

**E-PROCUREMENT ADOPTION BY GOVERNMENT PARASTATALS IN KENYA:
THE SUPPLIER PERSPECTIVE**

BY

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DECLARATION

I declare that this research project is my original research work and has not been presented to any other university for award of a degree.

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This research project has been submitted with my permission as the University Supervisor.

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DEDICATION

This work is especially dedicated to my fiancé Sheilah for believing in me and her relentless support and encouragement in my studies and to all my family members for their inspiration and prayers. Your support brought me this far.

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ABSTRACT

Since the introduction of the internet in the 1940s, businesses have been slowly adopting to the e-commerce or e-business concepts that uses ICT to facilitate business operations. E-procurement is one of the innovations provided for by the internet that has been widely accepted by different sectors worldwide and is therefore not a new concept. This study examined how the supplier attitudes, capacity, transparency and integrity affect their propensity to adopt it. To achieve this objective the study used primary data obtained from suppliers to Government parastatals in Kenya as at July 2013 through a questionnaire. A sample of 78 suppliers was selected but the firms that responded were 62. A regression model was determined to establish the relationship between propensity to adopt e-procurement and the other variables namely supplier attitude, supplier capacity and supply transparency and integrity. Pearson's correlation and regression analysis were used for the analysis and the tests of significance were carried out for all variables using t-test at the 95% level of significance.

The results indicate that the model examined in this study is significant with an R^2 of 95% and that two of the independent variables had a significant relationship individually with propensity to adopt e-procurement. The results further show there is a strong positive relationship between capacity and propensity to adopt.

The study concluded that attitude and supplier capacity can lead to adoption or non-adoption of e-procurement. Therefore it will be important for the parastatals to understand the relationship that exist between suppliers' propensity to adopt e-procurement and attitude, capacity and transparency and integrity as they prepare to embrace e-procurement.

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LIST OF ABBREVIATIONS

B2C	Business to Consumers
B2E	Business to Employees
B2G	Business to Government
EDI	Electronic Data Interchange
EPS	Electronic Procurement Systems
ICT	Information Communication Technology
IFMIS	Integrated Financial Management Information System
IT	Information Technology
OECD	Organization of Economic Corporation and Development
PPOA	Public Procurement Oversight Authority
SCM	Supply Chain Management

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Organizations the world over and government corporations have increasingly adopted e-procurement. A significant expenditure of public funds occurs in the procurement of goods, services and works. Public entities, as buyers, have a duty of care and trust in expending those funds. Further, not all the technology is in place yet to enable the Government to take full advantage of internet commerce (PPOA, 2009). The PPOA in 2009 identified issues in identification of parties in a transaction, synchronization, confidentiality, data integrity and bandwidth as the major considerations that the government had to make before taking full advantage of the benefits of e-procurement. According to Wilson (2002), e-procurement is the amalgamation of sales and purchasing business models and calls for differentiation based on application and functions. Therefore suppliers form an integral part of the adoption process and their attitude, integrity, transparency, capacity and willingness to comply play a major role in the success of the process. These suppliers are also using e-procurement systems for management of all processes relating to purchase. Technologies have changed and redefined the way organizations and government corporations operate.

1.1.1 E-Procurement

Since the introduction of the internet in the 1940s, businesses have been slowly adopting to the e-commerce or e-business concept that uses ICT to facilitate business operations. E-commerce as one of the innovations provided for by the internet has been widely accepted by different sectors worldwide and is therefore not a new concept. Hittet al.(1999) note that the use of ICT in a business is associated with less vertical integrations meaning that a business is able to conduct more transactions without the need to increasing or invest more in physical capacity. The concept of e-procurement can therefore be used to improve transactions and reduce costs in a business. Knudson (2002) defines e-procurement as aspects of procurement supported by various forms of electronic communication and takes up forms such as electronic data interchange, enterprise resource planning, e-sourcing, e-tendering, e-informing, among others. E-procurement can also be defined as a collaborative procurement of goods, works and services using electronic methods at every stage (Kumar and Agrahari 2007). De Boer et al. (2002)

indicate that various cost reductions and benefits have been already identified in the use of e-procurement.

The concept of e-commerce in which e-procurement has a central function has become an avenue for improving effectiveness through cost savings and productivity improvements in business transactions that involve the purchase of goods, services and works (Neef, 2001). E-procurement solutions have widened the range of Business to Business (B2B) as well as Business to Government (B2G) transactions by introducing innovative processes in public administration based on information and communication technologies (Scupol, 2009). The move to e-procurement that is supported by internet technologies has been gradual. During the introduction stages, e-procurement took up the form of electronic data interchange (EDI) whereby messages were sent using closed networks between organizations. The introduction of fast internet has further provided tools that assist in the entire process of procurement bringing in the issue of efficiency and transparency which have been identified as hindrances to the public procurement system (Odhiambo and Kamau 2003)

1.1.2 Suppliers and E-procurement in the Public Sector

Public procurement can be defined as the purchasing, hiring or obtaining by any other contractual means of goods, construction works and services by the public sector (Odhiambo and Kamau 2003). Tonkin (2003) indicates that the public sector undertakes e-procurement initiatives because it is believed that certain cost reductions and benefits including those related to public policy imperatives will arise without the considerations of the implications. The items involved in public procurement range from simple items or services such as office clips or cleaning services to large commercial projects such as the development of infrastructure including roads, military equipment and airstrips. With government as a service provider, a basic measure of a successful or failed public e-procurement will be manifested through quality and magnitude of the services it provides

The choice of suppliers has a direct impact on the goods, services or works procured by any private or public entity Elmagharby (2000). Since the result of an effective procurement strategy is the minimizing of costs at all stages, Porter (1985) points out that procuring from more than one supplier reduces the total costs of procurement. Mukhopadhyay et al., (2002) argues that new technologies lower searching and filtering costs and by increasing the number of sourcing

options companies can therefore intensify the competition between suppliers and increase their bargaining position. E-procurement can therefore enable a company lower search and evaluation costs as well as increase the number of potential suppliers through e-informing.

Supply managers on the other hand and other internal stakeholders can easily drive user adoption and system compliance through significant change management efforts and ongoing education of end users. This is because of the interactions made by suppliers and businesses who they supply to and those that manufacture or supply to them. Suppliers therefore become highly active internal marketers of e-procurement systems because of several interactions especially in the case of public procurement. Suppliers if involved early in e-procurement initiatives are therefore able to play an active role in the process's refinement and efforts in change management (Aberdeen, 2005). Particular benefits of e-procurement in the public sector are thought to include greater transparency in procurement through electronic publishing of tender notices and contract awards. This in turn is likely to enhance accountability and reduce the instances of corruption. When developing a business case for adopting e-procurement, it is important to assess the baseline benefits and costs associated with the process or processes to be automated in order to understand the probable outcomes of e-procurement adoption or enhancement (Scupola, 2009). In essence, it is important to understand what will change and how it will change when an e-procurement tool is implemented. E-commerce technologies have great potential to influence the direction of the productivity in an organization, however the willingness to adopt is determined by a number of factors, among them, reduction of transaction costs, improvement of customer service quality, defensive reaction to competitor's adoption, requirement by customers that their suppliers link their system as a condition for doing business, (Thong, 1999). On the other hand, the propensity to adopt e-procurement may be hindered by cost of investing in compatible systems, training of personnel, unwillingness to have a more open approach to tendering, perceived barriers to e-procurement among others, (Davilla et al., 2003).

1.1.3 Kenyan Parastatals and e-Procurement

Parastatals are organized institutions that are formed to undertake all business activities in key industries by the government with the purpose of fulfilling its economic policies. There are currently 147 parastatals operating in Kenya (The Parastatal e-News Kenya, 2013), however, the

government has been in discussions to re-align the parastatals in accordance to the devolved system of governance. Parastatals in Kenya have been investing in information technology as part of the ongoing reforms in the public sector leading to the decline in the costs in some key services World Bank (2007). Neef (2001) indicates that the more organizations can integrate e-procurement processes and systems directly into their supply chain, the greater the cost savings and product improvements. Reforms in the sector have been focused on improving governance and the regulatory framework, an example is the Public Complaints Standing Committee (Office of the Ombudsman) that was formed to deal with complaints against public officers relating to procurement and other issues of governance and transparency.

There have been various developments in public procurement and disposal which had for long been challenged by a lack of a clear legal framework and inefficiencies in the entire process of procurement. A process of continuous reforms in the sector since the late 90's has resulted in a better regulated public process through the Public Procurement and Disposal Act (2005), The Public Procurement and Disposal Regulations (2006) and the Suppliers Practitioners Management Act (2007). The regulations have created several autonomous bodies that also form part of the developments of the public procurement system in Kenya over the years. Part of the developments in the government procurement system has been the adoption of the Integrated Financial Management Information System (IFMIS) since the year 2005 as its sole accounting and resource management system. The government uses IFMIS for several initiatives including Electronic Payment System, e-Government Receipt Accounting System, State Public Procurement Portal, Integrated Human Resource Management system among others.

1.2 Statement of the Problem

Over the years, parastatals have relied on manual tendering process, selection of suppliers and requisitioning. With the eminent adoption of e-procurement by parastatals, suppliers are presented with new opportunities and challenges. Suppliers will be forced to integrate with parastatals through electronic data interchange partnerships and sharing of information systems. According to Mitra, Laka and Abdulla, (2000), the most common forms of e-commerce in the Kenya market are e-procurement, e-Banking and of late mobile banking. Of the three, e-procurement which is a user friendly, internet based purchasing system has generated a lot of interest due to its ability in improving efficiency and transparency as indicated by Neef

(2001). Management and administration of e-Procurement in Kenya poses unique challenges. A significant expenditure of public funds occurs in the procurement of goods, services and works. Public entities, as buyers, have a duty of care and trust in expending those funds. Further, not all the technology is in place yet to enable the Government to take full advantage of internet commerce (PPOA, 2009). The PPOA in 2009 identified issues in identification of parties in a transaction, synchronization, confidentiality, data integrity and bandwidth as the major considerations that the government had to make before taking full advantage of the benefits of e-procurement. However, if suppliers are integrated in adoption of e-procurement technology through partnerships using a combination of supplier partnering approaches, the use of e-procurement technology is easily adopted into the system Aberdeen (2005). But the existence of the supplier integration challenges may hold back the use of e-procurement especially in the context of Government to Business due to corruption, transparency, accountability, capacity, attitude and perceptions. Overall their cooperation and willingness is key to success of e-procurement.

