

**E-PROCUREMENT AND PROCUREMENT PERFORMANCE OF
SUPERMARKETS IN NAIROBI**

BY

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DECLARATION

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

Signed..... Date.....

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This project has been submitted for Examination with my authority as the University supervisor

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DEDICATION

I dedicate this work to my father Mr Vincent Simiyu Makali and mother, the late Mrs. Colleta Simiyu, who their love for education has seen me come this far, my husband Edwin Sudi Wandabusi, Sons Bixente Otunga and Clarence Wandabusi and other family members.

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To all of you, God bless and increase you immensely.

ABBREVIATIONS & ACRONYMS

CBD:	Central Business District
EAC	East African Community
ERP:	Enterprise Resource Programs
GDP:	Gross Domestic Product
JIT:	Just In Time
KISM:	Kenya Institute of Supply Management
MRO:	Materials Repair and Operational
(NCAPD):	National Coordinating Agency for Population and Development
SCM:	Supply Chain Management
SPSS:	Statistical Package for Social Sciences

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ABSTRACT

This study explored the contribution of e-procurement to procurement performance in supermarkets in Nairobi. The aim of the study was to assess the adoption of e-procurement in the supermarkets in Nairobi, to evaluate procurement performance in the supermarkets in Nairobi and to determine the contribution of e-procurement to procurement performance in supermarkets in Nairobi. The study was informed by need to generate data on best practices in the supermarket sector in the highly competitive and globalizing environment. From literature, e-procurement has been hailed as one of the best practices in procurement management.

This study was informed by the contingency theory of management and the resource based view of strategy. The contingency theory informed this study in terms of evaluating the adoption processes and how that aligns e-procurement practices towards stimulating procurement performance potential in an organization. The resource based view informed this study in terms of considered how supermarkets curve a competitive advantage based on e-procurement practices as a key resource in procurement processes. Empirical literature reviewed shows that e-procurement has proved advantageous in organizations across the globe. In Kenya, most studies on e-procurement have focused on adoption modalities. This study sought to contribute by focusing on the contribution of e-procurement to procurement performance in supermarkets.

Due to the small number of supermarkets in Nairobi, a census survey was done. The survey targeted 40 supermarkets drawn from Nairobi and its environs. Data was collected from the respondents using a semi structured questionnaire. The findings in this study show that adoption of e-procurement is still relatively low at 56% of the supermarkets and most supermarkets adopted e-procurement practices less than a year ago. From the ratings by respondents, the study established that the adoption process is far from optimal and a lot needs to be done to enhance the migration of procurement functions to the e-platforms. Further, the study established that e-procurement in supermarkets helps enhance cost efficiency by reducing wastage e.g. use of many papers and reduced costs of sourcing for suppliers. Considering lead times, adoption of e-procurement in supermarkets enhances efficiency by enabling integration of departments and branches. Further, e-procurement contributes greatly towards better communication between the different departments and branches thus it helps ensure operational efficiency and effectiveness. The most critical practices that contribute greatly to procurement performance in supermarkets are e-tendering, e-requisitioning and e-sourcing.

Based on the findings the study recommends that policy makers, especially in the ICT sector, come up with policies and programs that will enhance use of ICT in the retail industry in Kenya. Such programs can involve, through a public-private partnership, equipping SMEs with ICT skills for engaging in e-procurement processes. The study recommends that the supermarkets or retail industry adopting e-procurement ought to scale down on traditional procurement activities if the benefits of e-procurement are to be realized. Additionally, it is recommended that organizations focus more on streamlining e-tendering, e-requisitioning and e-sourcing because a strong and significant relationship exists between those e-procurement processes and procurement performance in supermarkets.

CHAPTER ONE: INTRODUCTION

1.1. Background of the study

Companies are under constant pressure to grow profitably in an increasingly competitive and rapidly changing business environment. According to Meyer and Schwager (2007), some of the factors putting pressure on organizations include growing retail power, industry consolidation, continuing downward pressure on price and globalization. Globalization and technology shifts require organization to reengineer their operations if they are to maintain competitiveness (Walters, 2008). These dynamics of the market economy call for a shift in business focus to consumer responsiveness and innovative solutions that deliver value to the consumer profitably.

