

**E-PROCUREMENT IMPLEMENTATION AND PERFORMANCE
OF COMMERCIAL STATE CORPORATIONS IN KENYA**

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OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE
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DECLARATION

STUDENT

I declare that this research project is my original work and has never been submitted to any other University for assessment or award of a degree.

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SUPERVISOR

This Project has been submitted for examination with my approval as the University supervisor.

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DEDICATION

I dedicate this research project to my late dad Elijah Moturi, my mother Rose Bangweso, my wife, my children Terrence and Taraji for their love, support, patience, encouragement and understanding. They gave me the will and determination to complete my masters.

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ABBREVIATIONS AND ACRONYMS

CSC	Commercial State Corporations
GDP	Gross Domestic Product
ICT	Information Communication Technology
IFMIS	Integrated Financial Management
KPIs	Key Performance Indicators
MDAs	Ministries Departments and Agencies
PE	Public Enterprise
PI	Performance Indicator
SCM	Supply Chain Management WAN:
SPSS	Statistical Packages for Social Sciences

ABSTRACT

The main purpose of this study was to establish the relationship between e-procurement implementation and performance of commercial state corporations in Kenya. Specifically, the study was to establish the extent to which state corporations have implemented e-procurement practices in Kenya. The studies that were reviewed indicated that despite the implementation of e-procurement in commercial state corporations, they failed to offer the relationship of such implementation on their performance. The study adopted a descriptive survey design whereby 54 commercial state corporations were targeted. Both primary and secondary data was collected; a questionnaire was employed as a data collection instrument. From the analysis of the findings, it was established that there exist a significant relationship between e-procurement implementation and performance of commercial state corporations. The findings of the study indicated that there was need for commercial state corporations to invest in the required equipment, personnel and knowledge to facilitate the e-procurement process. Moreover, the study established that commercial state corporations should invest in e-procurement as they can highly reduce the overall cost of operations in the supply management process and that Commercial state corporations need to set budgets aside for the adaptation and implementation of information systems to ensure that they are not left behind in development of information systems. To this end, it was established that commercial state corporations, which embrace modern technology are more efficient in their operations to an extent that this makes it possible for them to reduce the overall operational cost.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Technological advancements have eased the ways of doing business, as businesses are able to automate their operations, thereby providing timely services to the customers. Similarly, the progresses in the world of information technology has led to efficiency in procurement by organizations as these organizations are able to conduct their duties on the online platform and to this end, it is imperative to point out that evolution of information technology has changed the approaches of operations by governments and businesses (Nelson et.al, 2001). Moreover, procurement through the online platform has made it possible for government to reduce bureaucratic bottlenecks that hinder the process of procurement. Panetto and Boudjilida (2013) Observe that even though governments have adopted e-procurement, their biggest challenge has been adhering to the public procurement laws and guidelines as provided in the law. To this end, many governments across the world have embraced e-procurement; however, there is need for the said governments to adopt the best practices of procurement and not merely following or coping what has been done by successful countries.

One of the major theories used to study implementation of technology in organizations is technology diffusion theory. According to this theory, technology has been adopted in organizations based on the ease of its usage and effectiveness. In some of the firms, implementation of technology is by a vote while to the others it is by authoritative decisions. This theory has a huge effect in explaining about implementation of technology in organization.

Over the years, companies operating in Africa have been aggressive on reduction of cost on their operations. This is realized through effectiveness and efficiency in the organizations so as to improve profitability (Daveport, 2008). Darin (2010) adds by stating that e-procurement is as a result considered as a “cornerstone” in reduction of cost of purchasing and improving the performance across commercial state corporations. Commercial state corporations across the country have embraced use of technology in their operations to enhance their performance (Hardy & Williams, 2011). Therefore, e-procurement has an impact on the commercial state corporations in terms of improved performance and the reason for implementation of technology usage. According to Crook and Kumar (2008), Commercial State Corporations (CSC) has made progress on the use of e-procurement in order to improve their performance. This study therefore would be significant in helping to understand the impact of e-procurement in commercial state corporations.

1.1.1 E-procurement

According to Croom and Brandon (2007), e-procurement refers to the use of internet in all the process of procurement. There exist different practices or forms of procurement and they include e-auction, e-tendering, e-catalogue, e-marketplace among others. Vaidya and Callender (2006) observe that e-procurement can be said to be an end-to-end process, which integrates the entire process of organizational procurement. According to Crook and Kumar (2008) procurement is considered as a major function taking place in the supply chain so as to make sure that the needed products or services by the customers are made available.

A lot of resources are spent by firms in order to acquire different products and services in various stages within the production or in provision of service and the stages include sourcing, bargain, ordering receipt and post buying review. E-procurement exists in many forms, which focus on various stages in the procurement process. E-procurement needs to be directed on improving performance based on the five rights of procurement such as sourcing of goods or the services in the appropriate quality, right quantity, appropriate place, delivered in right time, and also out of the right source (Catherine & Susan, 2005).

Carlos et al (2005) argue that by nature, procurement links suppliers of organizations and their strategic objectives. In doing so, it helps in translating the strategic objectives for an organization to the sourcing needs which helps an organization to meet its goals. Procurement has a number of mismanagements that result to losses of public funds. This is the reason that has made a majority of global governments to make use of technology in procurement so as to reduce such kind of occurrences.

Bert et al (2014) postulates that e-procurement implementation influences the buying behavior in the organizations in terms of the process, choice criteria and the buying center. The process of buying constitutes of steps, stages or phases which often take place over time across firms. Efficiency has come in organization due to the implementation of e-procurement. A study by Bayton (2008), argues that there is a strong relationship between e-procurement and its application in the organizations. The extent of e-procurement implementation in organizations is high due to its importance in reducing costs, improving efficiency of services, enhancing responsiveness, improving relationship with the supplier and also resulting to better collaborations with the supplier.

1.1.2 Organizational Performance

Nyadimo (2011) asserts that performance covers three major areas in the output in terms of monetary (return on investment, return on assets or profits); performance of the product in the market (the market share or sales) and its shareholders return. Therefore, performance gives the foundation in which an organization can evaluate its success in the market based on its goals (Moszoro, 2014).

Various businesses have adopted e-procurement, which is influenced by the increasing trend to the purchasing inputs as well as the raw materials; implementation of e-procurement has been a key strategy in order to meet the targets of the subject organization(s). Ogot et al. (2009) evaluated e-procurement implementation in private firms in Kenya that included Safaricom Ltd; the findings indicated that implementation of e-procurement has resulted in to the following improved performance and in specific the buying behavior such as buying process, choice criteria as well as the buying center. The buying process is described as a number of stages, steps or process involved in buying which take place over time that result to actual purchase or subsequent evaluation. Erridge (2011) evaluated implementation of e-procurement at the Teachers Service Commission in Kenya and found out that, a strong relationship exists between e-procurement and application of ICT expertise. This shows that procurement efficiency is related to use of e-procurement. The major objective of performance is the growth in the effectiveness and efficiency in organizations that improve the ability in delivery of goods and services. Performance can also target organizational efficacy where goals and objectives in an organization are evaluated (Bert et al., 2014). Performance in the

operational level is concerned with quality control where customer level satisfaction is of major essence.

