THE EFFECT OF E-PROCUREMENT SYSTEMS ON INTERNAL CUSTOMER SERVICE IN STATUTORY BODIES

A CASE STUDY UGANDA REVENUE AUTHORITY

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A DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT AND ENTREPRENEURSHIP IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER'S DEGREE IN BUSINESS ADMINISTRATION OF KYAMBOGO UNIVERSITY

JANUARY, 2014

DECLARATION

I, Nalukwago Ruth do declare that this dissertation is original and to the best of my knowledge has never been presented to any other research Institution or Higher Learning Institution for any academic award and all the information obtained from other sources has been fully acknowledged.

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APPROVAL

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DEDICATION

This dissertation is dedicated to my daughter Nakalanzi Emily, Kajubi Elton (son), the Tenywa's, colleagues at my work place Muzaale, Senono Lorna and my supervisor Mr. Besigye Sam. To my classmates especially Akatuhereza Edson, Kwikiriza Godfrey, Patience Khabugo, Buhanda Brian, Kiama, Muhwezi, Mwebesa, Nakandi, Mother Mary, Gloria and Edmond.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to the almighty God for his abundant grace and blessings that have enabled me to finish this research work successfully. This work would not have come to its completion without God's assistance, wisdom, good health that enabled me to reach this far. I can only say EBENEZAR.

I would like to thank Dr Obanda Peter and Mr Kalinzi Charles my supervisors who struggled to supervise and worked hard to see the completion of this work.

Iam grateful to my family, for being supportive up to the end of this course.

My gratitude also to staff and management of Uganda Revenue Authority for the support and endless attention accorded to throughout the research period.

TABLE OF CONTENTS

Declaration……..ii

Approval……iii

Dedication……...iv

Acknowledgement……v

Table of Contents..... ……iv

List of tables……ix

Abstract……....xi

CHAPTER ONE INTRODUCTION..... 1

1.0 Introduction to the study 1

1.1General Background to the study..... 1

1.2 E-procurement in developing countries 2

1.3 Problem statement..... 4

1.2 Purpose of the study..... 4

1.3 Objective of the study 5

1.4 Research questions..... 5

1.5 Scope of the study 5

1.6 Significance of the study..... 6

1.7 Definition of key terms 7

CHAPTER TWO LITERATURE REVIEW 8

2.1 Introduction..... 8

2.2 E-procurement systems 8

2.3 Customer Service 9

2.4 Theoretical Review of e-procurement and customer service..... 10

2.5 Conceptual framework..... 13

2.6 Planning factors/rationale for introducing e-procurement system towards customer..... 15

2.7 The implementation of e-procurement system towards customer service 20

2.7.1 The success stories of e-procurement..... 20
2.7.2 Challenges employee and customer face using e-procurement system 22
2.8 Possible strategies of improving customer service using e-procurement 24
2.9 Conclusion..... 26
CHAPTER THREE METHODOLOGY 27
3.0 Introduction 27
3.1 Research Design..... 27
3.2 Area and population of the study 27
3.3 Sample size and sampling technique..... 28
3.3.1 Sample size..... 28
3.3.2 Sampling Techniques 28
3.4 Sources of Data 29
3.4.1 Primary Sources 29
3.4.2 Secondary Sources 29
3.5 Data Collection methods 29
3.5.1 Questionnaires..... 29
3.5.2 Structured Interview..... 30
3.6 Data Quality Control 30
3.6.1 Validity..... 30
3.6.2 Reliability..... 31
3.7 Measurement of variables 32
3.8 Procedure of the study..... 32
3.9 Data Presentation and Analysis..... 33
3.10 Limitations 33

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS 35

4.1 Introduction 35

4.2 Demographic Characteristics 35

4.3 Planning factors/rationale for introducing e-procurement system towards Customer Service 38

4.4: Implementation of e-procurement system towards customer service 48

4.5 Strategies of improving customer service using e-procurement system 59

CHAPTER FIVE: **DISSCUSION, SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS** 67

5.0 Introduction 67

Discussion of findings 67

5.1.1 The rationale for introducing e-procurement system in URA 67

5.1.2 The effect of implementation of the e-procurement system on customer service 71

5.1.3 Possible strategies of improving customer service using e-procurement system 75

5.2.2 The effect of implementation of the e-procurement system on customer service 78

5.2.3 Possible strategies of improving customer service using e-procurement system 79

5.2 Conclusion 80

5.3 Recommendations 81

5.3.1 Rationale for introducing e-procurement 81

5.1.3 The effect of implementation of the e-procurement system on customer service 82

5.2.3 Possible strategies of improving customer service using e-procurement system 82

5.4 Suggestions 83

References 84

Appendix 1 87

Appendix 2 93

LIST OF TABLES

Table 3.1: sample size determination……28
Table 4.1: Gender of the respondents.....35
Table 4.2: Age Distribution of the Respondents.....36
Table 4.3: Level of Education of the respondents.....37
Table 4.4: Department in which respondents fall.....37
Table 4.5: Introduction of e-procurement can lead to improved efficiency in customer service..38
Table 4.6: E-procurement is faster, cheaper and can lead to cost saving and thus improved customer service.....39
Table 4.7: E-procurement allow the purchasing function to focus on more value adding activities such as serving customers.....40
Table 4.8: Mistakes and errors in e- procurement process are eliminated with the adoption of e-procurement system.....41
Table 4.9: Reductions seen in lead times within the procure-to-pay cycle.....42
Table 4.10 Compliance problems are eliminated with e-procurement system.....43
Table 4.11 E-procurement leads to improved decision making process by keeping relevant information neatly organised and time stamped.....44
Table 4.12 Well managed e- procurement helps reduce inventory levels.....45
Table 4.13 E-procurement speeds up procurement cycle times and facilitates supplier performance improvements.....46
Table 4.14 E- procurement system, sources and ordering processes are always exact.....47
Table 4.15 E-procurement has resulted into increased efficiency in administrative tasks and increased customer utilisation of e-procurement.....47
Table 4.16 E-procurement has resulted into increased accuracy in purchasing information..... 48
Table 4.17 The reduction in operation processing costs is due to the introduction of e-procurement in URA.....50
Table 4.18 In URA the reduction in ordering lead time is a result of E-procurement.....51
Table 4.19 Increased efficiency and cost saving is custom services in URA has been achieved as a result of e procurement.....52

Table 4.20 Lack of high speed connections and software incompatibly affects adversely affects customer utilisation of e-procurement.....53

Table 4.21 The high level of computer literacy compromises customer utilisation of the e-procurement.....54

Table 4.22 Capturing of e-signatures for approval have greatly hindered customer utilisation of the e-
procurement.....55

Table 4.23 Regulatory barriers created by governmental action affect negatively e-procurement.....56

Table 4.24 Transaction risks can happen due to wrong purchased due to incomplete or misleading information.....57

Table 4.25 Customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data.....58

Table 4.26 There is a need to develop a user friendly e-procurement system in order to improve customer service.....59

Table 4.27 There is an urgent need to train customers how to use e procurement system to overcome the problem of computer illiteracy... 60

Table 4.28 Capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement.....61

Table 4.29 The government to pass electronic laws to enable efficiency customer utilisation of e-procurement.....62

Table 4.30 Security measures of data protection should be put in place to enhance customer utilisation of e-procurement.....63

Table 4.31 Correlation between e-procurement and customer service.....64

Table 4.32 Regression of e-procurement and customer service.....65

ABSTRACT

The study was to examine the effect of e-procurement system on internal customer service in Uganda Revenue Authority. The study was guided by three main objectives that is; to establish the rationale for introducing e-procurement system in URA, to examine the effect of implementation of the e-procurement system on internal customer service in Uganda Revenue Authority and to examine strategies of improving internal customer service using e-procurement system in Uganda Revenue Authority.

The study adopted a cross sectional study design because data was collected at one single point in time. The design assisted the researcher to examine in details the influence of e-procurement on internal customer service. A sample size of 66 respondents was selected for the study and questionnaire and interview were used to collect the findings of the study.

The findings of the study indicated e-procurement in URA was introduced purposely to improve procurement efficiency, save costs, reduce lead times, mitigate delays, reduce mistakes and errors, reduce inventory levels, reduce high customer complaints and that it is faster, cheaper, allows the purchasing function to focus on more value adding activities, promotes compliance and accuracy. That, there are some success stories registered such as increased efficiency accuracy in purchasing information, cost saving by 56% and better decision making. However, it was discovered that there challenges encountered such as lack of high-speed connections, computer illiteracy, problems in capturing of e-signatures, regulatory barriers, transaction risks which adversely affect customer utilization of the e-procurement. It is recommended that URA should develop a user friendly e-procurement system, train its staff, and make capturing of e-signatures easier and that the government need to enable and facilitate electronic transactions. Conclusively, a well-managed e-procurement system leads to efficient internal customer service.

CHAPTER ONE
INTRODUCTION

1.0 Introduction to the study

This chapter covers the background to the study, statement of the problem, objectives of the study, research questions, scope of the study, significance, and definition of key terms. The study was centered on e-procurement as independent variable and internal customer service as dependent variable.

1.1General Background to the study

E - Procurement is an important part of e- business (Ouchi, 2009). The mid1990s ushered in major technological advancements and many companies in developed countries such as United States and Britain started to talk about Business to Business (B2B) applications and e-procurement was among the first business application areas to make use of the internet and the Wide World Web in a user friendly way. Oliver (2004) concedes that many companies in Europe started to implement B2B strategies that would make them be part of this new business environment and be able to get some advantages of being early movers. As expected, many of them could not sustain themselves as they rushed into the e-procurement bandwagon with immature applications and without proper strategies. However, the excitement and dust over e-procurement has now settled and the value of e-procurement has increased enormously over the past decade (Knott and Geoffrey, 2005). “Advances in e-procurement technologies coupled with complementary technologies such as sourcing and contract management have accelerated the adoption and value of e-procurement.

1.2 E-procurement in developing countries

In developing countries in Asia such as Thailand and Sub-Saharan African countries like Kenya, Zambia and Uganda, some firms have discovered that many of their transactions still take place on paper, and they have run into problems ranging from content management to supplier participation in their systems. Most companies who desire to make the switch fall into two camps. The first are the slow step-by-step adopters. They implement one piece of their system at a time and slowly bring trading partners on board. The others follow the total replacement model. They build a totally parallel system, test it, then switch over to it when it works. There is usually some pain involved and some mistakes are discovered, but by and large these are absorbed and the business continues.

However, the period 1999 to 2000 shows that Africa's expectations and many developing countries were rather too high that many companies needed to put a lot of things in place before this new technology could work well for them (Terry, 2005). This era was followed by the trough of disillusionment in the period 2001-2002 as many Sub-Saharan African companies' expectations were not met. From 2003 onwards, there has been a steady appreciation of e-procurement as a lot of companies have put things in place and they have seen e-procurement work for them.

Over the years, many companies worldwide have been striving to provide exceptional customer service (Kent and Mayer, 2009). It lies at the heart of the mission of many organizations. Internal customer service is the service provided to colleagues and other departments within an organization, as well as vendors and anyone else an employee interacts with to get their job done (Marsh, 2004). Great internal customer service cannot exist without good communication across the

organization. Open, free flowing communication ensures individuals in different functions, departments and geographic locations have the information they need, and can effectively collaborate and coordinate to achieve goals. It is important to remember that an organization is an interconnected unit that depends upon all of its operating "gears" working together. If the gears are not running smoothly or are working at cross purposes, everything comes to a grinding halt and nothing gets accomplished (Knott and Geoffrey, 2005). Ignoring internal customer service simply puts the business of an organization at risk.

The adoption of electronic procurement systems in Uganda was necessitated by the need to reduce costs and encourage purchases in large quantities, thereby limiting the number of contracts. Uganda Revenue Authority introduced e-procurement in June 2011 for its contracts to achieve benefits such as increased efficiency and cost savings (faster and cheaper) in procurement and improved transparency (to reduce corruption) in procurement services. However, URA is faced with a problem of technological barriers which represent obstacles to the adoption of e-procurement due to technological factors such as lack of high-speed connections and software incompatibility. This can have a profound effect on ability to search various business and contracting opportunities as well as download, in a timely manner, all available information about a potential procurement. Further the high level of computer illiteracy for internal customer and capturing of e-signatures for approval have greatly compromised customer service (Nduru, 2013). This implies that the goal of URA of minimizing procurement costs and improving on efficiency and customer service is not yet achieved and thus required a thorough investigation into the problem in order to improve on customer service.

1.3 Problem statement

Many organisations in Uganda such as Bank of Uganda, Uganda Telecom MTN, Uganda Revenue Authority, Ministry of Finance Planning and Economic Development are picking interest in e-procurement because of its benefits (Bennett, 2009). Over the years Uganda Revenue Authority has been using manual procurement system in its procurement function however, the manual procurement system was characterized by high processing costs of about 20%, inefficiencies in administrative tasks, high mistakes and errors in purchasing, delays in customer service, yet sourcing and ordering processes are never too not exact (URA Communications Policy March 2013). To overcome such problems, Uganda Revenue Authority introduced e-procurement on June 2011 for its contracts to achieve benefits such as increased efficiency and cost savings and to allow the purchasing function to focus on more value adding activities such as serving customers rather than on operational issues (Mukasa, 2012). Despite the benefits indicated, there seem to have less impact on customer service. E-procurement system introduced is unreliable due to uncertain failure associated with it. The system has limited external usage, yet even internally it is not fully utilized (due to the fact it is all embracing) which is believed to have compromised on its capacity to provide more benefits (Nduru, 2013). There is no systematic study to date which has been undertaken to examine the effect of the e-procurement system in URA on customer service and this is why the study was undertaken to fill this gap.

1.2 Purpose of the study

The purpose of the study was to examine the effect of e-procurement system on internal customer service in statutory bodies specifically, Uganda Revenue Authority.

1.3 Objective of the study

The study was guided by the following objectives**: -**

i. To establish the rationale for introducing e-procurement system in Uganda Revenue Authority.

ii. To examine the effect of implementation of the e-procurement system on internal customer service Uganda Revenue Authority.

iii. To examine strategies of improving internal customer service using e-procurement system in Uganda Revenue Authority.