Walters (2008) suggested that to ensure customer satisfaction and customer loyalty, organizations have to work with their suppliers as well as the customers to ensure delivery of desired goods just in time. For such supply chain integration that delivers value to happen, organization use ICTs to enhance supply chain efficiency. E-procurement, enabled by advance in ICTs, has been promoted as one way of improving procurement efficiency and effectiveness (Musau, 2015). This study investigated the contribution of e-procurement to procurement performance in leading supermarkets in Nairobi.

1.1.1 E-Procurement

One of the key functions in supply chain management is procurement management. Procurement is the process of identifying, analyzing and in the most optimal way finding the means of availing goods and services that are needed in an organization (Eadie, Perera, Heaney & Carlisle, 2007).

The procurement process has four distinct stages or phases; information gathering or needs analysis phase, negotiation phase, settlement phase and the after sales phase (Eadie *et al.*, 2007). With advancement in ICTs, internet powered by high communication technologies (e.g. 3G or 4G networks) has made online business transactions a preferred mode of doing business (Musau, 2015). E-procurement is the process of buying goods and services on an online platform (Egbu *et al.*, 2003). E-procurement has been widely hailed as an antidote to challenges that ailed traditional procurement practices.

E-procurement is very important when it comes to improving procurement performance and by extension organizational performance (Manrodt, Gibson, & Stephen, 2005). E-procurement involves use of software to manage and execute procurement functions. The software used in e-procurement integrates procurement functions and creates interfaces that enable fast and cost friendly execution of activities like tendering, catalogues generation and management, supplier contracting and management, and general communication (Manrodt *et al.*, 2005). The automation of processes helps make transactions quick, enhances relationships through more contact between procuring entities and suppliers, provides evidence of transactions, and reduces paper work and related costs among other benefits (Egbu, Vines & Tookey, 2003). Due to the numerous benefits of e-procurement, many organizations both private and public are opting for e-procurement systems.

1.1.2 Procurement Performance

Procurement performance refers to how well procurement objectives are attained (Baily, 1998). The main procurement performance indicator is the extent to which the procurement function enables the organization to get best value for money spent on purchases and supplies (Musau, 2015).

While traditionally, costs were the major measure of procurement performance, measuring procurement performance currently requires paying attention to more variables (PPOA, 2009). Procurement performance measurement, in modern organizations, involves going beyond costs to consider quality, inventory, supplier relations, risk and customer satisfaction (Shalle, Guyo, & Amuhaya, 2014). Value for money in the procurement procedures is determined by cost of procurement process, price of commodities, timeliness of procurement and quality of goods or services procured (Baily, 1998). While cost is an important measure of procurement efficiency, least cost without delivering quality goods renders the procurement process ineffective (PPOA, 2009).

According to Shalle *et al.* (2014) procurement performance can be measured by focusing on “cost, quality, delivery, flexibility, and technology”. This implies that procurement performance is dependent on how relationships with suppliers are managed to ensure availability of required quality and quantity of supplies in an organization at the right cost, at the right time (Shalle *et al.*, 2014). The main goal of procurement is to ensure required quality inputs are available in an organization in a timely and cost effective manner (PPOA, 2007). Procurement performance is thus about improving the manner in which procurement activities are done towards delivering quality supplies in a timely and cost efficient way.

1.1.3 E-Procurement and Procurement Performance

In many organizations, procurement is inefficient and ineffective due to a fragmented approach to procurement (PPOA, 2007). Integrated purchasing offers an organization a competitive advantage due to economies of scale, capacity to bargain for better terms and lowered costs (PPOA, 2007). To properly integrate and centralize procurement, information technology is an important element.

Gunasekaran and Ngai (2008), pointed out that e-procurement enhances procurement performance through improved flexibility, quick transactions, and lowering operational costs. According to Croom (2006), e-procurement is beneficial strategically as well as operationally. The strategic importance of e-procurement is linked to its operational benefits. Such operational benefits include shortening procurement process, improving information exchange, reducing transactional costs and enhancing bargaining power of the procuring entity (Croom, 2006). Due to inbuilt efficiencies, e-procurement systems enable just in time production, reduction of production cycles and more customer participation in product development process. Such efficiency is strategically important because they become an efficiency driven competitive edge (Croom, 2006).