A number of researcher's have conducted studies on e-procurement. Tanking (2003) in a study of e-procurement in the public sector affirms that its benefits have been over stated and that measurement of the benefits is confused with making a case for political or commercial needs. Parade and Sophonthummapharn, (2008) in their attempt at looking at the benefits and risks of e-procurement look at the buyer's perspective as well as Coulthard and Castleman, (2001) who assess the acceptability of e-procurement by various stakeholders. Nepelski (2006) comes close to assessing the impact of e-procurement from a supplier's perspective when looking at the impact of e-procurement on the number of suppliers finding that the use of ICT intensifies competition among suppliers. Mose, Njihia, & Magutu, (2013) conducted a study on the Critical Success Factors and Challenges in E-procurement Adoption Among Large Scale Manufacturers in Nairobi Kenya. The study concluded that most of the large scale Manufacturing firms have adopted e-procurement. However these studies did not address suppliers perspective in the adoption of e-procurement. The study aims to answer the following research questions, what are the supplier attitudes towards adoption of e-procurement by parastatals? How does supplier transparency and integrity affect adoption of e-procurement? What is the supplier capacity to partner with parastatals to adopt e-procurement platform? Are suppliers willing to adopt e-procurement?

1.3 Objectives of the Study

The main objective of the study is to establish the challenges and opportunities presented to suppliers by adoption of e-Procurement by the parastatals in Kenya and their willingness to adopt it.

1.3.1 Specific Objectives:

- a) To establish supplier attitudes towards adoption of e-procurement by public corporations.
- b) To identify the possible supplier transparency and integrity issues associated with e-tendering and receiving.
- c) To establish the capacity of suppliers in partnership with public entities to adopt e-procurement practice.
- d) To establish the relationship between supplier attitude, capacity and propensity to adopt e-procurement.

1.4 Significance of the Study

The era of technology has developed rapidly throughout the years with many developing countries being left out from the benefits of various innovations. Developed countries are seen to be more efficient and effective in various aspects of public service due to adoption of ICT into their structures. This can also be the case for less developed countries especially in Africa. This study is motivated by a desire to establish how challenges encountered in adoption of e-procurement by parastatals can be reduced and benefits tapped. The study could prove very useful to:

1. Government policy makers – the findings of this study will provide the policy makers with information on what makes suppliers adopt or not adopt e-procurement. This will be significant to the policy makers as they formulate policy on prudential guidelines for e-public procurement.
2. Public procuring entities – the findings will also assess issues on e-procurement risk management from the supplier perspective. Procuring entities will be better enlightened on the existent attitudes, propensity by suppliers to integrate and this will assist them make informed choices.

3. Suppliers – Suppliers wishing to supply parastatals will be more prepared and informed in terms of the investments they are required to make to successfully form an integrated partnership as well as the potential pitfalls they are likely to encounter in the process.
4. Academicians interested in public e-procurement risks and their management – the findings of the study will assist other academicians to find gaps in literature on the topic and the study can also be used as a reference point for other related studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter will review existent literature on topics related to the set variables of the study. The study will draw material from several sources which are closely related to the theme and objectives of the study. Models by writers are used to illustrate the various sub topics mentioned in the objectives of the study.

2.2 E-procurement Adoption

According to Mose, Njihia, & Magutu, (2013), private and public sector organizations have been utilizing information technology (IT) systems to streamline and automate their purchasing and other processes over the past years. E-procurement is not new, Chaffey (2009) there have been many attempts to automate the process of procurement for the buyer using electronic procurement systems (EPS), workflow systems and links with suppliers through electronic data interchange (EDI). E-procurement refers to the electronic integration and management of all procurement activities including purchase, request, authorization, ordering, delivery and payment between a purchaser and a supplier, Chaffey (2009). A significant expenditure of public funds occurs in the procurement of goods, services and works. Public entities, as buyers, have a duty of care and trust in expending those funds. Further, not all the technology is in place yet to enable the Government to take full advantage of internet commerce (PPOA, 2009). The PPOA in 2009 identified issues in identification of parties in a transaction, synchronization, confidentiality, data integrity and bandwidth as the major considerations that the government had to make before taking full advantage of the benefits of e-procurement.

The notion of e- procurement adoption into the organization structure has been supported by the results of empirical studies. Holland and Lockett,(1997) found that the process of supply chain integration is followed by a reduction in the number of suppliers. Dai et al.,(2000) concluded that firms indeed benefit from reduced coordination and search costs, but in some contexts buyers still maintain close relationships with selected suppliers and various business models continue to co-exist. Similarly, drawing attention to the fact that the effects of ICT work in favor of both market and hierarchies, Baker et al., (2004) argue that due to the complexity of business

activities and interdependence between various factors determining the organizational form, the final outcome might not depend solely on ICT. However, other studies indicate that ICT leads to a change in firm boundaries and encourages firms to depend less on hierarchies and conduct more transactions at arm's length. The arguments of Malone et al.,(1987) are supported by Hitt et al, (1999) who found that, overall, increased use of ICT was associated with substantial decreases in vertical integration. Examining the relationship between firm size and ICT investment, Brynjolfsson et al., (1994) found evidence that increased ICT expenditures were correlated with decreasing firm size.

Although e-procurement systems provide numerous benefits to the firms, there is a certain amount of risks associated with e-procurement adoption. These risks could be viewed as negative driving force affecting the e-procurement adoption (Parida and Sophonthummapharn, 2008).Dai and Kauffman, (2001) argue that Internet-based e-procurement systems and B2B electronic market solutions need to be compatible to the greatest possible extent with the existing technologies, to have a reasonable chance to be widely adopted in the marketplace. Four categories of risk are identified within the literature related with e-procurement. Talluri et al., (2006) identify internal business risks arguing that implementing an e-procurement solution not only requires that the system itself successfully performs the purchasing process, but it integrates with the existing information infrastructure, in addition companies are uncertain about having the appropriate resources to successfully implement an e-procurement solution.

Davila, Gupta and Palmer, (2003) in their discussion on external business risks note that E-procurement solutions need not interact with internal information systems, but also need to collaborate with external constituencies; mainly customers and suppliers. External constituencies need to develop internal systems that facilitate the communication through electronic means, an issue that demands technology investments as well as incentives for these constituencies. For e-procurement technologies to succeed, suppliers must be accessible via the Internet and must provide sufficient catalogue choices to satisfy the requirements of their customers. Suppliers, especially in low margin industries, may be hesitator even unable to meet such demands without guarantees of future revenue streams (Davila et al., 2003).

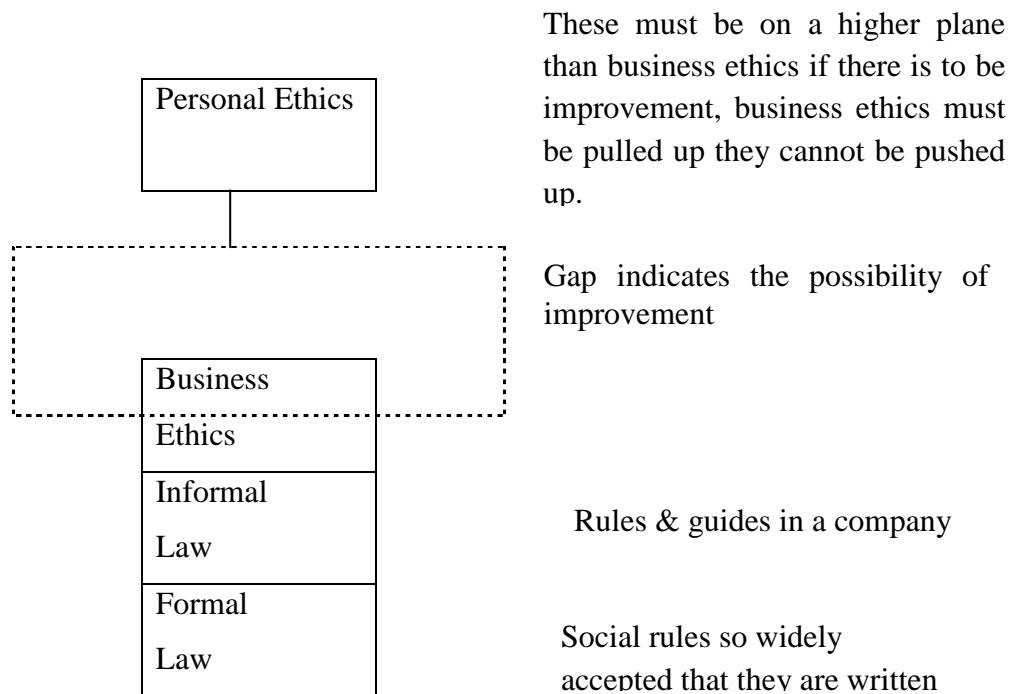
Davila et al., (2003) also identify technology risks in e-procurement explaining that companies also fear the lack of a widely accepted standard and a clear understanding of which e-

procurement technologies best suit the needs of each company. The significance of this risk factor seems to suggest the need for clear and open standards that would facilitate inter-organization e-procurement technologies. Without widely accepted standards for coding, technical, and process specifications, e-procurement technology adoption will be slow and fail to deliver the benefits as expected.

2.3 Transparency and Supplier Integrity

The process of e-procurement is also engulfed with integrity and transparency issues (Samaniego, Arranz and Cabezudo, 2006). Organizations must therefore be confident, for example, that unauthorized actions will not disrupt production or other supply chain activities when committing to e-procurement technologies. Man in society conforms to certain laws prescribed by the society. The laws may be written or informal or both but whatever is important is that it has to be abided by Saleemi, (2000) personal ethics influence business ethics and by extension the supplier integrity. A person who lives in the society is guided by the law as of his society. His actions are thus, influenced by the social and moral standards.