As noted earlier, the progresses made in the world of information technology has made it possible for many organizations to adopt or implement e-procurement; however, it is worth noting that not all the organizations have been able to reap the benefits of implementing e-procurement. Emiliani and Stec's (2005) conducted a research in a wood pallet company and the aim was to explore the use of reverse auction by the said company. The findings from the study established that e-procurement was not fruitful because often than not, the suppliers had the habit of retaliatory pricing to an extent that there was poor buyer-supplier relationship. To this end, it is essential to point out that e-procurement has various drawbacks such as sharing of information across organizations and sharing of vital proprietary information as an approach to disabling "silo mentality". Puschmann and Rainer (2005) contend that organizations interested in adopting e-procurement should adhere to the best practices of implementation, which spell that organizations should evaluate whether they have the capacity and technology to undertake the exercise. In terms of technological factors, organizations should assess their procurement role realignment, incorporation of systems of e-procurement with other appropriate systems, integration of all the suppliers to the system during the earlier phase, procurement process redesigning, and realignment of purchasing firm.

1.1.3 Commercial State Corporations in Kenya

According to Wamalwa(2003), the exact meaning of State Corporation is not definite. For instance, State Corporations can be established emanating from an act of parliament

or the President can establish a State Corporation by order for the reason of carrying out state duties. Moreover, a State Corporation can be as a result of representing a financial institution or bank as licensed according to the banking act or one established under the company act and the government has majority of the shares.

In Kenya, the Commercial State Corporations were established under the State Corporation Act Cap 446 in 1987. Most of the state corporations in the country came into place after independence in the 1960s or 1970s. Frabrozio et al. (2011) conducted a study and observed that over the last decade, many changes have taken place in Commercial state corporations across the globe such as development of new corporations or improvement of the existing ones. This has been attributed to implementation of modern technologies such as information communication technology (ICT). Increased need for efficiency of services among the commercial state corporations has forced firms to adopt strategic procurement practices so as to remain relevant in the market (Graham & Melyn, 2011).

Commercial state corporations have been formed so as to meet both social and commercial objectives. They are meant to correct failures in the market, exploit aims in social and political areas, offer education, health and redistribution of income in marginal areas (Greunen et al., 2010). At independence, 34 commercial state corporations got retooled by the Sessional Paper number 10 of 1965 as vital to the growth of the economy.

1.2 Research Problem

The current business environment is characterized by increased level of competition. Implementation of technology has been viewed as a major way in which firms or state corporations can improve their performance by increasing their level of efficiency. According to Achrol and Kotler (2011), performance of firms is achieved by effective use of technology since this provides them with the best way in which they can improve efficiency in their operations and product offering. When firms in the public sector experience continuous change, they are most likely to reexamine their procurement processes so as to improve their effectiveness. This is essential in improving the performance of the state corporations.

In a study carried out by Baternburg (2007) in Europe on the implementation of e-procurement showed that there are differences from one country to the other in regard to implementation of e-procurement. A study carried out by Greunen et al. (2010) examined the regulation on the e-procurement implementation in South Africa, analysis of the findings indicated that there is measurable importance in the supply chain management but this is not well understood within the government context. In a study by Akinyi (2011) in regard to e-procurement and efficiency within the telecommunications industry with a specific reference to Safaricom Limited Kenya showed that e-procurement is essential in relation to enhancing efficiency in telecommunications industry. Further studies by Nyadimo (2011) on information communications technology (ICT) and public procurement in Kenya indicated the role which ICT plays in terms of improving the efficiency in organizations. A study by Orina (2013) on e-procurement readiness factors

referencing the Kenya's public sector revealed that technology usage improved e-procurement performance.

Ruth (2012) conducted a study on the procurement process in Kenya and adoption of information technology. From the evaluation of the study outcomes, it was found that appropriate use of IT tools in the procurement process enhances effective distribution of information, quick process flow, and decentralization of the process of decision making and carrying out of various tasks, and better control and transparency in the overall procurement process. However, Ruth (2012) failed to recognize other essential tools of procurement as she only argued from an ICT perspective.

The studies, despite showing the e-procurement implementation in the corporations, failed to offer the effects of such implementation on their performance. In order to address the existing literature gap, the study sought to determine the e-procurement implementation vis-à-vis how commercial state corporations perform in the financial market. Accordingly, the current study set to evaluate the role of e-Procurement in enhancing procurement performance among state corporations in Kenya.

1.3 Research Objectives

The overall objective of this study was to determine e-procurement implementation on the performance of Kenyan commercial state corporations. In particular, the research was guided by the following objectives:

- i. To establish the extent to which commercial state corporations have implemented e-procurement in Kenya
- ii. To determine the relationship between e-procurement implementation and performance of commercial state corporations in Kenya

1.4 Value of the Study

The findings of the study will be important to Kenyan commercial state corporations to an extent that commercial state corporations will be able to realize efficiency and effectiveness in the procurement of various goods and services. The findings of this study would guide the commercial state corporations in the formulation of policies and the business practices that support implementation of e-procurement so as to enhance their performance.

The study also would be important to the employees of state corporations to learn and appreciate the positive contribution of e-procurement implementation on the performance of their state corporations. The findings of this study would also be significant to other corporations in the public sector as the principle related to implementation of e-procurement is applicable to all the state corporations.

The study findings will enhance the bridging of the current literature gap, thereby providing a basis or springboard for future research. Moreover the findings of the study

would enhance both practice and theory, whereby in practice, it will promote policy making in the public sector through determination of the relationship between e-Procurement implementation and performance of commercial state corporations. The findings also will be a crucial factor in the designing, planning and adoption of a solid e-procurement strategy in the Kenya's system of public procurement.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section discusses the literature on implementation of e-procurement and performance of commercial state corporations. Out of the review, the wider categories will be derived that are essential in identification of the major aspects of e-procurement and performance of Kenya's commercial state corporations. The section also reviews technology diffusion as the study is anchored on this theory.

2.2 Theoretical Framework

This section would review theories, which are relevant to the objectives of the study and they include technology acceptance model and technology diffusion model.

2.2.1 Technology Diffusion theory

According to this theory, technology has been adopted in organizations based on the ease of its usage and effectiveness. In some of the firms, implementation of technology is by a vote while to the others it is by authoritative decisions. This theory has a huge effect in explaining about implementation of technology in organization.

This theory can better be understood by the use of communication channel, which is a major contributor on the success of implementation of technology. Being a critical aspect in the communication channel, it provides awareness on any new technology. Trading partners require to work together in order to make sure that there is success on the e-procurement implementation (Grunasekeran&Ngai, 2008).

