E-PROCUREMENT AND PERFORMANCE OF GOVERNMENT MINISTRIES IN KENYA

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DECLARATION

This research proposal is my original work and has not been submitted for the award of a degree or any other qualification in any other University.

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

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DEDICATION

To my dear husband, child, parents and sisters for their encouragement and moral support during this period of the study.

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ABBREVIATIONS AND ACRONYMS

PPOA	Public Procurement Oversight Authority
IFMIS	Integrated Financial Management Information System
B2B	Business to Business
ICT	Information and Communication Technology
ABC	Activity Based Costing
EVA	Economic Value Analysis
EIS	Executive Information System
SPMS	Strategic Performance Measurement System
KPI	Key Performance Indicators
PPDA	Public Procurement and Disposal Act
P2P	Procure and Pay
TCE	Transaction Cost Economics
UK	United Kingdom
KRA	Kenya Revenue Authority
RBT	Resource Based Theory

ABSTRACT

The Kenya government through the National treasury launched electronic procurement (e-procurement) in government ministries with the aim of achieving transparency and accountability in the use of public funds. However the actual impact of e-procurement implementation on performance of organizations has not been wholly established by the existing literature. This study sought to establish the impact on organizational performance and challenges encountered through the implementation of e-procurement in the Government Ministries of Kenya. The study used survey design in conducting the study where all the ministries in the National government were studied. The target population consisted of users of the e-procurement system in all the 20 ministries. Primary data was used as the data collection method in this study, where structured and unstructured questionnaires were issued out through the drop and pick later method. Data collected was described through the descriptive statistical tools. This included tables, mean and standard deviation. Information on the extent of e-procurement implementation in government ministries, effect of e-procurement on organizational performance was analyzed through descriptive statistics. Regression and coefficient of determination were applied to establish the association that exists in both electronic procurement practices and operation in government ministries. The study found out that e-procurement had a significant impact on performance of government ministries. The study recommended that E-procurement is supposed to be adopted to aid the management staff appreciate the effect of these program. The study also recommended that the administration should adopt quantitative and qualitative features altogether in making their decision and most viable and inter-linked e-procurement policies and practices throughout the group to enhance cooperation.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Organizational functioning largely depends on the nature of procurement used. It entails service and property acquisition (Ebrahim, 2010) Today procurement is viewed as important part of management that supports the strategic objectives of an organization. It performs three broad functions of, maximizing efficiency in transactions and reporting; supporting supplier involvement and contracting processes; long term value addition that can lead to bottom line improvements (Young & Green, 2011).

The much pressure and demand to attain effectiveness, transparency and efficiency in delivery of excellent services , has become a crucial issue in public sector management today (Ancarani, 2008).Government of Kenya has undertaken various procurement reforms to harmonise the processes of procurement in the public sector, despite which, cases of anomalies such as, inefficiency, high cost of projects, discriminative selection and award of contracts, procurement delays caused by bureaucracy, equity issues, openness in the procurement process, are still being reported in public sector (GOK, 2013). PPOA Interim Report (2009) highlighted strategies to establish e-procurement in entire public firms in the country as means of cutting on corruption and shortening delays in tendering. Conferring to the report, the programme was planned to be begin in 2013 after the pilot survey comes to an end. The scheme that is attached to IFMIS was rolled out in August 2014 (Kosgey, 2014).

Chitkara (2005) on the other hand, defines performance as the level of achievement of activities undertaken. These activities relate to set out objectives that form the parameters of the project. Kakwezi and Nyeko (2012) assert that performance standards are an avenue for provision of procurement information that is objective and not biased which can assist in decision making when adopted. According to Panda and Sahu (2012) encouraging stakeholders to work towards their achievement requires objectives for e-

procurement to be clearly spelt out, measurement of performance set out and course of action for amendment be implemented.

1.1.1   E-Procurement

Rayport and Jaworski (2002) defined e-procurement as B2B software that has internet functions; requisition, approval, catalogue, control, receiving, payment processes. It allows smooth buying of goods and services by organizations and ability of suppliers to supply goods and services in accordance to the terms and conditions stated in the local purchase order at the right time, place and quantity.

To eradicate matters concerned with corruption in government procurement, ICT can be of great purpose to reduce financial wastage by enhancing good performance (Jennings, 2001). Khanapuri, Nayak, Soni, and Sharma (2011) suggest that corporate procurement can be enhanced through e-procurement yielding profits, establishing good procurement controls. E-procurement also contributes to reduced lead time, procurement cost and enhanced transparency (Bof & Previtali, 2010) The transfer of procurement functions from manual processes to internet use has great impact of reducing cases of corruption in public sector procurement (Panda & Sahu, 2010) Cost benefit was the main driver among other benefits of, transparency, better supplier-buyer relations, streamlined buying process that formed the basis to implement e-procurement (Sophonthummapharn & Parida, 2006).

In Kenya, the Public Financial Reform Management (PFRM) Strategy (Paper 2001-2006) proposed computerization in addition to combination of key functions of the government like the accounting, human resources payroll, budgeting and procurement. Transparency, ease of presentation and good financial management were mentioned among the advantages (GoK, 2001). The National Treasury is Government department which is leading the transformations in the the public financial management .Contained in the ministry is a department known as the Integrated Financial Management Information System (IFMIS) whose objective is leading, managing and designing, the IFMIS re-engineering process in entire government agencies, government departments and county

governments. The long-term Plan for government of Kenya IFMIS (2011- 2015) gave idea on the growth of the IFMIS. At this time, the system is undergoing re-engineering with the goal of improving the management techniques and presentation of financial information and data.

1.1.2   Organizational Performance

As per Richard et al. (2009) performance of an organization is how well objectives are achieved in an organization. It consists of Financial, Product market performances and the Shareholder return. Armstrong and Baron (2015) described firm performance as strategic and integrated approach that increases the effectiveness and capabilities of teams and individual contributors. They added that effective delivery of strategic and operational objectives can be enhanced by monitoring and aligning employee performance to objectives thence improving firm`s competitiveness. Direct financial gains that could be related to an organizations performance include; sales growth reduced organization costs and reduced project overruns among others.

Benefits of performance for an organisation can be pulled and enhanced through use of technology innovations especially e-procurement (Ramayah, Zbib, Jantan and Koh, 2006). Brush (1992) viewed organization performance as a field entailing the financial measures and non financial elements such as satisfaction of employees and social achievements. This study looked at both the financial aspect of cost reduction as well as the non financial aspects of performance. To achieve organization performance benefits there is need to have KPIs which are often numbers, but will differ from business to business. KPIs are vital means for firms to be able judge how well they are doing. These indicators allow firms to identify some of the critical factors, provide standardized way of determining whether goals, targets and objectives are being met.