Table 1.1 A model depicting the relationships among personal ethics, business ethics and the law.



Source: Saleemi, N. A. (2000). *Purchasing and supplies Management Simplified*.

Purchasing is a function that is generally vulnerable to fraud. Evans (2010) states that fraud is not necessarily restricted to those with title purchasing officer, but may involve anyone in direct contact with suppliers. While it may be unrealistic to check all purchase documents presented for payment, e-procurement seeks to ensure that an acceptable standard of discipline and efficiency is achieved Kenneth (2000). Kenneth(2000) continues to add that corporate ethics are statements issued by companies, government corporations and other organization's describing their general value systems and providing guidelines for decision making consistent with those principles. Such statements may relate to the social responsibilities of the organization and the responsibilities of their suppliers. But according to Samaniego et al., (2006), large firms are not concerned with security issues related with e-procurement. According to the PPOA electronic procurement system will eliminate corruption and un-necessary bureaucracy in procurement.

2.4 Supplier Capacity to Adopt E-procurement

Given the benefits of e-procurement, there still exist many organizations that have not effectively embraced the practice (Arasa and Achuora 2012).Kinyanjui and McCormick (2002) note that Kenya has a wide range of organizations struggling to adopt information and communication technology in their procurement functions. According to Wilson (2002), e-procurement is the amalgamation of sales and purchasing business models and calls for differentiation based on application and functions. The first application is the buy-side procurement which refers to an organization using electronic systems to purchase goods, such as office stationary, from contracted suppliers. These suppliers are also using e-procurement systems for management of all processes relating to purchase. This is simply coalescing of the corporate procurement portals and business to employees (B2E) applications. The second application is sell-side procurement. This model is used to describe how one supplier sells to a number of buying organizations using electronic systems such as, using e-procurement systems and-commerce technology. Sell-side procurement model is often used extensively in B2C (business to consumers). Well-designed sell-side solution is usually offering a higher level of customizations for each buyer than their B2C retail counterparts. This type of model attracts big supplier firms that have a stronger position in relationship with their buyers.

The last application is e-marketplace and trading hubs which is a combination of industry consortium and the trading exchanges. The marketplace model brings together many different

buying and selling organizations in one trading community. The most popular e-marketplace function is auction used for variety of product category. This type of model often helps to increase collaboration between companies in a single industry sector or providing the opportunity of e-procurement to companies, who would normally be too small to benefit (Parida and Sophonthummapharn, 2008).

Sigala (2003) indicates that e-purchasing adoption can be influenced by a large firm size and purchasing workforce. The rationale is that a buying firm with a larger purchasing unit is more likely to adopt e-purchasing, as it has greater information processing capacity, needs and organizational power than smaller firms. Moreover, a buying firm with a large purchasing unit is also more likely to possess the financial, skill resources and bargaining power to achieve the economies of scale required. On the other hand, small scale suppliers also lack in ICT knowledge and technical skills. OECD (1998) and Walczuch, Van Braven& Lundgren, (2000) attributed the failure of European small and medium enterprises (SMEs) to utilize e-commerce to their lack of e-commerce and Internet knowledge. Because of the obstacles in developing the necessary skills and technical knowledge, many firms postpone ICT adoption until they gain sufficient internal expertise.

Khanapuri et al., (2011) assert that there are a number of requirements relating to the adoption of e-procurement system. They include technology, objectives, information, staffing and skills. The requirements make the adoption process to face a number of challenges such as Compatibility, Integration, Adoption and regular use by employees and lack of capacity by small suppliers. Companies require investing in a good IT system with access to the web and integration to the customers. In addition the staff handling the system will require to be empowered. According to World Bank (2013), the cost of purchasing e-procurement software can be huge and may be prohibitively expensive for smaller organizations. They must consider not only the price of the software itself but other costs associated with the system and its implementation. Those additional costs include networking infrastructure, information technology hardware and software, application design, development and implementation, training, and maintenance of equipment. There is also the time required for employees to learn the new system.

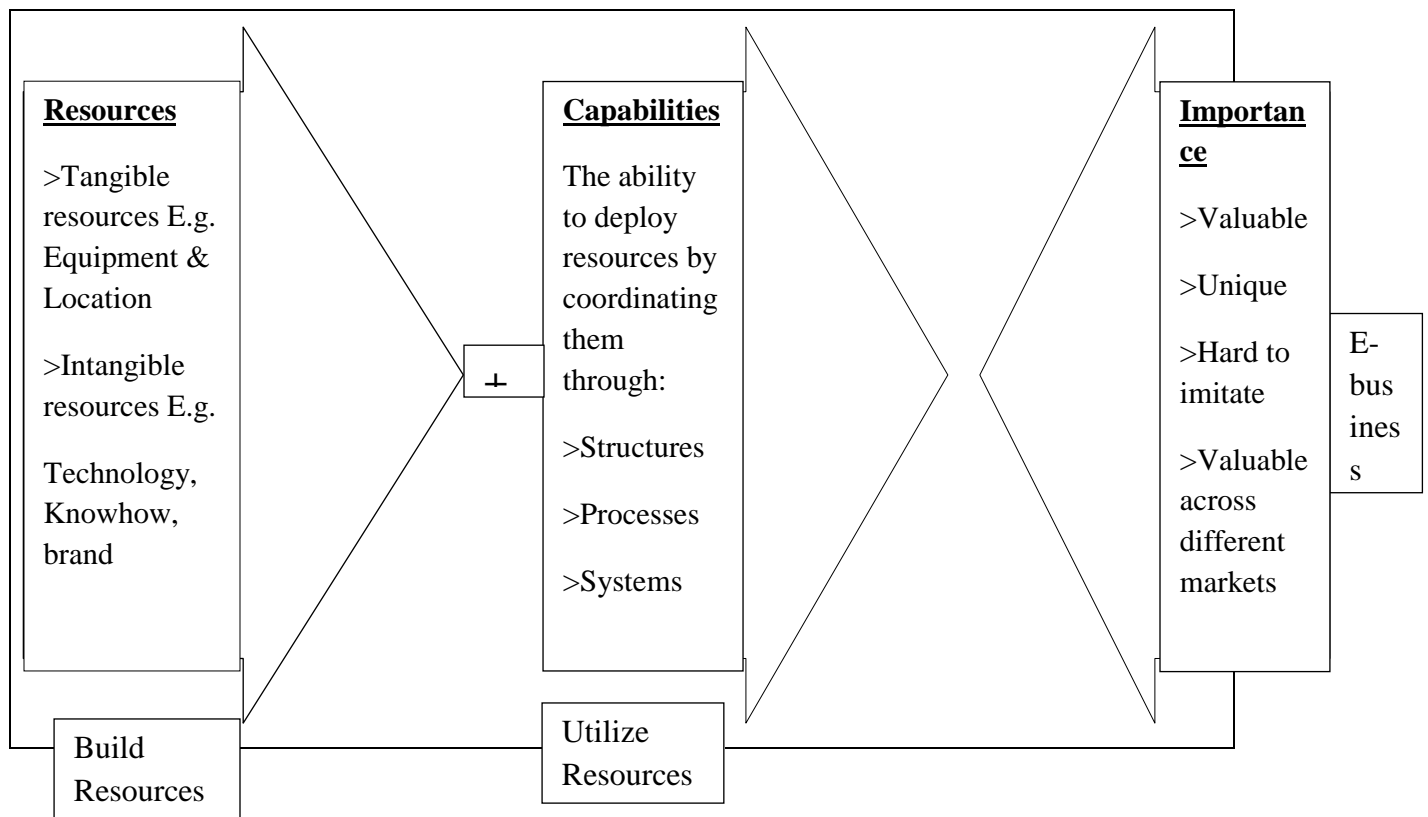


Table 1.2: Distinctive e-competencies result from combination of unique resources and capabilities.

Source Enders T. J (2008)

In order for a business to adopt e-business which encompasses e-procurement, it has to have resources and be capable of employing those resources to achieve its goal as depicted in the table above, Enders T. J (2008). Kwon & Zmud, (1987) classified variables that potentially influence ICT adoption into five broad categories: individual, task and innovation related, organizational and environmental characteristics. Patterson et al., (2003) also showed that organizational size, decentralized organizational structure, supply chain strategy integration, transactional climate and supply chain member pressure, and environmental uncertainty affected the adoption of ICT in Supply Chain Management (SCM). Kwon & Zmud, (1987) also suggested that these factors may be important to differing degrees of adoption among different organizations depending on the context or technology.

2.5 Supplier Attitudes towards E-procurement

The transaction cost theory according to Coase (1937) and Williamson (1985) indicate that the decreasing costs of search, evaluation and monitoring of competing suppliers should lead to a shift toward markets as a form of organizing economic activity. Consequently, the expectations regarding the potential of ICT as technologies introducing innovative ways of doing business, re-shaping firm boundaries and changing the constellations of value chains are enormous leading to the perception that availability of powerful and cheap ICT increases the attractiveness of markets (Malone et al., 1987), (Min & Galle, 2003) indicate that perceptions regarding the benefits, costs and risks of e-procurement systems significantly affect its adoption. Thong (1999) explains that positive perceptions regarding ICT benefits provide an incentive to adopt ICT in business transactions. Drew (2003) also concludes that many managers rejected the notion that e-commerce could be useful to their businesses as they have no idea of the potential e-commerce benefits, while Walczuch et al., (2000) revealed that the main barriers to Internet adoption and use are simply managers' concern and perceptions that the Internet would not lead to more efficiency or lower costs. Walczuch et al., (2000) indicates many suppliers are adopting a 'wait-and-see' attitude on e-procurement. Low IT literacy amongst the suppliers- most of them are transacting using either direct purchase or central contract modules and they are not highly educated and IT savvy also affects in adoption together with perceived high cost of enablement and suppliers contact information not up to date.