The extent to which a firm competes is influenced by implementation of technology. This means that a firm can take advantage of technology implementation in order to improve

its performance. Past findings show that technology diffusion influence compatibility as well as simplicity in the application of new technology (Hodess, 2009). The ability of firms to build on their competitiveness constantly is based on how efficient they are (Moszoro, 2014).

2.2.2 Technology Acceptance Model

This theory is essential in the way in which it explains about the behavior of individuals who use technology. The theory offers an explanation on why a user is likely to accept or reject the information technology through adapting the theory of reasoned action. The theory provides the foundation where external variables have an impact on the belief, attitudes and also the intention of usage (Kim & Santiago, 2005). The two cognitive beliefs which have been posited by the theory are the ease of use and perceived usefulness. Based on the theory, the actual use of technology is affected either directly or indirectly by the intension of a user, perception of usefulness, their attitude, as well as perceived ease of use. In addition, the theory proposes that external factors have an impact on the intention or actual usage of a system by mediated impact on the perceived usefulness or perceived ease of usage.

Several empirical studies have examined the use of this theory in order to explain how people behave in the implementation of e-procurement. Generally, it has been noted that the quality of work, the ease of use of the system, timely provision of tenders are important variables that offers an explanation for the acceptance of the e-procurement systems in organizations (Ndubisi, 2006). These variables were related to the intention on the use of the system and hence how willing the firms are in regard to implementation of

the e-procurement system depend on the usefulness, that is improved performance that is measured in terms of timely provision of tenders and quality of work.

2.3 E-procurement

E-procurement has been driven by increased trend in buying inputs as well as other kinds of raw materials from outside an organization. E-procurement is a major strategy in majority of the organizations in responding to changes in the business environment (Leung, 2007). It is related to internet based technologies on the order process as a result of the benefits on saving the transactional cost, increased level of competition for opportunities in sourcing as well as enhanced inter-organizational coordination. It covers automation of procurement on the internal process of organization and collaboration of suppliers (Lysons& Farrington, 2006).

It involves utilization of internet-based applications so as to manage the whole process in relation to purchasing. Use of technology in procurement involves the use of e-tendering, e-catalogue, e-ordering, e-bidding, e-auction, e-sourcing and rendering (Graham & Melvin, 2011). In addition, Gunasekeram and Ngai (2008) asserts that it constitutes the use of reverse auctions, purchase of cards, or integrated automatic procurement systems in order to expedite processing of buying in corporations. Critics argue that e-procurement provides a number of advantages but then the extent of implementation is less (Erridge, 2011).

According to Nyadimo (2011) e-procurement is essential since it is able to strengthen the search ability, ensure that there is faster and also transmission of accurate data, offer quick and more information and reduce the transactional cost. On the other hand, Ogot et

al (2009) assert that e-procurement improves customer service and their satisfaction, offer high quality products, increase product performance and quality, timely delivery, transparency and use of technology on the major suppliers. The competition and the threat of security are a great threat in the digital networks (Hardy & Williams, 2011). Implementation of e-procurement can have an impact on the cost, quality of products or services, logistics and organization that enhance satisfaction of the customers and so is the performance of firms.

2.4 E-Procurement and Performance of Commercial state corporations

Orina (2013) carried out a survey regarding the implementation of e-procurement which revealed that firms are able to reduce the inventory levels, lower on the order fulfillment cycle time, and also the price paid for the goods as well as lowering on administrative costs in procurement. Orodho (2003) postulates that e-procurement provides a number of benefits for instance saving on the prices and also reduction on cost, soft benefits for instance the individual time that is freed by the efficiency of the processes and also intangible benefits for instance financial approval, cultural change, as well as visibility in the performance of the supplier. Osmonbekov (2002) argued that e-procurement is beneficial to firms in terms of reducing the time to the market cycles, lowered material and the transactional cost and also the reduced level of stock.

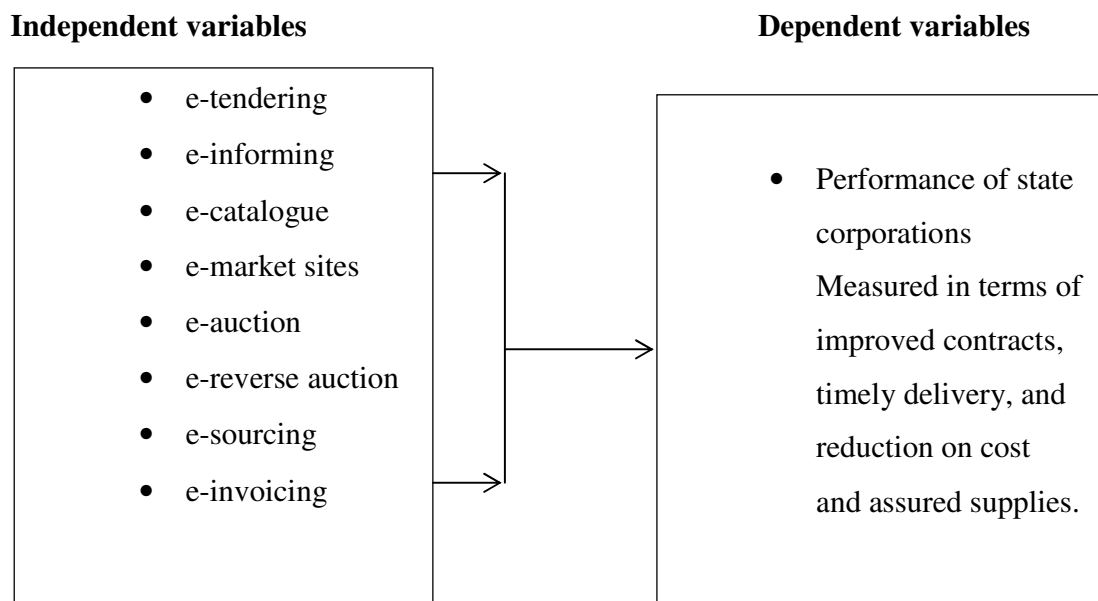
Past findings on this topic show that e-procurement improves the performance on procurement entity such as helping the policy makers to understand the way in which the policy objectives interact and how such policy has an overall effect on performance in the procurement system and helps governments in improving quality in terms of decision making as well as long terms actions (Pearcy&Guinipero, 2008). Further, it creates

stronger incentives within the government to ensure improved public procurement systems, helps in terms of setting priorities on the reformation within public procurement and also monitoring progress against the goals which have been set and provide information for evaluating the expenditure in the public service (Ogot et al., 2009). All these have a general impact on the performance of firms.

2.5 Conceptual framework

This study has evaluated e-procurement and how it is related to performance of commercial state corporations in Kenya. Independent variables are: e-tendering, e-catalogue, e-invoicing, a-auction, e-sourcing and the post purchase review. In addition, dependent variable is the procurement performance on the state corporations.

Figure 1: Conceptual framework



Source: Researcher (2016)

The dependent variable was procurement performance of state corporations. The independent variables were e-tendering, e-informing, e-catalogue, e-market sites, e-auction, and e-reverse auction, e-sourcing and e-invoicing.