1.1.3   Government Ministries in Kenya

The Kenya National Government is authorized to act based on the legal constitution in ensuring the protection of the safety and wellbeing of the citizens. The government

structure is split into two namely administrative and economic structures which are coordinated jointly (Mutui, 2014). The Government not only focuses on efficiency and effectiveness but also ensuring accountability and interactive access of information on public expenditure by the public and improvement to service delivery to internal customers (employees). To achieve this much attention is given towards the procurement practices and operations of the state corporations (GoK, 2005). The Government is run by ministries of which there are 20 ministries which are headed by the cabinet secretaries (GoK, 2014). The ministries mandate is formulating financial and economic policies, developing and maintaining both stable fiscal and monetary policies which promote socioeconomic advancement in all the government sub sectors (Mutui, 2014).

According to GOK (2015) the government ministries coordinate preparation of the annual national budget in the government units. They are set up so as to gain economic benefits and social order. However, it is argued that the only way to ensure economic benefits is to improve quality of management and increase productivity levels. Raising productivity levels requires governments to source for potential manpower, financial and material resources. According to PPDA (2015), information and communication technologies may be used in procurement and asset disposal proceedings.

1.2   Research Problem

Procurement in the public sector is essential for promoting service delivery to the public. However, there are constraints which affect smooth performance. Procurement is deemed to be vulnerable to corruption which leads to waste, reduced service quality and life enhancing opportunities. In spite of the Governments policies in place to enhance the procurement system; there are still traces of sub standard goods, services and works. Implementation of recommended performance standards if not properly done results in unnecessary high cost of operation, uncoordinated business activities, unmet domestic policy goals, and inability pull and maintain professionals (Chimwani, Iravo & Tirimba, 2014).

Information communication technology allows duties, authority, and control to be distributed. An organization is in a position to redefine itself given the mission, vision and culture (Morton, 2010). Panayiotou, Gayialis, and Tatsiopoulos (2011) carried out an analysis of the procurement processes of the Greek government. The study identified tangible benefits that included reduction in supply, tender costs and savings in lead time. The intangible benefits encompassed organization and process improvements. The study was done by Yen and Ng (2013) on the impact of Electronic trade on Purchasing. In their study they concluded that information technology had been implemented to promote worldwide competitiveness of various industries. They argued that procurement migration process from manual to internet use is determined size and nature of the firm as well as the companies' requirements. They came up with a theory on the effect of study of e-trade on the supply and purchases.

Mambo (2015) conducted a survey on factors influencing the adoption of E-procurement in the national government and noted that executive team is dedicated to e-procurement implementation, e-procurement is influenced by information technology, staff training and supplier capacity Otieno, Muthoni and Mungai (2013) conducted a study among chosen organisations in Kisii Town, Kenya. They looked at the factors affecting use of e-procurement. The study concluded that all variables under the study were significantly important. Kasisi, Mwangangi and Mwangi (2014) conducted a study of the factors influencing operations of the procurement function in Government organizations. They found out that e-procurement had no significant effect on the performance of procurement function. Muinde (2014) carried out a series of research about the role of electronic supply and procurement in improving the performance in the procurement of saving and credit cooperatives at Kitui teachers sacco. The findings established that saccos adopt customer service effectively on e-procurement to achieve success. E-business electronic data interchange, internet control, good governance influence procurement in saccos. Muhia (2015) did a research on implementation of e-procurement and procurement performance at Kenya Revenue Authority. He found that e-procurement positively influenced procurement performance at KRA. E-procurement is crucial because it transformed the formerly looked down traditional function into competitive

tool. He noted the internet through e-procurement had made e-procurement effective and efficient thus influencing procurement performance at KRA.

The above studies did not focus on e-procurement and performance of Government Ministries in Kenya and the challenges of implementing e procurement. Informed by this knowledge gap, this is majorly aimed to answer these questions: To what extend has e-procurement been implemented in government ministries? What is the effect of e-procurement on performance of government ministries? What challenges are being faced in the implementation of e- procurement by government ministries in Kenya?

1.3 Research Objectives

The main objective of this study was to establish the significance of e-procurement on performance in government ministries.

Specific objectives were:

i. To determine the extent to which e-procurement has been implemented in government ministries in Kenya.

ii. To determine the effect of e-procurement on performance in government ministries in Kenya.

iii. To establish the challenges experienced in the implementation of e-procurement in government ministries in Kenya.

1.4 Value of this study

This survey is very crucial to decision makers in government ministries by highlighting the association among performance of e-procurement; challenges encountered in implementation of e - procurement and how to address them. These findings are essential for; forecasting, formulating and implementation of an effective public sector procurement system that will align itself to the national economic strategy.

To Future Researchers and academicians, the study will add knowledge to e-procurement and performance discipline, and would also help them in carrying out further and related studies in public procurement as this study will avail critical information in formulation of policies and regulations with its alignment.

Management of various public sector and private institutions will benefit from the research to identify key factors to consider in implementation of e- procurement in achieving optimal performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This particular section reflected on theoretical and practical work performance of electronic procurement in the organizations. It encompassed literature on the resource-based theory, transaction cost theory, forms of e-procurement, e-procurement and organizational performance, performance measurement and challenges of e-procurement implementation. The empirical literature and its summary followed with the conceptual framework concluding this section.

2.2 Theoretical Literature Review

This section discussed the Resource based theory and Transaction cost theory applicable in the study.

2.2.1 Resource-based theory

According to Lambert (2005) Resource base theory states that a competitive advantage for a firm can be coined on its resource base. The resources of the organization go beyond finances and materials to encompass methods and processes. The internal capacity of an organization matters a lot. When an organization has requisite resources, it has capacity to innovate and deal creatively with arising challenges in the market.

The search for Information Technology is crucial in supply chain management and procurement (Pressutti, 2003). In areas of Information Technology, RBT has been identified as new set up that can analyse the sources and sustainability of Information Technology (Baily, 2008). According Caridi *et al.* (2004) Information Technology can be measured as economic rent that derives from strategic resources. Bales and Fearon (2006) View Information Technology as sustainable because the resources upon which IT is based are scarce, valuable, cannot be imitated, and are non-substitutable. Further, Pearcy and Guinipero (2008) reiterate that RBT is based on the concept that the resources controlled by firms are different and relatively immobile.

In this study, e-procurement was viewed as an approach that optimizes use of available resources to enhance efficiency and effectiveness in procurement and hence deliver a competitive advantage. The competitive advantage in this case manifests in terms of improved lead times, cost efficiency and customer satisfaction. E-procurement leads to better coordination and use of procurement resources towards seamless procurement operations that enhance Organizational performance.

2.2.2 Transactional Cost Theory

In this research Cost of Transaction Economics provided a useful prototype. Transaction cost economics theory broadly involves the fields of law, economics and organization and seeks to explain governance of transactions based primarily on the assumptions of bounded rationality and opportunism (Erick, 2006) with the changing perception on the role of governments, administrative functions which once were a preserve of government have been transferred to other players. Antonio (2004) opined that public procurement is a rules bound function with specific timelines dictated by the law. While making decisions, those involved usually have limitations on information. Reforms in the public procurement translate to change from manual procurement processes to internet based procurement systems. These changes focus majorly on organization and legal structures they are about transforming the manual system to modernized, faster, effective, and structures for carrying out day to day procurement business.

