

**ELECTRONIC PROCUREMENT IMPLEMENTATION:
CASE STUDY OF SELECTED FIRMS IN KENYA.**

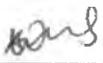
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D61/71136/2007

**A Management Research Project Submitted in Partial Fulfilment of the
Requirement for the Degree of Master of Business Administration (MBA) School of
Business, University of Nairobi, October, 2011**

DECLARATION

This project is my original work and has not been presented for degree award in any university.

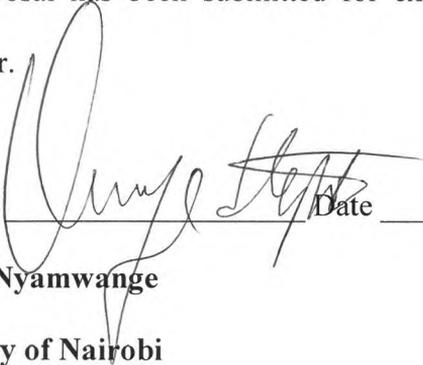
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This proposal has been submitted for examination with my approval as a university supervisor.

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ACKNOWLEDGEMENT

The preparation of this important document would not have been possible without the support, hardwork and endless efforts of a large number of individuals of institutions.

Special thanks and gratitude to my supervisor, Onserio Nyamwange whose encouragement, guidance and support from the initial to the final level enabled me to develop an understanding of the subject. To all the respondents in this study, your contributions cannot be ignored.

Lastly, my regards and blessings goes to all those who supported me in any respect especially my family members and friends who played a crucial role by their encouragement during the process.

DEDICATION

I dedicate this work to my family who have encouraged me all through my studies.

ABSTRACT

The purpose of the study was to explore the establishment of e-procurement system in selected organizations in Kenya. This was guided by certain objectives: What lessons can be learnt from e-procurement implementation, why the implementation of the new system failed to work, the challenges and benefits encountered when using an e-market provider. To satisfy the research objective, the study population was made up of the nine organisations that had formed a block client-base with e-sokoni in 2000 and had used e-sokoni platform to carry out electronic procurement in Kenya. Primary data was collected using structured questionnaires. Respondents from the organizations were purposively sampled which targeted the e-procurement project manager, project team members, procurement staff and IT staff who used the e-procurement system between the year 2000 and 2005; and are still working in the above mentioned organisations. Data was analyzed using descriptive statistics and presented in frequency tables, pie charts and bar charts.

The study revealed that a number of reasons affected the implementation of e-procurement system ranging from the individual level, organization and national level especially the legal framework. The benefits are enormous to those organizations that implement e-procurement fully.

The researcher therefore recommends that although the benefits of e-Procurement are significant, these benefits will not be gained automatically without successful implementation of e-Procurement initiatives.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Private sector and public sector constitute formal organisations; that is, the former sector made up of organisations owned and financed by individuals while the latter is largely made up of government and parastatals therein. Private sector is mainly money or profit oriented where as public sector is public utility oriented (Thompson, 2006). This paper concentrates more on the private sector targeting organization's profitability through the 'purchasing' or the broader term, 'procurement' unit.

The 'purchasing' unit has an important role in supporting the firm's ability to achieve and support profitability in the private sector through buying goods and services in a cost efficient manner. Purchasing involves the satisfaction of individual firms' requirements by striving to achieve the right quality, quantity, time and place, and price. Therefore, early definitions of purchasing tended to emphasize and centre on the tactical and clerical decisions involved in the purchasing of products and supplies (Burt and Pinkerton, 2003). In the 1990's purchasing evolved as part of a broader function; 'procurement' that is, "the systematic process of deciding what, when, and how much to purchase, the act of purchasing it (formerly, the 'purchasing' function), and the process of ensuring that what is required is received on time in the quantity and quality specified" and culminating in the 2000s' the recognition of terms "purchasing" and "procurement" as more or less synonyms in the profession (Monczka *et al.*, 2002; and Gundlach *et al.*, 2006).

The latest theoretical and indeed practical development trend in the profession is the tendency to re-organise and merger of the purchasing, procurement and logistics functions together to form the much wider perspective of 'Supply Chain Management' function. This is much wider than both 'procurement', 'purchasing' and 'logistics' functions independently. Supply Chain Management function may be defined or encompasses the purchasing function, storing, transportation and manages the relations between suppliers and internal customers and involves analysis, planning, implementation and measurement (Lysons and Farrington, 2006; Byarugaba, 2008).

In Summary, this new trend in 'Supply Chain Management' has made procurement to be seen as a strategic function and less as a clerical function in the organisation. This has made the focus on procurement to be taken more seriously by making sure the procurement unit has procurement professionals, standardisation of procedures in the unit, incorporation of information technology applications to enhance efficiency and reduction on costs, which enables the firm to achieve competitiveness, profitability and value for money.

Historically there have been major steps towards supply chain management improvement as a whole like the introduction of Just in Time (JIT), Enterprise Resource Planning (ERP) among others to enhance efficiency and reduce redundancy levels (Nyandiere, 2002) in both public and private sectors. With the development of the internet and, more particularly, of the Worldwide Web, the term e-commerce has come to be associated with the purchase of goods and services through the web. This has further led to the

development of supply chain management bent or leaning towards technology; that is, e-procurement. Of the many different types of e-commerce, one that has spread widely is that between businesses (B2B) that enables organisations to obtain their supplies through Electronic Procurement (Herna'ndez-Ortega, et. al, 2007).

E-procurement is a further and welcome development in the supply chain management processes aimed at eliminating much paper work activities and enhance operations control and finally, lead to cost reduction. E-procurement is “a technology solution that facilitates corporate buying using the internet” (Presutti, 2003) or “business-to-business purchasing practice that utilizes electronic commerce to identify potential sources of supply, to purchase goods and services, to transfer payment, and to interact with suppliers” (Min and Galle, (2003).

E-procurement can facilitate improved accuracy, reduced clerical work, reduced order-cycle time, and increased productivity for an organisation and this will drive significant value into the business (Heywood et al., 2002;, and Neef, 2001). Therefore for organisations to embark on e-procurement they will need to consider e-procurement as it is regarded to have far greater potential for cost saving and business improvement than online retailing or enterprise resource planning system and in particular, large companies are likely to reap more benefits from e-procurement through operational excellence element (Knudsen, 2003).

1.2 E-Procurement Implementation in Kenya

In Kenya, there are some organisations in the private sector that have initiated and currently practising e-procurement. Some of these organisations include; British American Tobacco (BAT), Coca cola, Kenya Ports Authority (KPA), Unilever, Bamburi Cement, Magadi Soda, Williamson Tea, Homegrown and Kenya Medical Supplies Agency (KEMSA) between the year 2000 and 2005. These organisations had formed a block client-base with e-sokoni and had used the e-sokoni platform to carry out e-procurement (e-sokoni profile, 2007).

E-sokoni incorporated in Kenya in 2000 and specialises in procurement agency services and management and supply chain management consultancy services (e-sokoni profile, 2007). Inappropriateness of international solutions in failure to contextualize with the local supply chain management problems, lead to the formation of a block client-base between e-sokoni with the companies hereinabove mentioned. E-sokoni, were the leaders in implementing e-procurement in Kenya based on the already said platform (e-sokoni profile , 2007).

1.3 Statement of the Problem

Currently, many organisations in Kenya use the manual system when carrying out the procurement function that involves a lot of paper work, which translates to a lot in expenses. In order for these organisations to save on their expenses and become more profitable; they may face the need to embrace technology in the procurement function by adopting e-procurement. That e-procurement is important in cost saving and hence profitability is itself out of question based on many organisations in other countries in the

world e.g. Denmark, Norway, Finland, Ireland, the United Kingdom, Spain, Germany, Portugal, Italy, Singapore, Brazil, USA and Australia that have adopted the use of e-procurement in their procurement function (Efkous, 2003).~In Kenya organisations such as Nation Media Group have also embraced the use of e-procurement through their digital platform N-Soko whereby their clients can purchase properties, vehicles, etc via the internet (Gitahi, 2011). In Kenya we also have Kalahari.co.ke which is an online retailer whereby clients purchase books, DVDs, games etc online (Biashara.co.ke).