1.4 Research questions

The study aimed at answering the following research questions: -

i. What was the rationale of introducing the e-procurement system towards internal customer service in Uganda Revenue Authority?

ii. How has the implementation of e-procurement system affected internal customer service in Uganda Revenue Authority?

iii. What are the strategies of improving internal customer service using the e-procurement system in Uganda Revenue Authority?

1.5 Scope of the study

- **Subject scope**

The study focused on e-procurement systems as an independent variable by looking at e-requisition, e-ordering, e-purchasing and e-sourcing. The study focused on customer service in Uganda Revenue Authority as the dependent variable by specifically looking at the internal

customers and thus the rationale and implementation of e-procurement systems towards customer service in Uganda Revenue Authority.

- **Geographical scope**

The study was carried out in Uganda Revenue Authority and its catchment areas in Kampala it service such as Kampala South, Kampala East, Kampala North, Crested Towers (Kampala Central. The main reasons for choosing catchment areas in Kampala was that e-procurement has not yet spread to up country offices and it is being used in Kampala only. Other offices outside Kampala use manual systems.

1.6 Significance of the study

The findings of the study may highlight the importance of e-procurement to organisations. This study is important because it is trying to address the contribution of e-procurement on internal customers. Internal customers are employees in various departments. The findings of the study will highlight how e-procurement creates interdepartmental relations which are important part of the supply chain and they have great influence on the external customers and therefore the overall organization's success. Therefore, the results of the study will help Uganda Revenue Authority to identify how e-procurement creates a link with other departments within the organization and how it affects customer service, and this will encourage other companies to implement and invest in e-procurement.

The study may help implementers of e-procurement on identifying how they can use it as a source of competitive advantage.

The results may help Uganda Revenue Authority on how invest more in e-procurement so as to register maximum benefits.

Other companies that have not implemented e-procurement should also be able to see the benefits and implement it so as not to be at a disadvantage with their competitors.

1.7 Definition of key terms

E-procurement is simply aspects of the procurement function support by various forms of electronic communication and its use in both the public and private sectors takes many forms including; electronic data interchange, enterprise resource planning, web-based enterprise resource planning, e-sourcing, e-tendering, e-reverse auctioning, e-auction for disposals, e-informing, e-collaboration(Terry, 2005).

Customer service is the provision of service to customers before, during and after a purchase. According to Turban et al. (2002), Customer service is a series of activities designed to enhance the level of customer satisfaction. That is, the feeling that a product or service has met the customer expectation.

Internal customer services - are understood as covering those services provided by distinctive organisational units/sections, or the people working therein, to other units/sections or individuals within the same organisation. Internal customer service is service directed towards others within the organization (Guthrine, 2005). For the purposes of this study internal customers are the departments and staff with in Uganda Revenue Authority.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The aim of this chapter was to try and put together what others have written about the topic that was addressed in this research work and tried and brought out the researcher's thoughts about what is found in current literature especially in relation to the topic. This chapter began with the theoretical review, conceptual review and lastly reviewed the study objectives.

2.2 E-procurement systems

According to Bennett (2009), e-procurement (electronic procurement, sometimes also known as supplier exchange) is the business–to-business or business-to-customer 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 (Guthrine, 2005). E-procurement is done with a software application that includes features for supplier management and complex auctions. The new generation of e-Procurement is now on-demand or a software-as-service (SaaS).

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 (Zeneca, 2001). 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 (Terry, 2005). Elements of e-procurement

include request for information, request for proposal, request for quotation, RFx (the previous three together), and RFx (software for managing RFx projects).

2.3 Customer Service

Internal customer service has to do with serving the needs of those within the organisation which ultimately affects how the external customers are treated (Ouchi, 2009). If people within the organisation are not providing good service to each other, it follows that the external customer will be affected in one way or the other. “Great external customer service depends on excellent internal customer service”. Departments within the organisation should be able to serve each other efficiently and effectively before they can satisfy their external customers (Knott and Geoffrey, 2005). Good internal customer service ensures that different units of the organisation work together in harmony and are in agreement over processes and procedures as they work towards a common goal. They must understand that what they do and how they do it affects the others and they are also affected by what others do and how others perform their duties.

Delivering high quality services and products to the external customer therefore is very much dependent on the level of internal customer service that exists within the organization (Anderson, 2000). Organisations must thus pay attention to matters relating to internal customer service as this not only makes the organisation survive and prosper in a highly competitive environment but also has the added advantage of motivating employees and promoting a conducive environment to work within (Bennett, 2009). Business practitioners have maintained that it is important to fulfil the needs of internal customers before meeting the needs of external customers. Bishop (2001), argues that employees must be satisfied before external customers will be satisfied. His reasoning is that if these internal customers are satisfied, they will love their jobs and feel a sense

of pride in the firm. Others have argued that employees must come first, even ahead of customers because if employees are not happy with their jobs, the external customer will never be uppermost in their minds and researchers also agree that satisfied internal customers are a critical prerequisite to the satisfaction of external customers.

2.4 Theoretical Review of e-procurement and customer service

Systems theory

The study adopted Systems theory. Ludwig Von Bertalanaffy (1940) developed the Systems theory in the 1940's and based his thinking on an interdisciplinary approach which attempts to fit together in different aspects of the organisation. His theory specifically dealt with the complex nature in systems, and proposed a framework which one can use to investigate any group of objects that work together to produce some result. Therefore the study employed systems theory to examine the influence of e-procurement on internal customer service delivery. The theory indicates the system must function efficiently and any fault in a system can affect the whole functioning of the whole system (Harrison and Sundern, 2000). Examined in comparable terms, this theory explains how electronic application of procurement (e-procurement) has had many benefits to organisations such as cost savings and profits. It thus makes it an important area of study and this particular study addressed how e-procurement is affecting internal customers in organisations (Ferguson and James, 2005).

This study was analyzed using systems theory by linking e-procurement and internal customer service delivery. It should be noted that procurement is an important department in many organisations and in many cases, the service level that the final customer gets is the reason for the organisation's existence, depends to a very large extent on the operations of the procurement

department and the type of materials procured. For example, head of orgnisation argues that "every part of an organisation contributes to customer satisfaction.

This entails that whatever the effects of e-procurement on the procurement department will inevitably affect other departments because they rely on procurement to bring in materials at the right time, price, quality, quantity and from the right sources which are used to produce goods for the end customer (Feigein, Kent and Mayer, 2009). If for example, important components do not arrive in time, production will be late, and the sales and marketing department may not live up to their promises to deliver to the customer as anticipated (Doyle, 2001). This therefore implies that the entire supply chain which encompasses the internal supply chains must be properly managed and coordinated as provision of goods and services to the final customer is wholly dependent on the efficiency and effectiveness of the entire supply chain.

Technology Acceptance Model

The Technology Acceptance Model (TAM) introduced by Davis (1989) is an adaptation of the Theory of Reasoned Action (TRA) specifically tailored for modeling user acceptance of e-procurement towards customer service. TAM was developed to explain and predict computer usage behavior. Although several theoretical models have been proposed to describe the phenomenon of e-procurement acceptance, TAM is increasingly recognized as a robust yet parsimonious conceptualization (Agarwal &Karahannna, 1998). The goal of TAM is "to provide an explanation of the determinants of computer acceptance that is general, capable of explaining user behavior across a broad range of end-user computing technologies and customer utilization of e-procurement, while at the same time being both parsimonious and theoretically justified"

(Davis et al.. 1989). It states that beliefs influence attitudes; which lead to intentions and to behaviors. TAM proposes two specific belief constructs, that is, perceived usefulness (the extent to which e-procurement is expected to improve customer service) and perceived ease of use (the degree to which the potential adopter expects e-procurement to be free of effort in use) as critical antecedents to an individual's technology adoption process (Davis, 1989). Both perceived usefulness and perceived ease of use a specific perception and are anchored to specific beliefs customers hold about the system. In summary, it was found that TAM could successfully predict e-procurement acceptance behavior under different technologies and different situations. In addition, it was found that TAM was a much simpler; easier to use and more powerful model of the determinant of user acceptance of computer technology than other models (Pavlou, 2003)

Organizational Perceived Usefulness of e-procurement towards internal customer service

Perceived usefulness (PU) is defined as "the degree to which a person believes that using a particular system would enhance his job performance" (Davis, 1989). Perceived usefulness has a direct positive correlation with attitude towards using the e-procurement system and behavior intention to use the system by the customers. A study by Malone and Yates (1989) reveals that e-procurement adoption in an organizationis influenced by the organization's perceived usefulness of the system besides customer satisfaction and system usage (Nguyen & Barrett, 2006).

2.5 Conceptual framework

The conceptual framework developed to examine the effect of e-procurement on internal customer service in Uganda Revenue Authority as shown below: -

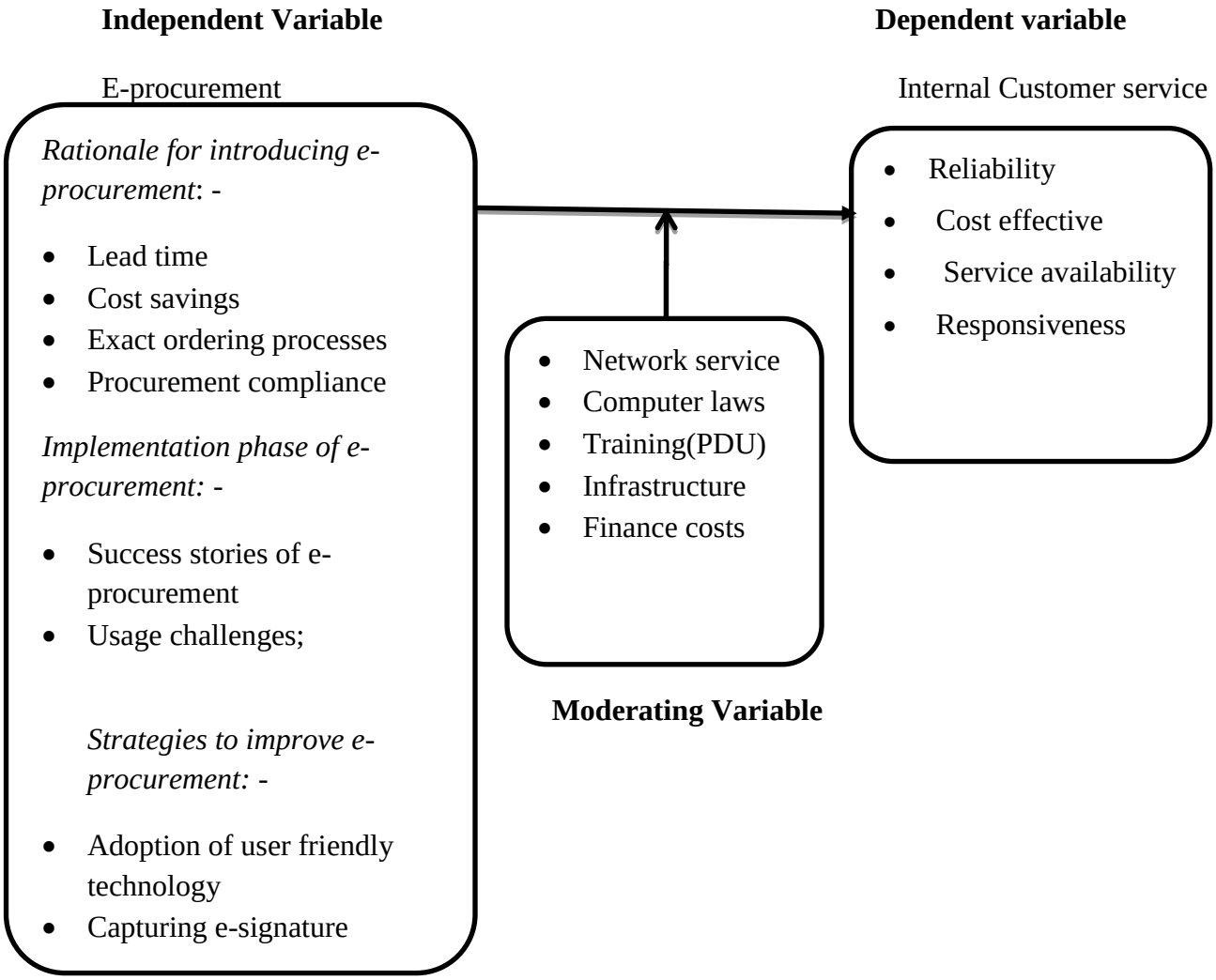

Figure 1: The Conceptual framework reflecting how e-procurement influences customer service **(Source: Adopted from the systems theory 1940, and modified by the researcher)**

As shown in figure 1 above, the conceptual framework was developed to examine the effect of e-procurement which is the independent variable on internal customer service which is the

dependent. It should be noted that the rational for introducing e-procurement is to allow the purchasing function to focus on more value adding activities such as serving customers rather than on operational issues which in turn lead to reduced lead times, cost savings, exact ordering process and procurement compliance. The effect of this leads to efficient customer service in terms of being reliable, cost effective, availability and responsiveness provided that moderating variables are well matched with independent and dependent variable.

Further the implementation of e-procurement has resulted to more success stories that have resulted into process efficiencies amounting to annual cost saving of about 56% and reductions in lead times by 51% within the procure-to-pay cycle. The benefits of e-procurement have a positive bearing on internal customer service in terms of reliability, cost effective, service availability and responsiveness and this can again be released if the moderating variables are well matched with independent and dependent variable.

However, internal customer service can be influenced by the moderating variables such as computer illiteracy, finance costs, infrastructures and network service problems thereby causing delays which can affect negatively customer service in an organisation. These moderating factors will be controlled by matching them with independent variable (e-procurement) and the dependent variable (internal customer service). Therefore, to manage the challenges that hinder efficient customer service, the study focused on several strategies that improve e-procurement such as adoption of user friendly technology and capturing e-signature. It is believed that if such strategies are well implemented they can result into efficient customer service.