According to Kaliannan and Awang, (2008) costs involved before a supplier becomes e-procurement compliant, infrastructure and skills such as lack of bandwidth support, poor computing and information systems architecture in general, prevents the majority of the suppliers from playing a more active part in e-procurement. Government policy and system constraints are also among the key perceptions that lead to conservative adaptation of e-procurement among suppliers.

According to Kaliannan and Awang, (2008) for any e-procurement initiative to be successful, there are a number of factors that an organization must critically consider. They include: user acceptance of new information system; information quality; trust; risk perception; early supplier involvement; staff training; users and buyers; compliance with best practices; top management support; continuous measurement of the key benefits; re-designing affected business processes

and actual selection of e-procurement solution.

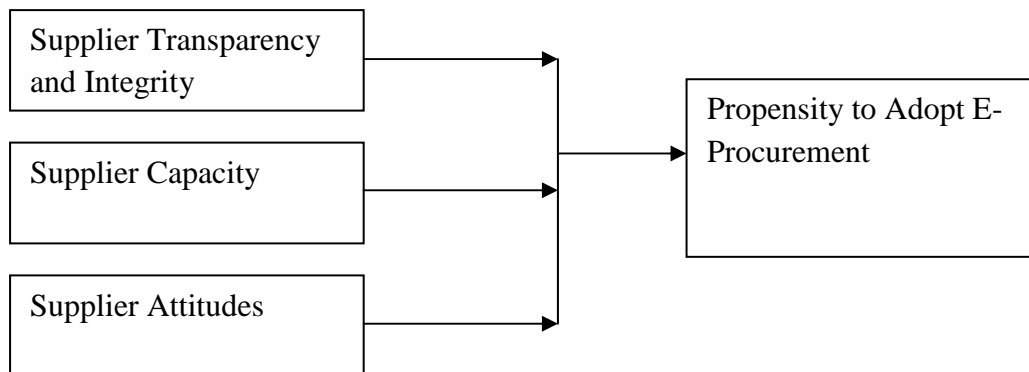
2.6 Supplier Propensity to Adopt E-procurement

According to Connolly and Olson, (2000), ICT is the one of the largest drivers of change in any industry. Buhalis (1998) attributes this trend to both rapid advances in technology as well as the increasing demands of the customers who look forward to flexible, specialized, accessible and interactive products and communication with principals. As much as E-commerce technologies have great potential to influence the direction of the productivity in an organization, the willingness to adopt is determined by a number of factors among them, reduction of transaction costs, improvement of customer service quality, defensive reaction to competitors adoption, requirement by customers that their suppliers link their system as a condition for doing business, Thong (1999). On the other hand, the propensity to adopt e-procurement may be hindered by cost of investing in compatible systems, training of personnel, unwillingness to have a more open approach to tendering, perceived barriers to e-procurement among others, (Davilla et al., 2003). Uptake by suppliers will be determined by the suppliers' appetite for change.

2.7 Conceptual Framework

Miles and Huberman, (1994) explain the conceptual framework as either a graphical or narrative presentation that explains the key factors of the study and the presumed relationship among the variables. The relationship between these variables assists the researcher to understand the form that the study will take in reference to the methodology.

Figure 2.1 Conceptual framework



Description of the model

Supplier transparency and integrity – the adoption of e-procurement has been noted to have benefits in relation to the efficiency and effectiveness of the procurement process. However, transparency and integrity depend on a large extent to non-ICT factors. Adoption of e-procurement can be therefore affected by the integrity of the. The study will assess to what extent the issues of transparency and integrity within the suppliers' affect adopting e-procurement.

Supplier capacity – the adoption of ICT initiatives into the structure of any organization needs that the organization to have resources for the initiative. The study will assess to what extent supplier capacity is taken into consideration when embracing e-procurement and what extent of capacity needs to be built by the suppliers.

Supplier attitudes –Business managers are found to make decisions on their rational judgments towards a specific direction that the business intends to take. Supplier attitudes to e-procurement can both be negative or positive and thus driving its decision to interact with parastatals that have adopted e-procurement.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter discusses the methodology used in gathering data, processing the data and translating the collected data into meaningful information. The process of research for the study was primarily exploratory as it sought to find suppliers perspective in adoption of e-procurement by parastatals. It also encompassed the research design that took into consideration aspects like the size of sample in relation to the target population, the variables under the study, the approaches to the research, and the methods employed in data collection.

3.2 Research Design

The study employed the cross sectional descriptive survey putting the evidence on how adoption of e-procurement by parastatals impacts on supplier capacity, attitude and integrity. Descriptive survey design was used, the elements and the variables that were studied were simply being observed without making any attempt to control or manipulate them.

3.3 Population of the Study

1470 suppliers to the parastatals represented the study population. The target population in the study was all the suppliers of the parastatals in Kenya As at July 2013. There were 147 parastatals operating in Kenya, (See appendix I). Each parastatals with an average of 10 unique suppliers, (The parastatal e-News kenya, 2013).

3.4 Sample of the Study

Simple sampling method as described in Bartlett, Kotrilik and Higgins, (2001) was applied to come up with a sample size of 78 suppliers. All the suppliers were considered homogenous. This allows for generalization.

3.4 Data Collection

In the study, the data collection exercise was carried out to come up with concrete data that was invaluable used to draw conclusions. The study was able to use the data collection instruments from two main sources which were the primary and secondary sources of data collection. The primary data collection instruments were self-administered drop and pick questionnaires so as to extract valuable first-hand data from the supplier's procurement staff. The questionnaire was made up of four sections, Section A which covered the demographic data, Section B which covered supplier attitude, Section C which covered transparency and integrity, section D which covered supplier capacity and finally Section E covering propensity to adopt. The set of questions was simple and straight-forward thus requiring straight-forward answers. In designing the questionnaire for research of primary data, the study used both open and closed type questions. Secondary sources of data collection involved the documentary reviews of data existing literature in books, journals, reviews, working papers, the relevant web sites such government web pages and this was important for making informed conclusions and recommendations concerning the study as well as supplementing data received from questionnaire.

3.5 Data Analysis

The study used quantitative method to analyze the data and examine the simultaneous effects of the independent variables on a dependent variable. The independent variables in the study include:

Supplier transparency and integrity –The study assessed to what extent the issues of transparency and integrity within the suppliers' affects adopting e-procurement.

Supplier capacity –The study assessed to what extent supplier capacity is taken into consideration when embracing e-procurement and what extent of capacity needs to be built by the suppliers.

Supplier attitudes – Supplier attitudes to e-procurement can both be negative or positive and thus driving its decision to interact with parastatals that have adopted e-procurement. The study therefore looked at the various attitudes held by suppliers in relation to adoption of e-procurement.

Processing and analyzing of the raw data was done using data analyses programs which were used to generate inferential and descriptive statistics such as the mean, standard deviation and frequencies from the respondents' responses to establish the relative importance and weight of each variable as well as the significance of the results. MS excel spread sheet tools were also utilized in presenting the quantitative data.

Regression analysis was used to establish the extent to which the three independent variables capacity, attitude and transparency & integrity explain the propensity to adopt e-procurement. The model is depicted as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3$$

Where:

Y is Propensity to adopt e-procurement

A is the Y intercept when x is zero

b1, b2 and b3 are regression weights attached to the variables

X1=Transparency and integrity

X2=Capacity

X3=Attitude

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 General Information

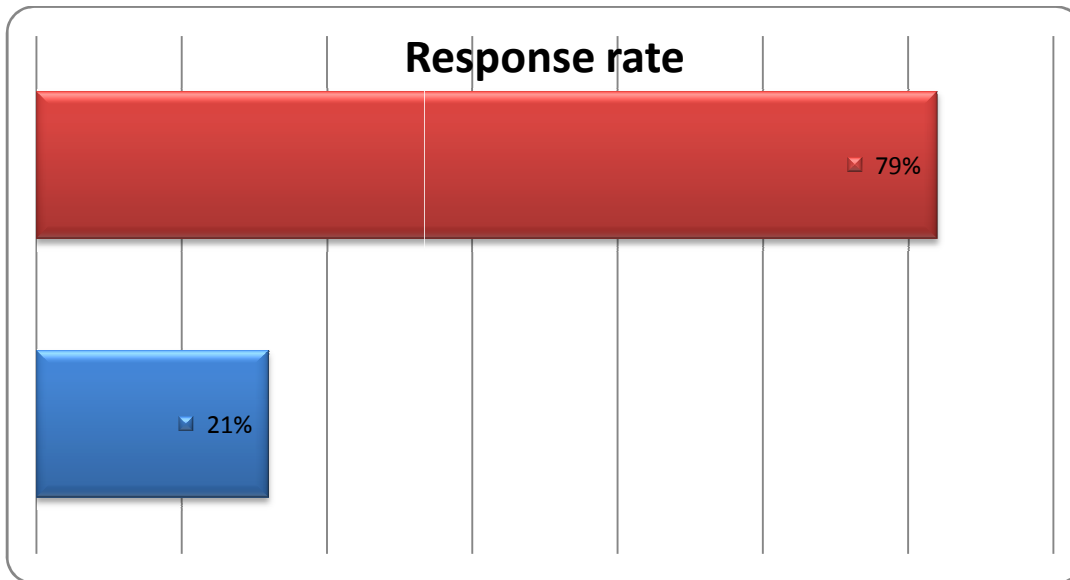
4.1.1 Response rate

Table 4.1 Response rate

Questionnaires	Frequency	Percentage
Not Returned	16	21
Returned and Filled	62	79
Total	78	100

Source: Research Data, 2013

Figure 4.1 Response rate



The questionnaires handed to respondents were 78 out of which 79% were returned when fully filled and 21% included questionnaires that were returned unfilled and those that were not returned. According to Gay (1995) a response rate of 50% is adequate and therefore that of 79% is also adequate for data to be analyzed and interpreted.