However, there are indeed scanty if any, studies trying to address this important area especially those trying to contextualise e-procurement to the local market. Therefore this study endeavours through the available e-procurement platform and generally the e-market as supported by e-sokoni address the issues of; lessons learnt from implementation, benefits harnessed thereof and challenges encountered with the use of the platform and lastly, challenges in dealing with an e-market provider e-sokoni. Thus, this study sought to fill the said gap by answering the following questions:

1. What lessons can be learned from e-procurement implementation i.e. Why e-procurement systems have failed to work?
2. What are the challenges and benefits encountered when using an e-market provider?

1.4 Objectives of the Study

The objectives of the study were as follows:

- i. To establish lessons learned from e-procurement implementation; i.e. the reason that made e-procurement systems fail to work.

- ii. To establish challenges and benefits encountered when using an e-market provider.

1.5 Value of the Study

The study is expected to be useful to the following:

Procurement professionals, will find this information useful and will help them to address factors identified so as to increase the usage of e-procurement and control the limitations of the technology among the population identified.

To government officials, they will find this research useful, as it may help them to know what they may encounter when embracing e-procurement for the government institutions.

To academicians, the study can also be used as resource material and as additional material to the already existing material related to the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Procurement

According to Landeros and Monczka (1989), they observed that the procurement function played an important role on the organisation's ability to achieve its strategies since buyers were one of the five (5) forces (Porter's five forces) that could impact competition in business. In business, procurement usually refers to purchasing the direct and indirect supplies needed to keep the company running and is tightly linked to the supply chain (Epiq Technologies, 2006). Procurement, in general, can be defined as simply the act of obtaining something and refers to the overall process of acquiring a product or service. Depending on the circumstances, it may include some or all of the following: identifying a need, specifying the requirements to fulfill the need, identifying potential suppliers, soliciting bids and proposals, evaluating bids and proposals, awarding contracts or purchase orders, tracking progress and ensuring compliance, taking delivery, inspecting and paying the supplier. Cole (2007) noted that the process of procurement may differ from company to company, and a government institution procurement process may also have a slightly different procurement process compared to a private company.

Initially, procurement (purchasing) was considered a clerical function, but recently there has been a need for procurement to move from a supportive level to a more strategic level in the overall business strategy (Williams and Morello, 2004). By the 1970s, purchasing/procurement began to receive academic attention as its importance as an administrative function became recognized (Ammer, 1974). Porter's (1980) views on his five forces model noted that suppliers and buyers power were two critical forces for

competitiveness that prompted firms to think of procurement as a strategic function rather than simply an administrative one. Since the 1980s, procurement has evolved from being viewed as merely a process for buying goods and services for a firm, to being more comprehensively defined as all the activities necessary to acquire goods and services needed to achieve user requirements (Tassabehji and Moorhouse, 2008).

2.2 Previous Studies Done

The potential of the Internet and its associated technologies to enable electronic commerce (e-commerce) has been widely documented in scholarly publications (Cronin, 1996; Lee & Clark, 1997; Press, 1996); the emphasis being on e-commerce, the global nature of electronic markets and the lower costs of reaching global markets (Montealegre, 2000; Steinfield et al., 1999; UNCTAD, 2001).

Hamid and Majid (2003), did a study on “The Opportunities and Challenges of Implementing E-Procurement: Lessons Learnt from Malaysian Industries” they described e-procurement as a method of procurement using the electronic catalogue and automated workflow processes for the case of Malaysia. The study found that firms realized significant cost savings and better management of the supply chain activities; they also learned that factors like incompetent infrastructure, global competition, human resistance to change and conflicting policies and standards posed immense pressure for the companies to move forward.

Harrigan et.al. (2008), did a research on the “The Development of E-Procurement within the ICT Manufacturing Industry in Ireland” based on the ICT manufacturing sector.

Exploratory research was used to address the knowledge gap in the area of e-procurement and they employed the use of a questionnaire to investigate various e-procurement activities within the sample. The study found e-procurement to be a developing function and reported significant benefits that included streamlined business processes, improvement in supplier relationships and reduced business costs. The study also found challenges experienced by the respondents to be lack of management support, lack of training, integration issues, lack of trust/ privacy and security issues.

Caniato et.al. (2010), did a research on e-procurement titled; “Towards Full Integration: E-Procurement Implementation Stages” whose purpose was to identify the different maturity stages of e-procurement adoption among companies. The research used a new general framework in which to measure e-procurement maturity through three components i.e. the level of adoption, technology and the organisational objectives. The study found that there was a strong relationship between e-procurement adoption and technology in place, and they also found that the organisational objectives had interesting linkages with both the adoption and technological functionalities and they concluded that these patterns of adoption are grouped into three clusters i.e. basic, intermediate and advanced.

Puschmann and Alt (2005), did a research on the “Successful Use of E-Procurement in Supply Chains”, that aimed at exploring the introduction of e-procurement systems and their contribution to the management of indirect goods in the supply chain. The study used a two part qualitative approach; the first part involved the summary of a

benchmarking study that was conducted by a consortium of 12 multinational companies and five successful practice companies were selected and analyzed in detail. The second part involved the drawing of the success factors identified in the benchmarking study and mapped them against the successful practice companies. In their findings, they found that there was need for an overall procurement strategy, an alignment of various e-procurement solutions along the procurement process and the need for integrated system architectures. They also noted that companies should realise that a no standardized e-procurement solution exists and that important success factors could also be “non-technical” in nature.

Walker and Harland (2008), conducted a research with respect to “E-procurement in the United Nations: Influences, Issues and Impact”, employing an extended multi-method of case study of e-procurement in the UN. The study adopted a three stage methodology: questionnaire survey of UN organizations, case studies of e-procurement issues in three UN organizations, and, an interactive workshop with the heads of purchasing of UN organizations. The study found that e-procurement was being used in the UN for transactions of routine, non-strategic purchases and further that UN development agencies are more likely to adopt e-procurement than humanitarian aid agencies as their operations are more predictable. This study therefore shows that even the private sector can efficiently adopt E-Procurement to their advantage.

2.3 Traditional Purchasing Procedures

In the traditional model, purchasing was seen as essentially a clerical function, and this can be seen by Porter’s (1990) value chain that included the procurement function as a

support activity; whereby procurement at that time focused on getting the right quantity and quality of goods to the right place at the right time at a decent cost (Reference for Business, 2010). According to Lysons and Farrington (2006), purchasing has traditionally involved three main phases namely the identification phase, ordering phase and post-ordering phase. The identification phase involves a requisition issued by the stores or a potential user then followed by the ordering phase where the requisition is received by the buyer and finally the post-ordering phase that involves delivery and collection of goods. This manual process has come to be regarded as inefficient as excessive time and cost of purely transactional activities makes the procurement system unacceptably slow, expensive and labor intensive; as each transaction generates its own paper trail (Reference for Business, 2010). Therefore a company can eliminate the paper intense and costly purchasing process of traditional business by incorporating the company's intranet to a supplier's web-based commerce site (Kalakota and Robinson, 2001).

2.4 E-Marketplaces

The Internet has changed the way that business is done in several ways with the introduction of e-commerce through business-to-business (B2B), business-to-consumer (B2C) and business-to-government and they make up the e-marketplace. Matthewson (2002), defines an e-marketplace as a platform for collaboration between buyers and sellers, that unites end-users, wholesalers and suppliers to streamline business procedures, automate procurement, improve productivity and reduce costs. E-marketplaces are said to be changing the way companies do business worldwide, especially with regard to the buyer-supplier relationship (Murtaza et. al., 2004).