2.6 Rationale for introducing e-procurement system towards customer service

According to Shane and Lafferty (2006), the purpose of e-procurement is to allow the purchasing function to focus on more value adding activities such as serving customers rather than on operational issues. The potential of e-procurement is so great that it has turned the formerly looked down upon traditional function into a competitive weapon. Companies have found a lot of benefits from their e-procurement projects which include the following: Process efficiencies amounting to annual savings. Ability to link directly into existing systems, such as ERP (Feigein, Kent and Mayer, 2009). Reductions seen in lead times within the procure-to-pay cycle, in some cases by 50%. Self-invoicing on behalf of clients can add to the bottom line. Month-end reconciliation can end the problem of the wrong items being ordered or the wrong price being offered as business processes have been streamlined and all are working off the same catalog (Knott and Geoffrey, 2005). The buyer is engaged in more strategic product management, leading to better contracts being negotiated. Maverick spending is reduced. Reductions in stock levels can lead to savings of millions of dollars.

According to Guthrine (2005), organisations need to introduce e-procurement in their operation because it helps with the decision-making process by keeping relevant information neatly organized and time-stamped. Most are template-driven which makes all transactions standardized and trackable. Keeping track of all bids means leveraging your knowledge to obtain better pricing. Companies can focus on their most lucrative trading partners and contracts.

According to Marsh (2004), well-managed e-procurement helps reduce inventory levels. Knowing product numbers, bid prices and contact points can help businesses close a deal while

other suppliers are struggling to gather their relevant data. E-Procurement systems that allow multiple access levels and permissions help managers organize administrative users by roles, groups, or tasks. Procurement managers do not need to be as highly trained or paid because such systems are standardized and easy to learn.

Procurement is an important part of the supply chain and does not only affect external stakeholders but also internal stakeholders. This entails that it has potential to add value not only to the external side of the supply chain but also to the internal supply chain. The electronic application of procurement (e-procurement) has had many benefits to organisations such as cost savings and profits (Morgan, 2003). It thus makes it an important area of study and this particular study addresses how e-procurement is affecting internal customers in organisations and goes further to determine how external customers are affected by Internal Customer Service

Although procurement is a secondary activity in the value chain, it has a lot of potential for value adding. Internal customers play an important role in organisations, for example procurement is an important department in many organisations and in many cases, the service level that the final customer gets, is the reason for the organisation's existence, depends to a very large extent on the operations of the procurement department and the type of materials procured (Knott and Geoffrey, 2005). For example, head of organisation argues that "every part of an organisation contributes to external customer satisfaction by satisfying its own internal customers." This entails that whatever the effects of e-procurement on the procurement department will inevitably affect other departments because they rely on procurement to bring in materials at the right time, price, quality, quantity and from the right source which are used to produce goods for the end customer (Doyle, 2001). If for example, important components do not arrive in time, production will be late, and the sales and marketing department may not live up to their promises to deliver

to the customer as anticipated. This therefore implies that the entire supply chain which encompasses both the internal and external supply chains must be properly managed and coordinated as provision of goods and services to the final customer is wholly dependent on the efficiency and effectiveness of the entire supply chain. Consequently, this brings in the concept of internal customer service in the sense that other departments are served by the procurement department in order for them to provide goods and services for the end customer who is the external customer. Recognising the importance of the internal customer is not new and is very important. If poor internal service exists, then the final service to the external customer will be diminished.

According to Terry (2005), there are many reasons for introducing e-procurement system in organisations to enhance customer service and these include: Purchases can easily be tracked as they are done over the internet. Many companies also integrate product specifications in their e-procurement systems which makes it easier for those authorised to buy the right products. Saves time as buyers simply use the internet to make orders and there is no need to make phone calls and suppliers receive the orders almost immediately and when they act on these orders, delivery is much faster than the traditional procurement methods.

Other reasons and benefits of introducing e-procurement as indicated by Knott and Geoffrey (2005) include:

Transactional benefits

According to the Feigein, Kent and Mayer (2009), e-procurement allows for payments to be done online. Typically, a web based transacting tool is used where items are selected from pre-sourced catalogs and submitted for electronic approval. There is then a link to the back end ERP system

for entry, payment of invoices, and collation of management information. Huge time savings and efficiencies are realised as a result of electronic processing due to: enabled relationships with suppliers which speeds procurement cycle times and facilitates supplier performance improvements. Greater data accuracy which minimises ordering inaccuracies and provides the essential foundation for management through measurement and analysis.

Compliance benefits

In many organisations issues of compliance and maverick spending are quite significant and require attention (Zeneca, 2001). This usually because employees are not usually aware of the arrangements that are in place rather than the fact that they want to ignore the laid down processes and procedures. E-procurement has a way of addressing this through tools such as catalogs and standard order processing and approval catalogs (Anderson, 2000). Compliance will be achieved due to: A simple and quick requisitioning-to-payment process including a user friendly interface and pre-sources catalogs tailored to the requirements of the individual user. A simple and quick strategic sourcing process with standard procurement processes and tools as well as easily accessible information. The e-procurement system, the only purchasing mechanism available.

Management Information benefits

The fact that key information such as cost center and commodity codes is hard coded against the user dramatically reduces coding errors and provides highly detailed and easily accessible data. This is very important in maximising the potential benefits of strategic sourcing (Bennett, 2009).

A successful e-procurement implementation will provide high quality, detailed management information and will negate the need for data warehousing or resource heavy data mining.

Price benefits

The ability to prove to your suppliers that you are using e-procurement as a tool to ensure end users do honour their contract status will enhance ability to negotiate down prices through: Greater enhanced capture and therefore reliability of spending information. Increased confidence that spending volumes can be guaranteed from increased compliance with system (Harrison and Sundern, 2000).

Payment benefits

The successful operation of the first four benefits enables electronic payment of invoices. This includes the ability to better control the business cash flow and to manage the efficient payment of the suppliers due to more streamlined procurement processes providing more timely and accurate information to the accounts payable department (Bishop, 2001). Potential benefits include reduced manpower and reduced spending on postage and stationery. When it comes to negotiations, procurement can guarantee the supplier a certain level of prompt payment which was not possible prior to e-procurement (Knott and Geoffrey, 2005). In fact, e-invoicing benefits are often under-assessed and ignored.

According to Shane and Lafferty (2006), the e-phenomena have led to the generation of different ideas and business models in order to enhance how organisations are conducting their businesses. A fully integrated e-business would mean automation of processes within a company and would minimise operational costs to a minimum.

As shown by the various authors (Bennett, 2009; Feigein, Kent and Mayer, 2009; Shane and Lafferty, 2006 and Terry, 2005) about the benefits of e-procurement towards customer services, the results show that little evidence has been put to prove that organisations which have introduced e-procurement have benefited much from e-procurement towards customer service. What the authors failed to put is that there are inadequacies involved in e-procurement system which cannot be overlooked. E-procurement system introduced in some organisations is unreliable due to uncertain failure associated with it. The associated investment is so huge and that above all is not delivering to the expectation which is believed to have compromised on its capacity to provide more benefits and this is what the study investigated in order to fill the knowledge gap.

2.7 The implementation of e-procurement system towards customer service

2.7.1 The success stories of e-procurement

The success stories registered as a result of introducing e-procurement (be it by private business or public institutions) include, according to Timmers (2000), a wider choice of suppliers, better quality, improved delivery, and reduced cost. In particular, the study indicates that e-procurement enhances efficiency through two main avenues: (a) transaction cost savings and (b) reduced direct procurement costs. Procurement carried out in an electronic marketplace has helped in consolidating separate procurement functions on the state, county, and municipality level. Examples of procurement activities potentially undertaken by the e-procurement include bidding, ordering, and payment of related data processing (Andersen, 2004). This has led to direct procurement cost savings in terms of human resources expenditures and administrative overhead in all three levels of public administration.

In addition, demand bundled across public institutions has reduced direct purchasing costs as public bargaining power increases relative to suppliers. Success stories brought about by electronic procurement include (a) increased transparency and accountability as electronically conducted processes allow better monitoring and benchmarking, and (b) easier, cheaper, and quicker exchange of information about prices and product offerings (Kaplan and Sawhney,2000). This creates a huge potential for transaction cost saving in terms of reduced search, matching, and order control costs.

On-line purchases and payment for goods and services in virtual markets constitute crucial elements of e-procurement. Successful adoption of e-procurement has led to potential results, which include the reduction of transaction costs, operational efficiencies, and a better foundation for decision making.

Most purchases in public sector institutions require that a bureaucratic procedure be followed. The majority of items are bought on requisition. This means that a great deal of effort is put into sending forms back and forth in the system. The internal coordination costs are therefore high with respect to the contracting procedure for commodities. As pointed out by Berryman et al. (1998), electronic procurement of commodities represents the greatest potential for savings. E-procurement simplifies work procedures and automates processes, for example in order processing and the handling of invoices and payments. This, combined with the regulated tendering processes, makes the idea of automating procurement an attractive option compared to the statusquo.

2.7.2 Challenges employee and customer face using e-procurement system

Challenges of e-procurement A number of recent studies have also looked into difficulties faced by firms in launching e-procurement and different authors have identified many challenges and drawbacks of e-procurement as follows: -

Technological barriers

Ferguson and James (2005), states that technological barriers represent obstacles to the adoption of e-procurement due to technological factors such as lack of high-speed connections and software incompatibility. This can have a profound effect on ability to search various business and contracting opportunities as well as download, in a timely manner, all available information about a potential procurement. Both cost and availability have a direct impact on a small firm's choice of access mode.

Market barriers

Market barriers include those barriers that are external to the firm, and are driven by market forces (supply and demand) as opposed to other entities such as the government (Zeneca, 2001). Regulatory (government barriers) barriers include barriers created by governmental action or intervention in the market or action directly affecting electronic commerce including procurement.

Barriers unique to firm size

Campbell (2002), highlighted that some barriers relate specifically to the size of the firm. For example, some small firms have concerns that the high cost of investing in e-commerce and e-procurement will prevent them from competing for such business. This "cost" is not necessarily

large in absolute terms, but it is relative to any perceived benefits that small firms expect what they will receive. In a recent survey of 102 international active e-marketplaces and procurement service providers, found the following perceived barriers to electronic procurement (Terry, 2005): a "wait-and-see" attitude among firms in selecting e-marketplaces and procurement service providers; concerns over security and confidentiality of the data needed to be exchanged in electronic environments; reluctance to share data with trading partners; the "non-feasibility of custom-made products" for pooling initiatives; lack of standardization.

Uncertainty over trust and commitment among trading partners

One of the researchers, Saeed (2008), examined buyers' perceptions of e-procurement risks and arrived at three dimensions: 1. Transaction risks resulting from wrong products purchased due to incomplete or misleading information; 2. Security risks resulting from unauthorized penetration of trading platforms and failure to protect transaction-related data while being transmitted or stored; and 3. Privacy risks arising from inappropriate information collection and information transparency. Both buyer and seller firms in their sample considered the following prohibitive and discouraging: The costs and development time required to set up online procurement systems, enabling these systems, and meeting workforce requirements of such systems; The lack of adequate security measures to protect data and Trust issues between buyers and sellers.

Electronic Signature

Nduru (2013) say in Uganda we still have a problem with e-signature and this has crippled e-procurement system in Uganda. Electronic Signature" means data in electronic form, affixed thereto or logically associated with, a data message, which may be used to identify the signatory

in relation to the data message and indicate the signatory's approval of the information contained in the data message. Digital Signature means a transformation of a message using an asymmetric cryptosystem such that a person having the initial message and the signer's public key can accurately determine: whether the transformation was created using the private key that corresponds to the signer's public key; and whether the message has been altered since the transformation was made (Nduru, 2013). The Electronic Signatures Act provides for use of electronic signatures, and regulation criminalization of unauthorized access and modification of electronic signatures, determination of minimum requirements for functional equivalence of electronic signatures.

In conclusion, although various authors (Nduru, 2013; Zeneca, 2001; Saeed, 2008; Andersen, 2004 and Timmers, 2000), indicated some of the success stories and challenges encountered by customer utilization of e-procurement, there is no empirical evidence to prove the existence of such success stories and challenges in utilizing e-procurement. What all the authors failed to highlight is that even if technological requirements are met and the implementation of e-procurement systems seems feasible, from a managerial point of view implementation has proven to be a challenging venture. Rajkumar (2001) pinpoints the managerial challenges by listing critical success factors of e-procurement implementation. It should be that implementation must be achieved in a manner of "incremental change" where technological solutions apply to regulations and policies and this is what the study intended to find out in order to fill the knowledge gap

2.8 Strategies of improving customer service using e-procurement

E-procurement strategies E-procurement is an area of procurement that is developing and changing at an extremely rapid rate giving way to development of technologies and new

strategies to serve the needs of the market (Terry, 2005). As a result, various strategies have been adopted by firms towards e-procurement technologies in order to meet up with the pace. More and more firms continue to undertake the wait and see approach (strategy) by not committing up to 70% of their resources into the business but waits for the best model of e-procurement. These firms are future- oriented as they look forward to seeing the current state of development and assess whether there is need to shift their established procurement processes to the e-world (Cooper, 2003). This type of strategy reflects active experimentation but no sizeable investment until the best e-procurement model is defined. Fewer firms take the passive strategy (4%), which connotes more observation without experimentation. This implies that the capabilities and risk solely depends on how efficient and quickly an organizational learning can be easily absorbed without creating absorptive capacities (Pratt and Bennett, 2009).

Other modest firms adopt the aggressive strategy (27%) which is however defined as riskier in the absence of any well defined solution and firms may likely end up by betting on the wrong technology. This strategy declares the adoption of e-procurement strategy by investing significantly up to 3% in order to gain a competitive lead or moving fast into e-procurement solutions (24%).