According to Basheka (2009) Reforming means transforming the features of systems and tailor making them to fit to the current changing needs. During reforms, systems with opacity are changed to allow for transparent ones, those lacking integrity are transformed to enhance integrity, where in the past responsibility for procurement actions could not be pin-pointed, clear principles of accountability now become the vogue, where there had been corruption, honesty now prevails and generally wrongdoing and weaknesses become exceptions rather than the rule. Public procurement reform is not a single activity. It is a process, implying continuous assessment and reviews.

2.3 Forms of E- Procurement

Presented in this part is the literature on forms of e procurement that are explored in this research include electronic tendering, electronic ordering, e- tendering, electronic informing as well as electronic sourcing.

2.3.1 E- Ordering

According to Mabert *et al.* (2010), procurement function automation helps in reducing various costs for firms. When an organization adopts e-procurement, the amount of money that it saves cannot be overlooked. It targets at minimizing the operational overheads. Targett and Powell (2009) advocate that to reduce the costs in organizations, information technology should be adopted and staff trained on the use of systems. Of crucial and better performance of the supply chain management in government ministries, there should be proper identification of need and good selection of the best software.

Xu et al. (2008) affirmed that compliance with e-procurement system significantly aids in reduction of the cost of transaction by enhancing greater accuracy level in the appropriation, billing, electronic documentation payment and system computerization. Evans and Wurster (2000) emphasized that as a result of transactional and process efficiencies major economies of information can be realized, a major one being cost improvements. Croom (2000) found out that efficiencies come about through the desire by buyers for lower prices from suppliers; reduced lead time through improved management information that allows for better decision making and heightens the rate of procurement process

2.3.2 E- Sourcing

E-Sourcing is defined by Aberdeen (2007) as use of internet and other related services as a decision support tool to detect, evaluate, negotiate and build up supplier and customer relationships that will effectively and efficiently aid supply chain and procurement processes.

Objective of e-sourcing is to cost effectively identify vendors, goods and works that can be bought at the best lowest total cost and at the same time achieving organization objectives. It assists organizations to enhance knowledge and train other members of staff in the entity, on the use of proven sourcing methods. E-sourcing can lead to process efficiencies of reduced overheads, reduced lead time and can allow buyers through the internet technology to identify across spatial boundaries a set of new suppliers for a certain category of requirements (Aberdeen, 2007). According to Boer (2002) increased flexibility in decision making and lower prices are benefits that can be exhibited from the practice of e-sourcing.

2.3.3 E- Tendering

Tendering is a purchasing process that involves the invitation of potential suppliers to make an offer to a firm specifying the price at which they are willing to sell and terms and conditions for sale. Which on acceptance by the buyer, is deemed to be the foundation of the agreement. The standard procurement procedures are required by firms in every stage of its procurement cycle. This includes supplier selection, negotiating of the contract, placement and payment of orders. The procedures are essential in controlling expenditure, ensuring accuracy in approvals and reducing overpayments. For approval of items costing higher than a specified price, tasks are best separated and senior managers need to be involved in order to enhance procurement performance (Lysons, 2006).

E–Tendering attracts bidders from different walks of life to submit their bids for a tender or even express interest to pre qualify. Suppliers are able to download tender documents and to do an online return. This in turn promotes competition, transparency and efficiency in the tendering process for both the organization and suppliers (Aberdeen, 2007).

2.3.4 E -Reverse Auction

According to Smart (2010) Reverse auction is real time, an online bidding process where the winner is the lowest bidder. The suppliers are given the contract by the customers who bid for them to get the business. The lowest bidder in this case is considered to be the winner. It is a strong negotiating weapon that enables several interested parties to bid and others to sell. This gives room to competition, increasing the competitiveness and improving the price at which goods and services can be sold. According to Attaran and Attaran (2002) to drive purchasing costs down, organizations are using reverse auctions.

E-reverse auction is probably the e-procurement tool creating the most dramatic changes to buyer /supplier relationships (Sivertsen, 2006). Studies indicate that when adopting E-procurement auctions, one can expect savings in time, quality, and money (Beall, 2003). E-reverse auction enables the buying companies to do business with suppliers who have better conditions and is offering the lowest price (Boer, 2002).

2.3.5 E- Informing

The electronic information as a dimension of electronic procurement is at no cost connected to any stage in the process of procurement. E-informing include searching and disseminating information on purchasing from customers and sellers through the internet (de Boer, Harink et al., 2002). Information sharing between buyers and suppliers is essential for ensuring suppliers fulfill their orders to the required specifications (Ho, Tai et al., 2008).

E-informing involves collection and dissemination of purchasing information amongst sellers and buyers in an organisation (Boer, 2002).

2.4 E-Procurement and Organisational Performance

Weele (2006) stated a relationship exists between performance, procurement process, efficiency and effectiveness. Through organisation performance a firm is able to find out how far it has progressed toward achievement of its goals. It can then identify areas of

weaknesses, strength, and decide on future initiatives that can lead to performance improvements.

Rajkumar (2001) noted that e-procurement has developed as a main section in the management of Supply Chain since the last decade. It has changed the way goods and services are being procured and strategically forecasted that e-procurement will allow purchasing resources from normal operation processes to planned sourcing.

2.5 Performance Measurement

According to Gunasekaran et al. (2001) Designing procurement measures and a procurement measurement system is crucial for conversion of individual business units into fully operational supply chain. This has led to the focus of supply chain measures and overall performance. Fauske et al. (2007) suggested that the initial step in tackling issues that abhor procurement measurement system implementation is designing supply chain strategies and processes as well as developing information communication technology tools. Christopher (2005) stated that procurement performance measures require continuous monitoring. Organization performance and achievement of set out strategies and goals can be effectively driven and measured through KPIS. The balanced scorecard is essential as a communication tool, for adding procurement value, engagement and maturity (Lindstrom, 2010).

To monitor and record savings accrued through e-procurement, Eakin (2003) suggested establishment of a savings capturing process, a spend analysis to identify quality of data arising from transactions. Evans (2004) states that central to matching firms operations with strategic direction, is selection of correct measures and outcomes. Therefore effective design of performance measurement systems should be undertaken. This includes Companies using (SPMS) for strategy implementation and accomplish the improvement of the drive performance. According to Webb (2004),the only way of measuring strategic performance is through setting up mechanisms to determine the viability of goals set by the and whether they are in line with the firm's long term plans.

2.6 Challenges of E-Procurement Implementation

There are risks involved in implementation of e-procurement. Failure to implement key strategies important for improving procurement process. By improving procurement practice several benefits associated with e-procurement may be achieved (Puschmann & Alt, 2005). Insufficiency in the evaluating impact of implementing the system of electronic procurement, results into over investment of the tools of electronic investment that may not result into any benefit. He also identified challenge accepting e-procurement by internal users. He states that this risk comes about when users have not been adequately consulted and trained on the use and benefits achieved from adoption particular tools. On the other hand suppliers may not very well cooperate due to lack of training or even lack of knowledge on use of e-procurement system (Premkumar, Ramamurthy and Nilakanta, 2004).