This change can be illustrated by (Barratt and Rosdahl, 2002) when they consider that the e-marketplace tends to show results in cheaper prices, reduced search costs and lower order costs for the buyer while the seller tends to experience reduced marketing costs, lower distribution costs and increased market coverage for his products. An e-marketplace which is also known as a net marketplace, a trading hub or an exchange usually brings buyers and suppliers together (Grieger, 2003) and enables businesses to collaborate with one another in the design, development, production and distribution of final products in a supply chain and can be said to provide an electronic procurement (e-procurement) solution (Segev et al., 1999).

2.5 E-Procurement

Morrison (2009), defines e-procurement as the business-to-business (or business-to-consumer or business-to-government) purchase and sale of supplies through the internet or other information and network systems and it can be used for purchasing goods and services. Kalakota and Robinson (2001), point out that the focal point of an organisation's e-procurement strategy is to better manage the organisation's operational costs. This can be achieved through the automation of the procurement system that will enable the organisation to have better control of its inventories, improve delivery schedules, and reduce purchasing costs and in totality gain operational efficiency (Morrison, 2009).

Hamid and Majid (2003), in their study found that firms realized significant cost savings with the implementation of e-procurement and this has lead to a more efficient Supply

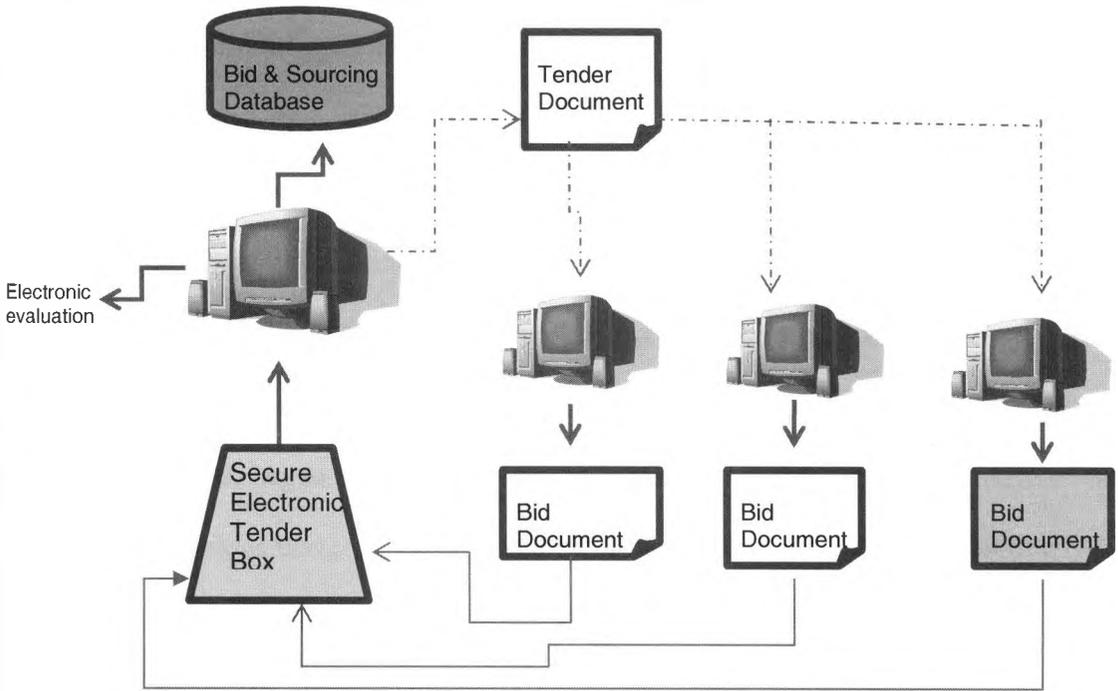
Chain system for the organisation. For instance they state that some companies were able to experience 10% reduction on the current material and services cost, some also experienced a reduction on manpower costs, storage system costs, and shipping arrangement costs and these translated to better management of the Supply Chain.

2.5.1 How E-Procurement Works

E-Procurement solutions consist of online platforms where organisations can perform their everyday purchasing activities from requisition to final payment. These platforms rely on technology to automate and streamline the purchasing process, and the Internet to connect with vendors, fulfil orders and transact business (Purchase Pro Inc, 2010). The company selects a platform then determines who will be allowed to transact business on it i.e. the purchasing organization, individual users or both. When using the platform tools, the company sets up a system where vendors are allowed to access the web portal and can view advertisements pertaining to tenders and this web portal enables them to also apply for the advertised tenders. After purchasing then the vendor is required to submit his bid on the web portal and wait for the opening of the tender on the specified day. On the day of opening the tender, the company will have set up an authorisation key for use by the procurement official in charge of the tenders. This authorisation key is programmed by the IT technicians and is generated by the e-procurement software and it is only available for use on the day of opening the electronic tender box. This authorisation key tries to ensure that the system has security as no body knows the key until the day and time of opening the tender (Smith, 2010).

This can be illustrated by the figure below:

Figure 2.1: Implementing Your E-Procurement System



Source: Smith, 2010; "E-Procurement: Strategies for Success",

2.6 History of E-Procurement

A few years ago during pre-e-procurement, electronic exchange of information concerning purchasing was limited to either faxed purchase orders or Electronic Data Interchange (EDI) (Neef, 2001). Development of e-procurement has a long history which dates back to the early 1970's where procurement automation began with the development of punch cards, Electronic Data Interchange (EDI) and data phones - functioning as primitive modems. These were followed by the development of the facsimile machine (fax) that provided a one-way communication system. Although these technologies had their advantages, they also had drawbacks like lack of electronic recording of historical data, lack of communication assurance and lack of security (Bidgoli, 2010) hence making them generally inefficient.

In the mid 1980s computers became more prevalent leading to the flourished development of EDI systems. Thus, EDI became a common form of procurement with the establishment and standardization of consistency among suppliers and buyers at technical (standards) level. Internet explosion in mid 1990s created new strategic and technological visions making use of the internet and intra-net a viable organisational solution (Bidgoli, 2004) for e-procurement. However its worth noting, that e-procurement really began in the late 1990s when several software companies led by Ariba and Commerce One, began to develop a suite of applications that allowed vendors to create electronic catalogs that focused on ORM and Maintenance, Repair and Operating (MRO) types of vendor products Neef (2001). The initial hurdles included lack of: appropriate vendors' skills, IT capacity to create or/ maintain the electronic catalogs and a bias towards this buy-side model in turn overburdened the buyer's staff making it unsuccessful. The hurdles lead several companies to outsource services to organisations who subsequently managed their electronic systems and hence the expansion of the entire e-procurement industry in the late 1990s.

E-procurement is still developing as it can be clearly established from the above discussed paragraphs. In particular, this may be summed up in the three broad generations of trading exchanges in e-procurement. These are namely; storefronts and Request for Proposals (RFP)/ Requests for Quotations (RFQ) constituting the first generation; while the second generation is represented by the virtual distributors and auction hubs whereas the third generation is made up of integration and the collaboration hubs (Kalakota and Robinson, 2001).

2.7 Types of E-Procurement Applications

According to Neef (2001), there are three types of e-procurement solutions; the first is buy-side desktop requisitioning where the employees, through their desktops and using the corporate intranet and its link with the Internet, undertake on-line purchase, complying with the company's buying routines and procedures. The second e-procurement solution is buy-side centralized procurement management where purchasing managers on behalf of the company, control the whole procurement process, analyze transactions and undertake the management of the suppliers. The third type of e-procurement solution is the sell-side applications where solutions are developed by potential suppliers to help them negotiate their products and services on the web.

