s private sector would be considered.

From respondents examined in both interviews and questionnaires as well as through documentation 10% of the questionnaires were spoiled leaving 90% for analysis basing on this basic results, it had been noted that good of the questionnaires signifying readiness and interest was from the respondent toward the study. However much interest was shown by the PMU where of course much was expected from them.

There was much improvement in conduct of all business in the organization for the past three years, where most of the problems/challenges that face most of developing countries appeared to be real in this area even in private companies of Tanzania. We will examine these challenges here below:-

4.6.1 Computer knowledge, application and usage.
It had been found that 100% of all respondents indicated that computer is really applicable in the organization. This means that availability of hardware to support e-procurement in private sector is not a challenge as it had observed that Berkeley Electrical Ltd as a private sector is capable of obtaining or acquiring computer hardware and let the operations run neither expenses and ignorance, nor negligence
by the government in a reason for not having e-procurement applicable in private sectors. However no software to support e-procurement is manifest.

Regarding computer knowledge it didn’t seemed as a big challenge on the implementation of e-procurement system since 75% of all departments had excellent knowledge on computer, leaving only 25% with good knowledge in computer use. In this case, the statistics signify that e-procurement can be launched in this organization, and no more training cost for employees would be required, since there aren’t computer illiterate in this organization and in key e-procurement staff.

4.6.2 Internet services and staff’s experience on internet
In regard to this, Berkeley Electrical Ltd is in use of internet since all respondents who had responded on this said there are internet services since internet enables the applicability of e-procurement system, at Berkeley Electrical Ltd as a private sector seemed to have no problem with the use of internet as a stumbling block towards effective application of e-procurement. It is indeed through internet that the key players of e-procurement can be able to go on searching items, negotiating, placing orders and eventually effect purchases.

Since internet services are available in these private sectors, it is then obvious that staff members do use and or try to use it for various purposes. The stores department seemed to be behind the use of internet, may be because their computer knowledge is not that much good, however there was no problem in IT, PMU and Administration departments regarding use of internet services. Though, these personnel might be using internet for other purposes rather than e-procurement. Nevertheless, from interviews and documentations made by the researcher, it had been manifested to him that most of the internet services in the organization in used by the staff to find good products for their own use, but also for leisure sometimes. Not only that but they used internet to search necessary information required by organization to compete against other competitors across the country and hence information becomes an important tool of completion, which includes preparation for negotiation, visiting vendor’s websites and the like.
4.6.3 Familiarity with electronic procurement
Majority of staff in Berkeley Electrical Ltd are familiar with e-procurement, only 22% of all staff are not familiar encompassing 78% of all staff in all departments. In this case therefore introducing e-procurement in this company will not be burden since majority of the staffs understands what it is. Therefore comprehension of staff members on e-procurement is not a challenge in private sector, where only few staff from IT and Store will have to undergo training to get the systems under operation.

4.6.4 Critical challenge of e-procurement in Tanzania private sector-Berkeley Electrical as a case study.
In relation to factors limiting other private sector, and other developing countries in the world, it had been found that most of these challenges do relate to those facing Tanzania’s public sector as well. The following are the critical challenges on the implementation of e-procurement in Tanzania though some of them are not reflected to other countries as was elaborated in the literature review.

4.6.5 E-Procurement policies/law that govern its applicability.
There are all procedures and system governing e-procurement in a country. There is a great need of having a system and law control over any process that taken place within its jurisdiction. The researcher has found out that 100% of respondents have responded as no policies and act are in place for e-procurement being officially implemented despite of its necessity in the sectors. Neither plans for procurement take off, no policies in place to govern the system. This is not just observed at Berkeley Electrical Ltd but AIC conference made in 2011 reported by citizen magazine the conference discussed about the implementation of e-procurement but no policies and act has been made up to know, also the South Africa’s Green paper on e-commerce highlighted that there is not an overall policy framework in most of African countries for procurement in general.
4.6.6 Digital signatures
Initiation of digital signatures is seen as a nightmare. It is indeed a challenge in most of developing countries as was observed through interviews and questionnaires made digital signatures are not even though of, perhaps due to the fact that no online contracts are affected i.e. no online purchases are made. At BEL whenever the claims made they sent them through emails to the main contractors and to the consultants for further response to the payment but the company still have to resend the claim again in hardcopy for confirmation and approval due this challenge.

