

**E-PROCUREMENT AND ORGANIZATIONAL PERFORMANCE OF
NON-GOVERNMENTAL ORGANIZATIONS IN NAIROBI, KENYA**

BY

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DECLARATION

This research project is my original work and has never been submitted for the award of a degree in any other University.

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SUPERVISOR’S DECLARATION

This proposal has been submitted for examination with my authority as the university supervisor.

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DEDICATION

I dedicate this project to my parents Phillip and Mary Adero and my siblings Queenveline, Leevarn, Roybilly, Brian jade, Cate Cindy, Christian Chuku and Mitchell. There is no doubt in my mind that without their support, tolerance and enthusiasm, I could not have completed this process.

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Lastly, I would like to appreciate a special friend Peter Orero for all the support he gave me.

LIST OF ABBREVIATIONS AND ACRONYMS

B2B:	Business to Business
CBOs:	Community Based Organization
EDI:	Electronic Data Interchange
ERP:	Enterprise Resource Planning
GDP:	Gross Domestic Product
ICT:	Information Communication Technology
IT:	Information Technology
NGO:	Non-Governmental Organization
UK:	United Kingdom
USA:	United States of America

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
LIST OF ABBREVIATIONS AND ACRONYMS	v
LIST OF TABLE	viii
LIST OF FIGURES	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 E-Procurement	3
1.1.2 Organizational Performance	5
1.1.3 Non-Governmental Organizations in Nairobi Kenya	6
1.2 Research Problem.....	7
1.3 Research Objective.....	10
1.3.1 Specific Objectives	10
1.4 Value of the Study.....	11
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction	12
2.2 E-Procurement.....	12
2.3 Organizational Performance.....	15
2.4 E-procurement and Organizational Performance	17
2.5 Challenges in E-procurement Implementation.....	20
2.6 Summary of Literature Review	22
2.7 Conceptual Framework	22
CHAPTER THREE	25
RESEARCH METHODOLOGY.....	25
3.1 Introduction	25
3.2 Research Design.....	25
3.3 Population of the study.....	25
3.4 Data Collection.....	25
3.5 Data Analysis	26
CHAPTER FOUR.....	28

DATA ANALYSIS AND INTERPRETATION	28
4.1 Introduction	28
4.2 Demographic Characteristics	28
4.2.1 Gender	28
4.2.2 Age	29
4.2.3 Length of Service	30
4.2.4 Education level.....	31
4. 3 Extent of E-procurement implementation in NGO's	32
4.4 Hindrance to implementation of e-procurement	34
4.5 Relationship between e-procurement implementation and performance of NGOs in Kenya	35
4.4 Inferential Analysis	36
4.4.1 Coefficient of Correlation	36
4.4.2 Regression Coefficient.....	37
4.4.3 Coefficient of Determination	38
4.6.2 ANOVA	39
CHAPTER FIVE	41
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	41
5.1 Introduction	41
5.2 Summary of findings and Discussion.....	41
5.3 Conclusions	42
5.4 Recommendations	43
5.5 Limitations and Suggestions for further Research	44
REFERENCES	45
APPENDIX I: QUESTIONNAIRE	48
APPENDIX II: LIST OF NGOS IN NAIROBI KENYA.....	51

LIST OF TABLE

Table 4.1 Extent of E-procurement implementation in NGO’s 33

Table 4.2 Hindrance to implementation of e-procurement 34

Table 4.3 Relationship between e-procurement implementation and performance of NGOs
in Kenya 35

Table 4.4 Coefficient of Correlation 37

Table 4.5 Regression Coefficients 38

Table 4.6 Model Summary 39

Table 4.7 ANOVA (Analysis of Variance) 39

LIST OF FIGURES

Figure 2. 1 Conceptual Framework	24
Figure 4.1 Gender	29
Figure 4.2 Age	30
Figure 4.3 Length of Service	31
Figure 4.4 Education level	32

ABSTRACT

The world has continued to experience information, communication and technology growth, increased knowledge by consumers about foreign goods and services, improved international relations, co-operations and agreements amongst countries, convergence of socio-cultural orientation leading to tremendous growth of international business. The main purpose of this study was to investigate the relationship between e-procurement and organizational performance on NGOs in Nairobi, Kenya. The study had three research objectives: To determine the extent of E-procurement implementation among NGOs in Nairobi, Kenya and to establish the relationship between E-procurement implementation and the performance of NGOs in Nairobi, Kenya. This study employed descriptive research design that gained an in-depth understanding on the relationship between e-procurement and performance of NGOs in Kenya. The target populations of this study are the NGOs in Nairobi Kenya. Data was collected mainly by use of a questionnaire. The researcher mainly used descriptive statistics to analyze data. This included frequency distribution tables, mean and standard deviation. The use of charts might also be considered. SPSS and Microsoft excel software was used to generate outputs. The study concluded that accountability has been encouraged; there is a competitive bidding and sourcing and that there was improved flow of information. On the other hand, lack of management support; late supplier involvement; lack of proper staff training; failure to comply with best practices and poor information quality were the hindrances to the implementation of e-procurement. Further, the study concluded that online advertisement of tenders has improved effectiveness; online short listing of tenders has ensured transparency; online requisition by organization staff has improve accountability and online advertisement of tenders has ensured the NGO gets competitive suppliers. Although e-procurement seems to have a lot positive of effects on organizations, it must be implemented with caution to ensure that it is implemented at the right time and under the right conditions. The stakeholders should also stay attune to any new e-procurement related legislation, or self-regulation mechanisms such as Code of Conducts and Interchange Agreement. In addition, they should educate their employees, modify existing policies, formulate new strategies, adopt updated security systems and software's, and incorporate security information management in their organizations. From the findings the significance value is .002 which is less than 0.05 thus the model is statistically significant in predicting how online advertisement of tenders, online quotations and mode of ordering is via online affects organizational performance. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 2.21), this shows that the overall model was significant. The findings of this study were only directly applicable to the NGOs in Nairobi. The time duration was not adequate to conduct a survey of all staff and NGOs in Nairobi therefore the study chose to identify 2 respondents per NGO. It only focused on e-procurement implementation and supply chain integration among NGOs in Nairobi. This same study should be extended to other industries and firms so that similarities and differences may be drawn. It will also be advisable to replicate this same study after some years have elapsed in order to establish the changes that have taken place since supply chain integration highly depends on technology which is subject to change.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The world has continued to experience information, communication and technology growth, increased knowledge by consumers about foreign goods and services, improved international relations, co-operations and agreements amongst countries, convergence of socio-cultural orientation leading to tremendous growth of international business. The procurement process has traditionally involved slow manual procedures and even slower systematic processes for handling procurement transactions (Hawking & Stein, 2011).

E-procurement has had an increasingly important role in business-to-business (B2B) commerce. Web-enabled B2B e-commerce enhances inter-organizational coordination resulting in transaction cost savings and competitive sourcing opportunities for the buyer organization (Subramaniam & Shaw, 2012). Nevertheless, despite the proliferation of literature dedicated to theory and practice, most of the contribution delivers only partial solutions regarding general rules of behavior. Supply managers now need to understand the impact of technology and gain competency in making a business case for E-procurement (Presutti, 2013).

The advent of the Internet as platform has been a catalyst for major changes in the operation and status of organizational procurement. Information Technologies have changed the way organizations and governments operate. As noted by Nelson, Jahn and Dune (2001), the majority of organizational spending consists of purchasing. In order to decrease the total

costs spent on purchasing process, internet technologies are used and e-Procurement has become popular to implement in the latest era by both governments and enterprises.

Although the opportunities for improvement seem abound, both private and public sector are still cautious as far as the adoption of electronic technologies is concerned (Zheng et al., 2004). Ward and Peppard (2003) indicate that 60% of Information Technology application in procurement initiatives and projects do not deliver the expected benefits.

The use of Information Communication Technologies (ICTs) has dramatically changed services, business models and people's expectations of the quality and efficiency of information sharing and service delivery. Development in information and communication technology, especially the Internet helps the application of alliances used by the manufacturers to become more effective through the integration of firm's information technology (IT) infrastructure. One of the information systems that helps revolutionize the supply chain activities is e-procurement (Brown & Maniam, 2005).