2.8 E-procurement Implementation

E-procurement complexities and risks are usually misunderstood and to effectively implement it changes must occur and will affect areas concerning personnel behaviour, skills, regulations and legislation, operational policies and business behaviour (Leipold, 2007). For an organisation to be ready to implement e-procurement it first must do an e-readiness assessment test, which is intended to provide a strategic view of e-readiness and may help to identify if there are critical problems with the process (ADB, IDB & WB, 2004) and may enable the organisation to act on these problems. E-readiness is defined as the measure of quality of a country's Information Communication Technology (ICT) infrastructure and the ability of its consumers, businesses and governments to use ICT to their benefit (The Economist Intelligence Unit Ltd, 2009). An e-readiness test helps the organisation to evaluate itself and know its institutional capacity in terms of human resources, its governance issues namely its policies, the legislation in the country i.e. on

whether it supports e-procurement and it also gauges the infrastructure and the IT systems available for implementation of e-procurement (Smith, 2010). After this assessment is carried out the test will provide an organisation with a framework for an effective, efficient and sustainable approach to implementation of e-procurement (ADB, IDB & WB, 2004). This test is important because when a country uses ICT to conduct more of its activities, the economy can become more transparent and efficient (The Economist Intelligence Unit Ltd, 2009).

To emphasize this Attaran (2001), points out a few factors that managers could consider before investing in e-procurement software namely; Employees' education which he considers as important as it gets employees engaged and involved in the process, this is because when a process changes, the jobs of those who do the work in that process must also be changed. Therefore, the way in which employees think and behave, their attitudes and beliefs, must also be realigned to fit in the new process. At implementation stage Attaran (2001) also notes that lack of sufficient online procurement experts within the company is one of the biggest hurdles that many companies face; therefore hiring a consultant who has installed such systems before can take some of the surprises out of the project. He also highlights the need for better communication with employees regarding the new system and the need to have adequate content management of the online catalogues to enable the success of e-procurement applications.

2.9 Why Invest in E-Procurement

The main objective of the e-marketplace is to drive out any inefficiency within the industry (Barratt and Rosdahl, 2002). Some of the benefits that users can experience

while using e-marketplaces would include lower transaction costs, price comparability, information exchange (Dothang & Thawatchai, 2008), increased IT effectiveness, improved marketing, improved customer relationship, back office facilitation and access to new revenue potential through greater market reach (Barratt & Rosdahl, 2002; Brunn et al., 2002; Petersen, 2002; Wilson & Abel 2002). These benefits enable the organisation to attain cost efficiency through reduction of maverick buying, the organisation will also experience improved auditing and better security by enabling staff and auditors to verify and track the movement of orders through the system and this will enable and encourage transparency in the system (Attaran, 2001). This translates to a solution that offers substantial return on investment, increased productivity and greater efficiency (Purchase Pro Inc, 2010) for the organisation.

2.10 Challenges of Using E-Markets and E-Procurement Systems

Dothang & Thawatchai (2008), observed that buyers only decided to use the e-marketplace for purchasing if they were confident that they had the ability to work in a networked environment and also if they perceived themselves to have Information Technology (IT) preparedness (e-readiness) that will provide them with confidence to use the system. When using an IT system one may encounter challenges and Davila et al. (2003), found that the challenges that users would face when using the e-marketplace would include high investment costs, security problems, and trust barriers that make most companies uncertain about whether they have the appropriate resources and experiences to use the e-marketplace successfully and he concluded that this may lead the users to refuse to adopt the e-marketplace practices.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

Research design constitutes the collection, measurement and analysis of data (Cooper et al, 1995). This study made use of an exploratory / explanatory research that informed the reader on the various issues that were faced by the selected firms when implementing electronic procurement in the Kenyan context; it is also a multiple case study. Exploratory research is useful when researchers lack a clear idea of the problem. This is because as a researcher one does not have clear ideas on lessons learned, challenges and benefits experienced when implementing electronic procurement in Kenya.

3.2 Population and Sample Size

The study population was made up of the nine organisations that had formed a block client-base with e-sokoni in 2000 and had used e-sokoni platform to carry out electronic procurement in Kenya. These organisations are BAT, Coca cola, KPA, Unilever, Bamburi Cement, Magadi Soda, Williamson Tea, Homegrown and KEMSA (Oanda C., personal communication, 2007). The study population targetted the e-procurement project manager, project team members, procurement staff and IT staff who used the e-procurement system between the year 2000 and 2005; and are still working in the above mentioned organisations. The researcher was able to trace twenty (20) people who fit the above criteria and constituted the target population for the study.

3.3 Data Collection Instruments

The researcher used primary data that was obtained through the use of questionnaires, interviews, discussions and enquires that were held with the employees. The main

instrument for primary data collection was the questionnaire. The questionnaire was used to obtain information from the nine organisations and was divided into four parts. Part A had closed and open ended demographic questions to classify respondents. Part B had questions on a five point likert scale that attempted to capture data for establishing the lessons learned from using an e-procurement system. Part C had questions on a five point likert scale, these questions tried to establish the benefits and challenges experienced by the purchasers when implementing e-procurement. Part D had questions on a five point likert scale, these questions tried to establish the challenges experienced by the purchasers when dealing with an e-market provider.

3.4 Data Analysis Techniques

The demographic information in Part A had used to categorise the respondents and to provide a general background of the respondents. The section was analysed through frequencies and percentages, pie charts and bar graphs. Part B dealt with the lessons learned from the purchasers when implementing e-procurement in the various firms. Part C dealt with the benefits and challenges faced by purchasers in implementing e-procurement. Part D dealt with the challenges experienced by the purchasers when dealing with an e-market provider. These sections were analysed through frequencies and percentages.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

In this chapter, the data from the completed questionnaire was summarized and presented in frequency tables and percentages.

4.2 Demographic Information

On demographic information, the sampled population was made up of 60% males while 40% were female. Quite a large number of the respondents had acquired college education level being represented by 50% followed closely by university graduates at 35% and secondary level only attracting 15% of the respondents.

From the respondents, 40% and 35% were members of CIPS and KISM professional bodies respectively. This would have an impact on the awareness of the e-procurement as professional bodies are usually at the forefront in the contemporary trends in the respective professional areas. However, 25% did not belong to any professional body.

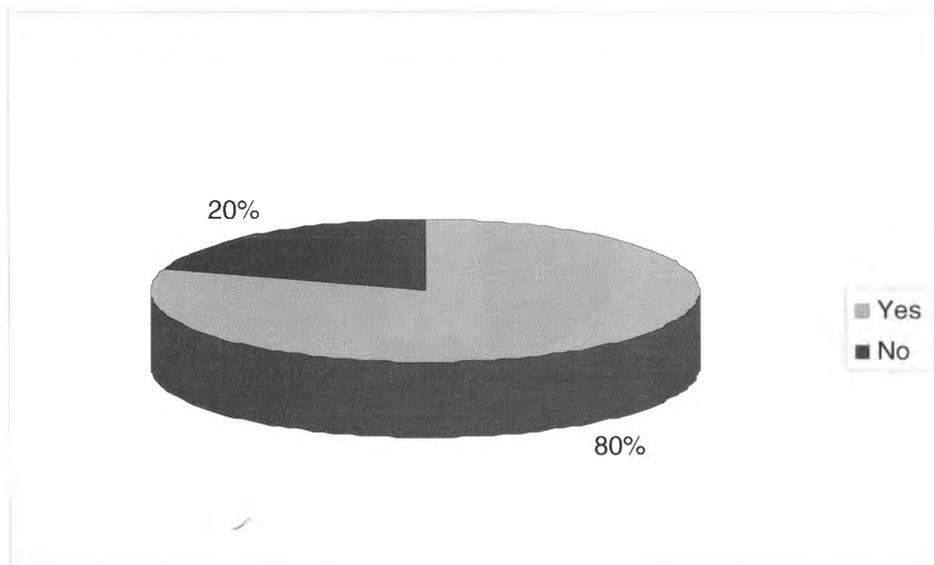
Out of the sampled population, 70% of the respondents were subordinates, 20% middle management while top management and others had 5% representation each.