4.6.7 Other challenges
There are other challenges arising from research which are not thought previously that they could have indeed become a challenge. These include the following:-

4.6.7.1 Power supply
According to responses given by respondents, power supply had been seen as critical challenge where by 56% of all respondents agreed. Unlike challenges facing the rest of the world’s developing countries where power supply has not been mentioned frequently, it has seen a critical challenge in Tanzania to effective application of e-procurement power rationing that has been going on in Tanzania for more than two-three years had been made e-procurement a night mare in most of the private sector. Though Berkeley electrical have already taken precautions by employing alternative means of power supply such as solar power and generator also the use of power backup system but these alternative means often not work out through and sometimes very expensive to operate.

4.6.7.2 Level of technology
Change and adoption to changing technology seen as the main reason to why e-procurement didn’t adopted. The researcher found that the use of office outlook as an internal communication and DMS for file movement common t Berkeley Electrical Ltd but all external communication was done manually.
4.6.7.3 Cost of software
It has been found that e-procurement package is very expensive, that most of private sectors cannot afford. The software required to run or operate e-procurement system very much expensive that made other sector not to adopt the system because others failed to adopt due to this challenge as we know the system need to share information, transaction is between more than one company so if one company fail to adopt the system also made another company to adopt it also. For example, company X has to make deal with company Y but company X afford to adopt e-procurement system while company Y did not is still manually operated due to the expenses affordability in adopting the system, it is off course going to be hard for company X to deal electronically with company Y. This is still challenge as most of companies involved in tendering i.e. contractors and subcontractors are not electronically operating, making it even harder for other companies to adopt the system.

4.6.7.4 Lack of awareness of practitioners.
It has been found that some of players are not well engaged and informed in e-procurement matters in such a way that they do not comprehend what e-procurement can provide for their companies and institutions both in private and public sectors. A lesson has gone already through various researchers that e-procurement multiplies profits times far, hence providing the institutions with extra ordinary abilities and capabilities to compete in the market and industries for provision of services and goods

4.6 Concluding Remark
This chapter presenting the findings and analysis of data found at Berkeley Electrical Ltd as far as the challenges associated with the implementation of e-procurement is concerned focused on the objectives of the study stated earlier. The data were collected through questionnaire survey and through interviews conducted by the researcher from respondents also company documents were also used.
CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
A considerable number of items are covered by this study on analysis of challenge associated with implementation of e-procurement within private organization a case study of Berkeley Electrical Ltd, one of the private organizations located in Dar es Salaam Tanzania. This chapter bears the general summary of the study. It then drew the conclusion from previous chapters and finally made some recommendations to the organization and to the academia.

5.1 Summary of Findings
General objective of the research was to find out a room possible for legal validity to make e-procurement possible and success in its implementation and online dispute resolutions with specific objectives of finding ways in Tanzanian firms to obtain law that governs the implementation of e-procurement and makes it valid, analyzing other challenges facing the performance of the implementation of e-procurement and examining the performance of procurement function in private sectors currently.

The researcher observed that there is a great need of having a system and law control over any process that taken place within its jurisdiction. The researcher has found out that 100% of respondents have responded as no policies and act are in place for e-procurement being officially implemented despite of its necessity in the sectors. Neither plans for procurement take off, no policies in place to govern the system. This is not just observed at Berkeley Electrical Ltd but AIC conference made in 2011 reported by citizen magazine the conference discussed about the implementation of e-procurement but no policies and act has been made up to know, also the South Africa’s Green paper on e-commerce highlighted that there is not an overall policy framework in most of African countries for procurement in general.
Initiation of digital signatures is seen as a nightmare. It is indeed a challenge in most of developing countries as was observed through interviews and questionnaires that digital signatures are not even though of, perhaps due to the fact that no online contracts are affected i.e. no online purchases are made. At BEL whenever the claims made they sent them through emails to the main contractors and to the consultants for further response to the payment but the company still have to resend the claim again in hardcopy for confirmation and approval due this challenge.

It had been found that 100% of all respondents indicated that computer is really applicable in the organization. This means that availability of hardware to support e-procurement in private sector is not a challenge as it had observed that Berkeley Electrical Ltd as a private sector is capable of obtaining or acquiring computer hardware and let the operations run neither expenses and ignorance, nor negligence by the government in a reason for not having e-procurement applicable in private sectors. However no software to support e-procurement is manifest.

Regarding computer knowledge it didn’t seemed as a big challenge on the implementation of e-procurement system since 75% of all departments had excellent knowledge on computer, leaving only 25% with good knowledge in computer use. In this case, the statistics signify that e-procurement can be launched in this organization, and no more training cost for employees would be required, since there aren’t computer illiterate in this organization and in key e-procurement staff.