E- Procurement is linked to Procurement performance because of the benefits associated with use of ICT and automation. Procurement goals are in line with delivering desired quality of goods and services in a timely and cost friendly manner. What e-procurement does is to facilitate fast and cost friendly procurement processes (Manrodt *et al.*, 2005). Additionally, as discussed by Manrodt *et al.* (2005), e-procurement enhances transparency in the procurement processes thus reducing corruption. By so doing, right procurement practices are established leading to purchasing of right quality of goods in a timely and cost efficient manner.

E-procurement has been widely practiced in the world: both in private and public institutions. Most governments have opted for e-procurement systems (Wu, 2007). In Kenya, recent pronouncements by President Uhuru Kenyatta are to the effect that all procurement in government ought to be through e-procurement platforms. The main reason why governments and private sector organizations are embracing e-procurement is to enhance procurement performance. Three key things define procurement performance: quality product, timely delivery, and right costs that facilitate customer satisfaction (Wu, 2007).

1.1.4 The Retail Industry in Kenya

The Retail Industry is one of the important sectors of any economy (Howard, 2001; Dragun and Knight, 2001; McGurr, 2002). Musau (2015) explains that this sector, apart from contributing to the national GDP, facilitates acquisition of day-to-day consumables for both the corporate sector and individuals at the household level. Retail chain stores gained prominence in the USA through the successes of chains like Wal-Mart and Tesco (Howard, 2001; Dragun & Knight, 2001; McGurr, 2002).

Kenya has become, and continues to position itself as a business hub in Eastern Africa (Omany, Njeri, & Mungai, 2013). The country is an attractive destination for investors because it acts as a gateway into the regional market and is the largest economy in the East African region. Another factor that makes Kenya attractive to investors in the Retail Industry is a high population growth rate (NCAPD, 2011). Since 1969, the population of Kenya has exponentially grown from 10.9 million to around 40 million people. What is exciting is that huge portions of the Kenyan population are joining the middle class wealth bracket (NCAPD, 2011). According to the NCAPD (2011), 55% of Kenyans are of working age and are engaged in some income generating activity; whether at family level or commercially.

Due to such factors, the country has attracted huge investments in the Retail Industry. The capitalist path of development has made the Kenyan society very pro-Europe or western life styles. Coupled by high literacy levels and a very industrious people, urban centers in Kenya are a beehive of activities (Omany *et al.*, 2013). The growth of urban centers has signaled great potential for retail businesses. The liberal market economy has encouraged growth of the Kenyan Retail Industry.

Consequently, numerous foreign retail firms have set shop on Kenya (Omondi & Namusonge, 2015). Consequently, Nairobi is rated highly as a business centre due to its shopping malls, retail chains, and robust Retail Industry in general. Some retail chain stores, such as Nakumatt, Tuskys, Uchumi, and Naivas, are leading retail stores in East Africa (Omondi & Namusonge, 2015).

Retail chain stores play an important role in the Kenyan economy. It is estimated that the Retail Industry in Kenya contributes about 18.5% of Kenya's GDP (Omondi & Namusonge, 2015). Despite the role played in the economy, players in the Retail Industry face stiff competition. As Ingari, Mule, Ondoro, Obura and Thairu (2012) reported, supermarkets in Kenya contribute significantly to the economy. However, due to competition many supermarkets that are not managed properly have registered poor returns (Ingari *et al.*, 2012). For instance, Uchumi supermarket has had to receive a government bailout in order to resume operations. However, the challenges bedeviling it seem far from being conclusively tackled. The study by Ingari *et al.* (2012) showed that procurement best practices significantly affected retail profits. For retail players to stay competitive, procurement practices are key (Chang & Wong, 2010).