A major concern in e-procurement implementation is impact of technological errors and failures , that are often overlooked (Sun et al., 2012) He states that though tools such as e-signature, e-notice have a significant effect on reducing lead time, incidences of security, costly errors and authenticating bidders may arise. This then pushes up the implementation costs since much of ethical behavior is demanded from the vendors who may be pressurized to compromise on their integrity. The public agency is charged with a responsibility of making sure that the inbuilt procurement mechanism is in the interior context of the Public Sector Act of Procurement.

2.7 Empirical Literature Review

Croom and Brandon (2009) explored lessons learned from the implementation of e-procurement United Kingdom public sectors. They identified issues that are essential and arise from e-procurement implementation. External price and internal cost efficiencies, finance system integration, IT infrastructure and project management. The finding was that realizing the full potential of e- procurement advances in the field of public procurement is a challenge in itself. The survey was based in United Kingdom but not in Kenya.

Smart (2010) examined role of e-procurement in purchasing management. Results indicated that buyers and suppliers are driven by the ancient procurement systems and that integration among firms was not affected. Conclusion of his study was that e-procurement had no determining effect on purchasing management. The study however focused on purchasing management but not the organization as a whole.

Sharifai, Mbaraka and Agaba (2013) found out in their research the connection between electronic procurement and the performance of the service organizations that were selected. The study employed a descriptive survey design with quantitative and qualitative approaches. It established e- procurement has a significant relationship with performance of service organizations. This conclusion came because IT has been embarrassed in all spheres of life to an extent that almost everything revolves around use of information technology. This research mainly focused only on service organizations in Uganda not in any other country.

Shale (2014) conducted the research to establish the importance of electronic procurement strategy on the Kenyan state corporations' performance.. The study used cross sectional survey research design it established that there was positive significant relationship among the components of e-procurement strategy. However the study limited itself to state corporations only.

Ngunyi (2014) focused his research on procurement practices and the performance of parastatals. Descriptive cross sectional research design was used. The study found that procurement practices being employed by the firms are not conclusive but instead the firms selectively employ only a few of the practices. The study focused majorly on procurement practices of parastatals in Kenya.

Rotich (2015) analyzed the relationship between the electronic procurement and the level of output I the county government's performance. The findings showed that Enterprise Resource Planning was a significant determinant of change in procurement performance. To result into better performance, county governments must make use of e-procurement

in any stage of the cycle. He realized that adoption of ERP system improved inventory the use and control of inventory. It also led to faster transportation of resources to the main warehouses in the county government. The study was limited to the county governments in Kenya.

2.8 Summary of Literature Review

The table 2.1 below indicates the summary of the empirical literature and the knowledge gap that the current study will address.

Table 2.1: Summary of Literature Review and Knowledge Gap

Scholar	Study focus	Findings	Knowledge Gap
Croom & Brandon (2009)	Implementation of e-procurement in United Kingdom public sectors.	Realizing the full potential of e -procurement advances in the area of public procurement was a challenge in itself.	Study was based in United Kingdom but not in Kenya as this study is.
Sharifai , Mbaraka and Agaba (2013)	E-Procurement and performance of service organizations in Uganda.	A significant relationship exists between E-procurement and service organizations.	Study focused on Ugandan service organizations not Kenyan service organizations.
Ngunyi (2014)	Procurement practices and the performance of parastatals in Kenya	Procurement practices being employed by the firms are not conclusive but instead the firms selectively employ only a few of the practices.	The study focused majorly on procurement practices of parastatals
Rotich (2015)	Analysed use of e- procurement on performance of procurement functions in county governments in Kenya	The ERP system implementation has led to the improvement of Inventory	Study focused on use of e- procurement in County government but not in

		control and usage in the county government and enhanced pricing of materials in the main warehouses of the county government. ERP is a significant predictor of change in procurement performance.	government ministries
Shale (2014)	Made a critical analysis in the importance of electronic procurement on the production of Kenya's corporation	He established that Components of e-procurement significantly affect performance in state corporations.	The study focused on State Corporations but not government ministries. It focused on customer service level among other factors
Smart (2010) ,	Explored the role of e-procurement in purchasing management.	e-procurement only acts as a helper to the effective functions of management	The study analysed management of the purchasing function but not the organization as a whole.

Source: Author (2016)

2.9 Conceptual Framework

An outline of concepts which are combined so as to establish the association between the research variables was shown in the conceptual framework (Mugenda & Mugenda, 2003). The conceptual framework in figure 2.1 below shows that these factors may lead to the successful implementation of e- procurement and influence the organizational performance.

Figure 2.1 Conceptual Framework
Independent Variables   **Dependent variables**

| E- Ordering |

| E- Sourcing |

| E- Tendering |

| E- Informing |

| E- Reverse Auction |

| E- Informing |

Organizational Performance
- Procedure lead time
- Quality
- Competitiveness
- Cost
- Transparency
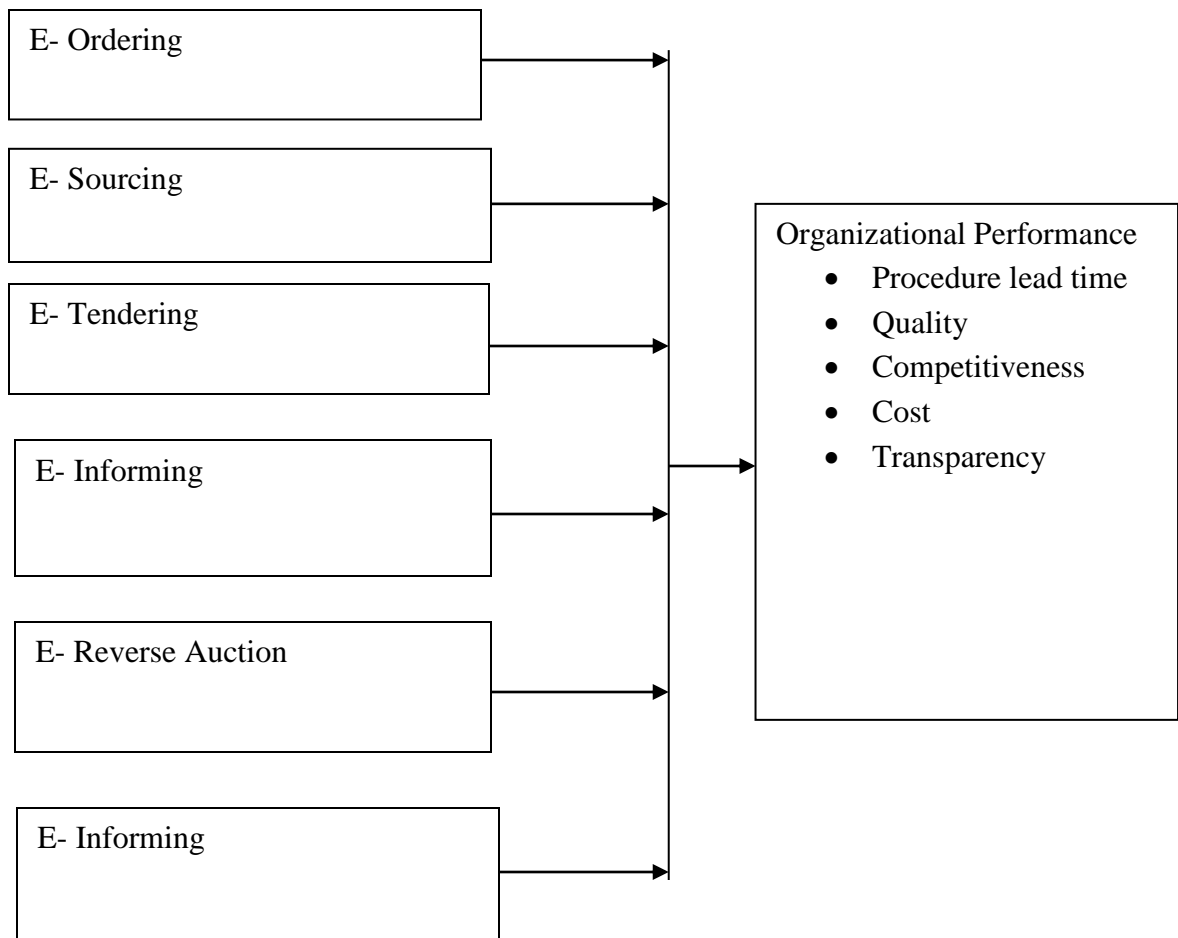
Source: Author (2016)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Discussed in this chapter is the survey plan employed, design of sampling, population of the study, techniques of data analysis and data collection methods applied.