In regard to this, Berkeley Electrical Ltd is in use of internet since all respondents who had responded on this said there are internet services since internet enables the applicability of e-procurement system, at Berkeley Electrical Ltd as a private sector seemed to have no problem with the use of internet as a stumbling block towards effective application of e-procurement. It is indeed through internet that the key players of e-procurement can be able to go on searching items, negotiating, placing orders and eventually effect purchases.

Since internet services are available in these private sectors, it is then obvious that staff members do use and or try to use it for various purposes. The stores department
seemed to be behind the use of internet, may be because their computer knowledge is not that much good, however there was no problem in IT, PMU and Administration departments regarding use of internet services. Though, these personnel might be using internet for other purposes rather than e-procurement. Nevertheless, from interviews and documentations made by the researcher, it had been manifested to him that most of the internet services in the organization in used by the staff to find good products for their own use, but also for leisure sometimes. Not only that but they used internet to search necessary information required by organization to compete against other competitors across the country and hence information becomes an important tool of completion, which includes preparation for negotiation, visiting vendor’s websites and the like.

Researcher observed that majority of staff at Berkeley Electrical Ltd are familiar with e-procurement, only 22% of all staff are not familiar encompassing 78% of all staff in all departments. In this case therefore introducing e-procurement in this company will not be burden since majority of the staffs understands what it is. Therefore comprehension of staff members on e-procurement is not a challenge in private sector, where only few staff from IT and Store will have to undergo training to get the systems under operation.

In relation to factors limiting other private sector, and other developing countries in the world, it had been found that most of these challenges do relate to those facing Tanzania’s public sector as well. The following are the critical challenges on the implementation of e-procurement in Tanzania though some of them are not reflected to other countries as was elaborated in the literature review. There are other challenges arising from research which are not thought previously that they could have indeed become a challenge. According to responses given by respondents, power supply had been seen as critical challenge where by 56% of all respondents agreed. Unlike challenges facing the rest of the world’s developing countries where power supply has not been mentioned frequently, it has seen a critical challenge in Tanzania to effective application of e-procurement power rationing that has been going on in Tanzania for more than two-three years had been
made e-procurement a night mare in most of the private sector. Though Berkeley electrical have already taken precautions by employing alternative means of power supply such as solar power and generator also the use of power backup system but these alternative means often not work out through and sometimes very expensive to operate.

Change and adoption to changing technology seen as the main reason to why e-procurement didn’t adopted. The researcher found that the use of office outlook as an internal communication and DMS for file movement common at Berkeley Electrical Ltd but all external communication was done manually.

It has been found that e-procurement package is very expensive, that most of private sectors cannot afford. The software required to run or operate e-procurement system very much expensive that made other sector not to adopt the system because others failed to adopt due to this challenge as we know the system need to share information, transaction is between more than one company so if one company fail to adopt the system also made another company to adopt it also. For example, company X has to make deal with company Y but company X afford to adopt e-procurement system while company Y did not is still manually operated due to the expenses affordability in adopting the system, it is off course going to be hard for company X to deal electronically with company Y. This is still challenge as most of companies involved in tendering i.e. contractors and subcontractors are not electronically operating, making it even harder for other companies to adopt the system.

It has been found that some of players are not well engaged and informed in e-procurement matters in such a way that they do not comprehend what e-procurement can provide for their companies and institutions both in private and public sectors. A lesson has gone already through various researchers that e-procurement multiplies profits times far, hence providing the institutions with extra ordinary abilities and capabilities to compete in the market and industries for provision of services and goods.
5.2 Conclusion
The aim of this study was to find out a room possible for legal validity to make e-procurement possible and success in its implementation and online dispute resolutions, also looking on the other challenges facing the implementation of e-procurement system implementation. It has been observed that the possibility of making e-procurement success in its implementation is not under the private organization but for government. However it has been observed that the critical challenge that limit the implementation of e-procurement system are the absence of law and act that govern the system and this is in both private and public organization. These also include power supply, digital signatures for online contract, cost associated with hardware and software, technological setbacks, poor management support from top managers as well as bureaucratic related issues.

The study concluded that neither plans for procurement take off, no policies in place to govern the system. This is not just observed at Berkeley Electrical Ltd but AIC conference made in 2011 reported by citizen magazine the conference discussed about the implementation of e-procurement but no policies and act has been made up to know, also the South Africa’s Green paper on e-commerce highlighted that there is not an overall policy framework in most of African countries for procurement in general.