E-Tendering

Refers to a system of employing the internet platform as a means of sending requests for prices and information to the appropriate suppliers and receiving the replies of suppliers

E-Catalogue

Is a list of services and products provided by a company together with their prices and attributes as published on an electronic document.

E-invoicing

System of using electronic communication as a means to delivering of bills and other relevant information

Delivery of bills and related information using electronic communications

E-Auction

The act of using the internet to bid or sell products and services

E-Sourcing-

The use of internet as a means to finding new suppliers

E-Reverse Auction

Sellers bid for the prices at which they are prepared to vend their products and services

E-Informing

Collecting and dispensing purchasing information

E-Market Sites

Employs virtual marketplace pegged on the internet where manybusinesses execute economic transaction

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section described the design of the research, sample design, target population, methods of data collection, and analysis of data.

3.2 Research Design

The study employed a descriptive survey design. According to Mugenda and Mugenda (1999), a research design refers to the structure or plan of a research, which strives to find appropriate solutions to research questions, which comprises of an summary of the research work ranging the from hypothesis, methods and techniques for gathering and analyzing data and presenting the outcomes in a form which can be understood. Orodho (2003) and Kothari (2004) describe “a descriptive survey design as a design that seeks to portray accurately the characteristics of a particular individual, situation or a group”. Descriptive Research encompasses the collection and analysis of quantitative data as an approach to describing various phenomenons.

3.3 Population

The population of this research constituted all commercial state corporations in Kenya as at 30th December, 2015, where there were 54 commercial state corporations in the country. It was a census study which focused on top level management staff in the procurement department of commercial state corporations in Kenya.

3.4 Data Collection Methods

This study employed semi-structured questionnaires to collect primary data. Closed and open-ended questions were used to explain collect data from respondents and this was in relation to the objectives of this study. The researcher chose Use of semi structured

questionnaires because of the consistency in the questions to and answers which came from the respondents. Response choices were nominal and that closed questions were measured in interval scale. Data was collected from the Commercial State Corporations where questionnaires addressed to supply chain officers from each state corporation procurement department in Kenya. The questionnaires were placed into sections A, B and C where each section was in line to the objectives of the study. Section A was on the profile of the respondents, Section B provided use of e procurement in the respondent organization, Section C covered the implementation of e-procurement and the performance of state corporations. The method of drop and pick later approach was employed when administering the questionnaires of the study.

Questionnaires were administered by use of drop and pick later method.

3.5 Data Analysis

Data collected from the field was coded accordingly. Percentages and frequencies were applied to examine data on demographics and determined degree to which commercial state corporations had implemented online procurement and the relationship between e-procurement and performance of commercial state corporation was analyzed using regression. Statistical package for social sciences was employed to analyse the quantitative data. Analysis of data was done through descriptive statistics for example the mean scores, frequencies and measures of dispersion such as variance and standard deviation. Each objective was analyzed through description analysis. Objective 1 on the extent to which state corporations have implemented e-procurement in Kenya was analyzed through mean scores and represented in form of tables. Objective 2 on determination of the effects of implementation of e-procurement and the performance of

state corporations in Kenya was analyzed using mean scores and then represented using tables and figures.

A multiple regression was applied to analyze the relationship between e-procurement and performance of Commercial State Corporations. The regression model was as below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon \dots \dots \dots (i)$$

Where;

Y = Performance of commercial state corporations

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of determination

X_1 = e-tendering

X_2 = e-informing

X_3 = e-catalogue

X_4 = e-market sites

X_5 = e-auction

X_6 = e-sourcing

X_7 = e-invoicing

ε = Error term

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The main objective of this study was to determine how the implementation of e-procurement and the performance of Kenya's commercial state corporations. The population was 54 commercial state corporations in Kenya. A Statistical Package for Social Sciences software was employed to analyze the data collected.

4.2 Response Rate

The study set to collect information on how the implementation of e-procurement influences the performance of commercial state corporations in Kenya. The study had 44 responds and this made a response rate of 81.5%. Mugenda and Mugenda (2003) argue that a response rate of 50% is adequate, 60% good and above 70% rated very well. This implies that based on this assertions; the response rate of 81.5% was very good.

4.3 General Information

Table 1: Response Rate

	Questionnaires administered	Questionnaires filled & returned	Percentage
Respondents	54	44	81.5

Source: Researcher, 2016

4.3.1 Distribution of Respondents by Gender

The study participants were asked to specify their gender, the outcomes are as indicated in Table 2 indicate that more than half of the respondents were male and a smaller percentage were female, implying most procurement positions are dominated by male

Table 2: Distribution of Respondents by Gender

Category	Frequency	Percentage
Male	26	60.5
Female	17	39.5
Total	43	100.0

Source: Researcher, 2016

Pegged on the analysis of the findings many (60.5%) of the participants' were male as opposed to their female counterparts who indicated 39.5 %. One respondent did not fill his/her gender hence the total frequency by gender was 43 respondents.

4.3.2 Age category of the Respondent

The researcher set to determine the age of the participants. The results are as shown in Table 3

Table 3: Age category of the Respondent

Age	Frequency	Percent
18-25 Years	1	2.3
26-35 Years	14	31.8
36-45 Years	27	61.4
Above 45 Years	2	4.5
Total	44	100.0

Source: Researcher, 2016

Based on the analysis of the study findings, most of the participants(61.4%) were between 36-45 years followed by 31.8% who indicated they were between 26-35 years. In addition, the study revealed that 2.3% and 4.5% were 18-25 and above years respectively. It be therefore concluded that majority of the people participated had 36-45 years

4.3.3 Number of Years worked in the corporation

The endeavor to determine years worked in the corporation. The study findings are as indicated in Table 4.

Table 4: Number of Years worked in the corporation

	Frequency	Percent
0-2 years	1	2.2
3-5 years	9	20.5
6-10 years	27	61.4
Above 10 years	7	15.9
Total	44	100.0

Source: Researcher, 2016

From the analysis of the study findings, many (61.4%) of the research participants indicated 6-10 years. Further, 20.5% of the respondents indicated 3-5 years, 2.2% of the respondents indicated 0-2 years while the remaining 15.9% of the respondents have worked in their respective corporations above 10 years. This means that majority of the people participated in this study have worked in their respective corporations for more than six (6) years hence they were able to give the information e-procurement implementation and performance in Kenya.

4.3.4 Highest level of education

The study wanted to establish level of education of the respondents. Table 5 shows the analysis of the findings.

Table 5: Highest level of education

Education Level	Frequency	Percent
High school or equivalent		0.0
Vocational/technical school		0.0
Bachelor's degree	25	56.9
Master's degree	17	38.6
Doctoral degree		0.0
Professional degree (e.g. CGPP)	2	4.5
Total	44	100.0

Source: Researcher, 2016

Based on the analysis of the finding most (56.9%) of the respondents had a bachelor's degree followed by 38.6% of the respondents who had a master's degree. Further, the study revealed that 4.5% indicated that they had a professional course such as certified institute of procurement and supply (CIPS). The findings of the study deduced that a majority of the respondents were university graduates.