In recent years organizations are becoming more discerning about E-procurement decisions that need to be made and how they respond to the multitude of pressures and influences. However, despite the continued E-procurement discussion, there has been a paucity of research that has incorporated its effect on organizational performance. This is surprising as Child (2007) noted the increased debate about the notion of procurement in organizational performance. If E-procurement is to obtain a strategic rather than an operational level of influence within the organizational hierarchy, consideration needs to be given to, as how actors can be strategically, operationally and technologically integrated.

Hult et al. (2004) state that supply chain predictability should be sought, but not at the expense of creating inflexibility. Organizations operating in the new economy need to align themselves internally with the demands that the dynamic environment imposes on strategic behavior (Phillips 2003). A good example of this is the need for a new mindset that must be instilled both in procurement and across the firm (Cousins & Spekman, 2013).

1.1.1 E-Procurement

Private and public sector organizations have been utilizing Information Technology (IT) systems to streamline and automate their purchasing and other processes over the past years. It is only in the past decade that e-Procurement systems have attracted attention. While there is debate about how recently e-Procurement has emerged, (Dai et al., 2001), there is no doubt that the use of the Internet in e-Procurement provides several advantages over earlier inter-organizational tools. For example, Electronic Data Interchange has been providing automated purchasing transactions between buyers and their suppliers since it was launched in the 1960s.

Enterprise Resource Planning (ERP) followed in the 1970s, and then came the commercial use of the Internet in 1980s. It was only in the 1990s that the World Wide Web the multimedia capability of the Internet - became widely enabled and provided the essential resource for the automation of procurement (OGC, 2002).

E-Procurement refers to the use of Internet-based (integrated) information and communication technologies (ICTs) to carry out individual or all stages of the procurement process including search, sourcing, negotiation, ordering, receipt, and post-purchase review (Croom & Brandon-Jones, 2004). While there are various forms of e-Procurement that concentrate on one or many stages of the procurement process such as e-Tendering, e-Marketplace, e-Auction/Reverse Auction, and e-Catalogue/Purchasing, e-Procurement can be

viewed more broadly as an end-to-end solution that integrates and streamlines many procurement processes throughout the organization. Businesses have realized that time and cost savings can be achieved by having a link with major suppliers through private networks such as electronic data interchange (EDI). The internet has enabled firms to even centralize their procurement and logistics systems that previously conducted in every country they operated.

E-procurement has become one of the most successful applications of electronic commerce (e-commerce), having been implemented by many companies seeking better business processes (Aberdeen Group, 2001). Kalakota and Robinson (2000) have identified benefits in cost saving, improved efficiency, measurement and single data entry; consequently, these are the three catalysts driving growth in the e-procurement area. E-Procurement is the procedure that involves goods procurement automation by use of internet. This process leads to significant reduction in both cost and time. As noted by Quinnox (2012), e-procurement is a very comprehensive phenomenon which includes making strategic initiatives and it can be used in reorganizing the entire purchasing process.

The e-procurement value chain consists of indent management, e-Tendering, e-Auctioning, vendor management, catalogue management, Purchase Order Integration, Order Status, Ship Notice, e-Invoicing, e-Payment, and contract management. Indent management is the workflow involved in the preparation of tenders. This part of the value chain is optional, with individual procuring departments defining their indenting process. In works procurement, administrative approval and technical sanction are obtained in electronic format. In goods procurement, indent generation activity is done online. The end result of the stage is taken as

inputs for issuing the NIT. Elements of e-procurement include request for information, request for proposal and request for quotation (Baily, 2008).

According to Callender (2009), public sector organizations use e-procurement for contracts to achieve benefits such as increased efficiency and cost savings in government procurement and improved transparency in procurement services. E-procurement in the public sector has seen rapid growth in recent years. Act 590 of Louisiana's 2008 Regular Legislative Session requires political subdivisions to make provisions for the receipt of electronic bids.

E-procurement in the public sector is emerging internationally.

Hence, initiatives have been implemented in Singapore, UK, USA, Malaysia, Australia and European Union. E-procurement projects are often part of the country's larger e-Government efforts to better serve its citizens and businesses in the digital economy. This field is populated by two types of vendors: big enterprise resource planning (ERP) providers which offer e-procurement as one of their services, and the more affordable services focused specifically of e-procurement. An E-procurement system manages tenders through a web site. This can be accessed anywhere globally and has greatly improved the accessibility of tenders (Baily, 2008).

1.1.2 Organizational Performance

Most organizations view their performance in terms of effectiveness in achieving their mission, purpose or goals. Most Non-Governmental Organizations, for example, would tend to link the larger notion of organizational performance to the results of their particular programs to improve the lives of a target group .At the same time, a majority of organizations also see their performance in terms of their efficiency in deploying resources. This relates to the optimal use of resources to obtain the results desired. According to Johnson, Scholes and

Whittington (2008), organizations have performance targets which focus on the outputs of an organization as a whole or part of the organization, such as product quality, revenues or profits. The performance of an organization is judged, either internally or externally, on its ability to meet its target.

Kaplan and Norton, (1996) developed the Balanced Scorecard, as a performance measurement system that considers not only financial measures, but also customer, business process, and learning measures . The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. It is a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance.

1.1.3 Non-Governmental Organizations in Nairobi Kenya

Non-Governmental Coordination Act of Kenya (1990) defines Non-Governmental Organization as a private voluntary grouping of individuals or associations, not operated for profit or for other commercial purposes but which have organized themselves nationally or internationally for the benefit of the public at large and for the promotion of social welfare, development, charity or research in the areas inclusive of, but not restricted to, health, relief, agriculture, education, industry, and the supply of amenities and services. National Non-Governmental Organization is a Non-Governmental Organization which is registered exclusively in Kenya with authority to operate within or across two or more districts in Kenya.

NGOs activities are now spread in every part of Kenya and cover almost every aspect of the economy. There are currently over 5000 registered NGOs. It was estimated at the end of 2012 that the wider not for profit sector (including NGOs, self-help groups, women and youth groups) encompassed over 220,000 organizations. It is estimated that the annual income of NGOs is \$1 billion, approximately 3% GDP. The Government now regards NGOs as true partners in development. Some NGOs are nationally-based that is they operate across the country while others only operate in one or more districts ,the latter category includes Community Based Organizations (CBOs).

NGOs are involved in multi-sectoral activities and mono-sectoral/thematic in their program focus. Currently, most NGOs are active in the health service activities (HIV/AIDS); education (especially non-formal activities); micro-credit and arrange of income-generating activities; agriculture (especially agricultural extension and fisheries); the environment; water and sanitation; training and capacity building; peace building and conflict transformation, social development and community empowerment Uganda National NGO policy (2008). Okal (2006) in his study observed that NGO's in Kenya are highly donor dependent. All the NGOs in Kenya access funds from external donors, with INGOs increasingly gaining access to funds from official donor agencies both bilateral and multi-lateral that are subsequently used, inter alia, to build the capacity of national NGOs.

1.2 Research Problem

E-procurement plays an important role in achieving a firm's goals. It is more than just a system for making purchases online. It provides an organized way to keep an open line of communication with potential suppliers during a business process. E-Procurement helps with the decision-making process by keeping relevant information neatly organized and time-stamped (Ginner, 2011).

This research focused on the NGOs because they play a critical role in the development of the economy. They help in the development and Operation of Infrastructure. NGOs facilitate communication by using interpersonal methods of communication, and study the right entry points whereby they gain the trust of the community. NGOs can develop a technical assistance and training capacity and use this to assist both CBOs and governments. In some cases, NGOs become spokespersons or ombudsmen for the poor and attempt to influence government policies and programs on their behalf (Okal, 2006)

The coordination and integration of activities with suppliers and understanding of customer's needs online results in greater benefits for an organization. According to Fraza (2010), E-procurement is a very important element to any organization. Besides facilitating the attainment of organizational individual workers goals, it also develops an environment that consistently produces cost effective, high quality and schedule beating output.

E-procurement is among the Supply-side activities that have been identified as a key area where information systems enabled innovations are likely to yield significant benefits for organizations (European Commission, 2006). The success of any e-procurement application will depend on a variety of factors. Some organizations implement e-procurement technologies and they succeed whereas others fail in the same.