4.3 Lessons Learned from E-Procurement

The respondents were asked to indicate whether or not their organisation had used e-sokoni platform to provide e-procurement services between the year 2000 and 2005. The study found out that between the year 2000 and 2005, many organizations sampled, indicated that they were using e-sokoni to provide e-procurement services. At least 80% were in agreement whereas only 20% of the sample did not use e-sokoni during that

period. This finding was useful to the research so as to confirm that the organisations had actually used the e-sokoni platform between the years 2000 and 2005.

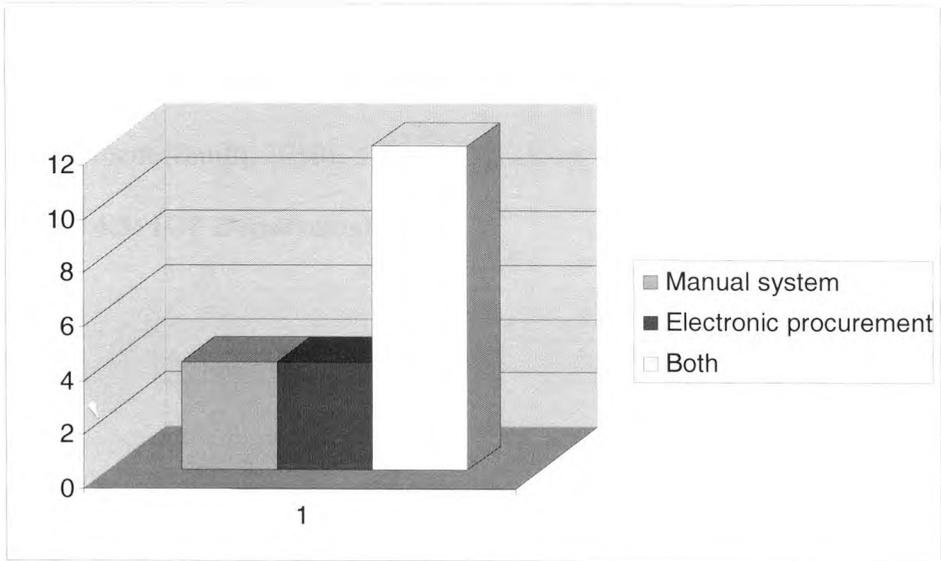
Figure 4.1: Use of E-Sokoni Between 2000 – 2005



4.4 Mode of Procurement

The study also sought to establish the mode of procurement that the companies used; therefore, the respondents were asked to state what mode of procurement they previously used and what mode of procurement they currently used in the organisation. The researcher's findings were able to establish that most of the respondents indicated that their companies made use of both electronic and manual system of procurement and in selected cases, they used either manual or electronic but to a lesser extent, as shown below in figure 4.2. This means that both systems were still in use suggesting that the implementation of the new system should have been successful as they did not abandon the manual system.

Figure 4.2: Mode of Procurement

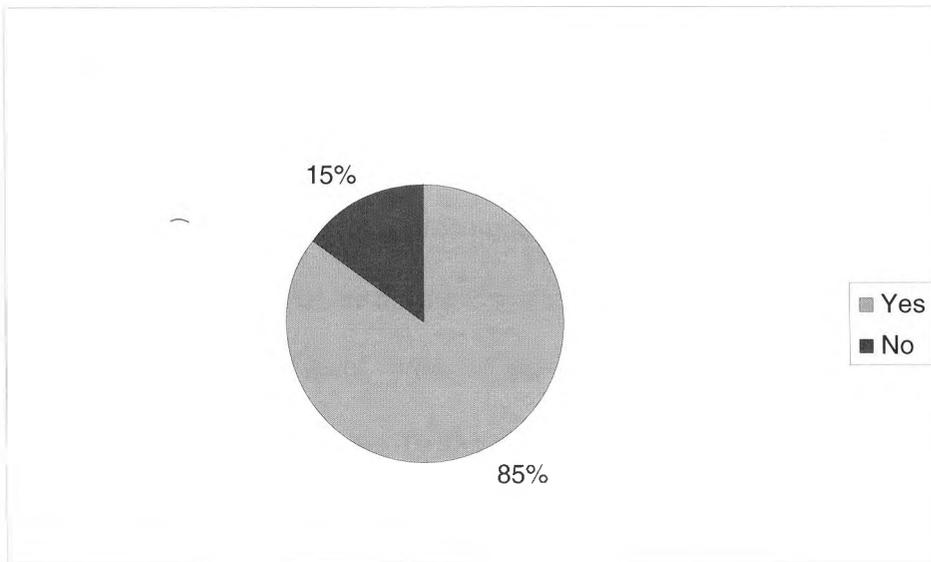


4.5 Presence of ICT Department

Considering that e-procurement needs to be supported by ICT departments or technological know how, the researcher wanted to find out whether the companies had an ICT department in place to handle e-procurement. Thus the respondents were asked to state whether or not their organisation had an ICT department to handle the e-procurement system. Indeed 80% of the respondents stated that the ICT department played a significant role in handling e-procurement, as shown in figure 4.3. This means that the organisation had technical ICT support to enable ease of use of the e-procurement system and prompt repair of the system in case of mechanical or software hiccups. From literature , E-readiness is defined as the measure of quality of a country's Information Communication Technology (ICT) infrastructure and the ability of its consumers, businesses and governments to use ICT to their benefit (The Economist Intelligence Unit Ltd, 2009). An e-readiness test helps the organisation to evaluate itself and know its

institutional capacity in terms of human resources, its governance issues namely its policies, the legislation in the country i.e. on whether it supports e-procurement and it also gauges the infrastructure and the IT systems available for implementation of e-procurement (Smith, 2010).

Figure 4.3: ICT Department



4.6 Reasons That Make E-Procurement Systems to Fail

In order to have a comprehensive analysis of the reasons that may make e-procurement to fail to work, the researcher classified the reasons into those that concern the suppliers and those that relate directly to employees in their respective organizations. On the lessons learned from e-procurement implementation, the study sought to explore whether the respondents, during the implementation were aware of the procurement system as a new method of carrying out procurement. The study found out that 75% of the respondents agreed that they were aware of the e-procurement system, while 15% were undecided and 10% disagreed on being aware of the system. This would mean that the employees'

awareness of the e-procurement system is crucial for the success of the implementation of the new system. This finding reiterates what Ataran (2001) who highlights the need for better communication with employees regarding the new system and the need to have adequate content management of the online catalogues to enable the success of e-procurement applications.

The researcher asked the respondents to state their perception on their job security due to the introduction of the new system. From table 4.1, it is evident that one of the reasons that affects implementation of e-procurement is the perception that staff had that the jobs were subject to threat when the new system was introduced, this is regardless of the sensitization that was done, 95% of the respondents showed that their jobs were perceived to be under threat. To the researcher this would mean that the employees' perception on their job security on the onset of the new system is crucial for the success of the implementation of the new system.

The respondents were asked to state their perception of the support given to the organisation by top management on the implementation of the new system. The study shows that the employees indicated that support from top management is salient to implementation of the e-procurement; this is proved by 80% of the respondents agreeing while only 20% were undecided and none disagreed to this view. To the researcher this would mean that the employees' perception on support given to the organisation by top management at the onset of the new system is crucial for the success of the implementation of the new system.

The study sought to find out if the training of staff plays an important role in effecting change in the organisation. From the results, the researcher found out that training of staff plays an important role in effecting the change, as the respondents held varying opinions on the same. This actually affected the transition from the paper based system to the e-procurement system. This was reinforced by the view that half of the sampled population were not proficient in information technology at the time of implementation of e-procurement as shown in table 4.1.

The researcher also sought to find out whether or not the new e-procurement system improved the working conditions and efficiency in the organisation. The staff noted that e-procurement improved efficiency and working conditions as 80% of the respondents agreed to this. These findings show that the improved efficiency and working conditions of the organisation should have facilitated the new system to be successful.