4.4 E-Procurement Implementation

The study requested the respondents to indicate the extent to which their state corporations had implemented e-tendering.

Table 6: E-Tendering Implementation

E-Tendering:	No Extent	Small extent	Moderate Extent	Large Extent	Very Large	Mean	Standard Deviation
	%	%	%	%	%		
Advertisement of tenders are done online	-	-	11.4	38.6	50.0	4.5	0.936
Registration of suppliers is done via the internet	-	2.3	20.5	45.5	31.0	4.2	1.004
Request for proposals is done online	-	6.8	31.8	38.6	22.7	3.9	0.773
The corporation responds to the suppliers via the internet	4.5	13.6	15.9	40.9	25.0	4.0	0.691
The company evaluates and automates the tenders online	6.8	13.6	36.4	27.3	15.9	3.8	0.869
Average(mean and standard deviation)						4.1	0.8546

Source: Researcher, 2016

Table 6 shows the results of the analysis of the findings. From the findings those recorded to a very large extent were on the statement that advertisement of tenders is done online with a mean of 4.5 and a standard deviation of 0.936. Those that recorded large extent were on statements that registration of suppliers is done via the internet with a

mean of 4.2 and a standard deviation of 1.004, the corporation responds to the suppliers via the internet with a mean of 4.0 and a standard deviation of 0.691, request for proposals is done online with a mean of 3.9 and a standard deviation of 0.773, and the company evaluates and automates the tenders online with a mean of 3.8 and a standard deviation of 0.869. The study concludes that e-Tendering has been implemented in commercial corporations in Kenya.

The computed mean score for E-tendering is 4.08 and this indicates that advertisement of tenders conducted online with a mean of 4.5 has an effect on the performance of commercial state corporations while registration of suppliers done via the internet has a strong influence on the effectiveness of e-procurement. Request for proposals done online is slightly below the computed mean of 4.08 and has a mean of 3.9, which shows that it has a moderate impact on the effectiveness of procurement

Table 7: E-catalogue Implementation

E-catalogue	No	Small	Moderate	Large	Very	Mean	Standard
	Extent	extent	Extent	Extent	Large		Deviation
	%	%	%	%	%		
Products and services are listed online	2.3	-	6.8	29.5	61.4	4.8	0.683
Purchase and payment of products is done via the internet	-	13.6	25.0	43.2	18.2	3.5	0.794
Average						4.2	0.984667

Source: Researcher, 2016

The study also sought to establish whether commercial corporations have implemented E –catalogue. From the analysis of the findings it was revealed that those recorded to a very great indicated that products and services are listed online with a mean of 4.8 and a standard deviation of 0.683. In addition, those who indicated to large extent indicated that purchase and payment of products is done via the internet with a mean of 3.5 and a standard deviation of 0.794. according to the findings, it can be deduced that commercial corporations has implemented E –catalogue.

From the computed mean score, it is evident that when commercial state corporations list their products and services in the online platform, such companies are likely to be effective their procurement as the mean of 4.8 is above the mean score 4.15 compared to purchases and payment of products being done over the internet.

Table 8: E-Invoicing Implementation

E-invoicing	No Extent %	Small extent %	Moderate Extent %	Large Extent %	Very Large %	Mean	Standard Deviation
Suppliers can send their bills and invoices online	-	15.9	20.5	52.3	11.4	3.7	0.582
Quotations of prices for products ordered can be done via the internet.	-	25.0	9.1	59.1	6.8	3.9	0.958
Average						3.8	0.77

Source: Researcher, 2016

The study also sought to determine the extent to which e-sourcing had been implemented within commercial state corporations. From the analysis of the findings, it can be revealed that quotation of prices for products ordered can be done via the internet with a mean of 3.9 and a standard deviation of 0.958 and that suppliers can send their bills and invoices online with a mean of 3.7 and a standard deviation of 0.582. Therefore, it can be concluded that commercial corporations has implemented e-invoicing.

Table 9: E-Auction Implementation

E-auction	No Extent %	Small extent %	Moderate Extent %	Large Extent %	Very Large %	Mean	Standard Deviation
Products to be auctioned are listed online	2.3	6.8	40.9	36.4	13.6	3.6	0.885
Payment of the auctioned goods is done via the internet	6.8	9.1	20.1	43.2	20.1	4.1	0.684
Buyers can submit their bids online	-	6.8	18.2	45.5	29.6	4.3	0.950
average	4.6	7.6	26.4	41.7	21.1%	4.0	0.839667

Source: Researcher, 2016

The study also sought to establish whether commercial corporations have implemented E-auction. Based on the analysis of the findings those agreed that is to a large extent recorded that buyers can submit their bids online with a mean of 4.3 and a standard deviation of 0.950, payment of the auctioned goods is done via the internet with a mean

of 4.1 and a standard deviation of 0.684 and a on products to be auctioned are listed online with a mean of 3.6 a standard deviation of 0.885. It be therefore depicted that most of Commercial Corporations have implemented of E-auction.

Table 10: E-sourcing Implementation

E-sourcing	No Extent %	Small extent %	Moderate Extent %	Large Extent %	Very Large %	Mean	Standard Deviation
Identification of suppliers is done online	-	-	15.9	59.1	25.0	3.8	1.001
Suppliers can express their interest to supply online	-	-	4.5	65.9	29.5	4.4	1.011
Quotations from suppliers is received online			2.3	22.7	75.0	4.9	0.773
Prequalification of suppliers is done via the internet	-	-	13.6	56.8	29.5	3.8	0.594
Average						4.2	0.84475

Source: Researcher, 2016

The researcher also requested the respondents to indicate the level agreement/disagreement on implementation of E-sourcing. Those recorded to a very large extent indicated that quotations from suppliers are received online with a mean of 4.9 and a standard deviation of 0.773. In addition, those indicated to a large extent indicated

that suppliers can express their interest to supply online with a mean of 4.4 and a standard deviation of 1.011, identification of suppliers is done online with a mean of 3.8 and a standard deviation of 1.001, and that the prequalification of suppliers is done via the internet with a mean of 3.8 and a standard deviation of 0.594. Therefore, it can be depicted that E-sourcing has been implemented in commercial corporations.

Table 11: E-markets Implementation

E-markets	No Extent %	Small extent %	Moderate Extent %	Large Extent %	Very Large %	Mean	Standard Deviation
Products and services are displayed on market sites	-	9.1	13.6	47.7	29.5	3.6	0.839
The corporations markets their products and services online	-	4.5	11.4	63.6	20.5	4.0	0.503
Average						3.8	0.671

Source: Researcher, 2016

The study required the respondents to indicate the extent of implementation of E-markets within their corporations. Based on the analysis of the findings those that agreed to a large extent indicated that the corporations markets their products and services online with a mean of 4.0 and a standard deviation of 0.503 and on products and services being displayed on market sites with a mean of 3.6 and a standard deviation of 0.839. From the analysis of the it can be depicted that commercial corporations have implemented E-markets.