In recent years, there has been an impressive accumulation of studies showing that E-procurement plays an important role in improving organizational performance and competitive ability in terms of cost reduction, product quality, ability to meet customer requirements (Wisner, 2009) and competitive advantage (Mentzer et al., 2011). Vaidya, Sajeev and Callender (2006) conducted a study on the critical factors that influence e-

procurement adoption success in the public sector. The study concluded that if e-Procurement initiatives in the public sector are to assist the development of e-Procurement across the information economy, there should be wider discussion and agreement on what constitutes the relevant CSFs and how the achievement of success can be assessed.

Batenburg (2007) also studied e-procurement adoption by European firms. It was established that there are indeed country differences with respect to e-procurement adoption, and that firms from countries with a low uncertainty avoidance such as Germany and the UK are the early adopters of e-procurement, while countries that are less reluctant to change such as Spain and France have lower adoption rates. Greunen, Herselman, and Niekerk (2010) also carried out a study on the adoption of regulation-based e-procurement in the Eastern Cape provincial administration. The study found that measurable benefits of supply chain management have not yet been realized due to general limited understanding of how supply chain management concept works within government environment.

E-procurement systems also allow more efficient integration of supply chains and provide better organization and tracking of transactional records for easier data acquisition. There is need to have a robust automated procurement system which is interlinked and this will lead to enhanced competitiveness and lowered costs (Ogot et al,2009) transactions can be standardized and all bids for products and services can be tracked more easily, allowing business owners to use such knowledge to obtain better pricing. Due faster exchanges of information and delivery of goods and services-procurement also promotes shorter product-development cycles.

Kinya (2013) in her study found out that the methodologies adopted by large scale firms in implementing e-procurement benefits an organization in many ways including eliminating

waste in all procurement cycles, reduce lead time, reduce inventory, reduce cost, improved customer satisfaction and improved demand management. The major focus of this study was on supply chain integration and hence falls short of substantial literature on e-procurement and performance of NGOs in Nairobi, Kenya.

Kambua (2013) conducted a study on the implementation of E-procurement in private hospitals in Kenya. Her study was primarily based on the implementation of e-procurement in private hospitals and did not address of non-governmental organizations. However, none of the above local and international studies has focused on the relationship between e-procurement and performance of NGOs in a developing country's headquartering like Nairobi, Kenya. This study therefore sought to bridge this knowledge gap by addressing the following research questions: What is the extent to which E-procurement has been implemented by NGOs in Nairobi, Kenya? What is the relationship between E-procurement implementation and the performance of NGOs in Nairobi, Kenya? And what are the challenges facing the implementation of E-procurement by NGOs in Nairobi, Kenya?

1.3 Research Objective

The main objective of the study was to establish the relationship between E-procurement and the performance of Non-Governmental Organizations (NGOs) in Nairobi, Kenya.

1.3.1 Specific Objectives

- (i) To determine the extent of E-procurement implementation among NGOs in Nairobi, Kenya.
- (ii) To establish the relationship between E-procurement implementation and the performance of NGOs in Nairobi, Kenya.

1.4 Value of the Study

The government should benefit from this study by embracing what has been adopted by NGOs in its procurement operations. This study was going a long way in informing government agencies on how to cut costs and other benefits associated with E-procurement. Efficiency in government procurement is of importance in ensuring that the best value for money is obtained by NGOs in Nairobi, Kenya. Efficiency as a result of e-procurement makes an organization achieve the cost saving that would free up resources that could be applied usefully to other tasks. The findings from this study were of importance to Non-Governmental Organizations because they gave an in-depth insight on E-procurement and its benefits.

Academicians and scholars were to find this research valuable to their knowledge advancement as it has improved on studies done under E-procurement. Future research can be done to improve limitations that were documented in this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The focus of this chapter was to highlight important research contribution which has been made in relation to the research's area of study. This enabled the researcher to analyze precisely any relevant aspect from various written sources available within the researcher's reach. Among the issues discussed are; e-procurement, organizational performance, E-Procurement and organizational performance, challenges in e- procurement implementation, summary of literature review and conceptual framework.

2.2 E-Procurement

Electronic procurement is also referred to as supplier exchange and can be defined as the business-to-business or business-to-consumer or Business-to-government purchase and sale of supplies, work and services through the Internet as well as other information and networking systems, such as Electronic Data Interchange and Enterprise Resource Planning (Baily, 2008).

According to Baily 2008, e- procurement is done with a software application that includes features for supplier management and complex auctions. The new generation of e-procurement is currently on demand or software as a service (SaaS). The e-procurement value chain comprises indent management, e-tendering, e-auctioning, vendor management, catalogue management and contract management. Indent management is the workflow involved in the preparation of tenders. This part of value chain is optional, with each procuring department defining its indenting process. As concerns work procurement, administrative approval and technical sanction are obtained in electrical format. On the other

hand, in goods procurement, indent generation activity is done online. The end result of the stage is taken as inputs for issuing the NIT (peter, 2012).

E-procurement is a purchasing practice that utilizes e-commerce to identify potential sources of supply, purchase goods and services, transfer payment, and interact with suppliers (Harrigan et al. 2008). E-procurement has provided a unique opportunity for managers to boost the competitiveness and profitability of the businesses by expediting purchase order processes, simplifying purchase payment, expanding supplier bases, reducing paperwork, and eliminating order errors (Min & Galle 2003).

The adoption of information and communication technology in both private and public sectors is a strategy for administrative reforms that have gained momentum in recent years. The use of ICT can help to improve the efficiency, quality, transparency as well as reducing operation costs in any organization. Many organizations frequently invest a lot of resources on ICT to ensure maximum performance. The concept E procurement is generally associated with the use of technology to conduct transaction by an organization. (McLaney, 1997).

E procurement is a term used to describe the use of electronic methods, typically over the Internet to conduct transactions between awarding authorities and suppliers. The process of e-procurement covers every stage of purchasing, from the initial identification of a requirement, through the tendering process, to the payment and potentially the contract management (Corsi, 2006).

E-procurement has become one of the most successful applications of electronic commerce (e-commerce), having been implemented by many companies seeking better business

processes (Aberdeen Group, 2001). Kalakota and Robinson (2000) have identified benefits in cost saving, improved efficiency, measurement and single data entry; consequently, these are the three catalysts driving growth in the e-procurement area. E-Procurement is the procedure that involves goods procurement automation by use of internet. This process leads to significant reduction in both cost and time. As noted by Quinnox (2012), e-procurement is a very comprehensive phenomenon which includes making strategic initiatives and it can be used in reorganizing the entire purchasing process.

According to Callender (2009) public sector organizations use e-procurement for contracts to achieve benefits such as increased efficiency and cost savings in government procurement and improved transparency in procurement services. E-procurement in the public sector has seen rapid growth in recent years. Act 590 of Louisiana's 2008 Regular Legislative Session requires political subdivisions to make provisions for the receipt of electronic bids. An E-procurement system manages tenders through a web site. This can be accessed anywhere globally and has greatly improved the accessibility of tenders (Bailey, 2008).

Van Weele (2005) argues that e-procurement implementation can reduce transaction cost by making sure that selected suppliers deliver a product of service that does not exceed extensive quality control. E-Procurement can also reduce costs by making sure that the components bought do not lead to complaints on final product to the customer. Product standardization, internal customer satisfaction can be enhanced through E-procurement due to the product variety concept. This can be achieved by reducing the number of different components and or the number of suppliers via set product standards. E- Procurement can contribute to fast and to continued innovation and improvement of product and user satisfaction.

There are a number of indicators which show proper e-procurement implementation, there are a number of factors that an organization must consider. They include: online advertisement of tenders, online quotations, company staff making their requisitions online, online supplier evaluation and specifications for procured items being done online (Bailey, 2008).

2.3 Organizational Performance

Efficient organization performance has been influenced by Proper cash management practices which stems from creation of a realistic cash flow budget that charts finances for both the short term (30-60 days) and longer term (1-2 years). Redouble efforts to collect outstanding payments owed to the company. Bill promptly and accurately. The faster one mails an invoice, the faster one will be paid. (Zariyawati et al, 2009). If deliveries do not automatically trigger an invoice, establish a set billing schedule, preferably weekly. Non-governmental Organizations should also include a payment due date. Closely monitor and prioritize all cash disbursements.