1.2. Research Problem Statement

According to KISM (2008), in the Retail Industry, long-term relationships help towards stabilizing and ensuring consistent supply of goods and services. Many suppliers, especially of fresh produce, to retail chains in Nairobi are SMEs (Omondi & Namusonge, 2015). The challenge when it comes to SMEs is lack of capacity to consistently supply on time and as per specifications (KISM, 2008). Additionally, the variety of goods sold in supermarkets or retail chains stores is huge leading to the firms having to deal with numerous and diverse caliber of suppliers (Orori, 2011).

Due to many suppliers, in supermarkets, managing many suppliers is a major cost concern especially when quality assurance is considered (Orori, 2011). It is for this reason that establishing long-term supply relationships is very poignant (KISM, 2008). However, even with long-term relationships established, there is need to have mechanisms of continuously scanning market for new suppliers with better terms, better offers, better operational efficiency, and quality systems (KISM, 2008).

Procurement is an important aspect of retail business strategy (Baily, 1998). This is because in retail business, purchase for retail is one of the core business activities (Shalle *et al.*, 2012). Procurement in the Retail Industry requires hands on approach. Consequently, as Omondi and Namusonge (2015) note, top management has to encourage best practices in procurement to ensure timely delivery of the right kind of products at the right price. Various studies done outside Kenya, have demonstrated that one sure way of enhancing procurement performance is embracing e-procurement (Eadie *et al.*, 2007; Gunasekaran & Ngai, 2008; Croom, 2006).

In Kenya the adoption of e-procurement is still at the inception stages (Makau, 2014). There are a number of studies done on e-procurement in Kenya but most of them focus on the public sector. Kipyego (2012) and Makau, (2014) did studies that focused on identifying the challenges in adoption of e-procurement in the public sector in Kenya. Kinoti, (2014) just like Makau (2014) did a study on challenges in adoption of e-procurement in the public sector with a special focus on supplier side issues in state corporations. Abdi, (2012) also did a study on state corporations but tried to link adoption of e-procurement to organizational performance. Musau, (2015) focused on state corporations but his study was specific to how inventory optimization challenges influenced e-procurement performance in state corporations. Additionally, Shalle *et al.* (2014), also did a very specific study investing how buyer/supplier collaboration influenced e-procurement performance in the public sector.

A number of studies have also been done on e-procurement in the private sector. For instance Mburu, (2011) looked at how e-procurement enhances efficiency in the telecommunication industry. Njoroge, (2010), did a study on factors influencing e-procurement in the construction industry. On e-procurement in the retail industry some seminal studies have been done (Ouma, Mwangi & Oduk, 2013).

Omondi and Namusonge (2015) did a study on best practices in the retail industry and established that e-procurement is one of the best practices. Orori (2010) did a study on factors influencing adoption of e-procurement in the Retail Industry. Some studies have focused on procurement best practices with a focus on supermarkets in Kenya (Ingari *et al.*, 2012; Ouma *et al.*, 2013). Although various studies have been done on e-procurement in the retail industry in Kenya, most of the studies focused on the level of assessing factors that influence adoption.

This study seeks to generate empirical evidence on benefits of adopting e-procurement. The study seeks to respond to three specific questions. What is the contribution of e-procurement to lead times in leading supermarkets in Nairobi? What is the contribution of e-procurement to customer satisfaction in leading supermarkets in Nairobi? What is the contribution of e-procurement to procurement cost efficiency in leading supermarkets in Nairobi?

1.3. Objectives of the Study

The main objective of this research is to evaluate the contribution of e-procurement to procurement performance in the Retail Industry in Kenya. The specific Research objectives are-

- i. To assess adoption of e-procurement in the supermarkets in Nairobi
- ii. To evaluate procurement performance in the supermarkets in Nairobi

- iii. To determine the contribution of e-procurement to procurement performance in supermarkets in Nairobi

1.4. Significance of the Study

The study is supposed to enhance understanding and knowledge of e-procurement practices in the Retail Industry in Kenya. The findings, from retail chain stores in Nairobi, can enable other Retail Industry players to identify gaps in their procurement systems. The identification of areas of improvement, can inform the companies' efforts to provide customers with the right product and the right service in the most effective and efficient way.