It upon that background that the study concludes; Tanzania government should make the act and its regulation present so that the system should be implemented.

5.3 Recommendations
In the light of the findings of the study above, there are recommendations that can be drawn from this work in overcoming challenges stated and the following can therefore be carefully looked upon:–

**Implementation of e-procurement system:** When receiving the adequacy of controls in e-procurement applications, assess the application of the following;
(a) A set of security mechanisms and procedures which taken together constitute security architecture for e-business e.g. internet firewalls, PKI, encryption, certificates and password management.

(b) Tanzania government should make the act and its regulation present so that the system should be implemented.

(c) The firewall mechanisms that are in place to mediate between the public network (internet) and the private networks of government.

(d) A process whereby participants in an e-business transaction can be identified uniquely and positively (e.g. using some combination of public and private key encryption and certifying key pairs.)

(e) Digital signatures with which the initiator of an e-commerce transaction can be uniquely associated.

(f) Logs of e-business applications which should be maintained by responsible personnel. Such logs would include operating systems logs and console messages, network management messages, firewalls logs and alerts, route management messages, intrusion detection Alarms, application and server statistics and system integrity checks.

(g) The features in e-business applications that enable the reconstruction of the activity performed by the application, i.e. the audit trails.

(h) Protection measures to ensure that the data collected with regards to the parties to the transactions would be disclosed without their consent no used for purposes other than that for which it was collected.

(i) The means of ensuring the confidentiality of data communicated between government and vendors (safeguarding resources, e.g. by way of an encrypted secure socket layer).

(j) A regular program of auditing and assessment of the security of e-business environments and applications to provide assurance that controls are present and effective.

Digital signatures and electronic contracts are relevant for instant in cases of dispute between trading partners in an e-commerce transaction.
**Certification authorities** secure electronic transactions and act as trusted third parties to verify information about parties. African certification authorities must take part in the international framework for supporting ways to link certification mechanisms and the mutual recognition of different certification authorities.

**Consumer protection:** in an electronic market place it is not easy for consumer to identify and localize suppliers so it is necessary to promote protection mechanisms.

**To overcome the problem of security, Encryption and decryption** techniques can provide the organization with authentication, authorization, confidentiality and integrity to electronic and internet services, enhancing security in business transactions.

**Electronic payments:** online payment using credit cards is a missing component of the African business environment, which is often cash-based. Electronic payments will involve central banks and other trade and financial institutions.

**Copyright and intellectual property rights:** Legislation on copyright and intellectual property rights on the internet is still in its infancy, and uncertainty about such legislation contributes to inhibiting business investment.

In addition, policies need to address infrastructure development which is key to the developing electronic commerce. Infrastructure that can play an important role for business includes cost-efficient communication technologies such as broadband, satellite connection and Voice Over Internet Protocol (VOIP). It is only possible to implement and operate e-commerce initiatives if there are modern banking and insurance firms operating, and these do not exist in some African countries. It is also important to raise awareness and to offer training programs that target the private business community in particular and the public in general.

New procurement methods require a standard mode of provisioning; this could help administrations replace their individuals purchase methods, which are not always based on sound functional bases, and therefore facilitate the fight against corruption.
In this case e-procurement presents a really opportunity to find ways to overcome current obstacles, to launch standard procedures that can reduce corruption, to increase social and business accountability and to promote more efficient public/private partnerships.

E-procurement is an excellent operational instrument for making decentralization a practical, useful policy rather than a theoretical objective to be pursued solely because it is supposed to deliver a better system of government.

The co-ordination of the various institutions involves in the implementation of an e-procurement program is a very important issue. In Italy, this problem has been addressed through the development of synergetic relations. It is possible that useful information could emerge from the direction of Italian colleagues in Consip and the Department of Innovations and Technologies.

In private sector the risks have been around for a number of years, best practices and good control frameworks have been developed. The following best practices should be recommended and can be used as a yardstick in determining the maturity of an entity in addressing the risks associated with e-procurement.