The researcher asked the respondents to indicate whether they thought there was the presence of a legal frame work that would have supported the implementation of the new e-procurement system. From this finding, it was indicated that the process of implementation of e-procurement required a legal framework, as 85% of the respondents agreed that the legal framework was vital in implementation. This shows that the presence of a legal framework to enable success of the implementation of the new system is important.

Table 4.1: Employees Perspective

Variable	Av. Result
Awareness of e-procurement as a method of procurement	4 (Agree)
Staff perceived their jobs under threat due to new system	4 (Agree)
Staff were sensitised about the new system	5 (Strongly Agree)
Top management were aware and supported implementation	4 (Agree)
The organization provided for training for e-procurement	2 (Disagree)
Transition from paper based to new system was easy	3 (Undecided)
You were Proficient in IT	2 (Disagree)
It was easy to adopt the new system	2 (Disagree)
E-procurement improved the working conditions	4 (Agree)
The systems recorded increased customer satisfaction	4 (Agree)
The new system enhanced better security of information	4 (Agree)
There was legal framework that facilitated e-procurement for the organization	2(Disagree)

4.7 Supplier Side

The process of e-procurement cannot be handled in isolation, the suppliers are pivotal to the process. Thus the table 4.2 shows how the respondents viewed the impact of suppliers to implementation of e-procurement. The researcher asked the respondents to indicate if the suppliers easily accepted and easily adapted the new e-procurement system. The findings showed that the suppliers did not easily accept the new system as 50% disagreed that suppliers easily accepted the change to the new systems. Therefore, showing that in order for the new e-procurement system to be successful the suppliers should have easily accepted the system. The researcher also found that the suppliers did not find it easy to adapt to the new system and this was shown by 40% of the respondents disagreeing, while 10% were undecided and 50% of them agreed.

The researcher asked the respondents to indicate if the suppliers were involved in the implementation of the new e-procurement system. The study findings indicate that the suppliers were not involved heavily in the implementation of the new systems and this issue may have impacted on the success or failure of the system, for instance, 80% of the respondents stated that they disagreed that suppliers were involved, whereas only 20% agreed that the suppliers were involved during implementation.

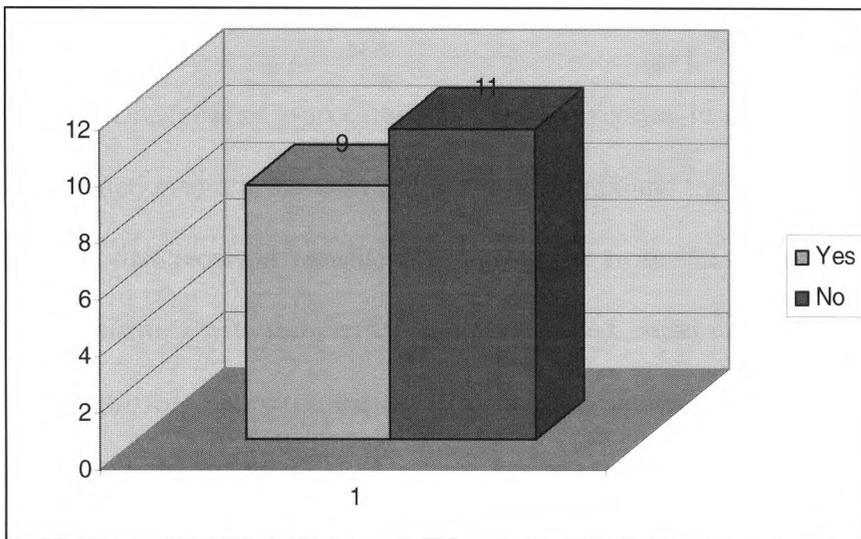
The researcher sought to find out if the suppliers had been sensitised on the new system and if the new system improved the working relationships with suppliers. According to the findings the suppliers were accordingly sensitised on the new systems of procurement as shown from the findings in table 4.2. The point of improved working relationships with suppliers, the respondents indicated that the new e-procurement system did improve the relationships whereby 90% of them agreed while only 10% disagreed. This was a milestone towards the success of the new system. These are in tandem with Porter's (1980) views on his five forces model, whereby he noted that the suppliers and buyers power were two critical forces for competitiveness that prompted firms to think of procurement as a strategic function rather than simply an administrative one. Since the 1980s, procurement has evolved from being viewed as merely a process for buying goods and services for a firm, to being more comprehensively defined as all the activities necessary to acquire goods and services needed to achieve user requirements (Tassabehji and Moorhouse, 2008).

Table 4.2: Supplier Side

Item	Av. Result
Suppliers easily accepted the change to the new system	2 (Disagree)
Suppliers were involved in the set up of the new system	2 (Disagree)
Suppliers were sensitised about the new system	4 (Agree)
The process of the new system was clear to suppliers	3 (Undecided)
The suppliers found it easy to adapt the new system	2 (Disagree)
E-procurement improved working relationship with suppliers	4 (Agree)

The researcher asked the respondents to state whether or not there were teams that were formed to facilitate the implementation of the new system. According to the research findings many respondents indicated that teams were formed to spearhead the implementation of the e-procurement systems. This is evident in the figure 4.4 above. These findings imply that the success of the implementation of e-procurement could be attributed to the formation of teams.

Figure 4.4: Team to Facilitate Implementation



4.8 Benefits When Using E-Market Provider

The benefits of e-procurement emanated from the second objective which sought to determine whether the new system brought about benefits to the organization. Process efficiency and process integration capabilities of a procurement process provide a significant contribution to the firm's performance. Thus the researcher sought to ask the respondents to indicate whether or not the new e-procurement system improved the procurement function, tracking of records and timely payments. From the findings, the study showed that the respondents indicated that the procurement function was improved with 65% of the respondents indicating this. There was also an improvement in the tracking of records and timely payments as shown from the findings where 90% and 75% of the respondents respectively attested to the view. These findings show that the improvement of the function should have facilitated the new system to be successful. This echoes the empirical evidence by Barratt and Rosdahl, (2002) who stated that the objective of e-procurement is to drive out any inefficiency within the industry.

The other benefits of e-procurement were an increase in firms' competitiveness through cost reduction and/or boosted efficiency with inbound logistics where 90% agreed. Other benefits that received considerable agreement from the respondents include improved communication with suppliers where 50% agreed, better customer service which attracted 75% approval, improved expenditure controls and ability of the procurement staff to focus on strategic issues as shown in the table 4.3. From literature review the findings also show correlation i.e Some of the benefits that users can experience while using e-marketplaces would include lower transaction costs, price comparability, information

exchange (Dothang & Thawatchai, 2008), increased IT effectiveness, improved marketing, improved customer relationship, back office facilitation and access to new revenue potential through greater market reach (Barratt & Rosdahl, 2002; Brunn et al., 2002; Petersen, 2002; Wilson & Abel 2002).

In essence, these benefits can materialize in a reduction of purchasing transaction costs, order fulfillment and cycle time, a reduction of the number of suppliers or even a reduction in the price paid, and the number of staff to support purchase transactions. This tallies with Attaran, (2001) and Purchase Pro Inc, (2010) who argued that the benefits enable the organisation to attain cost efficiency through reduction of maverick buying, the organisation will also experience improved auditing and better security by enabling staff and auditors to verify and track the movement of orders through the system and this will enable and encourage transparency in the system.