Procurement is important in the delivery of services in many areas of an organization. This research can benefit procurement, marketing, sales, operations management, and researchers interested in efficient procurement practice in Kenya. The study can also form the basis for further research in the field of use of ICT to enhance organization performance by enhancing operational efficiency. The study helped to identify opportunities for the Retail Industry in Kenya to transform their processes and technology to improve use of e-procurement platforms.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This section provides the review of literature that is related directly or indirectly to the study. The first section of the literature review provides theoretical literature linking e-procurement and procurement performance. The second part has empirical literature, which is presented thematically as per the research objectives. The literature was obtained from various sources such as peer-reviewed journals, books, and published research reports.

2.2. Theoretical Review

A lot of literature has been generated on supply chain management and its related concepts. However, as Chen and Paulraj (2004) pointed out, there are no comprehensive theories of supply chain management. What exist rather are prescriptive models that have been developed for use in practice. In the recent past, with focus on e-procurement, there have emerged supply chain management models advocating for use of ICT in integrating demand and supply side processes. Generally, this study adopted the resource-based theory and the contingency theory of management.

2.2.1. Resource Based Theory

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

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

2.2.2. Contingency Theory of Management

The contingency theory holds that circumstances play a critical role in determining the best possible response (Donaldson, 2001). Consequently, there is not good fit for all situations as other theories of management may tend to suggest. Each organization has unique circumstances and management has to tailor decision making to create best fits that address contextual issues. There are no predetermined notions that every organizations can fit into and there are no universal approaches that deliver results for every organization (Donaldson, 2001). All organizations have to attempt to uniquely respond to their circumstances and create a good fit for the emergent circumstances.

When applied to the procurement function, these theories lead to appreciation that the procuring environments are very different and unique. There are no models that are universal and can enable any organization that applies them to achieve procurement outcomes (Donaldson, 2001). While one approach works in one context or organization, the same approach would lead to failure when applied to other organizations. These are important considerations when it comes to adoption of e-procurement and actual procurement practices in organizations. E-procurement and procurement practices have to be adopted to fit the organizations unique circumstances thus stimulating optimal performance.

If the organization does not adopt its operations to circumstances or business environment contingencies, it will not be adequately fitted for operations in a given business environment leading to failures (Woodward, 2001). This study considers adoption of e-procurement and contribution of e-procurement to procurement performance. This theory informs this study in terms of evaluating the adoption processes and how that aligns e-procurement practices towards stimulating procurement performance potential in an organization. The extent to which e-procurement practices are adapted to the unique procurement circumstances is the extent to which its efficiencies are likely to be realized by the organization. Some of the contingencies to consider are technology available, the capacity of suppliers or distributors and their interests, the capacity of consumers and their interests, government regulations and policy, and available capital for investment.

2.3. Empirical Literature

Empirical literature refers to primary studies or previous studies done on a given subject or similar studies (Kothari, 2004). This empirical literature section presents previous studies done in Kenya and other parts of the world relating to e-procurement and procurement performance.

2.3.1. E-Procurement Platforms

E-procurement platforms refer to the different mechanisms used to manage online procurement activities in an organization (Hawking *et al.*, 2004). There are various types of software or online platforms deployed in organizations to facilitate e-procurement practices. Some of the commonly used platforms include Enterprise Resource Planning Software (ERP), Maintenance, and Repair Operations (MRO) software, E-sourcing software, E-reverse auctioning software, E-informing software and E- Market websites (Baily, 1998).

The Enterprise Resource Planning (ERP) is a widely used system that helps to integrate organizational operations (Hawking, Stein, Wyld & Forster, 2004). The ERP software helps to integrate organizational procurement processes as well as other functions like human resource management function (Baily, 1998). When using an ERP system, internet based applications facilitate the raising of requisitions, the approval of purchases, and the placement of orders, the receipting of received goods and services and feedback mechanisms on customer satisfaction with the entire procurement processes.

The MRO software is designed to track, create, and approve MRO related purchases (Baily, 1998). Such a system is very helpful in organizations that deal with plants that need regular maintenance and repair related supplies. What the system does is to automate the process of creating purchase orders and receipting or keeping records on received MRO supplies (Baily, 1998). An e-sourcing platform is characterized by use of ICT to manage sourcing of suppliers. A platform is created where suppliers can input their details and the system either prequalifies them or rejects their applications based on predetermined measures. Such a system has product specifications and purchasing requirements for each category of goods and services required by an organization. The system also acts as an interface for supplier training and feedback receipt. Some platforms used in procurement have been customized and tailored to handle the tendering process (Eadie *et al.*, 2007).