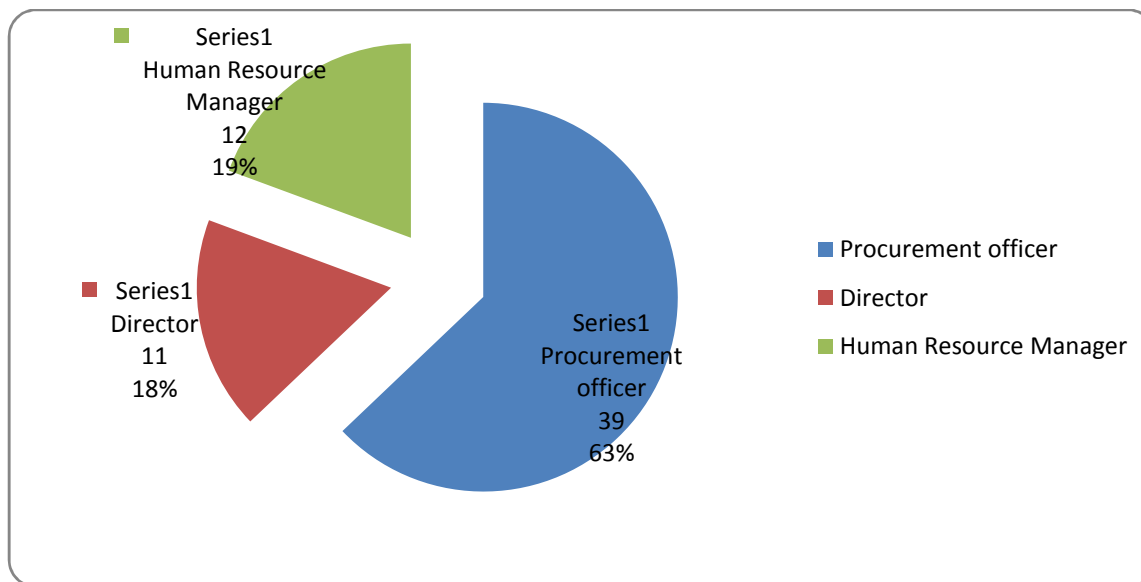
4.1.2 Position of respondent in organization

Table 4.2 Position of respondents

Position	Frequency	Percent
Procurement officer	39	62.9
Director	11	17.7
Human Resource Manager	12	19.4
Total	62	100.0

Source: Research Data, 2013

Figure 4.2 Position of respondents



The distribution of the respondents in regards to positions held was such that there were 63% procurement officers, 19% human resource managers and 18% directors of the organization.

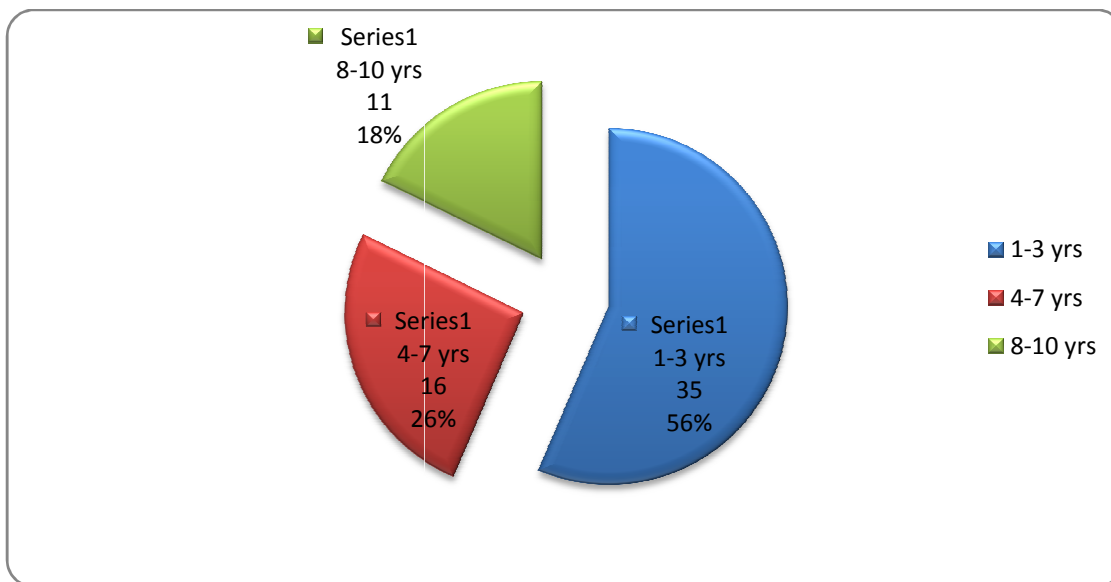
4.1.2 Period worked in the organizations

Table 4.3 Period worked

Period	Frequency	Percent
1-3 yrs	35	56.5
4-7 yrs	16	25.8
8-10 yrs	11	17.7
Total	62	100.0

Source: Research Data, 2013

Figure 4.3 Period worked



The majority of the respondents reported having been in the same organization for 1 to 3 years (56%) while 18% indicated they had been there for 8 to 10 years. The period worked in the organization of the respondents in this case will influence the responses to the questionnaire whereby respondents who have worked in the organization for longer will have better responses in regards to the capacity of the organization.

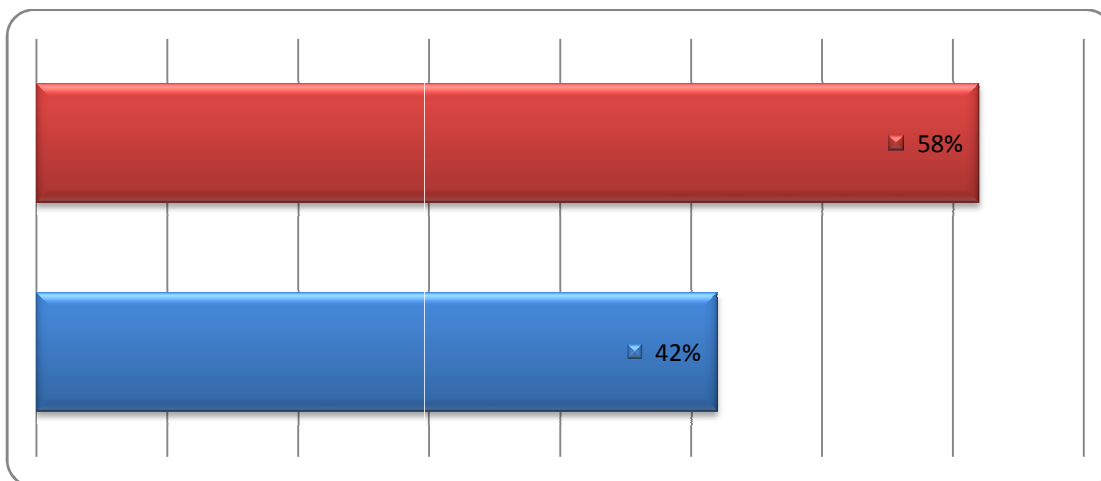
4.1.3 Years of organizations operations

Table 4.4 Years of operation

Years	Frequency	Percent
8-10 yrs	26	41.9
Above 10 yrs	36	58.1
Total	62	100.0

Source: Research Data, 2013

Figure 4.4 Years of operation



The majority of the respondents in the study have reported that their respective organizations had been operation for more than 10 years (58%) while a significant 42% indicated between 8 and 10 years. However, this may not be the same period they have been supplying to the government, but the length of period indicates that they have experienced various economies of scale and are knowledgeable of the market.

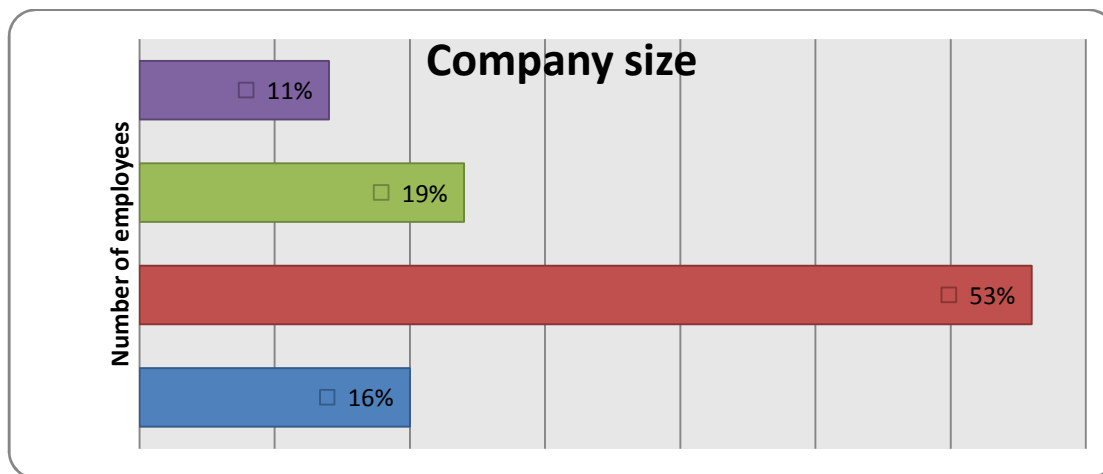
4.1.4 Company size in number of staff

Table 4.5 Company size

Number of employees	Frequency	Percent
Below 10	10	16.1
10-49	33	53.2
50-200	12	19.4
Above 200	7	11.3
Total	62	100.0

Source: Research Data, 2013

Figure 4.5 Company size



The data collected shows that majority of the sampled businesses had between 10 and 49 employees; this is reflected as 53% in figure 4.5. 19% of the respondents indicated that their company had between 50 and 200 employees, 16% said they were below 10 while 11% above 200 employees.