Table 12: E-informing Implementation

E-informing	No	Small	Moderate	Large	Very	Mean	Standard
	Extent	extent	Extent	Extent	Large		Deviation
	%	%	%	%	%		
Pre-qualified suppliers are notified online	4.5	13.6	22.7	43.2	15.9	3.6	0.842
Tenders are displayed via the internet	-	-	2.3	86.4	11.4	4.4	0.941
Average						4.0	0.8915

Source: Researcher, 2016

Also, the study required the respondents to indicate their agreement/disagreement implementation of E-informing. From the findings of the study those agreed recorded that tenders are displayed via the internet with a mean of 4.4 and a standard deviation of 0.941 pre-qualified suppliers are notified online with a mean of 3.6 and a standard deviation of 0.842. Therefore, it can be concluded most commercial corporations have implemented E-informing.

4.5 E-Procurement and the Performance of Commercial State Corporations in

Kenya

Table 13: Commercial State Corporations Performance In Relation To E-Procurement Implementation

Performance Of Commercial State Corporations	Mean	Standard Deviation
Reduction on supply chain costs has been achieved a result of e-procurement practices.	3.8	1.005
Service delivery has been enhanced as a result of e-procurement practices	4.8	0.663
Credibility has been achieved by advertising tenders online as a result of e-procurement practices	4.4	0.508
There is competitiveness in bidding and sourcing as a result of embracing e-procurement practices.	3.9	0.840
Identification of suppliers has been made easier as a result of e-procurement practices.	4.6	0.552
Buyer and seller relationship has improved as a result of e-procurement practices	4.2	0.683
Time taken to complete the procurement process has reduced as a result of the use of e-procurement practices	4.7	0.795
Requisition process for products and services is now faster due to the use of e-procurement practices	4.1	0.839
Average	4.3	0.735625

Source: Researcher, 2016

Further, the study sought the extent commercial state corporations have performed as a result of implementing e-procurement. Based on the analysis of the findings those recorded to a very large extent indicated that service delivery has been enhanced as a result of e-procurement practices with a mean of 4.8 and a standard deviation of 0.663, time taken to complete the procurement process has reduced as a result of the use of e-procurement practices with a mean of 4.7 and a standard deviation of 0.795, and on identification of suppliers has been made easier as a result of e-procurement practices with a mean of 4.6 and a standard deviation of 0.552. In addition, those indicated great extent recorded statements that credibility has been achieved by advertising tenders

online as a result of e-procurement practices with a mean of 4.4 and a standard deviation of 0.508, buyer and seller relationship has improved as a result of e-procurement practices with a mean of 4.2 and a standard deviation of 0.683, requisition process for products and services is now faster due to the use of e-procurement practices with a mean of 4.1 and a standard deviation of 0.839, there is competitiveness in bidding and sourcing as a result of embracing e-procurement practices with a mean of 3.9 and a standard deviation of 0.840 and reduction on supply chain costs has been achieved a result of e-procurement practices with a mean of 3.8 and a standard deviation of 1.005. The analysis of the findings concludes that commercial state corporations have performed as a result of implementing e-procurement.

4.6 Inferential Statistics

The study further applied general Linear Model to determine the predictive power of the relationship between e-procurement implementation and performance of commercial state corporations in Kenya. This included regression analysis, the Model, Analysis of Variance and coefficient of determination.

4.6.1 Regression Analysis

Furthermore, a multiple regression was undertaken by the researcher to test if there was a relationship between the variables of the study, i.e., the variables that are independent on the association between e-procurement implementation and performance of commercial state corporations. The study applied the statistical package for social sciences to code and computes the measurements of the multiple regressions for the research.

Coefficient of determination describes the degree to which variations in the dependent variable can be described by the variation in the variables, which are independent or the

percentage of variation in the variable that is dependent (performance of commercial state corporations) that is described by all the seven independent variables (e-tendering e-informing, e-catalogue, e-market sites, e-auction, e-sourcing, e-invoicing)

Table 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.866	0.749	0.731	0.116

The study took into account all the seven variables, explains only 74.9% on the relationship between e-procurement implementation and performance of commercial state corporations has indicated by the R^2 . This implies that there exist other variables in the study which have not been featured in this study. To this end, it important for further studies to be undertaken as a means of investigating the 25.1% of the factors not captured in this study.

Table 15: ANOVA of the Regression

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	80.375	7	11.482	35.527	.000 ^a
	Residual	11.635	36	0.323		
	Total	92.01	43			

The significance value is 0.000 which is lower than 0.05, therefore, the model is statistically significant in predicting how (e-tendering, e-informing, e-catalogue, e-market

sites, e-auction, e-sourcing, e-invoicing)) affect performance of commercial state corporations in Kenya.

Table 16: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.103	0.653		10.877	.0000
e-tendering	0.841	0.239	0.177	3.519	.0011
e-informing	0.716	0.244	0.191	2.934	.0056
e-catalogue	0.686	0.278	0.223	2.468	.0181
e-market sites	0.604	0.251	0.216	2.406	.0209
e-auction	0.577	0.243	0.186	2.374	.0226
e-sourcing	0.525	0.234	0.153	2.244	.0306
e-invoicing	0.488	0.227	0.148	2.150	.0378

Source: Author (2016)

The researcher conducted a multiple regression analysis as a means of establishing the relationship performance of e-procurement against the variables employed in this study

The regression model applied in this study becomes:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + C$$

Becomes;

$$Y = 1.103 + 0.852X_1 + 0.731X_2 + 0.654X_3 + 0.623X_4 + 0.554X_5 + 0.563X_6 + 0.462X_7$$

In relation to the above model, taking all variables of the study into account, whereby the variables include e-tendering, e-informing, e-catalogue, e-market sites, e-auction, e-sourcing, and e-invoicing constant at zero, performance will be 1.103. The data outcomes analyzed indicates that taking all other independent variables at zero, a unit raise in e-tendering will translate to a 0.852 rise in performance; a unit rise in e-informing, will translate to a 0.731 rise in performance, unit rise in e-catalogue will translate to a 0.654 rise in performance, a unit rise in e-market sites will translate to 0.623 rise in performance, a unit rise in e-auction will translate to 0.554 rise in performance, a unit rise in e-sourcing will translate to 0.563 rise in performance; and a unit rise in e-invoicing will translate to 0.462 rise in performance

This implies that e-tendering contributes the most to the performance followed by e-informing e-catalogue-market sites, e-auction-sourcing and e-invoicing respectively.