**Lessons to be learned from other countries-Korea’s experience**

The PREMnote 990,(2004) report provides countries like Tanzania the following lessons as it desires to move into e-procurement system despite shortcomings, still Korea’s experience offers four lessons that can help other counties implement such reform and overcome bureaucratic and other limitations:-

Firsts and perhaps most important, is the strong leadership. As with other public and private sector reforms, such leadership is essential without it, the public/private sector will hardly change throughout his term. President Kim consistently demonstrated strong interest in and commitment to build a strong information and communications infrastructure and advancing e-government. For example the president of the country has to come up with 11 suggested sections for effective implementation of e-procurement. Regular meetings are to be held in monitoring their progress.
Second, e-procurement reform is much more likely to be sustainable if it is introduced as part of nationwide e-government reforms, rather than as an isolated change. In Korea e-procurement was among the e-government reforms, increasing acceptance among the staff of the public and private procurement services. Moreover, each year the public administration is evaluated in term of its e-progress. Public surveys and studies rank ministries and agencies on their reform efforts, and awards are given to the top performers. These evaluations and awards increased e-procurement efforts among public and private procurement services staff. If the government of Tanzania is going to put e-procurement as one of its first priority reforms after recognizing the contribution it puts forth to the country’s economy.

Third, e-procurement requires a certain level of information and communications infrastructure. Although it does not require a start-of-the-art information networks, social and economic capacity for information and communication technology should be reviewed to determine the feasibility of reform. Developing countries often try to improve information and communications infrastructure by introducing e-procurement, but doing so imposes serious burdens on financing and implementation efforts. In Korea more than 70% of households (about 10 million) subscribe to high-speed Internet services and in November 2002 more than 60% of the country’s 43 million residents used the Internet on a regular basis. Almost all private suppliers have high speed Internet access. The government of Tanzania can insist and educate its citizens to the use and its importance of internet service and how that will contribute to the e-government. Internet services can be affordable by even citizens living in rural areas with many mobile phone services providers such as Tigo, Vodacom, Zantel, Airtel connecting people with cheapest access to internet.

Fourth, comprehensive process reengineering must be conducted prior to computerization. Careful sequencing and pacing of reforming are often at least as important as choosing the right technology. The value of e-procurement like other e-government reforms lies in its ability to transform rigid, inefficient bureaucracies into more efficient, responsive organizations by redesigning workflows and decision-making processes. Thus any e-procurement effort that simply replicates and
computerizes an existing system will fall short of expectations. In Korea process reengineering avoided replicating inappropriate, inefficient processes in the new system. Information strategy planning conducted after business process reengineering, contributed to a smooth multiyear transition. Both processes reviewed legal, administrative and even cultural differences in procurement processes between national and local governments and state-owned enterprises, and made necessary changes through the Presidential E-Government Committee.

**Areas for further studies**

There is yet a lot to be done to help the government of Tanzania to adopt e-procurement system. It is then recommended that more researchers on e-procurement done, to pave a way towards successful e-procurement system implementation in both private and public sectors.
REFERENCES.

Baily P. (1998), The need to have computerized system in organizations


Conference board (2001), Barriers associated to the implementation of E-procurement in Washington.


Ramirez (2011). Improving E-Procurement in Supply Chain through Web Technologies:


QUESTIONNAIRES TO RESPONDENTS

SUBJECT: THE CHALLENGE ASSOCIATED WITH THE IMPLEMENTATION OF E-PROCUREMENT SYSTEM AT BERKELEY ELECTRICAL LTD A PRIVATE ORGANISATION.

My name is Jenifa Callist, pursuing Msc.Procurement and Supply Chain Management at Mzumbe University. As part of fulfillment of the requirements for award of my Masters degree I am required to conduct and report on a research topic that its results will be useful to the larger society. I would like to request the professional opinion and comments from you with respect to the subject mentioned above. This questionnaire will be used by the researcher to collect direct data from Procurement Specialist/Officers and other staffs who have ideas of Supply Chain Management. I should be noted that maximum confidentiality will be exercised on the information provided and it will be used only for academic purposes with the Mzumbe University.

Therefore, personal particulars may be provided optionally. Kindly respond to this questionnaire.

Age Between 18-28...............................  
Between 29-38...............................  
Between 39-48...............................  
Between 49-58...............................  

Sex Male (M)........................................  
Female(F)........................................  

Marital Status Married..............................  
Single.............................................  
Divorced...........................................  
Separated.........................................  

Experience (in years)...........................................  
Rank in Organization.........................................  