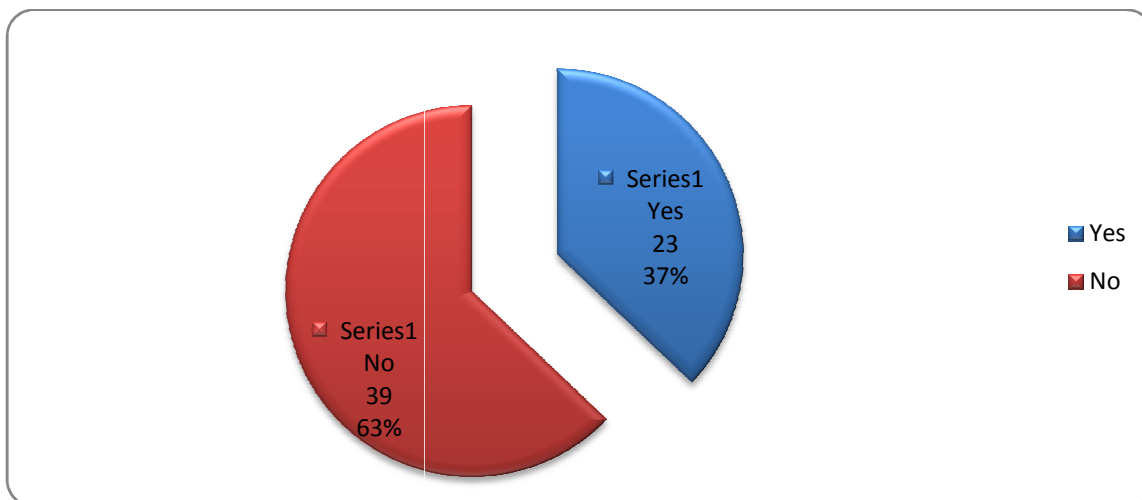
4.1.5 Existence of ERM system

Table 4.6 Existence of ERM

Response	Frequency	Percent
Yes	23	37.1
No	39	62.9
Total	62	100.0

Source: Research Data, 2013

Figure 4.6 Existence of ERM



When asked whether their businesses have existing enterprise resource management systems, 63% said no while only 37% indicated having ERM available. This means that majority of the respondents will have the relevant system to handle e-transactions while the remaining have to build capacity by installing such a system.

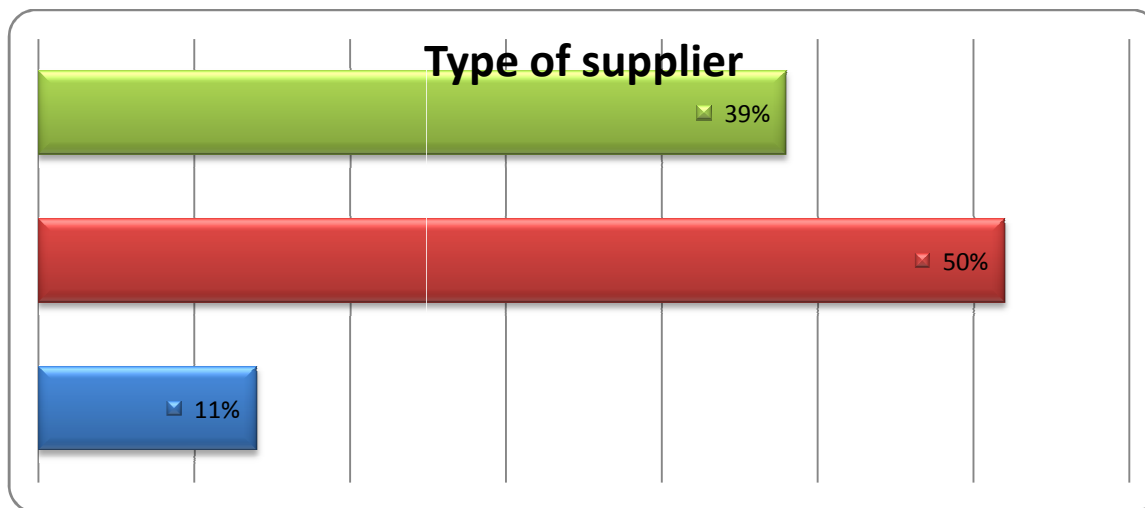
4.1.6 Type of suppliers

Table 4.7 Type of suppliers

Type	Frequency	Percent
Consumables	7	11.3
Services	31	50.0
Others	24	38.7
Total	62	100.0

Source: Research Data, 2013

Figure 4.7 Type of suppliers



The data collected showed that the businesses were mainly supplying non-tangible goods as shown by 50% who indicated the supplies were services as compared to 11% who indicated supplying consumables. 39% of the respondents indicated either supplying both consumables and services or other tangible goods such as computers and furniture.

4.2 Company Attitude to Adoption of E-Procurement

4.2.1 Attitude to Adoption of E-Procurement

Table 4.8 Company attitude to e-procurement adoption

Attitude statement	Mean	Std. Deviation
We support adoption	1.65	.791
We wait and see	2.98	.859
Improves efficiency	2.40	.999
It eases selling process	1.66	.542
All parastatals should adopt	2.18	.820
Does not improve anything	4.16	.578
Another White Elephant	3.77	.982
Kenyan's are too corrupt	3.13	1.431
Need to keep up with emerging trends	1.56	.842
Composite score	2.61	

Source: Research Data, 2013

The data collected above indicates a composite mean score of 2.61 with standard deviation of 0.87 across the means for the company attitude to adopt e-procurement. The data shows that majority of the respondents agreed to the statements relating to the attitude of the company to adopt the system. With the inclination towards the agree and strongly agree response the research can conclude that the respondents showed a positive attitude towards use of e-procurement in their organizations. This is further shown by a more than average disagree response on negative aspects of e-procurement such as it being another white elephant; the system not improving anything and that corruption is deep rooted in Kenya for the system to succeed.

4.2.2 Incentives to adopt e-procurement

Table 4.9 Incentives to adopt

Incentives to adopt	Mean	Std. Deviation
Access to Bandwidth	3.37	.487
Ready information systems	2.26	1.085
Passion for technology	1.44	.500
Composite score	2.35	

Source: Research Data, 2013

When asked whether they had incentives to adopt e-procurement in their respective companies, the passion for technology was noted to be mostly shared by majority of the respondents as indicated by a mean of 1.44 with standard deviation of 0.500 indicating that majority strongly agreed while the access to bandwidth was the most unshared incentive by the respondents. The data shows a composite score of 2.35 that inclines to the agree response meaning that respondents fairly agree that there are incentives to the adoption of e-procurement in their companies.

4.3 Transparency and Integrity

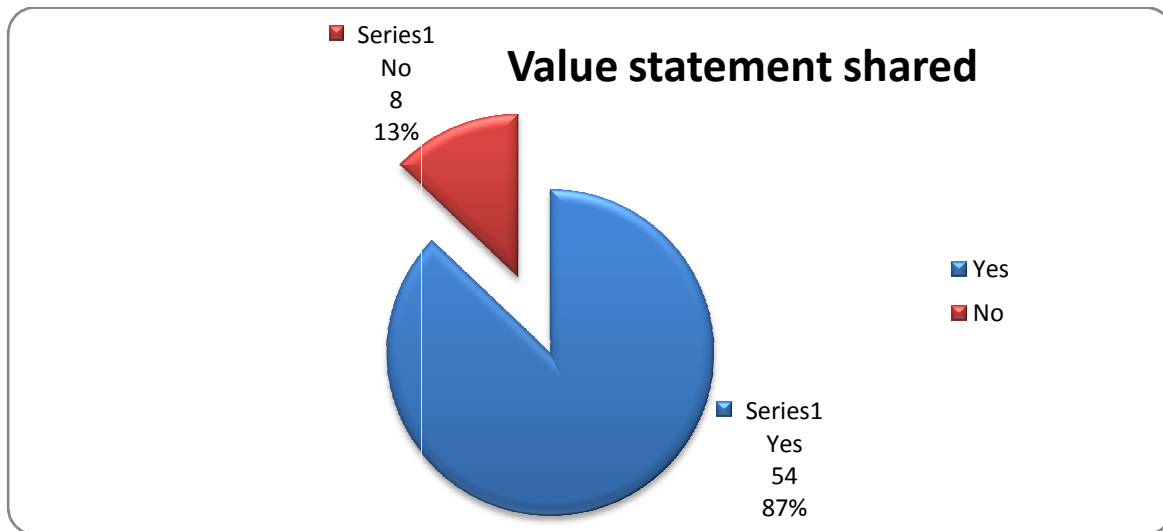
4.3.1 Existent of value statements

Table 4.10 Existent of value statements

Response	Frequency	Percent
Yes	62	100.0
No	0	.0
Total	62	100.0

Source: Research Data, 2013

Figure 4.8 Shared value statements



The data collected above shows a 100% existence of value statements among the companies interviewed and that 87% of them have shared the value statements within their organizations. This means that the companies have guiding principles on how to attend to procurement transactions and that majority are aware of the principles and therefore the effectiveness of the process is likely to improve.

4.3.2 Integrity and Transparency in organization

Table 4.11 Emphasized values

Values	Mean	Std. Deviation
Transparency	1.97	.178
Integrity	1.97	.178
Openness	1.97	.178
Trust	1.97	.178
Composite score	1.97	

Source: Research Data, 2013

Out of the four values given for the question on the emphasized values in their organizations in relation to procurement, majority of the responses were either very great extent or great extent giving a composite score of 1.97 that inclines to the great extent response. This shows that the businesses value transparency, integrity, openness and trust at almost the same level.

4.4 Company Capacity to adopt e-procurement

4.4.1 Extent of capacity to adopt

Table 4.12 Capacity to adopt e-procurement

Capacity	Mean	Std. Deviation
In a position to install IS	2.61	.732
Organization structures in place	2.65	.482
Qualified Personnel in Organization	2.48	.504
Organization has enough finances	2.42	.497
Composite Score	2.54	

Source: Research Data, 2013

The research showed a composite of the means so as to identify the overall capacity to adopt e-procurement in the companies and found a moderate capacity whereby the majority of respondents had indicated a neutral response to being in a position to install information management systems, having organization structures in place, having qualified personnel to implement the adoption and enough finances for the adoption process. The data collected means that the level of adoption is hindered by the factors not being prioritized in the companies.