Firms adopt these strategies mainly to ensure that costs are properly managed and margins are improved. Wilson (2009) divides the new models of e-procurement into three applications. • Buy- side procurement is a form of procurement system developed and implemented by large buyer organizations to web-enable their purchases with selected suppliers. These suppliers are also using e-procurement in the entire management processes relating to purchase, product development, transactions, etc. This actually creates a virtually integrated inter-organizational

system between the buyers and the seller like EDI systems but with greater scope and capabilities (Bennett, 2009). This type of model is designed predominantly to serve the needs of the buying organization. Sell-side procurement also referred to as e-sales is a form of procurement system by which one supplier sells to large number of buying organizations using E-procurement systems (Harrison and Sundern, 2000). E-Marketplace and trading hub is the combination of industrial consortium and the trading exchanges. This type of model brings together many different buying and selling organizations in one trading community.

In short, despite various view by different authors (Pratt and Bennett, 2009; Cooper, 2003 and Wilson, 2009) about the possible ways of improving internal customer service using e-procurement. Some of the solutions put forward may not be practical to some organizations like Uganda Revenue Authority; therefore, by conducting a study in Uganda Revenue Authority, the findings will prove more ways of improving internal customer service using e-procurement.

2.9 Conclusion

Despite the view of various authors and writers about the influence e-procurement on internal customer service, many organisations still have a long way to go to improve customer service delivery. Research was surely needed to collect data that can be used to demonstrate how e-procurement affects customer service.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This section presents the research design, area and population of the study, sample size and sample selection techniques, sources of data, data collection instruments, data quality control, procedure of the study, data analysis and interpretation and limitations of the study.

3.1 Research Design

The study adopted a cross sectional study design because data was collected at one single point in time. The design assisted the researcher to examine in details the influence of e-procurement on internal customer service. Furthermore, a cross sectional research design was intended to facilitate collection of qualitative information through in-depth interviews in order to allow time for interaction and to verify information collected through inspection of records.

Quantitative method was also used to collect data which could not be generated qualitatively such as customer service delivery.

3.2 Area and population of the study

The study was carried out at URA's head office, Nakawa Division in Kampala. Study population involved employees who were knowledgeable about the concept of e-procurement and internal customer service in Uganda Revenue Authority. Therefore, the study involved revenue officers and managers responsible for IT and e-procurement.

3.3 Sample size and sampling technique

3.3.1 Sample size

According to Krejcie& Morgan, (1970) a population of 80, requires a sample size of 66 to be **.**within a 95% level of confidence as shown in the table below: -

Table 3.1: The sample size determination as guided by Krejcie and Morgan (1970)

Category	**Population**	**Sample size**	**Sampling Technique**
Revenue officer using e-procurement system	70	56	Stratified random sampling
Managers (IT and E-procurement)	10	10	Purposive
Total	**80**	**66**	

3.3.2 Sampling Techniques

Two sampling techniques were used to select the sample size of the study. Managers were selected using purposive sampling technique. The purpose of using purposive sampling technique was to access confidential information relating to the e-procurement and internal customer service. This technique was used since managers had rich and deeper information and yet they were the center of ensuring good internal customer service. Revenue officers in various departments of URA were selected using stratified sampling technique to form strata. This technique was used to make sample selection without any prejudice and to enable every employee in each department to have the same chance to be part of the study.

3.4 Sources of Data

The researcher mainly employed both primary and secondary sources of data collection.

3.4.1 Primary Sources

The researcher used questionnaire and interview guide to solicit necessary data from the respondents. The reason for using these tools was to access firsthand information for the study.

3.4.2 Secondary Sources

The researcher also extracted data from URA reports relating e-procurement and customer service. Data obtained from URA reports was compared with the first hand information from primary sources so as to arrive at a conclusion.

3.5 Data Collection methods

The researcher used two key methods to collect data for the study that is; questionnaire and interview.

3.5.1 Questionnaires

The researcher used structured questionnaires to gather data from revenue officers of URA. Open ended and closed ended questions were used to access first-hand information. Close ended questions were used to give respondents alternative answers and to avoid waste of time in thinking (Mugenda and Mugenda, 2003). On the other hand, open ended questions were used to allow respondents to express issues at hand in details. Questionnaires were used because the format is familiar to most respondents, they are straight forward to analyze, simple to administer

and can be filled in at the respondents' convenient time (Gray, 1996). Most of the questions were short requiring direct answers based on Likert's (1932) scale for quantitative data. The questionnaires were designed in such a way that reflected the objectives of the study.

3.5.2 Structured Interview

The researcher also used structured interview to collect necessary data for the study. The researcher asked managers about their experience with the introduction of e-procurement, challenges encountered and various strategies of improving internal customer service using e-procurement. This instrument was used to access first hand information and it is the quickest technique of collecting data and questions can be repeated clearly for the respondents so that they comprehend them better (Burns, 2000). The researcher compared and contrasted the interview responses with the answers given in the questionnaire so as to gather more knowledge about the problem under the study. In the course of interviewing, the researcher was jotting down some important issues, which later was analyzed.

3.6 Data Quality Control

3.6.1 Validity

Several methods were used during the process of data collection to ensure quality data for the research. Personal prejudices and biases were avoided, systematic and accurate recording of observations made, listening carefully, establishment of trust and rapport with the interviewee were employed to ensure validity and reliability

Amin (2005) defines validity to be the ability to produce findings that are in agreement with the conceptual values. Validity of an instrument therefore means that the instrument is able to measure what it is intended to measure. Validity therefore has to do with how accurately the data obtained in the study represents the variables in the study. To ensure validity, the questionnaires

were pre-tested before the actual research was carried out. Based on the pilot study results, necessary adjustments were made on the questionnaires. For the researcher to consider those items relevant and valid, the ratings from the experts/supervisor were computed to derive content

valid index = $\frac{No\ of\ items\ rated\ as\ relevant}{All\ items\ in\ questionnaire}$

The content validity index (CVI) was computed as follows

Raters	Relevant	Not relevant	Total
1	29	4	33
2	30	3	33
Total	59	7	66

CVI= 59/66 = 0.89

Given that the CVI was above .70, the questionnaire was considered suitable for collecting data (Amin, 2005).

3.6.2 Reliability

Reliability is a measure of the degree to which a research instrument yields consistent data results or data after a repeated result Mugenda & Mugenda (2003). This refers to how consistent the research instrument is. Amin (2005) says that the instrument is reliable when it produces the same results when it is used repeatedly hence ensuring dependability and precision. To ensure the reliability, the researcher pre-tested the questionnaire. The Cronbach alpha approach was used to compute the reliability of the questionnaire. The following formula was used to calculate the Cronbach's coefficient alpha

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum SDi^2}{\sum SDt^2}\right)$$

Where α = coefficient alpha

$\sum SDi^2$ = sum variance of items

$\sum SDt^2$ = sum variance of scale

The results in all items were reliable since they generate alphas values above 0.7 (Amin, 2005; Kathuri and Palls, 1993).

3.7 Measurement of variables

The variable of the study were measured on a five point Likert scale ranging from 1- strongly to 5-Strongly agree. The choice of this measurement was that each point on the scale carries a numerical score which is used to measure the opinions of respondents and it is the most frequent used summated scale in the study of business and social attitude.

3.8 Procedure of the study

The study was conducted in a planned way in which the researcher first obtained a letter from the School of Management and Entrepreneurship of Kyambogo University which was presented to the management of URA. The researcher first issued out questionnaires to the lower level officers and after two weeks, the filled questionnaires were collected. In the process of collecting the questionnaires, the researcher asked the Commissioners, Supervisors and Managers various questions relating to the problem under investigation (senior officers).

To uphold ethical issues in the process of conducting the study, the researcher assured the respondents that the information given was to be treated with maximum confidentiality and for academic purposes only.

3.9 Data Presentation and Analysis

Qualitative and quantitative data collected was analyzed, interpreted, arranged and tabulated. **Quantitative data** was analyzed using appropriate computer packages such as SPSS, and Microsoft Excel. The purpose of using this type of analysis was to yield the desired statistical output and measures of dispersion which yielded the desired statistical output, measures of dispersion and measures of relationships. Results were presented in form of frequency tables which were interpreted accordingly.

Analysis of **qualitative data** was through descriptions of events and occurrences as gathered from the interviewees. The main reason for using this type of analysis was to present issues as they existed on ground without subjecting the research findings with statistical tests. Judgment was made on the basis of highest percentages or otherwise depending on the facts on the ground.

3.10 Limitations

Numerous limitations were encountered during the study including literature and research fatigue.

LITERATURE

Sufficient literature on study variables was not easy to obtain. There was also a case where there was outright refusal to avail information or demand for material compensation for data provided. The researcher tried to overcome this by getting advice from the experienced supervisors on how and where to locate relevant literature. Of course some of the literature was bought.

RESEARCH FATIGUE

The respondents shunned interviews and expressed some elements of irritation citing the high and frequent number of times they have been interviewed and ‘with no benefits accruing’. Some of the staff complained about the time ‘lost’ to interviews and discussions with researchers and thus loss of business. Persuasion was used to convince respondents to corporate.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter covers the presentation, analysis and interpretation of findings of the study carried out. The purpose of the study was to examine the effect of e-procurement system on internal customer service in Uganda Revenue Authority. This chapter covers the demographic data about the respondents, the rationale for introducing e-procurement system, the effect of implementation of the e-procurement system on internal customer service and strategies of improving internal customer service using e-procurement system.

4.2 Demographic Characteristics

To collect demographic characteristics, the study focused on; gender distribution of the respondents, age structure of the respondents, educational background and the departments in which respondents fall. The findings obtained are presented in the following tables follows:-

Table 4.1: Gender of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	53.0	53.0	53.0
	Female	31	47.0	47.0	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The study shows that out of the 66 respondents who participated in the study, there were more male (53 percent) respondents than female (47 percent) respondents considered in the study to come out with the aims and objectives of the targeted study. The implication of this finding is that the study was not gender balanced. However, the ideas, opinions and view of the

respondents relating to the rationale for introducing e-procurement system, the effect of implementation of the e-procurement system on internal customer service and strategies of improving internal customer service using e-procurement system were well presented.

After the analysis of the gender distribution of the study, the study sought to establish the age distribution of the respondents and the findings gathered are shown as follows:

Table 4.2: Age Distribution of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	26	39.4	39.4	39.4
	31-40	17	25.8	25.8	65.2
	40-50	12	18.2	18.2	83.3
	51+	11	16.7	16.7	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The findings in table 4.2 above shows that 39.4% of the respondents were in the age bracket between 20-30 years, 25.8% were between 31-40 years, 18.2% were between 40-50 years and the remainder (16.7%) were 51 years and above. The implication of this finding is that Uganda Revenue Authority generally employs young and talented people who can drive the corporate's mission towards its intended destination.

After the analysis of age distribution of the respondents, the researcher wanted to establish the educational background of the respondents and the results collected are shown in the following table:

Table 4.3: Level of Education of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Masters	6	9.1	9.1	9.1
	Bachelors	46	69.7	69.7	78.8
	Diploma	10	15.2	15.2	93.9
	Certificate	4	6.1	6.1	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

As shown in table 4.3 above, 69.7% of the respondents had bachelor's degree, 15.2% had diplomas, 9.1% were masters' holders and 6.1% had certificates in various fields. The implications of this finding is that the participants in the study had adequate level of education necessary to answer the questions posed to them and this enabled the researcher to solicit the desired information relating to e-procurement and internal customer service.

From the analysis of the level of education of the respondents, the study sought to ascertain the departments in which respondents fall. The results collected are presented as follows:

Table 4.4: Department in which respondents fall

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	IT	27	40.9	40.9	40.9
	Procurement	39	59.1	59.1	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The findings in table 4.4 above show that the study was majorly dominated by staff in the procurement section (59.1%) and 40.9% of the respondents were in IT department of Uganda

Revenue Authority. This was so because the study was generally centered on the activities of the procurement function and thus the focus was mainly on the procurement function.

4.3Planning factors/rationale for introducing e-procurement system towards Customer Service

The study sets one of its objectives to ascertain the rationale for introducing e-procurement system towards internal customer service and the details are presented in the descriptive statistics as shown in following tables: -

Table 4.5:The introduction of e-procurement can lead to improved efficiency with internal customer service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	15.2	15.2	15.2
	Disagree	6	9.1	9.1	24.2
	Not sure	3	4.5	4.5	28.8
	Agree	30	45.5	45.5	74.2
	Strongly Agree	17	25.8	25.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results in table 4.5 above shows that 71.3% (45.5% + 25.8%) of the respondents concurred that the introduction of e-procurement can lead to improved efficiency in customer service. The implication of this finding is that e-procurement has brought significant improvements in the execution of procurement process, accuracy in recording process, reduction of paper work. On the other hand 24.3% (15.2% + 9.1%) of the respondents disagreed with the view and 4.5% were not sure whether the introduction of e-procurement can lead to improved efficiency in customer service. This is because some staff have not yet seen the benefits of e-procurement and other may not have a clear understanding of what e-procurement is all about.

In an interview held with of the managers in procurement section, said that;

Before the introducing e-procurement, URA has been facing many procurement challenges and most of them were centered on efficiency. Inefficiencies in the procurement process were resulted resource wastage and delays which have affected efficient customer service delivery thereby resulting into high customer complaints being registered.

It should there be construed that to a greater extent e-procurement can lead to improved efficiency in customer service due to reduced customer complaints.

The study sought to find out whether e-procurement is faster, cheaper and can lead to cost saving and thus improved customer service, the results collected are presented as follows:

Table 4.6: E-procurement is faster, cheaper and can lead to cost saving and thus improved customer service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	11	16.7	16.7	21.2
	Not sure	6	9.1	9.1	30.3
	Agree	35	53.0	53.0	83.3
	Strongly Agree	11	16.7	16.7	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The findings in table 4.6 above shows that 69.7% (53% + 16.7%) of the respondent concurred that e-procurement is faster, cheaper and can lead to cost saving and thus improved customer service. This means that by introducing e-procurement internal customers are in position to receive services quickly, reliably and help the organization to cut procurement processing costs which in turn stimulates customer service. Nevertheless, 21.2% (4.5% + 16.7%) of the

respondents discarded the view that e-procurement is faster, cheaper and can lead to cost saving and thus improved customer service. It was only 9.1% of the respondents who were not sure with the view. The results from the interview emerged that;

> *E-procurement system initially is very expensive to install and requires the training of people to use. However, it becomes cheaper in the long run and thus results into cost saving by 56%.*

This shows that respondents had various responses regarding to how e-procurement is faster, cheaper and can lead to cost saving and thus improved customer service.