The results above show that e - procurement management practices have had a significant influence on the performance of Kenya's state corporations under the period of research. This is reinforced by the great Coefficient of Multiple Determination of 0.749 and significance change of 0.002

4.7 Discussion of the findings

This study sought to establish e-procurement implementation and Performance of Kenyan Commercial State Corporations. Specifically, the study wanted to determine the degree to which Kenya's commercial state corporations have adopted e-procurement and determine the relationship between e-procurement implementation and performance of commercial

state corporations in Kenya. The study employed technology diffusion theory and technology acceptance model to explain e-procurement implementation and performance of commercial state corporations.

Also the study wanted to request the research participants to show the degree to which the state corporations had implemented E-tendering. Making inferences from the findings of the study, it emerged that most respondents indicated to a large extent they have implemented E-tendering; E-catalogue; E-Invoicing; E-Auction; E-sourcing; E-markets; and E-informing. Further, the study established the relationship E-Procurement and the Performance of Kenya's Commercial State Corporations. The outcomes of the study established that E-Procurement implementation reduced supply chain costs, increased service delivery, has brought credibility; and also has brought about competitiveness in bidding. From the regression analysis it was revealed that there existed a significant relationship between procurement adoption and performance of Kenya's commercial state corporations.

CHAPTER FIVE

CONCLUSIONS, SUMMARY AND RECOMMENDATIONS

5.1 Introduction

This study intended to establish e-procurement implementation and performance of commercial state corporations in Kenya. The chapter discuss the summary of findings, conclusions and recommendations.

5.2 Summary

The purpose of this research project wasto establish the relationship between e-procurement implementation and commercial state corporations in Kenya.As such, this study endeavoured to determine general information from the participants so that to ascertain whether they had a significant influence regarding how state corporations performed. Regarding the gender composition of the study participants, it was revealed that males comprised the majority as opposed to their female counterparts. Most respondents were between36-45 years who most of them were university graduates.

To start with, this research paper aimed to determine how commercial state corporations had implemented E tendering. To a large extent, the study's respondents settled advertisement of tenders is done online, registration of suppliers is done via the internet, the corporation responds to the suppliers via the internet, request for proposals is done online and that and the company evaluates and automates the tenders online.

On E-catalogue implementation the respondents agreed that products and services are listed online and that purchase and payment of products is done via the internet.Also, the respondents indicated that E-invoicing has been implemented in that suppliers are able to

send their bills and invoices online and that quotation of prices for products ordered can be done via the internet.

The study revealed that E-auction has been implemented in commercial corporations. This has been revealed by statements that products to be auctioned are listed online; payment of the auctioned goods is done via the internet and buyers can submit their bids online. In addition, it was revealed that-sourcing has been implemented by commercial corporations as on statements that identification of suppliers is done online, suppliers can express their interest to supply online, quotations from suppliers is received online and prequalification of suppliers is done via the internet. Further, it was revealed that-markets have been implemented as products and services are displayed on market sites and the corporations market their products and services online. Also, it was revealed that E-informing has been implemented whereby pre-qualified suppliers are notified online and tenders are displayed via the internet.

Further, the study wanted to determine the relationship between E-Procurement and how Kenya's State Corporations performed. It was established that reduction on supply chain costs has been achieved a result of e-procurement practices. Moreover, service delivery has been enhanced because of e-procurement practices credibility has been achieved by advertising tenders online because of e-procurement practices. There is competitiveness in bidding and sourcing as a result of embracing e-procurement practices, identification of suppliers has been made easier as a result of e-procurement practices. Buyer and seller relationship has improved as a result of e-procurement practices, time taken to complete the procurement process has reduced as a result of the use of e-procurement practices

and that the requisition process for products and services is now faster due to the use of e-procurement practices.

5.3 Conclusions

From the analysis of the findings, there is a significant relationship between e-procurement implementation and performance commercial state corporations. Statements such as reveal this that through e-procurement implementation, there is a reduction on supply chain costs has been achieved a result of e-procurement practices, service delivery has been enhanced as a result of e-procurement practices credibility has been achieved by advertising tenders online as a result of e-procurement practices. There is competitiveness in bidding and sourcing because of embracing e-procurement practices. Identification of suppliers has been made easier because of e-procurement practices. Buyer and seller relationship has improved as a result of e-procurement practices, time taken to complete the procurement process has reduced as a result of the use of e-procurement practices and that the requisition process for products and services is now faster due to the use of e-procurement practices.

5.4 Recommendations

The study develops recommendations from its findings and conclusions. The role of e-procurement in the purchasing function cannot be overemphasized because it is crucial for value addition, more particularly to the clients in comparison to focusing on the operations of an organization. For state corporations to reap maximum benefits from the procurement process there is need to invest in the required equipment, personnel and knowledge to facilitate the e-procurement process.

Advancement of technology within organizations is significant as it helps in sharing of information, which in turn leads to development of distant marketplaces. Though there is a cost incurred in adopting and embracing e-procurement, the savings accruing outweigh the costs incurred. Consequently, commercial corporations are advised to invest in e-procurement as a means of reducing operational costs.

Findings of the study revealed that that the introduction of e-procurement by commercial corporations has had substantive positive implications. Such advantage of e-procurement include reduction on supply chain costs has been achieved a result of e-procurement practices, service delivery has been enhanced as a result of e-procurement practices and that credibility has been achieved by advertising tenders online as a result of e-procurement practices. Commercial state corporations should endeavor to come up with information systems as a technique of keeping abreast with the changing technological advancement. Therefore, there is need for them to budget for costs that come with the adoption of new technology as a means of ensuring the cost of operation is maintained low.

5.5 Limitations of the study

The research met with various challenges when conducting the research that included the fact that the commercial state corporations ordinarily do not want to give information due to client confidentiality. The findings of the study may not be generalizable to other organisations in Kenya to differences in social, political and economic environments in different parts of the country. In addition, some of the respondents would not find the subject to be of interest. Additionally, some respondents would not want to give the

information as they considered it of competitive importance. Time limitation made it impractical to include more respondents in the study. This study was also limited by other factors in that some respondents may have been biased or dishonest in their answers. However, the researcher did look for contradictions in the information given and no inconsistency were found.

5.6 Suggestions for further study

From the analysis of the findings, it can be suggested that study should be conducted looking into the factors that influence e-procurement strategy on performance commercial state corporations. Others various ways of collecting data, different study design should be employed to see if such results would be got or if there will be variation. Similar research should be carried out in private sector organizations so as to see whether the same results will be achieved.