Contact creditors (vendors, lenders, and landlords) and attempt to negotiate mutually satisfactory arrangements that will enable the organization to weather its cash shortage (provided it is a temporary one). In some cases, you may be able to arrange better payment terms from suppliers or banks. Assess other areas where operational expenses may be cut without permanently disabling the organization (Da Vila et al, 2003).

Kaplan and Norton (1996) developed the balanced score card used as a performance measurement framework to add strategic non-financial performance measures to the traditional financial metrics to give managers and executives a more 'balanced' view of

organizational performance. It evolved from its early use as a simple performance measurement framework to a full strategic planning and management system. The new balanced score card transforms an organization`s strategic plan from an attractive but passive document into the marching orders for the organization on a daily basis. It provides a framework that not only provides performance measurements but helps planners identify what should be done, measured and executed.

With growing interest in improving organizational performance, the balanced score card is a valuable tool that meets the need for improvement and change especially for companies venturing into very competitive or monopolistic market. It is a customer based planning and process improvement system with its primary focus on driving an organization`s change process by identifying and evaluating pertinent performance measures. It is an integral part of the mission identification, strategy formulation and process execution, with an emphasis on translating strategy into a linked set of financial and non-financial measures (Chan, 2004).

According to Becker (2011) developing a world class organizational performance measurement system hinges on a clear understanding of a firm`s competitive strategy, operational goals and a definitive statement of the employee competencies and behaviours required to achieve the firm`s objectives. Organizational performance measurement systems can create value only when they are carefully matched with the firm`s unique competitive strategy and operational goals.

Organizational Performance measures should be related to the strategic goals and measures that are organizationally significant and drive business performance, be relevant to the objectives and accountabilities of the individuals concerned, focus on measurable outputs, accomplishments and behaviours that are clearly defined and for which evidence can be

made available. There must be indication of data that will be made available for measurement which must be verifiable, precise, available and comprehensive, that is, covering all aspects of performance. Effective performance is measured not merely by delivery of results (however outstanding) in one area but by delivering satisfactory performance across all measures (Armstrong & Baron, 1998).

Technology has significant influence on organizational performance. This influence is moderated by such factors as the demographic variables of the organizations, and organizational practices such as corporate culture, managerial competencies and corporate culture of the organizations. Organizations should therefore lay more emphasis on research, and in particular find ways of working more closely with research institutions to enhance their performance (Muffatto & Payaro, 2004).

2.4 E-procurement and Organizational Performance

Many organizations have been seeking new ways to reduce procurement costs which typically represent the largest cost item in business operations (Vaidya et al., 2006). According to industry sources, the indirect procurement expenditure in Australia are about AU\$150 billion per annum and each procurement process incurs about A\$125 per transaction (Neef, 2001).

Most of the costs incurred are due to non-value added activities such as manual data re-entry, fixing errors, premium buys due to the inability to find competitive suppliers, inefficient search and evaluation of suppliers and their product offerings and the long process in reaching an agreement and obtaining approval before orders can be placed . E-procurement system, therefore, has attracted organizations' attention particularly in the last few years and

it has the potential to improve national productivity growth of any countries (Hawking & Stein, 2004).

The world has continued to experience massive information, communication and technology growth, increased knowledge by consumers about foreign goods and services, improved international relations, co-operations and agreements amongst countries, convergence of socio-cultural orientation leading to tremendous growth of international business. The procurement process has traditionally involved slow manual procedures and even slower systematic processes for handling procurement transactions (Hawking et al., 2011).

The advent of the Internet as a business systems platform has been a catalyst for major changes in the operation and status of organizational procurement. Information Technologies have changed the way organizations and governments operate. As noted by Nelson et.al. (2001), the majority of organizational spending consists of purchasing.

In order to decrease the total costs spent on purchasing process, internet technologies are used and e-Procurement has become popular to implement in the latest era by both governments and enterprises. Although the opportunities for improvement seem abound, both private and public sector are still cautious as far as the adoption of electronic technologies is concerned (Zheng et al, 2004). Ward and Peppard (2003) indicate that 60% of Information Technology application in procurement initiatives and projects do not deliver the expected benefits.

The rhythm and scope of IT in the past century was different from that in this century. In the past, organizations progressed at a slower pace when adopting new technologies. They had an aversion to risk that alters decision-making, trend that is deepened by incentive systems,

traditional decision-making patterns, account rendering mechanisms, hierarchal and rigid organizational structures, roles, motivation, size, resources, communication processes, institutional values and more (Moon, 2005).

E-procurement is a technical implementation that enables the transformation of organizational structures and workplace practices. Flexibility in the development and enablement of the associated systems and processes allows the diverse requirements of stakeholders and participants to be recognized and supported. This may include tailored training for buyers and procurement support staff as well as the ongoing reviews of the associated processes and tools (Berry & Berry, 1999).

By staying aware of participants' needs, support organizations can build, evolve and manage systems and processes that allow buyers to purchase goods and services from preferred suppliers (Afza & Nazir, 2007). E-procurement result into an improvement of the labour productivity of an organization and, as a consequence, contribute to a number of intermediate outcomes (better services, cost savings, time savings, transparency), to economic rationality (organizational efficiency, simplification) and to GDP growth (Corsi, 2006).

Electronic tendering can shorten a typical manual tendering process by half thus reducing procurement cycle time and transaction cost. E-procurement is most advantageous because of its speed and coverage, and when implemented properly, it has increased transparency in the tendering process and will allow most, if not all, tenders above the required threshold to be openly advertised. The encouragement of regional procurement through PICTA makes the implementation of e-procurement unavoidable (Filbeck & Krueger, 2005).

E-procurement has a strategic importance entity since its implementation necessarily crosses many institutional barriers and paradigms of many public managers. E-procurement brings a set of new rules and dynamics that create ways of doing business with the State in a totally different fashion, with a whole new and bigger set of participants, new incentives and a radically different cost structure; conditions that have the potential to create a competitive marketplace of unparalleled transparency, efficiency and access.

2.5 Challenges in E-procurement Implementation

In view of its potential, scope and impact, the effective implementation of procurement processes through electronic means or e-procurement, is one of the first projects that organizations seek to develop with regard to e-government however many challenges are face while adopting and utilizing e procurement. Which include; developing the skill base; Today's purchasing organizations have the challenge of attracting and retaining staff with the necessary skills. Ongoing professional development for procurement personnel is also lacking. All five case studies identified a need for skilled resources and are looking at ways of rectifying the situation. In the case of Italy, the government in conjunction with several universities has developed a post graduate program for procurement professionals.

Ensuring interoperability of systems and standards; the interoperability of systems and standards is an ongoing challenge facing all e-procurement systems. Managing this integration is difficult without technical standards, specifically in the area of data format. It is important to involve all appropriate stakeholders including public agencies, the software industry, private companies as well as national and international institutions. Managing authentication and security; Security and authentication are critical aspects of an e-

procurement system. Developing, maintaining and communicating these technical policies and solutions are difficult in the diverse environment of today's public sector.

Integrating the end-to-end procurement process; in many organizations, the tools necessary to complete the procurement transactions (e.g., search, requisition and payment) often reside in different departments or agencies. Related policies and procedures may also reside outside the procurement organization. Therefore, the full integration of the complete end-to-end process and the deployment of usable policies and procedures to support this process remain a key challenge.

2.6 Summary of Literature Review

The literature reviewed in this study points to the fact that a number of studies relating to the subject matter of this study have been done, while empirical evidence on most other areas are lacking. It is also evident that most of those studies already done, a majority of them are at the global scene and regional establishing a gap in terms of scope providing a rationale for further research attempts to zero in on this gap, especially in relation to the local context.

To start with, empirical evidence indicates that no work on E-procurement has been done within NGOs in Kenya. This calls for an attempt to do the same to bridge this gap. In addition, as relates to systems integration as well, there's no empirical evidence to indicate whether or not studies that examine systems integration within NGOs have been done.

Thirdly, most of the studies done tend to touch more on business organizations which are profit oriented as opposed to a non-profit ones like NGOs. These provide considerable gaps in research and in particular for comparison purposes. Consequently, it is in this background the researcher contemplates the need to further explore and document the same for use in academia and in practice.