The study found it useful to ascertain whether e-procurement allows the purchasing function to focus on more value adding activities such as serving customers. The findings collected are shown in the next table

Table 4.7: E-procurement allow the purchasing function to focus on more value adding activities such as serving customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	9	13.6	13.6	18.2
	Not sure	3	4.5	4.5	22.7
	Agree	32	48.5	48.5	71.2
	Strongly Agree	19	28.8	28.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results in table 4.7 above indicate that 77.3% (48.5% + 28.8%) of the respondents were in agreement that e-procurement allows the purchasing function to focus on more value adding activities such as serving customers. The implication of this finding is that the procurement

function is relieved from too many tasks and paper work which causes delays and inefficiency in the procurement process. On contrary 18.1% of the respondents expressed that e-procurement does not allow the purchasing function to focus on more value adding activities such as serving customers. This means the introduction of e-procurement has not changed much since customers still complain about the e-system used in Uganda Revenue Authority. It was only 4.5% of the respondents who were not sure about the view. This implies that the respondents did not understand the question or had mixed views and ideas about the test statement.

The study also found it useful to identify whether by introducing e-procurement mistakes and errors can be eliminated. The results collected are presented as follow:

Table 4.8: Mistakes and errors in the procurement process are eliminated with the adoption of e-procurement system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	9	13.6	13.6	18.2
	Not sure	5	7.6	7.6	25.8
	Agree	34	51.5	51.5	77.3
	Strongly Agree	15	22.7	22.7	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results of the study in table 4.8 suggest that 72.2% (51.5 % +22.7%) of the respondents agreed that mistakes and errors in the procurement process are eliminated with the adoption of e-procurement system. Although 18.1% (4.5% +13.6%) disagreed and 7.6% of the responses provided by the same respondents were not sure which suggests that they possessed varied

understanding as to whether mistakes and errors in the procurement process are eliminated with the adoption of e-procurement system. One manager in an interview had this to say;

> *With manual procurement system, mistakes are inevitable. Humans are capable of making mistakes and errors. Some people come to work when they are already stressed by various factors such family, work among others and chances of such a person to make mistakes are high In case a person makes a mistake at the beginning of the procurement transaction and this mistake or error is not identified immediately, this can prove to be fatal to the organization.*

It should be argued that the introduction of e-procurement was meant to iron out the problems that were involved in the manual procurement system. Manual system involved a lot of paper work and time consuming. This is because there were a lot of procedures that had to be followed and this involved a lot of mistakes and errors. From the foregoing therefore, it should be argued that there has been reasonable reduction in the errors and mistakes made especially in the processing and recording of purchasing transactions.

The study also found it important to examine whether the introduction of the e-procurement system can lead to a reduction in lead times within the procure-to-pay cycle. The findings gathered are presented in the next table as follows:

Table 4.9: Reductions seen in lead times within the procure-to-pay cycle, in some cases is by 50%

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	10	15.2	15.2	19.7
	Not sure	5	7.6	7.6	27.3
	Agree	30	45.5	45.5	72.7
	Strongly Agree	18	27.3	27.3	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results of the study in table 4.9 further indicated that 72.8% (45.5% + 27.3%) of the respondents were with a view that the reductions seen in lead times within the procure-to-pay cycle, in some cases is by 50%. However, even then the 19.7% (4.5% + 15.2%) of the respondents seemed to have disagreed with the view and 7.6% were not sure. This shows that respondents had varied responses regarding to how e-procurement leads to reduction in lead time. The findings from the interview held with one of the managers it emerged that

> *The normal ordering procedure for example would begin with the production of requisition note from the relevant user department to the stores department for issue of the item indicated. In case the item indicated is not available in the store, then purchase requisition can be raised and forwarded to the relevant user department for approval after which it can be sent to the purchasing department. The purchasing department can then prepare the purchase order and place the order with the supplier for that particular item to be delivered and thus makes the whole process lengthy. By introducing e-procurement it saved the Authority by 56%*

Basing on the above view it should be expected that e-procurement leads to a reduction in lead times within the procure-to-pay cycle.

After establishing whether e-procurement to a reduction in lead times within the procure-to-pay cycle, the study sought to establish whether compliance problems are eliminated with e-procurement. The findings gathered are presented as follows:

Table 4.10 Compliance problems are eliminated with e-procurement system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	6	9.1	9.1	13.6
	Not sure	2	3.0	3.0	16.7
	Agree	40	60.6	60.6	77.3
	Strongly Agree	15	22.7	22.7	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The findings of study in table 4.10 also indicate that 83.3% (60.6% +22.7%) of the respondents were in agreement that compliance problems are eliminated with e-procurement system. The implication of this finding is that e-procurement promotes procurement compliance in organisations. It should be noted that there were lot on non-compliance problems with the manual procurement procedure. Compliance will be achieved due to; a simple and quick requisitioning-to-payment process including a user friendly interface and pre-sources catalogs tailored to the requirements of the individual user, a simple and quick strategic sourcing process with standard procurement processes and tools as well as easily accessible information, the e-procurement system, the only purchasing mechanism available. However, 13.6% (4.5% + 9.1%) of the respondents disagreed and 3.0% were not sure. This reveals a significant variation in the opinions which could also relate to not clearly understanding the importance of e-procurement towards eliminating compliance problems in the procurement process.

The study wanted to find out whether e-procurement leads to improved decision-making process by keeping relevant information neatly organized and time-stamped. The results gathered are presented in the next table;

Table 4.11: e-procurement leads to improved decision-making process by keeping relevant information neatly organized and time-stamped

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	8	12.1	12.1	16.7
	Not sure	3	4.5	4.5	21.2
	Agree	31	47.0	47.0	68.2
	Strongly Agree	21	31.8	31.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

Table 4.11 shows that majority of respondents [78.8% (47.0% 31.8%) seem to agree that e-procurement leads to improved decision-making process by keeping relevant information neatly organized and time-stamped. Even though there were variations in responses to this test as revealed by the percentage of respondents [16.6% (4.5% +12.1%)] who disagreed with the view and 4.5% were not sure. The results from the interview indicated that

> *Purchasing information flow was limited especially in as far as communicating to the internal users and even external users were concerned. Worse still, in many instances the demands on the internal users were never met on time, the ordering procedure was very slow and uncertain thereby compromising decision making process.*

From the foregoing therefore, it should be reasoned that e-procurement results into improved decision-making process by keeping relevant information neatly organized.

The study further wanted to establish whether well managed e-procurement helps to reduce inventory levels in an organization. The findings collected are shown as follow:

Table 4.12Well-managed e-procurement helps reduce inventory levels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	4.5	4.5	4.5
	Not sure	7	10.6	10.6	15.2
	Agree	44	66.7	66.7	81.8
	Strongly Agree	12	18.2	18.2	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The study indicated that majority of the respondents [84.9% (66.7% +18.2%)] were in agreement that well-managed e-procurement helps reduce inventory levels. The implication of this finding is that e-procurement improves the inventory control and planning which is not the case with

manual system, in many cases stock outs for particular items were frequent. However, 10.6% of the respondents were not sure which means they lack knowledge on how e-procurement helps reduce inventory levels and 4.5% of the respondents disagreed with the statement. This suggests variations in responses by the various respondents. In an interview held with of the departmental heads he said that,

> *There is no way we can have stock outs when we are using e-procurement system. This is because there is a lot of efficiency in procurement process, short lead time and effective inventory planning system.*

From the above analysis it should be logical to state that that well-managed e-procurement helps reduce inventory levels.

It was also found out useful to test whether e-procurement speeds up procurement cycle times and facilitates supplier performance improvements. The results obtained are presented and analyzed as follows:

Table 4.13: e-procurement speeds up procurement cycle times and facilitates supplier performance improvements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	6.1	6.1	6.1
	Disagree	9	13.6	13.6	19.7
	Not sure	4	6.1	6.1	25.8
	Agree	36	54.5	54.5	80.3
	Strongly Agree	13	19.7	19.7	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

Table 4.13 shows that 74.2% (54.5% + 19.7%) of the respondents were in agreement that e-procurement speeds up procurement cycle times and facilitates supplier performance

improvements. This implies that there is no delay in the procurement process. However, 19.7% (13.6% + 6.1%) of the respondents suggested varied responses as they disagreed with the statement regarding to whether e-procurement speeds up procurement cycle times and facilitates supplier performance improvements. Further 6.1% of the respondents were not sure implying they were either confused by the statement or they were naïve about the view in regard to whether e-procurement speeds up procurement cycle times and facilitate supplier performance improvements.

The researcher also wanted to verify whether in using e-procurement system, sourcing and ordering processes are always exact. The results solicited are hereafter presented as follow:

Table 4.14 In using e-procurement system, sourcing and ordering processes are always exact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	12.1	12.1	12.1
	Disagree	17	25.8	25.8	37.9
	Not sure	6	9.1	9.1	47.0
	Agree	7	10.6	10.6	57.6
	Strongly Agree	28	42.4	42.4	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The study (as reflected in table 4.14) found that 53% (42.4% +10.6%) of the respondents seem to slightly agree that in using e-procurement system, sourcing and ordering processes are always exact. The implication of this finding is that respondents averagely knew how e-procurement system can boost the efficiency in sourcing and ordering processes. However, 37.9% (25.8% 12.1%) of the respondents disagreed and 9.1% were not sure. This also shows that there is a clear variation in the responses provided by the respondents about e-procurement system which can

boost the efficiency in sourcing and ordering processes. In an interview with one of the manager said that,

> *The rationale for introducing e-procurement was meant to make the whole procurement process perfect in that sourcing and ordering process problems are eliminated totally.*

From the above view therefore, it should reasoned that that in using e-procurement system, sourcing and ordering processes are always exact.

4.4: Implementation of e-procurement system towards customer service

The study focused on implementation process of e-procurement system in enhancing customer service in Uganda Revenue Authority and the findings generated are presented in the descriptive statistics as shown in following tables: -

Table 4.15 E-procurement has resulted into increased efficiency in administrative tasks and increased customer utilization of e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.5	1.5	1.5
	Disagree	14	21.2	21.2	22.7
	Not sure	8	12.1	12.1	34.8
	Agree	18	27.3	27.3	62.1
	Strongly Agree	25	37.9	37.9	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

From the table 4.15 above, 65.2% (27.3% + 37.9%) of the respondents were in agreement that e-procurement has resulted into increased efficiency in administrative tasks thereby leading to increased customer utilization of e-procurement. Nevertheless, 20.8% (1.5% + 21.2%) of the respondents disagreed and 12.1% were not sure about the view. This suggests varied responses regarding whether e-procurement has resulted into increased efficiency in administrative tasks

thereby leading to increased customer utilization of e-procurement. This is in agreement with what the departmental head highlighted that;

> *E-procurement has made administrative tasks simpler and faster. This signifies administrative efficiency. The paper work within the process had reduced considerably. But probably this could not be justifying, given the fact that the external part of the procurement process especially with the local suppliers is still done manually, because of some of them have not established websites and therefore are not linked to the system.*

Further the study sought to examine whether e-procurement has resulted into increased accuracy in purchasing information processing in URA and the findings collected are presented as follows:

Table 4.16: E-procurement has resulted into increased accuracy in purchasing information processing in URA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	7.6	7.6	7.6
	Disagree	6	9.1	9.1	16.7
	Not sure	4	6.1	6.1	22.7
	Agree	41	62.1	62.1	84.8
	Strongly Agree	10	15.2	15.2	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

In table 4.16 above, 77.3 (62.1% + 15.2%) of the respondents provided their understanding in regard to how e-procurement has resulted into increased accuracy in purchasing information processing in URA and their perceptions implies that there has been considerable reduction in purchasing information due to the use of internet technologies with the capabilities of the system. It was further be argued that much of the information relating to purchasing including the

production of purchasing and order requisitions, creating invoices, is processed and transmitted using the system (internet) facility. This leads to saving in terms of money and time that could have been otherwise expensed. On the other hand, 16.7% (9.1% + 7.6%) disagreed and 6.1% were not sure, implies that there is a need to closely focus on the variation in responses as regards to whether e-procurement has resulted into increased accuracy in purchasing information processing in URA.

The study aimed at establishing whether the reduction in operational processing costs is due to the introduction of e-procurement in URA, the results gathered are shown in the next table:

Table 4.17: The reduction in operational processing costs is due to the introduction of e-procurement in URA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.5	1.5	1.5
	Disagree	11	16.7	16.7	18.2
	Not sure	8	12.1	12.1	30.3
	Agree	28	42.4	42.4	72.7
	Strongly Agree	18	27.3	27.3	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results as reflected in table 4.17, 69.7% (42.4% + 27.3%) of the respondents seem to agree with the statement, and 6.5% were not sure. However, 18.2% (1.5% + 16.7%) of the respondents disagreed with the statement. The implication of this finding is that respondents exhibited some level of agreement as to the statement regarding whether the reduction in operational processing costs is due to the introduction of e-procurement in URA. Consequently, this further reveals that the respondents had varied opinion about whether the reduction in operational processing costs is

due to the introduction of e-procurement. From the foregoing therefore, it should be argued that one of the success stories Uganda Revenue Authority has registered in using e-procurement system is that operational processing costs have been reduced considerably and this has enabled it to serve its customers efficiently.