4.4.2 Company preparedness to adopt e-procurement

Table 4.13 Preparedness to adopt e-procurement

Factors	Mean	Std. Deviation
Structures	3.02	.614
Processes	2.85	.438
Systems	2.61	.964
Staff	2.77	.422
Technological know how	1.66	.848
Composite score	2.58	

Source: Research Data, 2013

The data collected above indicates a situation where majority of the respondents indicated being highly prepared in technological know-how than any other factor. The data shows a composite score of 2.58 with standard deviation of 0.66. This means that the preparedness of the companies to adopt e-procurement is moderate as the score inclines to the high extent response.

4.5 Company propensity to adopt e-procurement

Table 4.14 Company propensity to adopt

Statement	Mean	Std. deviation
We want to adopt it	2.02	.528
We intend to implement	2.42	.933
We wish to adopt	2.08	.581
We are ready to adopt	2.55	.953
We would love to Adopt	2.37	.707
We are able to adopt	2.95	1.299
Composite Score	2.40	

Source: Research Data, 2013

When asked to agree or disagree with related statements on the company's propensity to adopt e-procurement, a composite score of 2.40 of the means indicates that the respondents were moderately in agreement than disagreement with the statements that indicated the company's willingness to adopt e-procurement.

4.6 Relationship between Variables

4.6.1 Regression analysis

Table 4.15 Coefficient table results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	29.693	3.573		8.311	.000
Company Capacity	2.61	.278	-.662	-6.638	.000
Transparency and Integrity	1.97	.170	.210	2.151	.036

Source: Research Data, 2013

The aim of this is to establish the extent to which the three independent variables capacity, attitude and transparency & integrity explain the propensity to adopt e-procurement. The model is depicted as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3$$

Where:

Y is Propensity to adopt e-procurement

A is the Y intercept when x is zero

b1, b2 and b3 are regression weights attached to the variables

X1=Transparency and integrity

X2=Capacity

X3=Attitude

The established regression equation was:

$$Y = 29.693 + 1.97 X1 + 2.61 X2$$

The regression results show that when value of the independent variables used in the study (capacity, attitude and transparency & integrity) are zero, the propensity to adopt e-procurement by the companies is 29.693 at an observed t of 8.311 critical value and p value of less than 0.001 that makes the relationship between the independent and dependent variables in the study non-significant at the 95% confidence level.

The results show that company capacity, transparency and integrity positively affects the propensity to adopt e-procurement while attitudes negatively affects the adoption.

4.7 Discussion of the findings

4.7.1 Supplier attitudes towards adoption of e-procurement

The study in respect to establishing the attitudes of suppliers towards adoption of e-procurement found that majority of the suppliers were positive on the benefits of e-procurement and were in support of its adoption. This means that use of e-procurement is widely accepted and can be easily adopted in line with Thong (1999) view that positive perceptions regarding ICT benefits provide an incentive to adopt ICT in business transactions. Since technology is changing regularly, the respondents also noted that it was important to keep with emerging trends especially if it leads to improved efficiency and a better selling process. The findings coincide with findings by Min & Galle (2003) that indicate that perceptions regarding the benefits, costs and risks of e-procurement systems significantly affect its adoption. In respect to the incentives to adopt, the study found that majority of the respondents had ready information systems and had a passion for technology that would ease the process of adoption.

4.7.2 Supplier transparency and integrity issues associated with e-tendering and receiving

The study found that in regards to factors that were given a lot of emphasis in the procurement of goods and services, transparency, integrity, openness and trust stood out. According to (Kaliannan and Awang, 2008) for any e-procurement initiative to be successful, factors such as user acceptance of new information system; information quality; trust; risk perception; early supplier involvement; staff training; users and buyers; compliance with best practices; top management support; continuous measurement of the key benefits; re-designing affected business processes and actual selection of e-procurement solution for an organization must critically be considered. The study also found that majority of the suppliers sampled had value statements meaning that they considered transparency and integrity to a great extent. The findings agree with Sigala (2003) who indicates that e-purchasing adoption can be highly influenced by the structures in place in an organization.

4.7.3 Capacity of suppliers in partnership with public entities to adopt e-procurement practice

In regards to the capacity of suppliers, majority of the respondents reported that they were prepared in many aspects of the organizations in regard to e-procurement adoption including the technological knowhow, systems, staff and processes. However only few of the respondents reported that they were prepared in terms of structures needed for e-procurement. The findings coincide with the views of Kinyanjui and McCormick (2002) that Kenya has a wide range of organizations struggling to adopt information and communication technology in their procurement functions. According to Khanapuri et al. (2011) technology, objectives, information, staffing and skills are all essential to have for the adoption of e-procurement.

4.7.4 Relationship between supplier attitude, capacity and propensity to adopt e-procurement

The study in regards to the propensity to adopt e-procurement found that majority of the respondents were willing and ready to adopt e-procurement. The study formed a regression equation to analyze the relationship and found that the relationship was not statistically

significant owing to the P value that was less than 0.001. This means that the propensity to adopt e-procurement was not dependant only on the capacity, attitude and transparency/ integrity but other factors would also affect adoption. The findings coincide with Kwon & Zmud (1987) who also suggested that organizational and individual factors may be important to differing degrees of adoption among different organizations depending on the context or technology.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The objective of this study was to establish the propensity by suppliers to adopt e-procurement following adoption by government parastatals in Kenya. To achieve this, a models discussed in Chapter 3 regression model was used to establish the extent to which the three independent variables capacity, attitude and transparency & integrity explain the propensity to adopt e-procurement. Regression was performed on the composite values obtained to establish if there is a relationship between the variables computed under the model, the nature of the relationship and the strength of the relationship.

Data was collected using questionnaires self-administered by the respondents. Processing and analyzing of the raw data was done using SPSS data analysis program which generated inferential and descriptive statistics such as mean, the standard deviation and frequencies. The data is then presented in charts and tables from the respondents to establish the relative importance and weight of each variable. MS excel spread sheet tools are also used in presenting the quantitative data.

5.2 Key Findings

5.2.1 Supplier attitudes to adoption of e-procurement

The study found that a large percentage of the suppliers have positive attitudes towards the adoption of e-procurement in relation to supporting it adoption in their companies and the awareness of the advantages that include improving efficiency, easing the selling process and keeping up with emerging trends. Majority of the respondents indicated that they agreed or strongly agreed that adoption of e-procurement was made easier with incentives such as ready information systems in regards to ERM and the passion for technology in the companies.

5.2.2 Transparency and Integrity Issues associated with e-procurement

In relation to the second objective, the study finds that transparency, integrity, openness and trust were highly emphasized values by majority of the suppliers. This is in addition to the existence of value statements that are important in building standards for operations by suppliers.

5.2.3 Capacity of suppliers in partnership with public entities to adopt e-procurement practice.

The study finds that majority of the suppliers have enterprise resource management systems in place that assist in the adoption of e-procurement partnerships with public entities. The study also finds that there is moderate to great capacity available in relation to information systems available, organization structures, qualified personnel and adequate financial resources to adopt e-procurement. The study finds that majority of the suppliers are well prepared in relation to setting up e-procurement but some showed lack of structures and the required processes.

5.2.4 Supplier propensity to adopt e-procurement

In regards to finding out the supplier propensity to adopt e-procurement the study finds that majority of the businesses are willing to adopt e-procurement into their systems. This is shown by a high mean score for responses on their willingness, intention, love, ability and readiness to adopt e-procurement. The study calculated a composite score of 2.40 of the means indicates that the respondents were more in agreement than disagreement with the statements that indicated the company's willingness to adopt e-procurement.

5.3 Conclusion

The study aimed at establishing the challenges and opportunities presented to suppliers by adoption of e-Procurement by the parastatals in Kenya. The study concludes that for e-procurement to be easily adopted, information systems have to be set up by all companies, structures will have to be invested on and processes standardized.

The major challenge found in the study was that of lack of information systems such as access to bandwidth and enterprise resource management systems that are key to adopting e-procurement. Organizations willing to adopt e-procurement should therefore invest into structures and

processes necessary for e-procurement adoption. A non-statistically significant relationship between capacity, attitude, transparency and integrity and the propensity to adopt e-procurement was also found whereby the independent variables with the exception of attitudes influence the adoption of e-procurement positively among the suppliers.

5.4 Recommendation

Based on the findings of the study, the researcher would suggest for further examination of the different challenges relating to adoption of e-procurement for suppliers other than that of information technology and structures. The researcher recommends the uptake of e-procurement for suppliers wishing to grow their customer base, processes, operational funds and improving their human resource capabilities and skills.

5.5 Limitations of the study

The study focused on a few selected suppliers to parastatals in Kenya. The procedure of selecting the suppliers was judgmental and therefore difficult to generalize the results. Data availability could also skew the results of the valuations making generalization of the results difficult.

Attitudes were used to forecast the expected future adoption of e-procurement which posed a challenge because the inherent assumption was that what the sampled supplier perceived towards adoption will be the greatest determinant of the future adoption which may not be the case because the external and internal environment of a firm are always changing.

Another limiting factor was that the sample of respondents was limited to a small number because of data collection cost. The design used was ex-post-facto research design where the researcher has no control over the independent variables.

5.5 Suggestions for further research

There is scope for further development of this analysis. The study was limited to suppliers of parastatals while the public sector includes ministries and other public offices. The researcher would thus recommend for further study in the topic of e-procurement adoption among both private and public sector and an analysis of the challenges experienced by suppliers as well as the organizations purchasing.

Further study in e-procurement and its effect on key structures and process as well as overall performance of an organization would improve literature on the topic as well as improve the capacity of the organizations.