2.7 Conceptual Framework

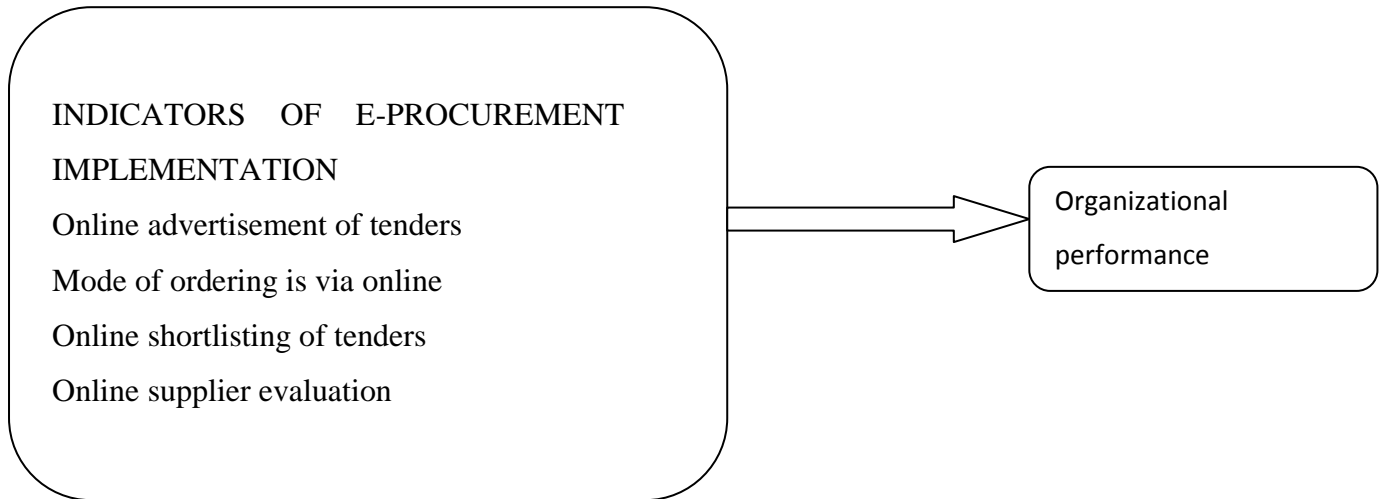
A conceptual framework helps to simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of this study was based on three independent variables namely; online advertisement of tenders, online quotation and company staff making their requisitions online. The dependent variable of this study was the organizational performance

of non-governmental organizations in Nairobi, Kenya. Figure 1 shows how the various independent variables influenced the dependent variable under study.

Figure 2. 1 Conceptual Framework

Independent variable

Dependent variable



Source: author (2014)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the methodology that the proposed study took. Population from which the study was conducted is defined together with the sample size and how it was being determined. Finally, the chapter discusses the data collection techniques and how this data was analyzed and interpreted.

3.2 Research Design

This study employed descriptive research design that gained an in-depth understanding on the relationship between e- procurement and performance of NGOs in Kenya. Descriptive research design avoided invalid inferences as it focuses on answering the “why” question. Descriptive research design allowed the researcher to study the elements in their natural form without making any alterations to them. The design also allowed the researcher to come up with descriptive statistics that assisted in explaining the relationship that exists among variables. Kambua (2013) successfully used this method in her study on the implementation of E-procurement in private hospitals in Kenya.

3.3 Population of the study

The target populations of this study are the NGOs in Nairobi Kenya. There are 50 NGOs in Nairobi, Kenya (appendix II). Given that this is a relatively small population, a census was proposed.

3.4 Data Collection

The respondents were procurement managers and information technology managers or their equivalent. Data was collected mainly by use of a questionnaire. The questionnaire has structured open and closed ended questions. It comprised of four sections; the first part was

seeking to obtain general information on the respondents' profile. The second part was devoted to the extent to which e-procurement has been implemented by NGOs in Nairobi, Kenya. The third part was seeking to obtain the relationship between e-procurement implementation and the performance of NGOs in Nairobi, Kenya. The last part was devoted to the challenges that hinder the implementation of e-procurement by NGOs in Nairobi, Kenya. The researcher adopted a drop and pick method where the instruments were being dropped in the morning and be collected after having been completed by the respondents.

3.5 Data Analysis

Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data was then coded to enable the responses to be grouped into various categories. For objective 1 and 2 Descriptive statistics method was adopted. Correlation and regression analysis method was also used.

The researcher mainly used descriptive statistics to analyze data. This included frequency distribution tables, mean and standard deviation. The use of charts might also be considered. SPSS and Microsoft excel software will be used to generate outputs.

Descriptive statistics was used to analyze demographic data, to establish at which extent e-procurement had been implemented by NGOs in Kenya. Performance of NGOs was analyzed using regression analysis. In order to establish the effect of e-procurement on organizational performance, regression analysis was employed.

The following regression equation will was used;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Whereby Y = Organizational performance of NGOs in Nairobi Kenya

X_1 = online advertisement of tenders

X_2 = online quotations

X_3 = mode of ordering is via online

ε = Error term β_0 is the intercept

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

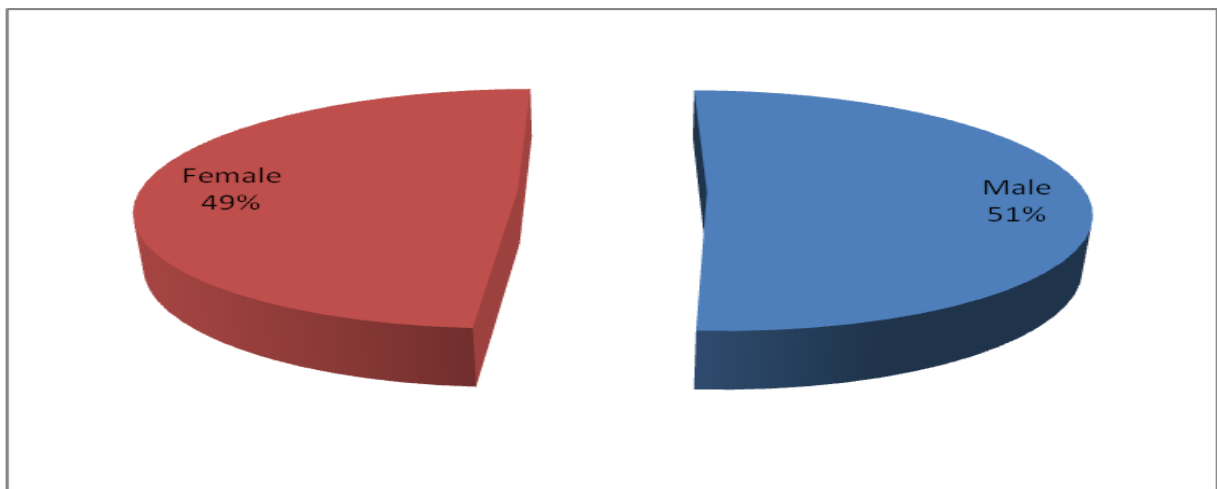
This chapter presented the data analysis and discussion on the relationship between E-procurement and the performance of Non-Governmental Organizations in Nairobi Kenya. The data was collected in the form of questionnaire and analyzed using tally method. Out of the 100 questionnaires distributed, 75 responded and returned their questionnaires contributing to the response rate of 75%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings are based on the objectives.