Table 4.3: Benefits of E-Procurement

Item	Av. Result
Reduced paper documentation	4 (Agree)
Improved order tracking	5 (Strongly Agree)
Timely payments	4 (Agree)
More efficient administration of the procurement function	5 (Strongly Agree)
Improved transparency	3 (Undecided)
Reduced cost of transactional activities	4 (Agree)
Improved monitoring of supplier performance	4 (Agree)
Improved communication with suppliers	4 (Agree)
Better customer service	5 (Strongly Agree)
Improved expenditure controls	4 (Agree)
Central management of contracts	3 (Undecided)
Ability of procurement staff to focus on strategic issues	4 (Agree)

4.9 Challenges Encountered When Using E-Market Provider

As part of addressing the second objective of the study, there was need to determine the challenges that impede the implementation of e-procurement in organizations. The researcher sought to ask the respondents to indicate their perception of lack of top management support and handling of change management and how it was seen as a hindrance to the successful implementation of the new e-procurement system. From the study findings it was found that, Lack of top management support was cited as one of the challenges where 90% of the respondents agreed that it was a challenge as shown in table 4.4. The findings also showed that the difficulties the organizations had in handling change was also a salient matter with 90% of the respondents agreeing while only 10% disagreed that it was a challenge. These findings show that lack of top management support and handling of change management could have contributed to the new system not being successful.

The researcher sought to ask the respondents to indicate their perception of lack of enough funding and insufficient bandwidth to the successful implementation of the new e-procurement system. The study findings showed that lack of enough funding and insufficient bandwidth to run the programmes were also cited as challenges towards implementation with 70% and 50% of the respondents respectively indicating this. There was lack of compatibility or integration between the systems i.e the software being used was not compatible with the organization. Similarly the system was slow when it came to carrying out transactions such as uploading and downloading of materials when

transacting, and this could have impacted significantly to the new system not being successful.

The researcher also sought to ask the respondents to indicate whether or not inadequate technology, lack of training and supplier non readiness contributed as a challenge to the successful implementation of the new e-procurement system. From the study findings as shown in table 4.4 above, it was also found out that inadequate technology, lack of training and supplier non readiness to use the system contributed immensely towards the slow or otherwise uninstalation of the new system. Indeed, Lack of technical, physical and procedural controls emerged as a challenge when using the e-market provider. This posed a major challenge towards successful adoption of the new system. The findings do emphasise what Dothang & Thawatchai (2008), observed that buyers only decided to use the e-marketplace for purchasing if they were confident that they had the ability to work in a networked environment and also if they perceived themselves to have Information Technology (IT) preparedness (e-readiness) that will provide them with confidence to use the system. Also, Davila et al. (2003), found that the challenges that users would face when using the e-marketplace would include high investment costs, security problems, and trust barriers that make most companies uncertain about whether they have the appropriate resources and experiences to use the e-marketplace successfully and he concluded that this may lead the users to refuse to adopt the e-marketplace practices.

Table 4.4: Challenges When Using E-Market Provider

Item	Av. Result
Lack of management support	4 (Agree)
Organizations difficulty in handling change management issues	4 (Agree)
Lack of funding	5 (Strongly Agree)
Insufficient bandwidth and speed	4 (Agree)
Mistrust of using the system	2 (Disagree)
Lack of compatibility/integration between systems i.e software compatibility	5 (Strongly Agree)
System slow to carryout transactions i.e. uploading and downloading	5 (Strongly Agree)
Adoption of e-procurement in Kenya was slow thus not favourable for organizations	3 (Undecided)
Employees who used the system were not trained	4 (Agree)
Supplier lack of readiness in using the system	5 (Strongly Agree)
Inadequate technology infrastructure	4 (Agree)
Lack of standardization	3 (Undecided)
Lack of confidentiality in information	3 (Undecided)
Lack of technical, physical and procedural controls	4 (Agree)

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.

This chapter presents the summary of findings and discussions, conclusions and recommendations derived from the findings of the study. The chapter also presents the limitations that were encountered in the process of gathering data.

5.2 Summary of Findings.

From the results tabulated in chapter 4, it was evident that most organizations were using e-sokoni as a platform to provide e-procurement services between 2000 and 2005. Similarly, there was evidence that the companies used both manual and electronic systems though there were challenges that affected proper usage of the new systems. Table 4.1, highlights the reasons that impact heavily on implementation of the e-procurement, some of the reasons that stood out prominently included issues of awareness of the new systems, the perception that the new system posed a threat to the jobs of staff, support from management is indeed very salient in any change process and so it came out strongly from the findings. Considering e-procurement is an IT concept, there was need for infrastructure coupled with training of the involved staff in the implementation.

A noteworthy finding of this work is that a firm's structural characteristics play a significant part in what effect ICT has on their sourcing strategies. In two out of three industries, the variables controlling for firm size had a significant impact on the

likelihood of a firm increasing its number of suppliers. This indicates that the impact of ICT on internal work organization, make-or-buy decisions and relationships with suppliers and customers is not alike for every company.

Past experience has shown that many efforts have failed because they targeted processes contained only in a single department. Most importantly, the benefits, costs, and risks of IT implementation need to be identified, managed, and controlled if businesses are to derive value from their investments. In many cases, the real benefits are not identified, resulting in companies not recognizing the true value of e-procurement, this is evident from table 4.3.

Therefore, there is a need to better understand the value of e-procurement at a level of analysis smaller than a firm. The analysis of the intermediate outcome of e-procurement can shed more light on the efficiency of the process than financial outcome measures, such as return on assets or return on investment.

In order to realize the benefits of e-procurement as shown in table 4.3, it is necessary to properly improve the process and not simply to automate the existing methods of working. Then, processes have to be continuously measured and analyzed by defining and implementing performance measures and key performance indicators. Some of the benefits; reduced paper documentation, improved order tracking, more efficient administration, better audit trail of transaction, development of closer purchaser- supplier relations among other benefits.

In the survey companies that procure online were asked how electronic procurement affected the number of their suppliers. Irrespective of the industry, the largest share of firms did not see any change in the size of supplier pool resulting from the introduction of the new transaction channel. Only a small group of firms stated that the deployment of electronic procurement was followed by a decrease in the number of suppliers.

Furthermore, the results indicate that the impact of the technology in question on companies' sourcing decisions varies from industry to industry. In the same way, the type of goods procured online might have various consequences for sourcing strategies of companies operating in different industries. These results confirm only the intuitive expectation that when facing different economic conditions and structural characteristics in a particular industry, companies adopt ICT tools for different strategic reasons which, in turn, has different implications for companies operating in various industries.

5.3 Conclusion

This study explored comprehensively the measures for the success of an e-Procurement implementation initiative to be determined by measuring user and supplier satisfaction. It became apparent from the literature that industry sector e-Procurement initiatives must also focus on transparency and accountability issues. The results show that e-procurement implementations have broadened in reach and deepened in scope for the last 10 years.

This change as evident from the findings has resulted in greater adoption of invoicing and payment activities consistent with the move towards more fully operational systems and

the development of greater e-commerce capabilities. This increase in reach and scope has also made the challenges associated with software and catalogue integration and the alignment of organisational culture with procuring online more visible. The availability and accessibility of procurement information is critical in the monitoring and evaluation of procurement activities and as an input to strategic decisions surrounding procurement. In a nutshell, this study has shown that e-procurement has a positive impact on the procurement performance measures in most organizations. Among the operational measures, reduction in errors and maverick buying are most significantly affected by e-procurement. Given that the users in the divisions have been dealing with inefficient and cumbersome manual systems, e-procurement has definitely made their purchasing easier.

5.4 Recommendations

The procurement process is one of the most important processes, and its costs, reliability, and risks considerably influence the performance or even survival of a company. Still, many companies lack an approach to rigorously and quantitatively evaluate their options, benefits, and risk. When interpreting the findings of this study, it is important to note that user and supplier satisfaction with the implementation of e-procurement initiative does not necessarily suggest that the public sector agency is better or worse off operationally. Future research should seek to use more objective measures of implementation success. Nonetheless, customer satisfaction is still an important dimension of performance on which to measure the success of an e-Procurement initiative, since it can significantly influence the agency's perception of whether the implementation effort was justified.

Although data gathered through direct observation of actual failure situations and responses of users involved in the implementation through in-depth multiple case studies of e-Procurement initiatives would ideally suit for the purpose of this study, the researcher believes that this study has yielded several insights that could be useful to practitioners who will be faced with implementing an e-Procurement initiative in the future. E-Procurement is not a ‘fashion’ that will soon pass. Although the benefits of e-Procurement are significant, these benefits will not be gained automatically without successful implementation of e-Procurement initiatives.