3.2 Research Design

The survey plan was adopted in this research to assist attain the objectives of the study. Survey design is most suitable since it involves getting views on e-procurement and its influence on performance of government ministries. It will assist the researcher obtain a considerable amount of information which can be generalized to the whole population. (Kothari, 2004)

3.3 The Population

The study focused on people from twenty (20) government ministries in Kenya (GOK, 2015) as on (Appendix 11). Census is proposed given the small population size of the government ministries in Kenya. The census approach will ensure obtaining substantial and credible information from a small population (Mugenda & Mugenda, 2003).

3.4 Data Collection

The chief data collected came from self-administration of feedback forms (questionnaires), which had both open and closed ended questions, to supply chain officers trained in handling the e-procurement system (IFMIS). The feedback forms were split into three parts. Section A contained questions on extent of e-procurement implementation. Section B contained questions on effect of electronic procurement on operations in Kenya's government ministries. Section C had questions on challenges faced in the implementation of e -procurement in government departments in Kenya. The questionnaires were dropped and pick later.

3.5 Data Analysis

The data was revised for wholeness, consistency and accuracy. It was then categorized by assigning code and cross tabulated to allow the statistical analysis of the reactions. Data pertaining to demographic information was analysed using frequency distributions and percentage.

Table 3.1 Summary of data collection and methods analyzing data

Aim	Questionnaire's part	Analysis of data
To determine the level to which e-procurement has been implemented in government ministries in Kenya.	Section A	Descriptive analysis
To determine the effect of e-procurement performance within government departments in Kenya.	Section B	Correlation & Regression analysis
To establish challenges experienced in adoption of e-procurement in Kenyan government ministries.	Section C	Descriptive analysis

CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

Provided in this stage is the findings of the survey, discussion of the results and a summary of the analyzed data. Results were presented on e-procurement and performance of government ministries within the country. The objectives to which the study concentrated on include: To reveal the level to which e-procurement has been implemented in government ministries of Kenya, determine effect of e-procurement on performance of government ministries and establish the challenges experienced in the adoption of e-procurement in government departments in Kenya.

4.2 Response Level

The research focused on a sample size of twenty respondents out of which 14 questionnaires were filled up and brought back giving a reaction rate of 70% which was substantive to assist draw conclusions to the study. The response rate was also representative since it was based on the assertion by Mugenda and Mugenda (1999), a reaction level of fifty percent is enough for analysis and reporting; a proportion of sixty percent is better and a reaction rate of seventy percent and above is excellent. The response rate was deemed to be outstanding.

4.3 General information

This study sought information on the length of period respondents had worked for the government ministry, and whether the ministry had adopted e-procurement. When questioned for how long they have been working in the government ministry, 28.6% of all informants reported to have stayed there for 0- 3 years, 35.7% were employed for period of 4 -6 years, 21.4% of all the informants were on job for a period of 7 to 9 years and the remaining 7.1% was equally shared between those who have worked for 10 -12 years and more than twelve years.

When asked whether their ministry had adopted the IFMIS, 100% of all respondents agreed with the statement.

4.4 Adoption of E-Procurement Practices

The informants were to point out the level of E-procurement practices adopted in the government ministry on a scale of 1-5. In which, 1-showed no level; 2-small extent; 3-extent was moderate; 4-extent is large; and 5-extent very large. The results of no extent and small extent were abstracted to signify a parameter having an average score of 0 - 2.5 on the continuous Likert scale; $(0 \leq S.E < 2.4)$. The tally of average extent were taken to symbolize a variable with an average score of 2.5-3.4 on the constant Likert scale $(2.5 \leq M.E < 3.4)$. Then the results of large and very large levels altogether were selected to show a variable with an average score of 3.5 to 5.0 on the continuous Likert scale; $(3.5 \leq L.E < 5.0)$. If the standard deviation is greater than 1.0 it denotes a major difference on the E-procurement practices on the parameter between the respondents.

The table 4.1 below indicate the outcomes of e-procurement practices after analysis.

Table 4.1: Adoption of E-Procurement Practices

E-Procurement Practices	Mean	Std dev
E-Requisitioning	3.87	.89
E-Tendering	3.90	.78
E-Catalogue	3.71	.91
E-Invoicing	3.91	.80
E-Auction	3.73	.81
E-Sourcing	4.00	.76
E-Reverse Auction	3.67	1.01

Source: Research data, (2016)

The results after analysis in the table 4.1 above show that the E-procurement practices adopted by the government ministries includes: E-requisitioning with (*M=3.87, SD=0.89*), e-tendering with *(SD=0.78, M=3.9)*, e-catalogue with (*SD=0.91, M=3.71*), e-invoicing with(*M=3.91, SD=0.8*), e- auction with (*M=3.73, SD=0.81*), e-sourcing with (*M=4, SD=0.76*), and e-reverse auction with (*M=3.67, SD=1.01*). The findings concur

with the literature that the objective of e-sourcing efficiently determines the combination of suppliers, goods and services that can help achieve organizations objectives at the lowest total cost. It also provides a basis for enhancing and institutionalizing knowledge and proven sourcing methods across an entity.