The e-tendering platforms handle all tendering process phases. They are tailored to send tender announcements to suppliers, to analyze tender submission and to award marks based on tender requirements and specifications (Eadie *et al.*, 2007). From such a platform, suppliers can send information requests and receive feedback that aids tender bid preparation processes. In case an organization does not want to engage in elaborate tender processes, E-reverse auctioning platforms are very helpful (Egbu *et al.*, 2003).

Such platforms enable purchasers to get offers from both established and new suppliers for given goods and services. Organizations can combine e-procurement with traditional procurement practice (Egbu *et al.*, 2003). This can be achieved through deploying platforms like the E-informing software. Such platforms only enable the procurement department to gather and distribute information. The software helps individuals to raise requisitions internally, to give feedback to internal customers, to collect information from the market players and to give feedback to suppliers.

E-markets sites are becoming popular in Kenya (Omondi & Namusonge, 2015). What such sites enable is for groups of suppliers and buyers to access variety of goods and services and engages in online business transactions. Such sites have advanced systems that integrate financial services in a system where orders can be raised, purchase approvals made, purchasing orders generated, electronic invoices generated, and goods paid for electronically (Egbu *et al.*, 2003).

2.3.2. Adoption of E-Procurement in Kenya

E-procurement enhances performance of procurement by reducing transaction costs but most critically by reducing fragmentation in procurement (Musau, 2015). E-procurement is supposed to be an end-to-end solution that integrates and streamlines procurement processes in an organization (Abdi, 2012). However, studies show that adoption of e-procurement differs across sectors and across organizations. Musau (2015) reports that e-procurement is at the initial stages of adoption in Kenya: both for private and public organizations. A study by Abdi (2012) indicated that many public sector organizations in Kenya have adopted e-procurement. However, only certain procurement functions are performed electronically while many procedures are still performed manually (Abdi, 2012).

According to Abdi (2012), some of the procedures still done manually despite existence of e-procurement platforms are short-listing of suppliers, the call for Projects, and the tendering process. Kipyego (2012) and Musau (2015) pointed out that the initial costs of implementing e-procurement tend to be prohibitive. Makau (2014) did a study that revealed that adoption of e-procurement in parastatals in Kenya was determined by technology, public procurement regulation, Employee's competence, and Managerial commitment. Very few companies and public organizations have or can afford the necessary ICT infrastructure required for full implementation of E-procurement.

Apart from costs, as discussed by Omondi and Namusonge (2015), and Matunga (2013), lack of change management and adequate training for staff makes adoption of e-procurement difficult. Other challenges have been slow network connectivity or lack of internet connectivity in some areas, and limited number of ICT savvy SMEs (Musau, 2015; Kipyego, 2012). Consequently, organizations tend to, selectively, adopt the e-procurement system thus limiting its impact on overall organizational performance.

Kinoti (2013) did a study, which revealed that suppliers play an important role in determining adoption of e-procurement system. According to Kinoti (2013), the attitude of the suppliers and their capability defines whether they participate in e-procurement processes or not. In the case of parastatals, the new levels of transparency and integrity required by the e-procurement system make traditional suppliers to be opposed to it. This is because the e-procurement platform disrupts the traditional relations between procurement departments and suppliers. Therefore, adoption of e-procurement is not just dependent on organizational resources but also the resources available to other stakeholders: especially the suppliers.

2.3.3. E-Procurement and Lead Times

A lead-time refers to time taken between the raising of a requisition and actual acquisition of a product. It refers to delays in delivering products to customers. E-procurement has been widely embraced because it significantly reduces lead times (Egbu *et al.*, 2003). What e-procurement does is to free procurement employees because they do not have to spend many hours working on paper work. Instead, online templates and automated systems in an online system enables just in time performance of procurement functions. Traditionally, procurement managers spend a lot of time in meetings discussing procurement details with potential suppliers (Rankin, Chen & Christian *et al.*, 2006). The internet has substantially reduced time requirements related with booking meetings and engaging in discussions.