4.2 Demographic Characteristics

4.2.1 Gender

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

Figure 4.1 Gender



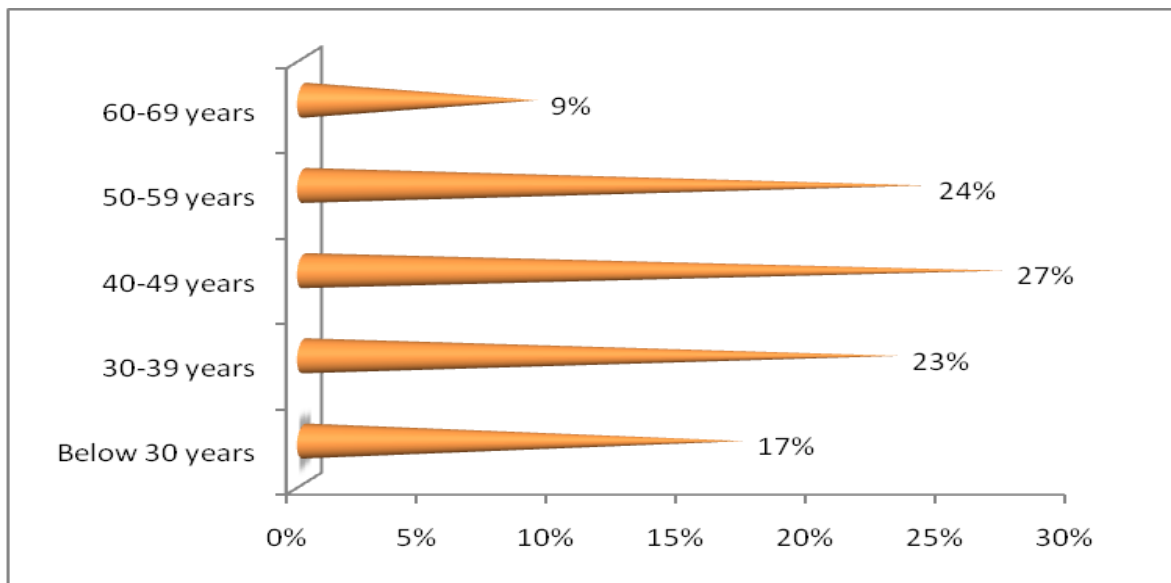
Source: field data (2014)

From the findings illustrated in table 4.1 the majority of the respondents (51%) were males while 49% were females. This illustrates that there is gender disparity as majority of the respondents are males.

4.2.2 Age

The study also sought to establish the age distribution of the respondents as shown in figure 4.2.

Figure 4.2 Age



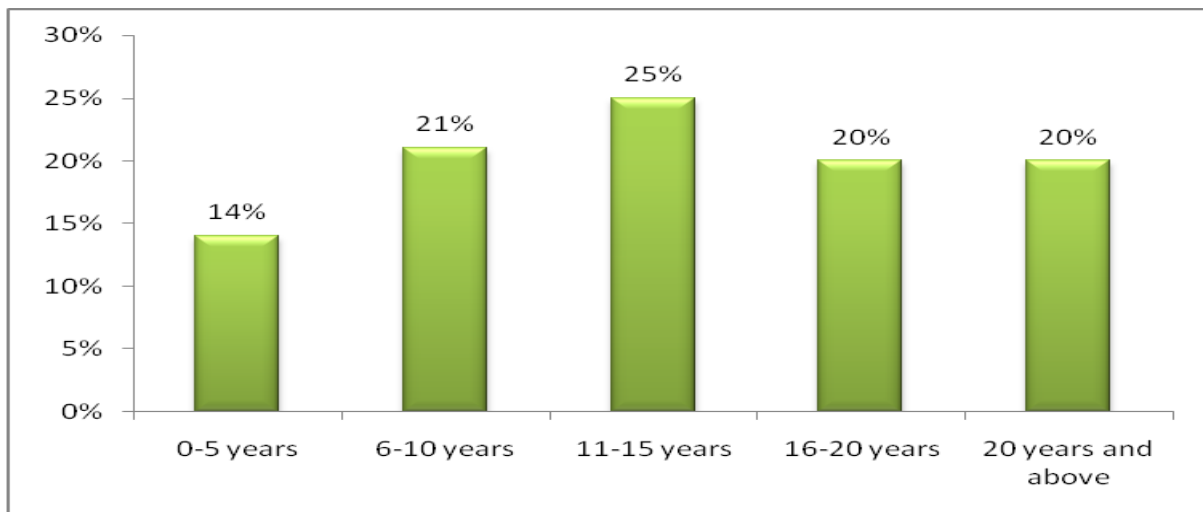
Source: field data (2014)

With respect to age distribution of the respondents, table 4.2 shows that (27%) of the respondents are below 30 years, (23%) of the respondents are within the age group 30-39 years, (27%) are within the age group 40-49 years, 24 (24%) of respondents are within the age group 50-59 years and (9%) are within the age group 60-69 years. This implies that most of the respondents are within the economic active age group of 30-59 years which represents 74% of the total respondents.

4.2.3 Length of Service

The respondents were asked to indicate the number of years they have worked in their respective organizations and the results are as in figure 4.3.

Figure 4.3 Length of Service



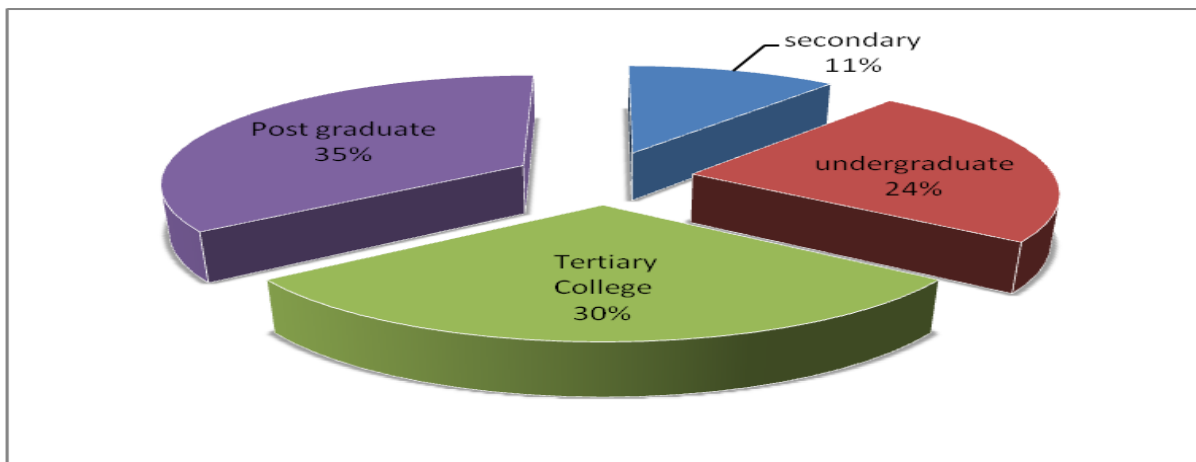
Source: field data (2014)

From the figure above, most of the respondents (25%) had worked for 11-15 years, 21% for 6-10 years, 20% for 16-20 years and above 20 years respectively and 14% had worked for 0-5 years. This illustrates that the respondents had worked with the non-governmental organizations for a long period to give credible information on the relationship between E-procurement and the performance of Non-Governmental Organizations. It also depicts that the respondents were highly experienced owing to the many years they had worked the non-governmental organizations.

4.2.4 Education level

The respondents were asked to indicate their highest level of education. This is of great importance as it depicts respondent's knowledge and ability to perform with respect to the achievement of the organization common goal. The findings are as stipulated in figure 4.4.

Figure 4.4 Education level



Source: field data (2014)

Figure 4.4 indicates that most of the respondents (35%) had post graduate degrees, 30% had tertiary level education and 24% were undergraduates while 11% had secondary school level of education. This illustrates that majority of the respondents were highly trained in their profession as they had very high academic qualifications.

4. 3 Extent of E-procurement implementation in NGO's

The study sought to establish the extent to which the respondents agreed to the following statements about e- procurement implementation in NGOs. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- very small extent, 2- small extent, 3- To a moderate extent, 4- To a great extent and 5-To a very great extent. The mean and standard deviations were generated from SPSS and are as illustrated in table 4.1;

Table 4.1 Extent of E-procurement implementation in NGO's

	Mean	STDev
All the organization staff make requisitions online	4.66	0.542
Tender are advertised online	4.65	0.482
Specifications for procured items are posted to the organization websites	4.53	0.621
Short listing of tender is done by e-procurement system	4.44	0.524
Call for proposals is done through the organization websites	4.11	0.057
Accountability has been encouraged	3.89	1.015
There is a competitive bidding and sourcing	3.48	0.626
There is improved flow of information	3.45	0.162

Source: field data (2014)

From the study findings in Table 4.4, majority of the respondents agreed to a very great extent with the statements that all the organization staff make requisitions online; tender were advertised online; specifications for procured items was posted to the organization websites; short listing of tender was done by e-procurement system and call for proposals was done through the organization websites as shown by the mean scores of 4.66, 4.65, 4.53, 4.44 and 4.11 respectively. On the other hand, most of the respondents agreed to a moderate extent with the statements that accountability has been encouraged; there is a competitive bidding and sourcing and that there was improved flow of information as shown by the mean scores of 3.89, 3.48 and 3.45 respectively. From the above findings it is clear that all the organization staff make requisitions online; tender were advertised online; specifications for procured items was posted to the organization websites; short listing of tender was done by e-procurement system and call for proposals was done through the organization websites.