E-sourcing can lead to process efficiencies of reduced overheads and lead time (Aberdeen, 2007). Also according to Aberdeen (2007) through e–tendering buyers are in a better position to source for suppliers from different localities. The suppliers are in turn able to express interest, bid for tenders in the shortest time possible promoting competition for the tender and providing an efficient, transparent procurement process for both organization and suppliers.

The findings also agree with the literature that reverse auctions are used as a tool for negotiation that enables several bidders to bid and sell to individual buyers and organizations are using reverse auctions to lower the purchase costs. This greatly increases competition and brings down the price (Attaran & Attaran, 2002).

4.5 Effects of e-Procurement on Organizational Performance

The informants were to indicate the level E-procurement influences organizational performance on a ratio of 1 to 5.where 5-extent is very large, 4-extent large, 3-average extent, 2- small level and 1- no extent. The results of medium extent were chosen to indicate a variable with an average score of 2.5-3.4 on the constant Likert scale (2.5≤M.E<3.4). The results of very large extent and large extent altogether were selected to symbolize a parameter that had a mean results of 3.5- 5.0 on the continuous Likert scale (3.5≤L.E<5.0). The marks of small extent and no extent have been taken up to denote a variable which had an average outcome of 0 to 2.5 on the continuous Likert scale (0≤ S.E<2.4). If the standard deviation is greater than 1.0, it suggests a big variation on the effects of E-procurement on organizational performance on the parameter amongst the respondents. The table 4.2 below displays the effects of e-procurement upon organizational performance.

Table 4.2: Effects of E-procurement on Organizational Performance

Effects of E-Procurement	Mean	Std dev
Leads to cost reduction	3.90	.86
Reduced procedure lead times	3.73	.81
Increased procurement Quality	3.92	.72
Increased supplier participation and Competitiveness	4.01	.79
Reduced paper consumption and costs	3.76	.90
Increased Quality and availability of information	3.86	.75
Reducing errors in order transmission	3.68	.96
Reduction in inventory	3.71	.87

Source: Research data, (2016)

The improved performance is reflected through cost reduction with *(M=3.9, SD=0.86)*, reduced procedure lead times with *(M=3.73, SD=0.81)*, increased procurement quality with *(M=3.92, SD=0.72)*, increased supplier participation and competitiveness with *(M=4.01, SD=0.79)*, reduced paper consumption and costs with *(M=3.76, SD=0.9)*, increased quality and availability of information with *(M=3.86, SD=0.75)*, and reduction in inventory with *(M=3.71, SD=0.87)*.

The findings agree with the literature in that E-procurement helps reduce costs because the costs of evaluating tender documents are significantly reduced (Hawking et al., 2004). Through use of software, the number of people required to sift through documents and analyze the tender documents is significantly reduced. Sourcing for suppliers is made efficient with e-procurement. E-procurement significantly helps reduce quality failure related costs. According to Hawking et al. (2004) when the process is automated, all suppliers are subjected to specified criteria by a system. This reduces corruption cases and corruption related costs due to compromised quality.

Also the findings concur with the literature review in that according to Heywood (2002) noted that communication is a critical element that ensures compliance on behalf of the supplier. Through an e-procurement platform, suppliers are enabled to receive continuous information which them helps them become compliant. On the other hand, for the procuring entity, electronic platforms provide an avenue for quickly and efficiently

gathering market intelligence (Heywood, 2002). Because of enhanced capacity to manage inventory at optimal levels, e-procurement platforms help the procuring entity to deliver products on demand basis. The benefits of just in time procuring are not only in reducing inventory costs for the procuring entity but also customer satisfaction due to good quality for products whose quality is affected by storage (Davila et al., 2003).

The findings agree with the literature review in that according to Rankin et al. (2006) internally, e-procurement helps towards centralization of procurement activity. This kind of centralization facilitated by integration software like ERP is important because it reduces the time it takes for information transfer from one department to another (Eadie et al., 2007) The integration of departments enables real time sharing of information hence faster reception, evaluation, approval, and requisition of required supplies in an organization. Even for organizations that have global presence, e-procurement systems enable sharing of information real time without having to wait for months for approvals due to communication delays.

4.6 Challenges facing the adoption of E-procurement

The informants were required to show the level to which they encounter different challenges while taking part in the implementation of e-procurement on a range of 1-5. The ratios mean; 1-no level, 2- the level is small, 3-medium extent, 4- the level is large and 5- the extent is too large. The results of small and no level were chosen to signify a parameter which had a mean totals of 0 to 2.5 on the continuous Likert scale ($0 \leq$ S.E<2.4). the score of both large and too large level had been selected to indicate a variable with a mean results of 3.5 to 5.0 on the constant Likert scale ($3.5 \leq$ L.E<5.0) and finally the outcomes of moderate level have been taken to show a variable having an average results of 2.5 to 3.4 on the permanent Likert scale ($2.5 \leq$ M.E<3.4). If the standard deviation is greater than 1.0, it suggests a major variation upon the challenges facing adoption of E-procurement on the parameter in the midst of informants. The table 4.3 below shows the challenges facing the acceptance of electronic procurement within government ministries

Table 4.3: Challenges facing the adoption of E-procurement

Challenges	Mean	Std dev
Internal end user resistance to procurement systems	3.78	.82
Low/different levels of IT maturity among vendors	3.67	1.02
Supplier adoption	3.71	.87
Top management support	3.70	.91
Security and Authentication	3.93	.79

Source: Research data, (2016)

The results after analysis in the table 4.3 above, the respondents pointed out the possible limitations facing the adoption e-procurement practices in the government ministries as internal end user resistance to procurement systems with *(M=3.78, SD=0.82)*, Security and Authentication with *(M=3.93, SD=0.79)*, supplier adoption with *(M=3.71, SD=0.87)* and top management support with *(M=3.70, SD=0.91)*.

The findings agree with the literature in that According to Premkumar, Ramamurthy and Nilakanta (2004) the fact that users are not adequately consulted on the implementation of an e-procurement tool they will not embrace it fully, posing a common risk.

The challenge of security and authentication is experienced when adopting e-procurement. The finding concurs with the literature review in that computer fraud can be internal or instigated by outsiders. Some fraudulent employees can enter the wrong information into the system thus compromising data integrity. There are physical as well as logical computer security risks. Such logical risks include viruses, Trojans and hackers that lead to corruption of computer files or theft of such files. Once an organization adopts an e-procurement platform, they also have to invest in computer security. Supplier adoption is another challenge faced by the government ministries when adopting the e-procurement practices. The finding agrees with the literature review in that many suppliers are not ICT savvy hence not utilizing the e-procurement platforms.

4.7. Relationship between E-procurement practices and Orgainisational Performance

This survey proposed there exist an association linking the adoption of e-procurement and performance of government ministries. To formulate the model that explains the

association among parameters, Regression analysis was employed. The table 4.4 is a model summary for determining the coefficients.