With e-procurement platforms, potential suppliers get instant alerts, receive further information on a platform and channels requests for clarification to procurement officers from the comfort of their offices or rooms (Rankin *et al.*, 2006). This helps lower information transfer loop times and hence the time taken to respond to procurement requests. According to Rankin et al. (2006), internally, e-procurement helps towards centralization of procurement activity. This kind of centralization facilitated by integration software like ERP is important because it reduces the time it takes for information transfer from one department to another (Eadie *et al.*, 2007) The integration of departments enables real time sharing of information hence faster reception, evaluation, approval, and requisition of required supplies in an organization. Even for organizations that have global presence, e-procurement systems enable sharing of information real time without having to wait for months for approvals due to communication delays.

2.3.4. E-Procurement and Cost Efficiency

One of the reasons why organizations opt for e-procurement is reduction in procurement costs. One of the measures of procurement efficiency and effectiveness is procurement related costs. The aim of procurement management is to deliver desired quality of goods to an organization at minimal cost possible. According to Eadie *et al.* (2007), e-procurement when properly embraced significantly reduces procurement costs through simplification of the procuring process and reduction of wastage. As discussed by Gebauer, Beam and Segev (1988), who studied procurement processes in the United States, procurement costs increase due to spending on preparation of paper work, working on tender documents, advertising tenders, costs of sharing or distributing tender documents and costs of storing huge volumes of paper work and supplier records. The internet provides very lean communication opportunities.

E-procurement helps reduce costs because the costs of evaluating tender documents are significantly reduced (Hawking *et al.*, 2004). Through use of software, the number of people required to sift through documents and analyze the tender documents is significantly reduced. Sourcing for suppliers is made efficient with e-procurement. For instance, costs related to traveling around to meet with potential suppliers or waiting for potential suppliers to travel in order to have a business meeting are substantially reduced. Software, websites, and the internet do the work of attracting or disseminating information about available tenders to which various suppliers are attracted. E-procurement significantly helps reduce quality failure related costs. According to Hawking *et al.* (2004), when the process is automated, all suppliers are subjected to specified criteria by a system. This reduces corruption cases and corruption related costs due to compromised quality.

With e-procurement platforms transparency and accountability is achieved increasing the procurement process integrity. All suppliers can adequately follow the procurement process through information interfaces on the e-procurement platform. According to Rankin *et al.* (2006), E-procurement is important because it reduces administration costs. When less staff is required in the procurement process, it means managers have to deal with fewer staff hence greater staff control or management. Additionally, because most procurement transactions are automated, the supervision role is significantly reduced. All that managers have to ensure is electronic system integrity and a procurement process goes on without hitches. Egbu *et al.* (2003) did a study, which revealed that e-procurement reduces overall costs by more than 20%.

2.3.5. E-Procurement and Customer Satisfaction

Customer satisfaction is realized when quality goods and services are delivered in a timely manner at the right cost (Harrigan, 2008). E-procurement contributes to customer satisfaction through enhancing quality assurance and timely delivery. Using automated, internet based systems ensures strict adherence to quality specifications (Harrigan, 2008). Additionally, seamless communication between procuring entity and suppliers aids supplier to comply with quality standards (Davila, Gupta & Palmer, 2003).

E-procurement platforms provide automated systems of tracking and keeping records about suppliers. Such records may include delivery times, quality of products delivered, supplier prices and other pertinent information that enables procurement officers to make evidence based decisions when handling suppliers (Davila *et al.*, 2003). E-procurement increases access to a diverse pool of suppliers (Davila *et al.*, 2003). This is important towards customer satisfaction because it enables an organization to source for a variety of goods and keep up with changes in product specifications.

According to Harrigan (2008), the convenience of accessing suppliers enables the procurement entity to customize purchasing to needs of individual customers. This is because costs of procurement are significantly reduced through use of online platforms and the process is simplified.