4.4 Hindrance to implementation of e-procurement

The study further sought to establish the hindrances to the implementation of e-procurement. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- very small extent, 2- small extent, 3- To a moderate extent, 4- To a great extent and 5-To a very great extent. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

Table 4.2 Hindrance to implementation of e-procurement

	Mean	STDs
lack of management support	4.73	0.971
Late supplier involvement	4.35	0.482
Lack of proper staff training	4.34	0.5
Failure to comply with best practices	4.23	0.308
Poor information quality	4.13	0.62
Failure to continuously measure key benefits hinder the implementation of e-procurement	3.76	0.542
Slow user acceptance of new information systems	3.63	0.808

Source: field data (2014)

From the study findings in Table 4.4, majority of the respondents strongly agreed that lack of management support; late supplier involvement; lack of proper staff training; failure to comply with best practices and poor information quality were the hindrances to the implementation of e-procurement as indicated by the mean scores of 4.73, 4.35, 4.34, 4.23 and 4.13 respectively. Most of the respondents on the other hand, agreed to a moderate extent that failure to continuously measure key benefits hinder the implementation of e-procurement and slow user acceptance of new information systems were the hindrances to the implementation of e-procurement as indicated by the mean scores of 3.76 and 3.63 respectively.

4.5 Relationship between e-procurement implementation and performance of NGOs in Kenya

The study asked the respondents to indicate the extent to which they agreed with the following statements about relationship between e- procurement implementation and performance of NGOs in Kenya. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- To no extent, 2- To a little extent, 3- To a moderate extent, 4- To a great extent and 5-To a very great extent. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

Table 4.3: Relationship between e-procurement implementation and performance of NGOs in Kenya

	Mean	Std Dev
online advertisement of tenders has improved effectiveness	4.29	0.469
Online short listing of tenders has ensured transparency	4.27	0.834
Online requisition by organization staff has improve accountability	4.1	1.224
Online advertisement of tenders has ensured the NGO gets competitive suppliers	4.00	0.5
Online requisition by organization staff has improve flexibility	3.88	1.576
Online call for proposals has ensured effectiveness	3.83	0.649
Online short listing of tenders has improved effectiveness	3.76	1.521
Online call for proposals has improved flexibility	3.75	0.231

Source: field data (2014)

From the study findings in Table 4.4, majority of the respondents strongly agreed that online advertisement of tenders has improved effectiveness; online short listing of tenders has ensured transparency; online requisition by organization staff has improve accountability and online advertisement of tenders has ensured the NGO gets competitive suppliers as indicated by the mean scores of 4.29, 4.27, 4.10 and 4.00

respectively. Most of the respondents on the other hand, agreed to a moderate extent that online requisition by organization staff has improve flexibility; online call for proposals has ensured effectiveness; online short listing of tenders has improved effectiveness and online call for proposals has improved flexibility as indicated by the mean scores of 3.88, 3.83, 3.76 and 3.75 respectively.

4.4 Inferential Analysis

4.4.1 Coefficient of Correlation

To ascertain the perceived relationship between e-procurement and organization performance of the non-governmental organizations, the study employed Pearson's product moment correlation analysis where the study employed coefficient of determination, regression analysis and regression coefficient on online advertisement of tenders, online quotations, mode of ordering is via online. This was done to respond to objective of the study which sought to establish the perceived relationship between e-procurement and organization performance. To compute the correlation (strength) between the study variables and their findings the researcher used the Karl Pearson's coefficient of correlation (r). From the findings, , it was clear that there was a positive correlation between online advertisement of tenders and organization performance as shown by a correlation figure of 0.432, it was also clear that there was a positive correlation between online quotations and the organization performance with a correlation figure of 0.5410, there was also a positive correlation between mode of ordering via online and organization performance with a correlation value of 0.6754. This shows that there was a positive correlation between organization performance and online advertisement of tenders, online quotations and mode of ordering via online.

Table 4.4: Coefficient of Correlation

		Organizational Performance	Online Advertisements	Online Quotations	Mode of Ordering
Organ. Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Online advertisement of tenders	Pearson Correlation	.432	1		
	Sig. (2-tailed)	.0032			
Online Quotations	Pearson Correlation	.5410	.3421	1	
	Sig. (2-tailed)	.0021	.0014		
Mode of ordering	Pearson Correlation	.6754	.1240	.0621	1
	Sig. (2-tailed)	.0043	.0120	.0043	

Source: field data (2014)

4.4.2 Regression Coefficient

Multiple regression analysis was conducted as to determine the relationship between E-procurement and the performance of Non-Governmental Organizations and the three variables. As per the SPSS generated table 4.19, the equation

$(Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon)$ becomes:

$$Y = 1.308 + 0.558X_1 + 0.785X_2 + 0.620X_3$$

The regression equation above has established that taking the three factors into account (online advertisement of tenders, online quotations and mode of ordering is via online at zero, organizational performance will be 1.308. The findings presented also shows that taking all other independent variables at zero, a unit increase in online advertisement of tenders will lead to a 0.558 increase in organizational performance; a unit increase online quotations will

lead to a 0.731 increase in organizational performance and a unit increase mode of ordering is via online will lead to a 0.785 increase in organizational performance. This infers that use of online advertisement of tenders was most effective to organizational performance followed by online quotations and then mode of ordering is via online contributed the little to organizational performance.

Table 4.5 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.308	1.342		1.623	0.357
Online advertisement of tenders	0.558	0.310	0.172	4.342	.0276
Online Quotations	0.731	0.156	0.210	3.592	.0285
Mode of ordering is via online	0.785	0.322	0.097	3.542	.0202

Source: field data (2014)

4.4.3 Coefficient of Determination

Further the researcher conducted a multiple regression analysis so as to analyze the relationship between E-procurement and organizational performance. The researcher applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Organizational performance) that is explained by the three independent variables (online advertisement of tenders, online quotations and mode of ordering is via online).

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.913	0.834	0.751	0.4538

Source: field data (2014)

The three independent variables that were studied, explain only 83.4% of the Organizational performance as represented by the adjusted R^2 . This therefore means that other factors not studied in this research contribute 16.6% of Organizational performance. Therefore, further research should be conducted to investigate the other factors (16.6%) of Organizational performance.

4.6.2 ANOVA

Table 4.7 ANOVA (Analysis of Variance)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressi	1.424	9	.208	3.23	.002 ^a
	Residual	5.375	20	.232		
	Total	6.799	29			

Source : field data (2014)

a. Predictors: (Constant), online advertisement of tenders, online quotations and mode of ordering is via online

b. Dependent Variable: Organizational performance.

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance.

The "F" column provides a statistic for testing the hypothesis that all $\beta \neq 0$ against the null hypothesis that $\beta = 0$ (Weisberg, 2005). From the findings the significance value is .002 which is less than 0.05 thus the model is statistically significant in predicting how online advertisement of tenders, online quotations and mode of ordering is via online affects organizational performance. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value = 2.21), this shows that the overall model was significant.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary, conclusions and recommendations of the study on e-procurement and organizational performance on non-governmental organizations in Nairobi, Kenya.

5.2 Summary of findings and Discussion

The study concluded that all the organization staff make requisitions online; tender were advertised online; specifications for procured items was posted to the organization websites; short listing of tender was done by e-procurement system and call for proposals was done through the organization websites. On the other hand, accountability has been encouraged; there is a competitive bidding and sourcing and that there was improved flow of information. The findings are the same as Baily's (2011) who ascertained that e-procurement is done with a software application that includes features for supplier management and complex auctions, his findings ascertained that the new generation of e-procurement is currently on demand or software as a service.