Table 4.4: A summary of Regression Model

Model	R	R Square	Adjusted R Square	Standard approximation Error
1	.923[a]	.852	.854	.462

Source: Research data, (2016)

The survey strived to look at the level to which dependent parameters are influenced by independent parameters. It was carried out by creating the coefficient of determination shown in table 4.4. The summary of the model was highly substantial (p=0.035) revealing that the model was functional. As shown by the model, "R Square"(coefficient of determination) is an estimate of variation in the dependent variables. That is to mean, coefficients of determination shows the level to which independent parameters affect the dependent parameters as explained in the regression model.

The value of R square from the model was 0.852 pointing out that the percentage of the dependent parameter difference that was shown by the independent parameters was 85.2%. A percentage of this kind shows a good level of forecast. 85.2 percent of the differences in entities performance could be explained by the variations in e-ordering,e-informing, e-tendering, e-sourcing and e-reverse auction, leaving 14.8 percent unexplained (error term).The $F_{(5,8)}=9.211$, P- value of 0.035 (Less than 0.05) infers that the model of organizational performance is meaningful at the 5 per cent significance. The connections among research parameters are shown by R, the correlation coefficient. There existed solid positive association amongst survey parameters with value of 0.930 as shown by results from the sketch above.

The finding captured through the coefficient of determination in the study is proper because as discussed by Omondi and Namusonge (2015), there are other factors that influence organizational performance. Some of the other best practices identified by Omondi and Namusonge (2015) that influence organizational performance are hiring of trained personnel, and use of innovative technology. The table 4.5 below displays outcomes of Anova after analysis

Table 4.5: Analysis of variance

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	9.81	5	1.962	9.211	.035[a]
Residual	1.70	8	.213		
Total	11.51	13			

a. Predictors: (Constant), e-ordering, e-sourcing, e-tendering, e-informing; e-reverse auction

b. Dependent Variable: Organizational Performance

Source: Research data, (2016)

ANOVA findings *(F(5,8)=9.211, P=0.035)* in Table 4.5 indicate that connections exists among the response and predictor parameters. The table 4.5 displays that dependent variable are largely determined by the independent variables. The reason being that the value of P represented by 'sig' shows if the change is big or small. In this research, the ANOVA of the model is very substantial given P=0.035 < 0.05 (meaning the regression representation is well suited for the information).

Table 4.6: Significance of Coefficients

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	.080	.416		.192	.847
E-ordering	.429	.100	.383	4.29	.002
E-sourcing	.040	.014	.157	2.857	.005
E-tendering	.239	.086	.317	2.779	.007
E-informing	.120	.060	.159	2.000	.049
E-reverse auction	.34	.07	.243	.023	.023

a. Dependent Variable: Organizational Performance

Source: Research data, (2016)

In table 4.6, the contribution of each independent parameter is denoted by both the standardized and un-standardized coefficients. The level of significance resulting from contribution by the independent parameters are displayed in the last column. The value of t indicate the possibility that the value of a single parameter in the regression representation is not zero (=0). The smaller the value of t, the higher the chances that the value of the parameter is greater than 0. If the entire independent variables are held constant, the unstandardized coefficients denote the amount to which dependent variable changes with independent variable.

The predictor model means, $\beta_0 = 0.08$, indicate that if the quantity of independent parameters are remain unaltered at zero, organizational operation would be 0.08, $\beta_1 = 0.429$, indicating that a unit change in e-ordering would leads to increase in 0.429 units in organizational performance; $\beta_2 = 0.040$, indicates that a unit change in e-sourcing would give rise to an increase in organizational operation by 0.040 units; $\beta_3 = 0.239$, reveals that a unit change in e-tendering would lead to an increase in organizational operations by 0.239 units; $\beta_4 = 0.120$, indicate a unit change in e-informing would lead to performance

of the organisation increase by 0.120 units; and $\beta_5 = 0.34$, reveals that a unit change in e-reverse auction would lead to a rise in organizational performance by 0.34

Based on the model, e-informing, e-tendering, e-sourcing, e-reverse auction and e-ordering have the highest influence on organizational performance. Eadie et al. (2007) explained that e-sourcing is important because it redefines supplier management and relationships. The e-tendering and e-sourcing platforms are good because from such platforms, suppliers can send information requests and receive feedback that aids tender bid preparation processes (Eadie et al., 2007). These factors could explain why the processes influence organizational performance the most.

The corresponding p-value confirms that the association between e-ordering and organizational performance is statistically significant i.e. p-value=0.002<0.05. The relationship between e-sourcing and organizational performance is also statistically significant i.e. p-value=0.005<0.05. Equally, the relationship between e-informing, e-tendering, e-reverse auction and organizational performance is at the 95% confidence level where p-value<0.05 that is statistically substantial. There exists an important linear relation between e-tendering and organizational performance, e-reverse auction and organizational performance as well as e-sourcing, e-ordering, e-informing and organizational performance.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

E-procurement as described as a business to business application of internet functions that allow buyers in an organization to buy services and commodities, producers to communicate and meet the purchase requests made (Rayport & Jaworski 2002). This chapter provides a summary of findings, challenges faced in e-procurement, impacts of e-procurement practices on organizational performance, adoption of e-procurement practices, commendations, implications of the survey on practice, theory and policy, conclusion, suggests areas for future research and the shortcomings of the research.

5.2 Summary of the Findings

The findings from the study uncovered that government ministries adopt specific e-procurement procedures in the administration of their operations that are directed to its corporate strategy managing their value chain function and these e-procurement practices have greatly contributed to the performance thus creating competitive power in the same government departments by concentrating on efficiency and effectiveness.

The findings concur with literature on other similar studies. It was noted that there exists relationship between procuring well, at the right time, procurement process and performance achieved (Weele, 2006). At this age of very uncertain, sporadic business environment and stiff competition coupled with very knowledgeable customer, government ministries are turning inward, tapping as much value from their core competencies to establish a sustainable competitive edge through operational effectiveness and efficiency to improve the organizational performance.

5.2.1 Adoption of E-procurement Practices

Government ministries purposely implement e-procurement procedures that are directed towards corporate strategy in managing its ministries value chain function. These practices have greatly impacted organizational operations of the government ministries by enhancing effectiveness and efficiency hence yielding competitive superiority in the

same competitive government ministries. The e-procurement practices adopted by government ministries include e-sourcing, tendering, requisitioning and auction. The suppliers can send information requests and receive feedback that aids tender bid preparation processes.

5.3 Conclusion

The objectives of this research were to develop the significance of e-procurement upon the operation of government ministries within the country, to find out the level to which e-procurement has been implemented, determine the effect of e-procurement on performance and to bring out the challenges facing the adoption of e-procurement in government ministries in Kenya. From study findings and earlier discussions, it is evident that there exists solid e-procurement strategies and practices that have furthered good performance within the operation and supply chain and conversely government ministries total performance and its competitive power in the challenging business setting.

From the survey findings, the study deduces the implementation of e-procurement system enhances the organizational performance. The enhanced performance manifested through cost reduction, reduction in inventory, reduced lead times and increased quality and availability of information. This shows that e-procurement was good tailored process to fit the government ministries, alter the demands as ministries possessed good defined e-procurement systems and plans. Such practices would offer the government ministries high achievement rate to alter the process consequently enhanced organizational performance and competitive power.