A company should carefully analyze its own business processes and procurement transactions, and use suitable criteria (e.g., costs, risks, lead time, and percentage of transactions beyond a certain threshold). Both the criteria and the simulation/ process model can be properly modified without much trouble.

5.5 Limitations of the Study

Due to time and resources constraints, the study was restricted to nine organizations that had formed a block client-base with e-sokoni in 2000 and had used it as a platform to implement e-procurement. Getting response from the project managers and other staff was quite difficult as they claimed to be busy. The researcher would have explored more organizations and population countrywide but only targetted only 20 staff that were sampled from these organizations.

5.6 Suggestions for Further Research

In light of the study carried out the researcher would suggest further research to be done on the following topics namely; A study to determine the effects of government policies and regulations on the process of e-procurement in Kenya.

Another study could be conducted to determine the role played by suppliers in effective implementation of e-procurement systems in Kenya's public sector organizations.

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APPENDICES

Appendix 1: Introduction Letter to the Respondent

University of Nairobi

School of Business

P.O.BOX 30197

Dear respondent,

I am a student at University of Nairobi (UON), pursuing a Masters Degree in Business Administration (MBA). Kindly assist me in completing my research work for my MBA by answering the questionnaire presented to you. The purpose of this questionnaire is for getting information for my MBA thesis; whose title is **Electronic Procurement Implementation: Case Study of Selected Firms in Kenya**.

The information gathered from this research work will be treated in utmost confidentiality, as it will only be used for academic purposes.

Anne Muthigani

Mr. S. O. Nyamwange

MBA Student.

University Supervisor.

Appendix 2: Questionnaire to the Respondent

SECTION A: Demographic Information

1. Your gender: Male Female

2. What is your highest level of education?
 - University (Specify PHD, Masters, Undergraduate) _____
 - College (Specify Diploma, Certificate) _____
 - Secondary _____

3. What is your field of specialization? _____

4. Your position in the organization
 - Top management
 - Middle management
 - Subordinate
 - Others, please specify

5. Please specify your membership KISM CIPS NONE Other

6. Between the year 2000 and 2005, did your company use or plan to use e-sokoni as a platform to provide e-procurement services to your organisation? Yes No

7. Currently what mode of procurement does your company use?
Manual System Electronic procurement Both

8. If answer for above is Electronic Procurement or Both, please specify which e-system you currently use _____

9. If manual system, do you plan to use electronic procurement in your organization in the future? Yes No

10. If No, has your company ever used electronic procurement as a mode of purchasing?
Yes No

11. If Yes, please specify which e-system your company used _____

12. Do you still use this system? Yes No

13. If No, what are the reasons why your company stopped using the e-system?
.....

14. If Yes, did you have an ICT department to handle the e-procurement system? Yes []
No []

15. If No, did you use a consultant? Yes [] No []

16. From the list below indicate the e-procurement application that your organisation used:

- E-Sourcing []
- E-Tendering []
- E-Advertising []
- E-Reversed Auctions []
- E-MRO []
- Web-Based Enterprise Resource Planning []
- E-Quotations; via email []
- Others, please specify

17. Did your organisation identify a champion for the new e-procurement system?
Yes [] No []

18. Was there a team formed to spearhead the implementation of the new e-procurement system?
Yes [] No []

FOR THE FOLLOWING SECTIONS PLEASE INDICATE YOUR LEVEL OF AGREEMENT WITH THE FOLLOWING STATEMENTS:

KEY: Strongly Disagree (1); Disagree (2); Neither Agree nor Disagree (3); Agree (4); Strongly Agree (5)

SECTION B: LESSONS LEARNED FROM E-PROCUREMENT IMPLEMENTATION (REASONS THAT WOULD MAKE E-PROCUREMENT SYSTEMS FAIL TO WORK)

	Statement	1	2	3	4	5
1	During implementation you were aware of e-procurement as a method of carrying out procurement					
2	Staff easily accepted the change to the new system					
3	Staff perceived their jobs to be under threat due to the new system					
4	Staff were sensitised on the new system					
5	Staff were committed to the adoption of the new system					
6	Suppliers easily accepted the change to the new system					
7	Suppliers were sensitised on the new system					
8	Top management was aware of e-procurement as a method of carrying out procurement					
9	There was support from top management to implement e-procurement.					
10	The change to the new system was adequately communicated to top management					
11	Your organization had provision for you to undergo training for e-procurement					
12	The change to the new system was adequately communicated to you					
13	The change to the new system was adequately communicated to suppliers					
14	The transition process from paper based system to the new system was easy					
15	Staff were involved in the set up of the new system					
16	Suppliers were involved in the set up of the new system					
17	You were proficient in Information Technology (IT)					
18	There was presence of after sale service from the service provider					
19	You found the system to be complex					
20	The processes of the new system were clear to you					
21	The processes of the new system were clear to suppliers					
22	It was easy for you to adapt to the new system					
23	It was easy for suppliers to adapt to the new system					
24	E-procurement improved the working conditions in the organization					
25	E-procurement improved work relationships with the suppliers					
26	The new system performed to your expectations					
27	The new system recorded increased customer satisfaction					
28	The new system recorded quick responses to issues					
29	The new system enabled better security of information					
30	There was a legal framework that facilitated e-procurement for the organization					

SECTION C:

KEY: Strongly Disagree (1); Disagree (2); Neither Agree nor Disagree (3); Agree (4); Strongly Agree (5)

i) BENEFITS ENCOUNTERED WHEN USING AN E-MARKET PROVIDER

	Statement	1	2	3	4	5
1	Reduced paper documentation					
2	Improved order tracking					
3	Reduction of maverick buying					
4	Timely payments					
5	More efficient administration of the procurement function					
6	Improved transparency in the organisation.					
7	Reduced time in processing orders.					
8	Improved access to procurement opportunities for suppliers.					
9	Better audit trail of the transactions.					
10	Reduced cost of transactional activities					
11	Improved monitoring of supplier performance					
12	Reduced non-value adding clerical activities					
13	Improved communication with suppliers.					
14	Enabled access to more suppliers					
15	Development of closer purchaser – supplier relationships					
16	Better customer service					
17	Improved expenditure controls					
18	More reliable system					
19	The system had quicker updates					
20	Reduced lead time.					
21	Central management of contracts					
22	Procurement staff were able to focus on strategic issues					

ii). CHALLENGES ENCOUNTERED WHEN USING AN E-MARKET PROVIDER

	Statement	1	2	3	4	5
1	Lack of support from top management					
2	Organisation had difficulty in handling change management issues					
3	Lack of funding.					
4	Unclear requirements.					
5	Insufficient internet bandwidth and speed.					
6	Mistrust of using the system i.e. fear of enhancing forgery through use of the system					
7	Lack of compatibility/integration between systems i.e. The software being used was not compatible with organizations you were transacting with					
8	System was slow to carry out transactions i.e. uploading and downloading of materials when transacting was slow					
9	Adoption of e-procurement in Kenya was slow, thus it was not favourable for the organization					
10	Payment when using the system was not favourable for you and the contractor					
11	Employees who dealt with the system were not trained to use the system					
12	Suppliers lack of readiness in using the system					
13	System had poor design.					
14	Inadequate technological infrastructure.					
15	System provider did not responded to queries adequately					
16	Gave after sale service i.e. gave support services.					
17	Lack of standardisation in the new system					
18	Lack of confidentiality of information sent					
19	Service provider had contingency plans in case of system failure					
20	Lack of protecting data to prevent from unauthorised access					
21	Lack of regular back up of business related documents such as spreadsheets, email etc.					
22	Organisation enabled sharing of passwords					
23	Organisation allowed limited access to certain data					
24	Lack of technical, physical and procedural controls for security					

Kindly give any other comment

.....

Thank you for your participation in filling out the questionnaire.