On the other hand, lack of management support; late supplier involvement; lack of proper staff training; failure to comply with best practices and poor information quality were the hindrances to the implementation of e-procurement. Further, failure to continuously measure key benefits hinder the implementation of e-procurement and slow user acceptance of new information systems were the hindrances to the implementation of e-procurement. These findings are in line with the (Berry & Berry, 1999) who contends that Flexibility in the development and enablement of the associated systems and processes allows the diverse requirements of stakeholders and participants to be

recognized and supported. This may include tailored training for buyers and procurement support staff as well as the ongoing reviews of the associated processes and tools.

Lastly, the study established that online advertisement of tenders has improved effectiveness; online short listing of tenders has ensured transparency; online requisition by organization staff has improve accountability and online advertisement of tenders has ensured the NGO gets competitive suppliers. On the other hand, online requisition by organization staff has improved flexibility; online call for proposals has ensured effectiveness; online short listing of tenders has improved effectiveness and online call for proposals has improved flexibility.

5.3 Conclusions

The study concludes that majority of the respondents were males aged below 30 years and had worked for 11-15 years. Further, that majority of the respondents were highly trained in their profession as they had very high academic qualifications.

The study concluded that accountability has been encouraged; there is a competitive bidding and sourcing and that there was improved flow of information. Further, the study recommends that all the organization staff make requisitions online; tender were advertised online; specifications for procured items was posted to the organization websites; short listing of tender was done by e-procurement system and call for proposals was done through the organization websites.

The study also concluded that failure to continuously measure key benefits hinder the implementation of e-procurement and slow user acceptance of new information systems were the hindrances to the implementation of e-procurement. On the other hand, lack of management support; late supplier involvement; lack of proper staff training; failure to

comply with best practices and poor information quality were the hindrances to the implementation of e-procurement.

Further, the study concluded that online advertisement of tenders has improved effectiveness; online short listing of tenders has ensured transparency; online requisition by organization staff has improve accountability and online advertisement of tenders has ensured the NGO gets competitive suppliers. Online requisition by organization staff has improved flexibility; online call for proposals has ensured effectiveness; online short listing of tenders has improved effectiveness and online call for proposals has improved flexibility.

5.4 Recommendations

Although e-procurement seems to have a lot positive of effects on organizations, it must be implemented with caution to ensure that it is implemented at the right time and under the right conditions. It is important to remember that e-procurement may not be right for all types of organizations depending on their business operations and their level of technological development among other things.

This research recommends a combination of the suggested legal measures to give more effective solutions to reduce the legal uncertainties. The stakeholders should also stay attune to any new e-procurement related legislation, or self-regulation mechanisms such as Code of Conducts and Interchange Agreement. In addition, they should educate their employees, modify existing policies, formulate new strategies, adopt updated security systems and software's, and incorporate security information management in their organizations. Communicating and enforcing these policies by all workers, especially the higher level management team, will further increase the effectiveness of these security

measures. Since e-procurement is about automating the manual procurement system, this research suggests that NGOs works day and night to implemented-procurement.

5.5 Limitations and Suggestions for further Research

The findings of this study are only directly applicable to the NGOs in Nairobi. The time duration was not adequate to conduct a survey of all staff and NGOs in Nairobi. This is the reason why the study chose to identify 2 respondents per NGO. This study has only focused on e-procurement implementation and supply chain integration among NGOs in Nairobi. This same study should be extended to other industries and firms so that similarities and differences may be drawn. It will also be advisable to replicate this same study after some years have elapsed in order to establish the changes that have taken place since supply chain integration highly depends on technology which is subject to change.

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APPENDIX I: QUESTIONNAIRE

The questionnaire is meant to collect information on the relation between E-procurement and performance of NGOs in Nairobi, Kenya. Kindly answer the questions by writing a brief statement or ticking in the boxes provided as will be applicable. The information provided will be treated as strictly confidential and at no instance will your name be mentioned in this research. This research is intended for an academic purpose only.

SECTION ONE: DEMOGRAPHIC INFORMATION

1. Gender Male Female
2. Age below 30 years 30-39 years 40-49years 50-59 years
 60-69 years
3. For how long did you/have you work(ed) with this NGO?
 - a) 0-5 years
 - b) 6-10 years
 - c) 11-15 years
 - d) 16-20 years
 - e) 20 and above years
4. What is your highest level of education?
 - i. Secondary
 - ii. Undergraduate
 - iii. Tertiary College
 - iv. Postgraduate
 - v. Other (specify)

SECTION TWO: TO WHAT EXTENT HAS E-PROCUREMENT BEEN IMPLEMENTED BY NGOs IN NAIROBI, KENYA

Kindly give the extent of your agreement with the following statements about e-procurement implementation in your NGO?

Very great extent [1] great extent [2] moderate extent [3] small extent [4] very
small extent [5]

	1	2	3	4	5
Tenders are advertised online					
Short listing of tenders is done by the e-procurement system					
Specifications for procured items are posted to company website					
All company staff make requisitions online					
Call for proposals is done through the company website					
There is competitive bidding and sourcing					
there is improved flow of information					
accountability has been encouraged					

SECTION THREE: WHAT IS THE RELATIONSHIP BETWEEN E-PROCUREMENT IMPLEMENTATION AND PERFORMANCE OF NGOs IN NAIROBI, KENYA

The following are statements about relationship between e- procurement implementation and performance of NGOs in Kenya. To what extent do you agree with these statements?

Very great extent [1] great extent [2] moderate extent [3] small extent [4] very small extent [5]

No	Description	(1)	(2)	(3)	(4)	(5)
i	Online advertisement of tenders has improved transparency					
ii	Online advertisement of tenders has ensured the NGO get competitive suppliers					
iii	Online requisition by company staff has improved flexibility					

iv	Online requisition by company staff has improved accountability					
v	Online shortlisting of tenders has improved effectiveness					
vi	Online shortlisting of tenders has ensured transparency					
Vii	Online call for proposals has ensured effectiveness					
viii	Online call for proposals has improved flexibility					

SECTION 4: TO WHAT EXTENT DOES THE FOLLOWING CHALLENGES HINDER THE IMPLEMENTATION OF E-PROCUREMENT BY NGOS IN NAIROBI KENYA

Very great extent [1] great extent [2] moderate extent [3] small extent [4] very small extent [5]

no	description	1	2	3	4	5
i	Lack of management support					
ii	Failure to comply with best practices					
iii	Slow user acceptance of new information systems					
iv	Late supplier involvement					
v	Lack of proper staff training					
Vi	Poor information quality					
vii	Failure to continuously measure key benefits hinder the implementation of e procurement					

APPENDIX II: LIST OF NGOS IN NAIROBI KENYA

1. Beacon of Hope
2. Bridge Africa
3. Care International
4. Church Worlds Service and Witness
5. CORAT Africa
6. East Africa Wildlife Society
7. Feed the Children
8. Food for the Hungry International
9. Handler International
10. International Bible Society
11. Kenya Society for the Protection and Care of Animal
12. Living Water International
13. Luther World Relief
14. Map International
15. Mercy International Kenya
16. Omega Foundation
17. Operation Smile Mission Kenya
18. Oxfam Kenya
19. PACT Kenya
20. Samaritan Purse
21. save the Children Fund
22. Summer Institute of Linguistics
23. Terre Des Homme
24. Ujamaa Center
25. United Bible Society
26. United Nations Environmental Programme
27. World Concern International
28. World Relief International
29. World Vision
30. Africa Harvest Biotech Foundation International
31. African population and health research centre
32. Amnesty International Kenya
33. Arise Child Development Organization
34. African Development and Emergency Organization (ADEO)
35. Future Kids Project
36. Gibb Africa Ltd
37. International Rescue Committee
38. Kenya Aids NGO's Consortium
39. Kenya Community Based Health Financing Association.
40. Kenyan-Heart National Foundation
41. Olive Leaf Foundation
42. Pan Africa Climate Justice Alliance
43. Pangea Network
44. Pathfinder International
45. Save the Children (USA)
46. Separations International
47. Support For Tropical Initiative In Poverty Alleviation
48. Theo vision international
49. Ufadhili Trust
50. Undugu Society Of Kenya