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APPENDICES

Appendix I: Sample Questionnaire

Please give answers in the space provided and tick () in the box that matches your response to the questions where applicable

SECTION A: DEMOGRAPHIC DATA

Respondent's details

1. What is your current Job title

2. How long have you been with the organization

Organizations background information

3. Name of the organization

4. Years of operation in Kenya

5. What is the company size in terms of number of staff?

Below 10 () 10-49 () 50-200 () Above 200 ()

6. Does your organization have an enterprise resource management system_____

Yes () No ()

7. If yes above please specify the system _____

8. Types of supplies

(a) Consumables ()

(b) Services ()

(c) Others (specify) _____

SECTION B: ATTITUDE

9. To what extent do you agree with the following regarding your company’s attitude to adoption of e-procurement by parastatals? Use 1- Strongly Agree 2- Agree 3 – moderate

4 – Disagree 5 – Strongly Disagree

	1	2	3	4	5
We support its immediate adoption					
We shall wait and see					
It will improve your selling efficiency					
It will ease your selling process					
All parastatals should adopt it					
It will not improve anything					
It’s just another white elephant government project					
Kenyan’s are too corrupt, even such systems can’t help					
We need to keep up with emerging business trends like e-procurement					

10. To what extent do you agree with the following regarding incentive for your company to adopt e-procurement Use 1- Strongly Agree 2- Agree 3 – moderate

4 – Disagree 5 – Strongly Disagree

	1	2	3	4	5
We have bandwidth access					
Our information systems are ready for e-procurement					
We have a passion for technology					

SECTION C: TRANSPARENCY AND INTEGRITY

11. Do you have a value statement as a company?

Yes ()

No ()

12. If yes above, is the statement shared with all the staff in the organization?

Yes ()

No ()

13. To what extent are the values below emphasized in your organization?

Use 1- Very Great extent 2- Great extent 3 – moderate extent

4 – Small extent 5 – Not at all

	1	2	3	4	5
Transparency					
Integrity					
Openness					
Trust					

14. To what extent do you agree with the following regarding your company? Use 1- Strongly Agree 2- Agree 3 – moderate 4 – Disagree 5 – Strongly Disagree

	1	2	3	4	5
Would submit a bid if you did not meet some of the tender documentation requirements					
Believe your company would be prejudiced if e-procurement is in place					
Would support public disclosure of the results of the procurement process					
Would pay fees in order to win a tender					

15. IF you feel that your organization would be prejudiced if e-procurement is in place, please explain how _____

SECTION D: CAPACITY

16. To what extent do you agree with the following regarding your company’s capacity to adopt e-procurement Use 1- Strongly Agree 2- Agree 3 – moderate 4 – Disagree 5 – Strongly Disagree

	1	2	3	4	5
In a position to install an Information management system compatible with parastatals IFMS if it is made mandatory					
Consider your organization to have in place organizational structures to adopt e-procurement					
Organization has technically qualified personnel to implement adoption of e-procurement					
Organization has enough finances to invest in e-procurement					

To what extent do you consider that your organization prepared to adopt e-procurement in terms of the factors below Use 1- Very Great extent 2- Great extent 3 – moderate extent 4 – Small extent 5 – Not at all

	1	2	3	4	5
Structures					
Processes					
Systems					
Staff					
Technology know how					

SECTION E: PROPENSITY TO ADOPT

17. To what extent do you agree with the following regarding your company’s propensity to adopt e-procurement Use 1- Strongly Agree 2- Agree 3 – moderate 4 – Disagree 5 – Strongly Disagree

	1	2	3	4	5
We want to adopt it					
Intend to implement it					
We wish to adopt it					
We are ready to adopt it....					
We would love to adopt it...					
We are able to adopt it					

Appendix II: List of Parastatals

- | | | | |
|----|--|----|--|
| 1 | National Museums of Kenya | 40 | Kenya Sugar research foundation |
| 2 | Betting Control and Licensing Board | 41 | Pests control Products Board |
| 3 | N.G.O. Co-ordination Bureau | 42 | Central Agricultural Board |
| 4 | Kenya Revenue authority | 43 | Nyayo Tea Zones Development Corporation |
| 5 | Retirement Benefits Authority | 44 | Agricultural development Corporation |
| 6 | Kenya Re-Insurance Corp. | 45 | Kenya Seed Company |
| 7 | Capital Markets Authority | 46 | Kenya Agricultural research Institute |
| 8 | Consolidated bank of Kenya | 47 | Coffee Research Foundation |
| 9 | Deposit Protection Fund Board | 48 | Tea research foundation |
| 10 | Kenya Post Office savings Bank | 49 | Sugar Arbitration board |
| | Kenya Accountants & Secretaries Examination | | |
| 11 | Board (KASNEB) | 50 | Agricultural Information resource Centre |
| 12 | Kenya National Assurance (2001) Limited | 51 | Kenya Sisal Board |
| 13 | Central Bank of Kenya | 52 | Bukura Agricultural College |
| 14 | Capital Markets Tribunal | 53 | National council for Science & Technology (NCST) |
| 15 | State Corporations Appeals tribunal | 54 | Public Universities Inspection Board |
| | Kenya Institute for Public Policy Research and | | |
| 16 | Analysis | 55 | University of Nairobi |
| | National Water Conservation & Pipeline | | |
| 17 | Corporation | 56 | Moi University |
| 18 | National Irrigation Board | 57 | Egerton University |
| | | | Jomo Kenyatta University of Agriculture & |
| 19 | Kenya Water Institute | 58 | Technology |
| 20 | Water Services Regulator Board | 59 | Kenyatta University |
| 21 | Lake Victoria South Water Services Board | 60 | Maseno University |
| 22 | Coast Water Services Board | 61 | Kenya National examination Council |
| 23 | Northern Water Services Board | 62 | Kenya Literature Bureau |
| 24 | Water Services Trust Fund | 63 | Jomo Kenyatta Foundation |
| 25 | Rift Valley Water Services Board | 64 | Kenya Institute of Education |

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|----|--|-----|---|
| 26 | Lake Victoria North Water Services Board | 65 | Kenya Education staff Institute |
| 27 | Athi Water Services Board | 66 | Commission for Higher Education |
| 28 | The Tana Water Services Board | 67 | Higher Education Loans Board |
| 29 | Water Resources Management Authority | 68 | Teacher's Service Commission |
| 30 | Tea Board of Kenya | 69 | Western University College of scienceand Technology |
| 31 | Pyrethrum Board of Kenya | 70 | Kenya Power and Lighting Company |
| 32 | Horticultural Crops development authority | 71 | Kenya electricity Generating Company (KenGen) |
| 33 | Coffee Board of Kenya | 72 | Kenya Pipeline Company |
| 34 | Agricultural Finance Corporation. | 73 | National Oil Corporation of Kenya |
| 35 | National Cereals & Produce Board | 74 | Kenya Petroleum Refinery |
| 36 | Kenya Plant Health Inspectorate Board | 75 | Electricity Regulatory Board |
| 37 | Kenya Sugar board | 76 | The Energy Tribunal |
| 38 | Nzoia Sugar Company | 77 | Rural Electrification Authority |
| 39 | Chemilil Sugar Company | 78 | Energy Regulatory Commission |
| 83 | Transport Licensing Board | 79 | Kenya Airports Authority |
| 84 | Kenya civil Aviation Authority | 80 | Kenya Railways Corporation |
| 85 | Transport licensing Appeal Tribunal | 81 | Kenya Ports Authority |
| 86 | Kenya National Shipping Line | 82 | Kenya Ferry Services Limited |
| 87 | Communication Commission of Kenya | 121 | Kenya Roads Board |
| 88 | Postal Corporation of Kenya | 122 | National Sports Stadia Management Authority |
| 89 | Telkom Kenya Ltd. | 123 | Kenya Cultural Centre |
| 90 | Kenya Broadcasting Corporation | 124 | Kenya National Library services |
| 91 | Kenya Film Commission | 125 | National Disability Council |
| | The Kenya Information & Communication | | Gender commission |
| 92 | Technology | 126 | |
| 93 | Numerical Machining Complex | 127 | Kenyatta National Hospital |
| 94 | Kenya National accreditation service | 128 | Kenya Medical Training College |
| 95 | Anti-Counterfeiting Agency | 129 | National Hospital Insurance fund |
| 96 | Kenya Industrial Property Institute | 130 | Moi Teaching & Referral Hospital, Eldoret |
| 97 | Kenya Agricultural & Development Institute | 131 | Kenya Medical Research institute |
| 98 | East Africa Portland cement | 132 | Kenya Medical Supplies Agency |

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|-----|---|-----|--|
| 99 | Kenya Industrial estates | 133 | Radiation protection board |
| 100 | Kenya Bureau of Standards | 134 | Kenya Tourist Development Corp. |
| 101 | Industrial development bank Capital Limited | 135 | Kenya Tourist Board |
| 102 | Kenya Investment Authority | | Catering Training & Tourism Development levy |
| 103 | Export Processing Zones Authority | 136 | Trustees |
| 104 | Kenya National Trading Corporation | 137 | Kenya Utalii College |
| 105 | Kenya Wine Agencies Limited | 138 | Kenya Wildlife Services |
| | Industrial & Commercial Dev. Corporation | 139 | Kenyatta International Conference Centre Corporation |
| 106 | (ICDC) | 140 | Hotels& Restaurants Authority |
| 107 | Industry Property Tribunal | 141 | Kenya Forest Service |
| 108 | Kenya Marine & Fisheries Research Institute | 142 | Kenya Forestry Research Institute |
| 109 | Kenya dairy Board | 143 | National environmental Management authority |
| 110 | Kenya Meat commission | 144 | Public Complaints Standing committee |
| 111 | Kenya Veterinary Board | 145 | Poverty Eradication Commission |
| 112 | Co-operative College of Kenya | 146 | Kenya National Bureau of Statistics |
| 113 | New Kenya Co-operative Creameries Ltd | 147 | Public Archives Advisory Council |
| 114 | Ewaso Ngiro North Development Authority | | |
| 115 | Ewaso Ngiro South Development Authority | | |
| 116 | Lake Basin Development Authority | | |
| 117 | Coastal Development Authority | | |
| 118 | Kerio Valley Development Authority | | |
| 119 | Tana & Athi River Development Authority | | |
| 120 | National Housing Corporation | | |