The importance of e-procurement towards customer service was further tested with the statement which necessitated respondents view on whether the reduction in ordering lead times is due to e-procurement. The responses gathered are presented as follow:

Table 4.18 In URA the reduction in ordering lead time is a result of e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	9.1	9.1	9.1
	Disagree	12	18.2	18.2	27.3
	Agree	28	42.4	42.4	69.7
	Strongly Agree	20	30.3	30.3	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The analysis of results in table 4.18 reveal that 72.7% (42.4% + 30.3%) of the respondents were in agreement that in URA the reduction in ordering lead time is a result of e-procurement. However, 27.3% (18.2% + 9.1%) opposed the view. This reveals a significant variation in the opinions which could also relate to not clearly understanding whether in URA the reduction in ordering lead time is a result of e-procurement. In an interview with one manager posed a question that,

> *How can you compare e-procurement system with manual procurement system? He continued to say that e-procurement means accuracy, efficiency, reliability, timeliness,*

cost effective and responsiveness. All these are the reasons for adoption of e-procurement which are missing with the manual procurement system. Our ordering lead times have reduced by 56% meaning that were able to save a lot of time and money and this will help us to concentrate to activities that can improve customer service delivery.

From the above view therefore, it should be note that to some extent there has been some the reduction in ordering lead time in URA a result of introducing e-procurement system in the operation.

The study sought to establish whether increased efficiency and cost saving in customer service in URA has been achieved as a result of e-procurement. The findings obtained are shown as follows:

Table 4.19 Increased efficiency and cost saving in customer service in URA has been achieved as a result of e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	11	16.7	16.7	16.7
	Not sure	2	3.0	3.0	19.7
	Agree	29	43.9	43.9	63.6
	Strongly Agree	24	36.4	36.4	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

From the results of the survey as reflected by table 4.19, 80.3% (43.9% + 36.4%) of the respondents seem to agree that increased efficiency and cost saving in customer service in URA has been achieved as a result of e-procurement. The implication of this finding is that e-procurement has boosted efficiency and cost saving in customer service in URA. However, 16.7% of the respondents opposed the view and 3.0% were not sure indicating variation in the

responses generated by the respondents. The results from the interview, one manager had this to say,

> *The system provides us with an easy way of ordering goods and services from our desk without having to go out and get quotes. It is simple and intuitive. I think its simplicity is a major attraction for us.*

From the foregoing therefore, it should be logical to state that to a certain extent, efficiency and cost saving in customer service in URA has been registered due to e-procurement.

In identifying the challenges encountered in the implementation of e-procurement, various questions were posed to the respondents and the results collected are shown as follows:

Table 4.20: Lack of high-speed connections and software incompatibility affects adversely customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	10.6	10.6	10.6
	Disagree	18	27.3	27.3	37.9
	Not sure	6	9.1	9.1	47.0
	Agree	28	42.4	42.4	89.4
	Strongly Agree	7	10.6	10.6	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

Results of the survey as reflected in table 4.20 shows that 53% (42.4% + 10.6%) of the respondents concurred that lack of high-speed connections and software incompatibility affects adversely customer utilisation of the e-procurement. Although 37.9% (27.3% +10.6%) of the respondents seem not to agree with the statement and that 9.1% were not sure, the results from the interview suggest that

There is a problem of unreliability and systems failure. The respondents indicated that sometimes there are technical problems and the system goes down and therefore cannot be used which makes it unreliable. If there is too much dependence on the system, systems failure means no work.

From the foregoing therefore, it should be maintained that the implementation stage of e-procurement is challenged by systems failure as this creates a backlog of tasks thereby compromising internal customer service.

In verifying the user friendly problems of e-procurement, the finding generated as herein presented as follow:

Table 4.21: The high level of computer illiteracy compromises customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	15.2	15.2	15.2
	Disagree	7	10.6	10.6	25.8
	Not sure	7	10.6	10.6	36.4
	Agree	23	34.8	34.8	71.2
	Strongly Agree	19	28.8	28.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

Results of the study in table 4.21 indicate that 62.4% (34.3% +28.8%) of the respondents agreed with the statement that the high level of computer illiteracy compromises customer utilisation of the e-procurement. The implication of this finding is that people don't understand how to use the procurement system. However, very little is known about the acceptance of e-procurement systems by employees and external customers of Uganda Revenue Authority. The study shows that it would be inappropriate for Uganda Revenue Authority to assume that adoption decisions of e-procurement systems made by the management would result in automatic and spontaneous

acceptance of the system by their employees. This is because imbalance in benefits may occur between organisational and user level. On the other hand 25.8% (15.2% + 10.6%) of the respondents disagreed with the statement and 10.6% were not sure implying that some respondents may understand how to use e-procurement system in URA. Nevertheless, it is not clearly known how internal and external have responded to their organizational decisions to embrace e-procurement systems and in what ways various factors have contributed to their acceptance of these systems.

Further the study wanted to ascertain whether capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement and the results collected are shown as follow:

Table 4.22: Capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	3.0	3.0	3.0
	Disagree	15	22.7	22.7	25.8
	Not sure	4	6.1	6.1	31.8
	Agree	22	33.3	33.3	65.2
	Strongly Agree	23	34.8	34.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results in table 4.22 above reveal that 78.1% (33.3% +34.8%) of the respondents agreed that capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement. This implies that there is a limitation in the use of e-procurement system. URA rushed into the e-procurement bandwagon with immature applications and without proper strategies. However 25.7% (22.7% + 3%) of the respondents disagreed and 6.1% were not sure showing varied responses as far as capturing of e-signatures for approval have greatly hindered

customer utilisation of the e-procurement. The findings from the interview with on manager emerged that,

> *Electronic signature is uniquely linked to the signatory; reliably capable of identifying the signatory; created using secure signature creation device that the signatory can maintain under his sole control; and linked to the data to which it relates in such a manner that any subsequent change of the data or the connections between the data and signature are detectable. This is still a major problem to ensure effective customer service.*

It should be argued that to a great extent capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement.

The study wanted to ascertain whether regulatory barriers created by governmental action affect negatively e-procurement. The findings collected are shown as follow:

Table 4.23 Regulatory barriers created by governmental action affect negatively e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	4.5	4.5	4.5
	Disagree	14	21.2	21.2	25.8
	Not sure	8	12.1	12.1	37.9
	Agree	27	40.9	40.9	78.8
	Strongly Agree	14	21.2	21.2	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

Table 4.23 reveals that 62.1% (40.9% + 21.2%) of the respondents seem to agree that regulatory barriers created by governmental action affect negatively e-procurement. The implication of this finding is that use of e-procurement can be effective if it meets the legal requirement. This makes provision for the safety and security of electronic transactions and information systems; prevent

unlawful access, abuse or misuse of information systems by including computers (and electronic devices like mobile phones) and make provision for securing the conduct of electronic transactions in a trustworthy electronic environment and to provide for other related matters. Nevertheless, 25.7% (21.2 +4.5%) of the respondents disagreed with the view and 12.1% were not sure indicating varied responses from respondents as far as regulatory barriers created by governmental action towards e-procurement system.

The study also wanted to confirm whether transaction risks can happen due to wrong products purchased due to incomplete or misleading information. The findings collected are presented as follows:

Table 4.24:Transaction risks can happen due to wrong products purchased due to incomplete or misleading information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	6.1	6.1	6.1
	Disagree	12	18.2	18.2	24.2
	Not sure	4	6.1	6.1	30.3
	Agree	27	40.9	40.9	71.2
	Strongly Agree	19	28.8	28.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

To results of the survey as reflected in table 4.24 suggest that 69.7% (40.9% +28.8%) of the respondents were in agreement as to whether transaction risks happened due to wrong products purchased due to incomplete or misleading information. Conversely, 24.3% (6.1% + 18.2%) of the respondents agreed implying that transaction risks happened due to wrong products purchased due to incomplete or misleading information and 6.1% were not sure indicating that they may not have understood the question or lack clear knowledge whether transactional risks happen when using e-procurement. From the above view it should be comprehensible to note

that if wrong information is fade in the system and the recipient may get wrong items ordered thereby compromising customer service.

Further the study wanted to verify whether customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data.

Table 4.25 Customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	9.1	9.1	9.1
	Disagree	16	24.2	24.2	33.3
	Not sure	3	4.5	4.5	37.9
	Agree	24	36.4	36.4	74.2
	Strongly Agree	17	25.8	25.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The findings in table 4.25 above shows that 72.2% (36.4% +25.8%) of the respondents were with a view that customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data. The implication of this finding is that e-procurement is affected generally by computer hackers and crackers because of lack of security measure. Hacking in simple terms means an illegal intrusion into a computer system or network. While crackers are individuals who break into information systems to intentionally cause harm; hackers may not cause any harm at all, but may simply be curious and experimental. However, 33.3% (24.2% +9.1%) of the respondents disagreed with the statement and 4.5% were not sure thereby giving varied responses as far as adequate security measures to protect data are concerned. From the foregoing therefore, it should be noted that customers are estopped from using e-procurement because of lack of adequate security measures. Further there is a significant challenge in

gathering and prosecuting evidence in computer crime prosecutions. Investigators face challenges in ensuring that the integrity of computer evidence had been maintained.

4.5 Strategies of improving customer service using e-procurement system

The study aimed at identifying strategies that can be employed to improve internal customer service using of e-procurement system in Uganda Revenue Authority and the findings generated are presented in the descriptive statistics as shown in following tables: -

Table 4.26 There is a need to develop a user friendly e-procurement system in order to improve customer service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.5	1.5	1.5
	Disagree	8	12.1	12.1	13.6
	Not sure	6	9.1	9.1	22.7
	Agree	32	48.5	48.5	71.2
	Strongly Agree	19	28.8	28.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results in table 4.26 above revealed that 77.3% (48.5% +28.8%) of the respondents agreed that there is a need to develop a user friendly e-procurement system in order to improve internal customer service. This means that involving employees at both planning and implementation stages decrease the resistance to any IT system because they develop a feeling that they are important stakeholders who can make decision about how the system can be made or work for them. Nevertheless, 13.6% (12.1% + 1.5%) of the respondents had disagreeing responses to the test statement and 9.1% were not sure about the view. It should therefore, be noted that adopting a user friendly system depends on customer involvement at the planning and implementation stage. This can greatly improve customer utilization of e-procurement system in place.

In ascertaining whether there is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy, the results collected are hereinafter presented as follow:

Table 4.27: There is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	3.0	3.0	3.0
	Disagree	5	7.6	7.6	10.6
	Not sure	5	7.6	7.6	18.2
	Agree	38	57.6	57.6	75.8
	Strongly Agree	16	24.2	24.2	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

The results in table 4.27 suggest that 81.8% (24.2% +57.6%) of the respondents agreed with the test statement that there is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy. However, in as much as respondents agreed with the test statement, there were variations in responses as reflected by the respondent who disagreed [10.6% (7.6% +3.0%) and those who were not sure (7.6%) over the same test from the respondents' point of view. The results from an interview held with one manager it emerged that,

> *When employees are given a clear signal from their senior management about the importance of the e-procurement system to succeed and also receive considerable support in terms of necessary training and required changes necessary for business process, their willingness to accept e-procurement system are increased. Training helps customers in two distinct ways: a) It helps in the transfer of knowledge from vendors consultants to employees about why the e-procurement system is needed and how it should improve their work. This in turn helps in addressing the fear employees may have about the e-procurement system.*

From the above view it should be logical to give internal customers hands-on training because it can help customers (both internal and external) to know about the features of the software and thus helps in developing a familiarity with the system. Thus, user training is essential to overcome the problem of computer illiteracy.

The study also found it necessary to identify whether capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement, the findings obtained are shown in the next table:

Table 4.28 Capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.5	1.5	1.5
	Disagree	14	21.2	21.2	22.7
	Not sure	5	7.6	7.6	30.3
	Agree	24	36.4	36.4	66.7
	Strongly Agree	22	33.3	33.3	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

From the survey, as reflected in table 4.28, it can be reduced that respondents agree [69.7%(33.3% +36.4%) that capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement, though this percentage is not significantly far from the average, some respondents [22.7%(21.2% +1.5%)] disagreed and others (7.6%) were not sure thereby giving varied responses from the respondents who participated in the study. One manage in an interview said that,

> *There are no means of enhancing customer utilization of e-procurement unless capturing of e-signatures is made easier. There is need to affix data in electronic form which can be used to identify the signatory in relation to the data message and indicate the signatory's*

approval of the information contained in the data message. This process includes an advanced electronic signature as well as secure signature. However, the whole process should not be made complicated to stop the process of capturingof e-signatures.

It should therefore be argued that capturing of e-signatures should not be stringent to customers in order to stimulate customer utilisation of the e-procurement.

In examining whether the government to pass electronic laws to enable efficient customer utilisation of the e-procurement, the results generated are presented as follow:

Table 4.29 The government to pass electronic laws to enable efficient customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	9.1	9.1	9.1
	Disagree	3	4.5	4.5	13.6
	Not sure	5	7.6	7.6	21.2
	Agree	42	63.6	63.6	84.8
	Strongly Agree	10	15.2	15.2	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

From the results of the survey as reflected in table 4.29 above, 78.8% (53.2% +12.3%) of the respondents agreed that the government should pass electronic laws to enable efficient customer utilisation of the e-procurement. Its worth noting that as much as the respondent agreed with the test statement, they were some respondent [13.6 % (4.5% +9.1%) who disagreed with the statement and others (3.9%) were not sure implying that to some extent the respondents were not sure about the statement. One manager during the interview had this to say,

The government need to enable and facilitate electronic transactions; remove and eliminate the legal and operational barriers to electronic transactions; promote technology neutrality in applying legislation to electronic communications and transactions; provide legal certainty and public confidence in the use of electronic

communications and transactions; promote e-Government services through electronic communications and transactions with the Government, public and statutory bodies; ensure that electronic transactions in Uganda conform to the best practices by international standards; encourage investment and innovation in information communications and technology to promote electronic transactions.

In short, the government should focus generally on e-laws to enable efficient customer utilisation of the e-procurement.