From the findings, the study concludes e-procurement practices being adopted by government ministries faced various challenges which hindered the effectiveness of the implementation and adoption process. The main challenges included; lack of ICT by the suppliers, inadequate top management support, computer fraud and related risks. Therefore, the government ministries faced diverse challenges that slowed down the e-procurement adoption process.

5.4 Recommendations

E-procurement ought to be adopted to aid executive team recognize the contribution of such ideas. A flexible e-procurement practices adopted through proper research will effectively and efficiently aid the business fulfill its various and changing needs as well as deal with challenges springing from a dynamic global business setting.

Administration ought to implement both qualitative and quantitative features making the decisions and more suitable e-procurement practices and strategies incorporation throughout the grouping will create cooperation.

5.5 Implications of the Study on Policy, Theory and Practice

An entity that embraces healthy e-procurement practices outshine those that do not and in fact the disparity continues to widen as such firms go on to creatively explore fresh e-procurement practices aiming faster and additional creation of value given vast competition and high expectations from the stake holders. This is evident in the theory described in the literature review section. The top management should aim at actively and innovatively investing in proper e-procurement practices for their organisations to grow. This is to keep pace with the globalization and stiff competition where there is less time left for entities that are slow in handling such issues. Stake holders from all levels of the entity are supposed to take part the implementation of e-procurement.

An interactive approach between the producer and the customer teamwork is therefore vital for suitable e-procurement practices. In line with these efforts, the executive should establish further ways of encouraging suppliers and workers to reflect on suitable e-procurement practices that enhances firm performance. E-procurement as shown from the research, is tethered to corporate strategy in improving the organizational performance and eventually creating competitive superiority. Clear policies are supposed to be formulated, adopted and frequently checked to make sure they remain relevant to the firm in order to adopt effective e-procurement processes.

5.6 Limitations of the Study

The research encountered a number of challenges. Firstly, a restriction on resources was the main limitation. The research was powerless owing to financial constraints and therefore statistical significance was not arrived at.

Secondly, some of the targeted respondents did not give the feedback. Others did not submit back the feedback forms saying they did not have enough time feeling them. Still others argued that disclosing information touching on their ministry was violating the policies of the ministries making it hard to get ministerial support. This is attributable to inadequate access to information.

5.7 Areas of Further Research

Because this survey focused on e-procurement and organizational performance of government departments in Kenya, it proposes that analogous studies should carried out in other sectors of the Kenyan economy to allow comparability and for generalization of results on e-procurement in in the country.

The study strived to discover the e-procurement and organizational performance of government ministries within the country. The survey suggests a serious research should be conducted to analyze factors affecting the adoption of e-procurement practices in government ministries in Kenya.

Basing on a larger sample size that can stand in for different groups of people in an entity to allow generalization of information, a research on performance of Government ministries and e-procurement can be carried out. This will make it possible to find significant interrelatedness from the data.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

This study seeks to obtain information on the significance of e-procurement on performance of government ministries in Kenya. All information received will be treated confidentially and used for academic purposes only. Fill in by writing in the spaces provided or by ticking in the appropriate box.

SECTION A: IMPLEMENTATION OF E -PROCUREMENT

1. Name of the ministry…………….................................... (Optional)

2. For how long have you worked for the government Ministry? ....

a) 0 to 3 years   (   )

b) 4 to 6 years   (   )

c) 7 to 9 years   (   )

d) 10 to12 years   (   )

e) Over 12 years   (   )

3. Has your ministry adopted IFMIS?

Yes   (   )   No   (   )   Not aware   (   )

4. Kindly indicate the extent to which the ministry has adopted each of the following methods of IFMIS in procurement practices. Use the scale of: 1 to 5 where: 1 = No Extent; 2 = Small extent; 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

E-Procurement Practices-Level of Implementation	1	2	3	4	5
e-Requisitioning (sending requests of requirements to the AIE holders for approval)					
e-Tendering- (sending requests for information and prices and receiving from suppliers responses using Internet technology)					
e-Catalogue (list of goods or services on sale with their prices as an electronic document)					
e-Invoicing (delivery of bills using electronic communications)					
e-Auction (bid for products or services through the Internet)					
e-Sourcing (identifying new suppliers through the Internet technology)					
e-Reverse Auction(sellers bid for the prices they are willing to sell their goods and services)					
e-Informing (gathering and distributing procurement information using internet technology)					

5. How do you rate IFMIS implementation at your ministry?

a) Excellent   (   )

b) Very good   (   )

c) Good   (   )

d) Poor   (   )

e) Very poor   (   )

SECTION B: EFFECTS OF E-PROCUREMENT ON PERFORMANCE OF GOVERNMENT MINISTRIES

6. To what extent is the performance in this ministry affected by e - procurement? Use a scale of 1 to 5 where 1 is very small extent, 2 is small extent, 3 is moderate extent, is large extent and 5 is to a very large extent.

Statement	1	2	3	4	5
Leads to cost reduction					
Reduced procedure lead times					
Increased procurement Quality					
Increased supplier participation and Competitiveness					
Reduced paper consumption and costs					
Increased Quality and availability of information					
Reduced errors in order transmission					
Reduced inventory					

7. In your own opinion, has implementation of IFMIS affected performance in government ministries?

Yes (   )   No (   )

8. If yes please explain..

SECTION C: CHALLENGES FACING THE ADOPTION OF EPROCUREMENT

9. Has your Ministry faced any challenges in the implementation of e-procurement?

Yes [   ]   No [   ]

10. What challenges has your Ministry faced in the implementation of e-procurement?

…………………………………………………………………………………………

…………………………………………………………………………………………...

11. To what extent has the organization faced each of the following challenges in the adoption of E-procurement Please indicate on a Scale of 1 – 5 where: 1 = No Extent; 2 = Small extent; 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

STATEMENT	1	2	3	4	5
Internal end user resistance to learn embrace procurement systems					
Low/different levels of on IT maturity among vendors					
Supplier adoption					
Low top management support					
Security threat and authentication					

12. Suggest ways your Ministry can improve performance through E- procurement

…………………………………………………………………………………………

Thank you for your participation

APPENDIX II: LIST OF GOVERNMENT MINISTRIES IN KENYA

Ministry of Agriculture, Livestock and Fisheries

Ministry of Finance and National Treasury

Ministry of Industrialization and Enterprise Development

Ministry of Education

Ministry of Interior and Coordination of National Government

Ministry of Health

Ministry of Energy and Petroleum

Ministry of Transport and Infrastructure and Housing & Urban Development

Ministry of Public Service, Youth & Gender Affairs

Ministry of Tourism

Ministry of Devolution and Planning

Ministry of Sports, Culture and the Arts

Ministry of Information, Communication and Technology

Ministry of Water & Irrigation

Ministry of Land

Ministry of Environment & Natural Resources

Ministry of Labor & East Africa Affairs

Ministry of Mining

Ministry of Defence

Ministry of Foreign Affairs & International Trade