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APPENDICES

Appendix I: List of Commercial State Corporations in Kenya

S /No.	Commercial State corporations	Sector
1.	Agro-Chemical and Food company	Agriculture, Livestock & Fisheries
2.	Kenya Meat Commission	Agriculture, Livestock & Fisheries
3.	Muhoroni Sugar Company Ltd	Agriculture, Livestock & Fisheries
4.	Nyayo Tea Zones development Corporation	Agriculture, Livestock & Fisheries
5.	South Nyanza Sugar Company Limited	Agriculture, Livestock & Fisheries
6.	Chemilil Sugar Company Ltd	Agriculture, Livestock & Fisheries
7.	Nzoia Sugar Company Ltd	Agriculture, Livestock & Fisheries
8.	Simlaw Seeds	Agriculture, Livestock & Fisheries
9.	Fisheries Development and Promotion Service (new)	Agriculture, Livestock & Fisheries
10.	Kenya Wildlife and Forestry Conservation Service	East African Affairs, Commerce & Tourism
11.	Kenya National Trading Trading (KNTC) East	East African Affairs, Commerce & Tourism
12.	Kenya Safari Lodges and Hotels Ltd East African	East African Affairs, Commerce & Tourism
13.	Golf Hotel Kakamega East African	East African Affairs, Commerce & Tourism
14.	Kabarnet Hotel Limited East African	East African Affairs, Commerce & Tourism
15.	Mt Elgon Lodge East African	East African Affairs, Commerce & Tourism
16.	Sunset Hotel Kisumu East African	East African Affairs, Commerce & Tourism
17.	Jomo Kenyatta Foundation	Education, Science & Technology
18.	Jomo Kenyatta University Enterprises Ltd	Education, Science & Technology

19.	Kenya Literature Bureau (KLB)	Education, Science & Technology
20.	Rivatex (East Africa) Ltd	Education, Science & Technology
21.	School Equipment Production Unit	Education, Science & Technology
22.	University of Nairobi Enterprises Ltd	Education, Science & Technology
23.	University of Nairobi Press (UONP)	Education, Science & Technology
24.	Development Bank of Kenya Ltd	Industrialization & Enterprise Development
25.	Kenya Wine Agencies Ltd (KWAL)	Industrialization & Enterprise Development
26.	KWA Holdings	Industrialization & Enterprise Development
27.	New Kenya Co-operative Creameries	Industrialization & Enterprise Development
28.	Yatta Vineyards Ltd	Industrialization & Enterprise Development
29.	National Housing Corporation	Lands, Housing & Urban Development
30.	Consolidated Bank of Kenya	National Treasury
31.	Kenya National Assurance Co. (2001) Ltd	National Treasury
32.	Kenya Reinsurance Corporation Ltd	National Treasury
33.	Kenya National Shipping Line	Transport & Infrastructure
34.	Kenya Animal Genetics Resource	Agriculture, Livestock & Fisheries
35.	Kenya Seed Company (KSC)	Agriculture, Livestock & Fisheries
36.	Kenya Veterinary Vaccine Production Institute	Agriculture, Livestock & Fisheries
37.	National Cereals & Produce Board (NCPB)	Agriculture, Livestock & Fisheries
38.	Kenyatta International Convention Centre	East African Affairs, Commerce & Tourism
39.	Geothermal Development Company (GDC)	Energy & Petroleum
40.	Kenya Electricity Generating Company	Energy & Petroleum
41.	Kenya Electricity Transmission Company	Energy & Petroleum
42.	Kenya Pipeline Company (KPC)	Energy & Petroleum
43.	Kenya Power and Lighting Company (KPLC)	Energy & Petroleum
44.	National Oil Corporation of Kenya	Energy & Petroleum
45.	National Water Conservation and Pipeline Corporation Environment,	Industrialization & Enterprise Development

	Water & Natural Resources	
46.	Numerical Machining Complex	Industrialization & Enterprise
47.	Kenya Broadcasting Corporation	Information, Communication & Technology
48.	Postal Corporation of Kenya	Information, Communication & Technology
49.	Kenya Development Bank	National Treasury
50.	Kenya EXIM Bank	National Treasury
51.	Kenya Post Office Savings Bank	National Treasury
52.	Kenya Airports Authority (KAA)	Transport & Infrastructure
53.	Kenya Ports Authority (KPA)	Transport & Infrastructure
54.	Kenya Railways Corporation (KRC)	Transport & Infrastructure

Source: Presidential Taskforce on Parastatal Reforms (2015)

Appendix II: Questionnaire for the respondents

(To be filled by staff in the procurement department)

The role of this study is to examine implementation of e-procurement on the performance of commercial state corporations in Kenya. Your opinion shall be kept confidential as the study is meant for academic purposes. You should not indicate your name. Answer by writing in the spaces provided or by ticking in appropriate box.

SECTION A: GENERAL INFORMATION

- i. Gender: Male Female

- ii. Age category of the Respondent 18-25 26-35 36-45 Above 45

- iii. How long have you worked in the corporation 0-2 3-5 6-10 Above 10

- iv. What is your job title.....

- v. What is the highest level of education you have completed?
High school or equivalent
Vocational/technical school
Bachelor's degree
Master's degree
Doctoral degree
Professional degree
Other (please specify).....

- vi. What's the name of your state Corporation.....

- Vii. Which Ministry does your state corporation fall under

SECTION B: E-PROCUREMENT IMPLEMENTATION

Kindly indicate the extent to which your organization has implemented each of the following methods of e-procurement. Use the scale of: 1 – 5 where: 1 = No Extent; 2 = Small extent; 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

E-Tendering:	1	2	3	4	5
Advertisement of tenders are done online					
Registration of suppliers is done via the internet					
Request for proposals is done online					
The corporation responds to the suppliers via the internet					
The company evaluates and automates the tenders online					
E-catalogue	1	2	3	4	5
Products and services are listed online					
Purchase and payment of products is done via the internet					
E-invoicing	1	2	3	4	5
Suppliers can send their bills and invoices online					
Quotations of prices for products ordered can be done via the internet.					
E-auction	1	2	3	4	5
Products to be auctioned are listed online					
Payment of the auctioned goods is done via the internet					
Buyers can submit their bids online					
E-sourcing	1	2	3	4	5
Identification of suppliers is done online					
Suppliers can express their interest to supply online					
Quotations from suppliers is received online					
Prequalification of suppliers is done via the internet					
E-markets	1	2	3	4	5
Products and services are displayed on market sites					
The corporations markets their products and services online					
E-informing	1	2	3	4	5
Pre-qualified suppliers are notified online					

Requisition of orders is done via the internet					
Tenders are displayed via the internet					

SECTION C: RELATIONSHIP BETWEEN E-PROCUREMENT AND THE PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA.

To what extent has the commercial state corporations performed as a result of implementing e-procurement. Please indicate for each procurement performance measure on a scale of 1-5 where: 1 = No Extent; 2 = Small extent; 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

PERFORMANCE OF COMMERCIAL STATE CORPORATIONS	1	2	3	4	5
Reduction on supply chain costs has been achieved a result of e-procurement practices.					
Service delivery has been enhanced as a result of e-procurement practices					
Credibility has been achieved by advertising tenders online as a result of e-procurement practices					
There is competitiveness in bidding and sourcing as a result of embracing e-procurement practices.					
Identification of suppliers has been made easier as a result of e-procurement practices.					
Buyer and seller relationship has improved as a result of e-procurement practices					
time taken to complete the procurement process has reduced as a result of the use of e-procurement practices					
Requisition process for products and services is now faster due to the use of e-procurement practices					

THANK YOU VERY MUCH FOR YOUR TIME