The study sought to find out whether security measures of data protection should be put in place to enhance customer utilisation of the e-procurement. The results collected are presented as follows:

Table 4.30 Security measures of data protection should be put in place to enhance customer utilisation of the e-procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	6.1	6.1	6.1
	Disagree	9	13.6	13.6	19.7
	Not sure	1	1.5	1.5	21.2
	Agree	35	53.0	53.0	74.2
	Strongly Agree	17	25.8	25.8	100.0
	Total	66	100.0	100.0	

Source: Field data, 2013

From table 4.30 above, respondents [78.8% (53.0% +25.8%) agreed with statement that security measures of data protection should be put in place to enhance customer utilisation of the e-procurement. However, 39.6% (26% +13.6%) disagreed and 3.9% were not sure giving varied responses, implying that they have different opinions about security measures of data protection should be put in place to enhance customer utilisation of the e-procurement. This could also infer that some people don't know security measures of data protection. The results from the interview indicated that,

Companies need to be encouraged to come out of hiding and start communicating incidences of cyber crime (even if it is to the overseer body) and educating users about the tricks used by cyber criminals. The status quo, is that an inside racket makes off with millions of money and the bank keeps it under wraps. This creates a vicious cycle of repeat offences with each incident getting more sophisticated and a greater financial embarrassment.

IT managers need to start garnering support from management on prevention of cyber or computer related crimes. Once there is sufficient buy information from management, then it is easier for security policies to be enforced and this will drastically lower the vulnerability and subsequently the attacks.

From the foregoing therefore, there is a need to optimally exploit the great resource of e-procurement system by ensuring that customers have access to these new technologies. To achieve this, there is a need to create secure, conducive, and enabling environment for all users and beneficiaries of the e-procurement to avoid abuse and misuse. This is also necessary to build trust and ensure security of users of e-procurement.

The extent to which e-procurement effects service delivery and the percentage of other factors

Correlation coefficient of determination and regression were used to determine the extent to which e-procurement affects customer service in Uganda Revenue Authority and the findings are presented in the following tables as shown below.

TABLE 4.31: CORRELATION BETWEEN E-PROCUREMENT AND CUSTOMER SERVICE

	Customer Service			
	Correlation coefficient (r)	Coefficient of determination (r^2)	Significance of the correlation (p)	Number of respondents (n)
E-procurement	.859	.738	.000	66

Source: Field data, 2013

The results in table 4.31 above show that there is strong positive correlation between e-procurement and customer service in Uganda Revenue Authority (r = .859) with a coefficient of determination (r^2) of .738. These findings were significant (p < .000). Therefore, e-procurement influences internal customer service in Uganda Revenue Authority greatly. It should be noted improving e-procurement can stimulate customer service. The findings in table 4.31 above indicate that e-procurement accounts for 73.8% of the variation in customer service and other factors which are not known by the researcher contributes 26.2%.

However, it was important to establish the regression of e-procurement on customer service. Findings are presented in the following table accompanied with an analysis and interpretation of the findings.

Table 4.32: Regression of e-procurement and customer service

Dependent variable: Customer Service		
R	*.811*	
r^2	*.658*	
Adjusted r^2	*.643*	
ANOVA		
Fisher's Ratio (F)	*Sig. (p)*	
17.9	*.000*	
	Coefficient	
	T	*Sig.*
E-procurement	*3.620*	*.019*

Source: Field data, 2013

Table 4.32 shows a moderate linear relationship between e-procurement and internal customer service (r = .811). In order to determine the effect of e-procurement on iternal customer service, the regression coefficient was squared (r^2 = .658) and then adjusted (Adjusted r^2 = .643) and expressed as a percentage. Thus, it is shown that e-procurement accounts for 64.3% of the variance in internal customer service. These findings were subjected to an ANOVA test and found significant (F = 17.9, p < .000). Thus, this implies that e-procurement has an effect on internal customer service in Uganda Revenue Authority.

The coefficient of e-procurement (.019) was computed to determine its effect on internal customer service. E-procurement with significance value (p) less than .05 significantly affects customer service. Thus, e-procurement affects internalcustomer service (p < .05).

CHAPTER FIVE

DISSCUSION, SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS

5.0 Introduction

This chapter presents the discussion of findings, summary of findings, conclusions, recommendations and suggestions. It is divided into five sections. The first section presents the discussion of findings, the second section covers the summary of findings according to the objectives. The third section presents conclusions and fourth section presents recommendations and the fifth section presents suggestion for further research.

Discussion of findings

5.1.1 The rationale for introducing e-procurement system in URA

Table 4.5 shows that 71.3% of the respondents concurred that the introduction of e-procurement can lead to improved efficiency with in internal customer service. This is in agreement with Feigein, Kent and Mayer (2009) that e-procurement system results into process efficiencies and those inefficiencies in manual procurement system resulted into resource wastage, delays and high customer complaints. That e-procurement has brought significant improvements in the execution of procurement processes, accuracy in recording process and reduction of paper work. It should there be construed that to a greater extent e-procurement can lead to improved efficiency in customer service due to reduced customer complaints.

Table 4.6 shows that 69.7% of the respondent concurred that e-procurement is faster, cheaper and can lead to cost saving by 56% and thus improved internal customer service. This is in line

with Marsh (2004), that effective management of e-procurement results into annual cost saving This means that by introducing e-procurement, customers either internal or external are in position to receive services quickly, reliably and help the organization to cut procurement processing costs which in turn stimulates customer service.

The results in table 4.7 indicate that 77.3% of the respondents were in agreement that e-procurement allows the purchasing function to focus on more value adding activities such as serving customers. Shane and Lafferty (2006), the purpose of e-procurement is to allow the purchasing function to focus on more value adding activities such as serving customers rather than on operational issues. The potential of e-procurement is so great that it has turned the formerly looked down upon traditional function into a competitive weapon. It should therefore be noted that the procurement function is relieved from too many tasks and paper work which causes delays and inefficiency in the procurement process.

The results in table 4.8 suggest that 72.2% of the respondents agreed that mistakes and errors in the procurement process are eliminated with the adoption of e-procurement system. This was supported by Terry (2005), that some reasons for introducing e-procurement system in organisations to eliminate mistakes and errors. It should be argued that the introduction of e-procurement was meant to iron out the problems that were involved in the manual procurement system such as too much paper work and time consuming.

Table 4.9 indicates that 72.8% of the respondents were with a view that the reductions seen in lead times within the procure-to-pay cycle, in some cases are by 51%. This is exactly Feigein,

Kent and Mayer (2009) says that e-procurement results in the reduction in lead times within the procure-to-pay cycle. It should be noted that manual procurement involves a lot of bureaucratic steps that cause delays. Basing on the above view it should be expected that e-procurement leads to a reduction in lead times within the procure-to-pay cycle.

Table 4.10 also indicates that 83.3% of the respondents were in agreement that compliance problems are eliminated with e-procurement system. Zeneca (2001), that in many organisations issues of compliance and maverick spending are quite significant and require attention. This usually because employees are not usually aware of the arrangements that are in place rather than the fact that they want to ignore the laid down processes and procedures. E-procurement has a way of addressing this through tools such as standard order processing and approval catalogs. This means that e-procurement promotes procurement compliance in organisations. It should be noted that there was a lot on non-compliance problems with the manual procurement procedure.

Table 4.11 shows that 78.8% of respondents agreed that e-procurement leads to improved decision-making process by keeping relevant information neatly organized. This is what Guthrine (2005), says that organisations need to introduce e-procurement in their operation because it helps with the decision-making process by keeping relevant information neatly organized and time-stamped. Most are template-driven which makes all transactions standardized and trackable. Keeping track of all bids means leveraging your knowledge to obtain better pricing. Companies can focus on their most lucrative trading partners and contracts

From the foregoing therefore, it should be cemented that, purchasing information flow was limited especially in as far as communicating to the internal users and even external users were

concerned. Worse still, in many instances the demands on the internal users were never met on time, the ordering procedure was very slow and uncertain thereby compromising decision making process.

Table 4.12 shows that 84.9% of the respondents were in agreement that well-managed e-procurement helps reduce inventory levels by 20%. According to Marsh (2004), well-managed e-procurement helps reduce inventory levels. Knowing product numbers, bid prices and contact points can help businesses close a deal while other suppliers are struggling to gather their relevant data. The implication of this finding is that e-procurement improves the inventory control and planning which is not the case with manual system, in many cases of stock outs for particular items were frequent. From the above analysis it should be logical to state that a well-managed e-procurement system helps reduce inventory levels.

Table 4.14 shows that 53% of the respondents seem to slightly agree that in using e-procurement system, sourcing and ordering processes are always exact. Further Table 4.13 shows that 74.2% of the respondents were in agreement that e-procurement speeds up procurement cycle times and facilitates supplier performance improvements. The implication of this finding is that e-procurement system can boost the efficiency in sourcing and ordering processes and thus speeds up procurement cycle times. It should therefore be noted that the rationale for introducing e-procurement was meant to make the whole procurement process perfect in that sourcing and ordering process problems are eliminated totally.

5.1.2 The effect of implementation of the e-procurement system on internal customer service

Table 4.15 shows, 65.2% of the respondents were in agreement that e-procurement has resulted into increased efficiency in administrative tasks thereby leading to increased customer utilization of e-procurement. This is in agreement with Andersen (2004) that e-procurement has made administrative tasks simpler and faster. This signifies administrative efficiency. The paper work within the process had reduced considerably. But probably this could not be justifying, given the fact that the external part of the procurement process especially with the local suppliers is still done manually, because of some of them have not established websites and therefore are not linked to the system.

Table 4.16 indicates, 77.3% of the respondents provided their understanding in regard to how e-procurement has resulted into increased accuracy in purchasing information processing in URA and their perceptions implies that there has been considerable reduction in purchasing information due to the use of internet technologies with the capabilities of the system. This is what Timmers (2000) indicated that much of the information relating to purchasing including the production of purchasing and order requisitions, creating invoices, is processed and transmitted using the system (internet) facility. This leads to saving in terms of money and time that could have been otherwise expensed. It can therefore be concluded that e-procurement has resulted into increased accuracy in purchasing information processing in URA.

The results in table 4.17 shows 69.7% of the respondents agreed with the statement that the reduction in operational processing costs is due to the introduction of e-procurement in URA. This is in line with Kaplan and Sawhney (2000) that e-procurement creates a huge potential for

transaction cost saving in terms of reduced search, matching, and order control costs. From the foregoing therefore, it should be argued that one of the success stories Uganda Revenue Authority has registered in using e-procurement system is that operational processing costs have been reduced considerably and this has enabled it to serve its customers efficiently.

The results in table 4.18 reveal that 72.7% of the respondents were in agreement that in URA the reduction in ordering lead time by 51% is a result of e-procurement. This view was supported by Kaplan and Sawhney (2000) that successful adoption of e-procurement has led to potential results, which include the reduction of transaction costs, operational efficiencies, and a better foundation for decision making. From the above view therefore, it should be noted that to some extent there has been reduction in ordering lead time in URA a result of introducing e-procurement system in the operation.

Table 4.19 indicates that 80.3% of the respondents seem to agree that increased efficiency and cost saving in customer service by 56% in URA has been achieved as a result of e-procurement. This is in agreement with Timmers (2000) that central to the whole of introducing e-procurement is to stimulate efficiency and reduce costs. The implication of this finding is that e-procurement has boosted efficiency and cost saving on internal customer service in URA. From the foregoing therefore, it should be logical to state that to a certain extent, efficiency and cost saving in customer service in URA has been registered due to e-procurement.

Results in table 4.20 shows that 53% of the respondents concurred that lack of high-speed connections and software incompatibility affects adversely customer utilisation of the e-

procurement. This was further revealed by Ferguson and James (2005), those technological barriers represent obstacles to the adoption of e-procurement due to technological factors such as lack of high-speed connections. From the foregoing therefore, it should be maintained that the implementation stage of e-procurement is challenged by systems failure as this creates a backlog of tasks thereby compromising internal customer service.

The findings in table 4.21 indicate that 62.4% of the respondents agreed that the high level of computer illiteracy compromises customer utilisation of the e-procurement. This is what Nduru (2013) says that lack of skills to use e-procurement is major procurement challenge. The implication of this finding is that people don't understand how to use the procurement system. However, very little is known about the acceptance of e-procurement systems by employees and external customers of Uganda Revenue Authority. The study shows that it would be inappropriate for Uganda Revenue Authority to assume that adoption decisions of e-procurement systems made by the management would result in automatic and spontaneous acceptance of the system by their employees.

The results in table 4.22 reveal that 78.1% of the respondents agreed that capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement. This is what Nduru (2013) says that in Uganda we still have a problem with e-signature and this has crippled e-procurement system in Uganda. Electronic Signature" means data in electronic form in affixed thereto or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and indicate the signatory's approval of the information contained in the data message. This implies that there is a limitation in the use of e-procurement

system. URA rushed into the e-procurement bandwagon with immature applications and without proper strategies. It should be argued that to a great extent capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement.

Table 4.23 reveals that 62.1% of the respondents seem to agree that regulatory barriers created by governmental action affect negatively e-procurement. This what Rajkumar (2001) points out that there are still challenges in legal framework on how to use e-procurement system. The implication of this finding is that use of e-procurement can be effective if it meets the legal require. This makes provision for the safety and security of electronic transactions and information systems; prevent unlawful access, abuse or misuse of information systems by including computers (and electronic devices like mobile phones) and make provision for securing the conduct of electronic transactions in a trustworthy electronic environment and to provide for other related matters.

Table 4.24 suggest that 69.7% of the respondents were in agreement as to whether transaction risks can happen due to wrong products purchased due to incomplete or misleading information. This is in agreement with Saeed(2008), that there a of e-procurement risks such as transaction risks resulting from wrong products purchased due to incomplete or misleading information. From the above view it should be comprehensible to note that if wrong information is fade in the system and the recipient may get wrong items ordered thereby compromising customer service.

Table 4.25 shows that 72.2% of the respondents were with a view that customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data. This is what

Saeed(2008), said that the security risks resulting from unauthorized penetration of trading platforms and failure to protect transaction-related data while being transmitted or stored hampers greatly customer utilization of e-procurement. From the foregoing therefore, it should be noted that customers are estopped from using e-procurement because of lack of adequate security measures. Further there is a significant challenge in gathering and prosecuting evidence in computer crime prosecutions. Investigators face challenges in ensuring that the integrity of computer evidence had been maintained

5.1.3 Strategies of improving internal customer service using e-procurement system

Table 4.26 indicates that 77.3% of the respondents agreed that there is a need to develop a user friendly e-procurement system in order to improve internal customer service. This is what Wilson (2009) say that organisations need to install software which is user friendly to enable people use it and the whole process should involve all the users of the system. It should therefore, be noted that adopting a user friendly system depends on customer involvement at the planning and implementation stage This can greatly improve customer utilization of e-procurement system in place.