77
The questions will be asked to the respondent as follows

1. Are you familiar with electronic procurement practices?

2. Is there any need of implementing e-procurement system in your organization?

3. How is that e-procurement system efficient to procurement activities?

4. Is there any challenge associated with implementation of e-procurement system in your organization?

5. What are the benefits of that e-procurement in the organization?

6. Is there any law or a policy governs the implementation of e-procurement?

7. If the answer in question 6 is no, are there any plans underway to establish policies to govern e-procurement system?

8. Is there a need of law/act and regulation of e-procurement system?

9. Do you use digital signatures in approving or signing online contract?

10. How does this method cost the organization?

11. What other challenges on implementation of e-procurement system?

12. How long does it take for workers to adopt e-procurement system?

13. Is there any necessity for conducting training in order to be able to use that system?
14. What strategy do you have on the application of e-procurement in SCM in the organization?
........................................................................................................................................................................

15. What are the impacts of e-procurement to supply chain management?
........................................................................................................................................................................
........................................................................................................................................................................

16. How does the impact of e-procurement help in Supply Chain Management in the organization?
........................................................................................................................................................................
........................................................................................................................................................................

17. What is the applicability of e-procurement system in your organization?
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........................................................................................................................................................................
........................................................................................................................................................................

Thank you for your Cooperation.
I am a Master degree student of Mzumbe University, Dar es Salaam Business School (MUDBS) pursuing Masters of Science in Procurement and Supply Chain Management. As a requirement, this study aiming at finding challenges associated with the implementation of e-procurement within Private sectors. It aimed on looking factors that limit the applicability of e-procurement system in Tanzania private sectors as a partial fulfillment for that award.

You are requested to answer the following questions.

The results of this study are purposely for academic and will be confidentially treated.

1) What is your gender?
2) What is your level of education?
3) State you’re working experience in this company?
4) What is your working career?
5) Are you familiar with e-procurement?
6) Is there any need of implementing e-procurement system at Berkeley Electrical Ltd?
7) Is there any law or policies governs the implementation of e-procurement?
8) Is there a need of law and regulation of e-procurement?
9) Do you use digital signatures in approving or signing online contract? What is the impact of tax incentives on the FDIs in Tanzania?
10) Is there any challenge associated with implementation of e-procurement system in your organization?
11) What other challenges on implementation of e-procurement system?
12) Is e-procurement applicable in your organization?
### APPENDIX III
### ACTUAL BUDGET
#### Research Budget

<table>
<thead>
<tr>
<th>S/N</th>
<th>Main Research Activities</th>
<th>Estimated Cost (Tshs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Stationary</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Ream paper @ 20,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Flash Disk @ 20,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Modern @ 50,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Short note book @ 2000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Box file @ 5,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Ball pen @ 500/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>94000/=</strong></td>
</tr>
<tr>
<td>2</td>
<td><strong>Literature Review</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photocopy cost 250,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internet bills for three months 40,000/=</td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>650,000/=</strong></td>
</tr>
<tr>
<td>3</td>
<td><strong>Data collection and analysis</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Printing questionnaires 100,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data collecting cost 150,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication 150,000/=</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research trips 150,000/=</td>
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<tr>
<td></td>
<td></td>
<td><strong>550,000/=</strong></td>
</tr>
<tr>
<td>4</td>
<td><strong>Final Report writing and handover binding</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Printing and binding of final report 250,000/=</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>250,000/=</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td><strong>TOTAL</strong></td>
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</tr>
<tr>
<td></td>
<td></td>
<td><strong>1,544,000/=</strong></td>
</tr>
</tbody>
</table>
The proposed time and expenses in the tables below are being anticipated to be enough through reflecting the activities to be conducted to complete the research.

**Time Scale and Work Plan**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time Period in Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choosing research topic</td>
<td>1</td>
</tr>
<tr>
<td>Problem definition/background information</td>
<td>1</td>
</tr>
<tr>
<td>Literature Review</td>
<td>2</td>
</tr>
<tr>
<td>Methodology</td>
<td>1</td>
</tr>
<tr>
<td>Writing first proposal</td>
<td>2</td>
</tr>
<tr>
<td>Revision and correction</td>
<td>1</td>
</tr>
<tr>
<td>Typing, editing and presentation of final proposal</td>
<td>1</td>
</tr>
<tr>
<td>Collecting data</td>
<td>7</td>
</tr>
<tr>
<td>Data Interpretation and Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Data discussion, Generalization, recommending and concluding</td>
<td>2</td>
</tr>
<tr>
<td>Writing First Draft Report</td>
<td>2</td>
</tr>
<tr>
<td>Correcting, Editing of Final Report</td>
<td>1</td>
</tr>
<tr>
<td>Presentation of Final Report</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL WEEKS** 26