The results in table 4.27 suggest that 81.8% of the respondents agreed with the test statement that there is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy. This is what Cooper (2003) says there is a need to train people on how to use the latest technology. From the above view it should be logical to give customers hand-on training because it can help customers (both internal and external) to know about the features of the software and thus helps in developing a familiarity with the system. Thus, user training is essential to overcome the problem of computer illiteracy.

Table 4.28 reflects that respondents agreed 69.7% that capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement. Nduru(2013) says that Electronic Signatures Act provides for use of electronic signatures, and regulation criminalization of unauthorized access and modification of electronic signatures, determination of minimum requirements for functional equivalence of electronic signatures and that this process should not be made complicated to stop the process of capturing of e-signatures. It should therefore be argued that capturing of e-signatures should not be stringent to customers in order to stimulate customer utilisation of the e-procurement.

Table 4.29 shows that 78.8% of the respondents agreed that the government should pass electronic laws to enable efficient customer utilisation of the e-procurement. It was further noted that the government need to enable and facilitate electronic transactions, remove and eliminate the legal and operational barriers to electronic transactions, promote technology neutrality in applying legislation to electronic communications and transactions, provide legal certainty and public confidence in the use of electronic communications and transactions, promote e-Government services through electronic communications and transactions with the Government. In short, the government should focus generally on e-laws to enable efficient customer utilisation of the e-procurement

Table 4.30 shows that 78.8% respondents agreed with statement that security measures of data protection should be put in place to enhance customer utilisation of the e-procurement. This is in line with Campbell (2002) that some barriers relate specifically to security measures of data protection should be put in place. That concerns over security and confidentiality of the data

needed to be exchanged in electronic environments and that companies need to be encouraged to come out of hiding and start communicating incidences of cybercrime. From the foregoing therefore, there is a need to optimally exploit the great resource of e-procurement system by ensuring that customers have access to these new technologies. To achieve this, there is a need to create secure, conducive, and enabling environment for all users and beneficiaries of the e-procurement to avoid abuse and misuse. This is also necessary to build trust and ensure security of users of e-procurement.

5.2 Summary of the major Findings

5.2.1 The rationale for introducing e-procurement system in URA

The finding indicated that the rational for introducing e-procurement was meant to improve efficiency in customer service, reduce resource wastage, reduce lead times within the procure-to-pay cycle by 51%, mitigate delays, reduce mistakes and errors in the procurement process, reduce inventory levels by 20% and reduce high customer complaints. Further it was noted that e-procurement was introduced because it is faster, cheaper and can lead to cost saving and thus improved internal customer service.

It was noted that e-procurement allows the purchasing function to focus on more value adding activities such as serving customers and that the potential of e-procurement is so great that it has turned the formerly looked down upon traditional function into a competitive weapon.

It was also noted that compliance problems are eliminated with e-procurement system. That E-procurement has a way of addressing this through tools such as standard order processing and approval catalogs. This means that e-procurement promotes procurement compliance in

organisations and thus leads to improved decision-making process by keeping relevant information neatly organized.

That using e-procurement system, sourcing and ordering processes are always exact. The implication of this finding is that e-procurement system can boost the efficiency in sourcing and ordering processes and thus speeds up procurement cycle times.

5.2.2 The effect of implementation of the e-procurement system on internal customer service

It was discovered that e-procurement has resulted into increased efficiency in administrative and increased accuracy in purchasing information processing thereby leading to increased customer utilization of e-procurement.

The study highlighted that e-procurement creates a huge potential for transaction cost saving in terms of reduced search, matching, and order control costs.

That successful adoption of e-procurement has led to potential results, which include the reduction of transaction costs, operational efficiencies, and a better foundation for decision making.

However, it was discovered that there was lack of high-speed connections and software incompatibility and high level of computer illiteracy compromises customer utilisation of the e-procurement. It was also noted that capturing of e-signatures for approval has greatly hindered customer utilisation of the e-procurement. That regulatory barriers created by governmental action affect negatively e-procurement.

That transaction risks can happen due to wrong products purchased due to incomplete or misleading information and that customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data.

5.2.3 Strategies of improving customer service using e-procurement system

It was noted that there is a need to develop a user friendly e-procurement system in order to improve customer service and that organisations need to install software which is user friendly to enable people use it and the whole process should involve all the users of the system.

There is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy.

That capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement.

It was further noted that the government need to enable and facilitate electronic transactions, remove and eliminate the legal and operational barriers to electronic transactions, promote technology neutrality in applying legislation to electronic communications and transactions, provide legal certainty, public confidence in the use of electronic communications, transactions, promote e-Government services through electronic communications and transactions with the Government.

The security measures of data protection should be put in place to enhance customer utilisation of the e-procurement. That concerns over security and confidentiality of the data needed to be

exchanged in electronic environments and that companies need to be encouraged to come out of hiding and start communicating incidences of cybercrime.

5.3 Conclusion

This study focused on e-procurement and customer service in Uganda Revenue Authority as case study. The study indicated that at the planning phase, Uganda Revenue Authority was inspired to introduce e-procurement in its operation purposely to improve procurement efficiency save costs by 56%, reduce lead times by 51%, mitigate delays, reduce mistakes and errors, reduce inventory levels 20%, reduce high customer complaints and that it is faster, cheaper, allows the purchasing function to focus on more value adding activities, promotes compliance and accuracy.

At implementation stage, there are success stories registered and these increased efficiency in administrative tasks, increased accuracy in purchasing information processing, creates a huge potential for transaction cost saving in terms of reduced search, matching, and order control costs and a better foundation for decision making.

However, it was discovered that the implementation stage is challenged by lack of high-speed connections, computer illiteracy, problems in capturing of e-signatures for approval, regulatory barriers, transaction risks can happen due to wrong products specifications has affected adversely customer utilisation of the e-procurement.

The study recommends the development of a user friendly e-procurement system, train customers how to use e-procurement system make capturing of e-signatures easier and that the government need to enable and facilitate electronic transactions, remove and eliminate the legal

and operational barriers to electronic transactions, promote technology neutrality in applying legislation to electronic communications and transactions, provide legal certainty, public confidence in the use of electronic communications and transactions, promote e-Government services through electronic communications, transactions with the Government and security measures of data protection should be put in place to enhance customer utilisation of the e-procurement.

5.4 Recommendations

Based on the findings, discussion and conclusions, it is recommended in this study that;

5.4.1 Rationale for introducing e-procurement

Uganda Revenue Authority should continue to use e-procurement since it results into efficiency in customer service, reduce resource wastage, reduce lead times within the procure-to-pay cycle, mitigate delays, reduce mistakes and errors in the procurement process, reduce inventory levels and reduce high customer complaints.

It is further recommended that URA should stick to use e-procurement system since the system is faster, cheaper and can lead to cost savings and allows the purchasing function to focus on more value adding activities such as serving customers and that the potential of e-procurement is so great that it has turned the formerly looked down upon traditional function into a competitive weapon.

5.4.2 The effect of implementation of the e-procurement system on internal customer service

The management of Uganda Revenue Authority should consider involvement in programmes that seem to have the potential to boost the use and the performance of e-procurement in the execution of procurement tasks in Uganda Revenue Authority. Such programmes may include user (internal and external customers) work shop, seminars, performance measurement and management training among others. Such programmes will help potential users to understand how the system works and thus lessen the problem of computer illiteracy.

The study recommended to the management of URA to improve on the reliability of the system because this will increase the potential for future benefits. One of the problems identified with the e-procurement system is that it is somehow unreliable; at times it is down. This probably explains why there is limited use of the system. Therefore by strengthening the IT infrastructure it will enable Uganda Revenue Authority to reap benefits out the e-procurement system.

5.4.3Strategies of improving customer service using e-procurement system

The capturing of capturing of e-signatures should be made easier for customers so that people are able to use the system without any challenge.

It also recommended that the government should remove and eliminate the legal and operational barriers to electronic transactions; promote technology neutrality in applying legislation to electronic communications and transactions, provide legal certainty and public confidence in the use of electronic communications and transactions, promote e-Government services through electronic communications and transactions with the Government and security measures of data protection should be put in place to enhance customer utilisation of the e-procurement.

Further it is recommended to the management of Uganda Revenue Authority that before introducing e- system, the management should have first trained the employees how to use e-procurement system to enable them perform their tasks efficiently. Further the management should improvise means of encouraging the staff of URA to use the system. This will boost employees' morale to use the system.

5.5 Suggestions

The study suggests that the research be undertaken on all electronic systems used in Uganda Revenue Authority such as e-tax and e-payment on customer service. The study suggests different research tools to be used in order to test the relevancy of ICT adopted by Uganda Revenue Authority towards customer service.

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APPENDIX 1

QUESTIONNAIRE FOR REVENUE OFFICERS

Dear Sir/Madam,

This questionnaire is designed to collect data on the effect of the E-Procurement Systems on internal Customer Service in Uganda Revenue Authority. Your contribution will enable the researcher to accomplish the research study. The information given by you will be treated with maximum confidentiality and for academic purposes only. You are therefore kindly requested to spare some of your limited time and answer the following questions by ticking or filling in the blank space with what is most appropriate to you:

Section A: Bio Data

1. Can you kindly indicate your gender?

Male	Female

2 Age in years:

20-30	31- 40	41-50	51+

3 What level of education have you attained so far?

Diploma	
Degree	
Masters	
If others, (please specify)	

4. In which department do you work? …….

Section B: Planning factors/rationale for introducing e-procurement system towards internal customer service

In this part of the questionnaire you are expected to answer by choosing one of the following options:

Code:	**1**	**2**	**3**	**4**	**5**
For:	**Strongly Disagree**	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**

	1	**2**	**3**	**4**	**5**
1. The introduction of e-procurement can lead to improved efficiency on internal customer service.					
2. E-procurement is faster and cheaper and thus can lead to cost saving and thus improved internal customer service					
3. E-procurement allow the purchasing function to focus on more value adding activities such as serving customers					
4. Mistakes and errors in the procurement process are eliminated with the adoption of e-procurement system.					
5. Reductions seen in lead times within the procure-to-pay cycle, in some cases by 50%.					
6. Compliance problems are eliminated with e-procurement system					
7. e-procurement leads to improved decision-making process by keeping relevant information neatly organized and time-					

	stamped					
8.	Well-managed e-procurement helps reduce inventory levels					
9.	e-procurement speeds up procurement cycle times and facilitates supplier performance improvements					
10.	In using e-procurement system, sourcing and ordering processes are always exact.					

11. Are there other reasons for introducing e-procurement? If yes, please support your answer?----------

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Section C: Implementation of e-procurement system towards internal customer service

In this part of the questionnaire you are expected to answer by choosing one of the following options:

Code:	**1**	**2**	**3**	**4**	**5**
For:	**Strongly Disagree**	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**

Success stories registered	**1**	**2**	**3**	**4**	**5**
12. E-procurement has resulted into increased efficiency in administrative tasks thereby leading to increased customer utilization of e-procurement			1		
13. E-procurement has resulted into increased accuracy in purchasing information processing in URA			1		
14. The reduction in operational processing costs is due to the introduction of e-procurement in URA			1		
15. In URA the reduction in ordering lead time is a result of e-procurement			1		
16. Increased efficiency and cost saving in customer service in URA has been achieved as a result of e-procurement			1		
Challenges encountered			2		
17. Lack of high-speed connections and software incompatibility affects adversely customer utilisation of the e-procurement			2		
18. The high level of computer illiteracy compromises customer utilisation of the e-procurement.			2		
19. Capturing of e-signatures for approval have greatly hindered customer utilisation of the e-procurement			2		
20 Regulatory barriers created by governmental action affect negatively e-procurement			2		
21 Transaction risks can happened due to wrong products			2		

	purchased due to incomplete or misleading information					
22	Customer utilisation of the e-procurement is affected by lack of adequate security measures to protect data.					

23 Are there other challenges encountered by customer utilization of the e-procurement? If yes, please support your answer?----------

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Section D: Strategies of improving internal customer service using e-procurement system

In this part of the questionnaire you are expected to answer by choosing one of the following options:

Code:	**1**	**2**	**3**	**4**	**5**
For:	**Strongly Disagree**	**Disagree**	**Not Sure**	**Agree**	**Strongly Agree**

		1	**2**	**3**	**4**	**5**
24	There is a need to develop a user friendly e-procurement system in order to improve internal customer service					
25	There is an urgent need to train customers how to use e-procurement system to overcome the problem of computer illiteracy.					
26	Capturing of e-signatures should be made easier to stimulate customer utilisation of the e-procurement					

27	The government to pass electronic laws to enable efficient customer utilisation of the e-procurement					
28	Security measures of data protection should be put in place to enhance customer utilisation of the e-procurement					

29 Are there possible ways of improving customer service using e-procurement system?

If yes, please support your answer----------

END

Thank you very much

APPENDIX 2

INTERVIEW GUIDE IT MANAGER AND PROCUREMENT MANAGER

1. Are you aware of the factors for introducing e-procurement system in URA?
2. If yes, what the main factors for introducing e-procurement system in URA?
3. Has the introduction of e-procurement system in URA improved on internal customer service?
4. If yes, how has the introduction of e-procurement system in URA improved customer service utilization?
5. If no, what are the main challenges encountered customer utilization of e-procurement system?
6. Are there any effort done by URA to improve customer utilization of e-procurement system?
7. If yes, what kind of intervention has URA done to improve customer utilization of e-procurement system?
8. Are the intervention put in place effective to enhance customer utilization of e-procurement system?
9. If no, what strategies could you suggest to improve customer utilization of e-procurement system?

End

Thank you for your cooperation