Another important aspect of e-procurement platforms is supplier and customer feedback (Harrigan, 2008). The e-platform enables procuring entities to gather information from both customers and suppliers in real time. The effect of this is that procuring entities are able to address and manage customer specifications better. For instance, in case of product failure, it is easier to work with the supplier and customer in real time and find amicable resolutions of arising concerns (Davila *et al.*, 2003). Customer feedback is used by the procuring entity to help supplier improve their products while supplier communication enables the procuring entity to manage customer expectations and concerns. The net effect of such interactions is greater customer satisfaction and growth in brand value.

Heywood (2002) noted that communication is a critical element that ensures compliance on behalf of the supplier. Through an e-procurement platform, suppliers are enabled to receive continuous information which then helps them become compliant. On the other hand, for the procuring entity, electronic platforms provide an avenue for quickly and efficiently gathering market intelligence (Heywood, 2002). Because of enhanced capacity to manage inventory at optimal levels, e-procurement platforms help the procuring entity to deliver products on demand basis. The benefits of just in time procuring are not only in reducing inventory costs for the procuring entity but also customer satisfaction due to good quality for products whose quality is affected by storage (Davila *et al.*, 2003).

2.4. Procurement Performance in the Retail Industry

Procurement in retail business is a core competence area unlike in other organization where it is a secondary function; support service. It is for this reason that for organizations like Tesco, procurement is a highly professionalized and most technical department (Baily, 1998). To succeed in retail business, the procurement officers have to come up with and sustain retail supply chains that deliver an added advantage to organizations offering. Procurement in Retail Industry is closely linked to logistics because the procuring entities not only buy but they have to ensure safe transportation of produce, storage, and display in shops (Crompton & Jessop, 2001).

According to Crompton and Jessop (2001), another challenge for procuring entities in Retail Industry is maintaining the right inventory levels. This is because demand for goods and services is driven by different factors on a daily basis. The procurement agents have to scan the market to quickly pick market needs and efficiently deliver goods in tandem with demand; especially seasonal or spontaneous demand (Daudelin, 2001).

Procurement officers in retail chain stores need a continuous flow of information on levels of stock on the shelves but also in the stores for just in time interventions. It is for this reasons that e-procurement becomes a major strategic tool in the Retail Industry. Due to competition, retailers are always redefining their business in order to satisfy customers. For retailers to be ahead of competitors, they have to reduce costs while maintaining high service standards. A good testimony to how procurement contributes to a competitive advantage is the story of Wal-Mart. Wal-Mart conquered the market by ensuring customers get the right product at the right place whenever they want it (Daudelin, 2001).

The Kenyan retail industry seems to have come of age and in Nairobi, it has attracted some of the leading world players like Game and Woolworth (Omondi & Namusonge, 2015). The retail chain stores subsector has undergone tremendous transitions. The population of Nairobi has been increasing but equally the purchasing power of Kenyans (Omondi & Namusonge, 2015). The growing middle class has seen every street Nairobi being patronized by a retail chain store outlet. Some of the key players in the retail chain store sector in Kenya include Nakumatt, Uchumi, Tuskys, Ukwala and Naivas.

Just as Baily (1998) observed that retail chains tend to be structured in more or less the same manner, this seems to be the case with Kenyan retail chain stores. Omondi and Namusonge (2015) recently did a study on the role of supply chain leadership in performance of retail institutions. The study used Nakumatt Holdings as a case study and established the use of best practices that have driven growth for the retail chain store (Omondi & Namusonge, 2015). The organization uses innovative technology to collect data, which then is used in decision making. Some of the best practices identified in Nakumatt is hiring of trained personnel, cost control, customer orientation, proactive approach in management and use of innovative technology (Omondi & Namusonge, 2015). Omany *et al.* (2013) did a study to establish the factors affecting e-procurement in Kenya.

The study established that e-procurement had become a major determinant of business performance for many firms in Kenya. However, e-procurement had not been embraced by many organizations especially small and micro enterprises. Consequently, many of the firms failed to meet e-procurement demands or needs and lost out when it came to tenders in government and in the private sector. According to the study by Omany *et al.* (2013), use of e-procurement in Kenyan firms is determined by capability, e-procurement platforms and the value attached to e-procurement.

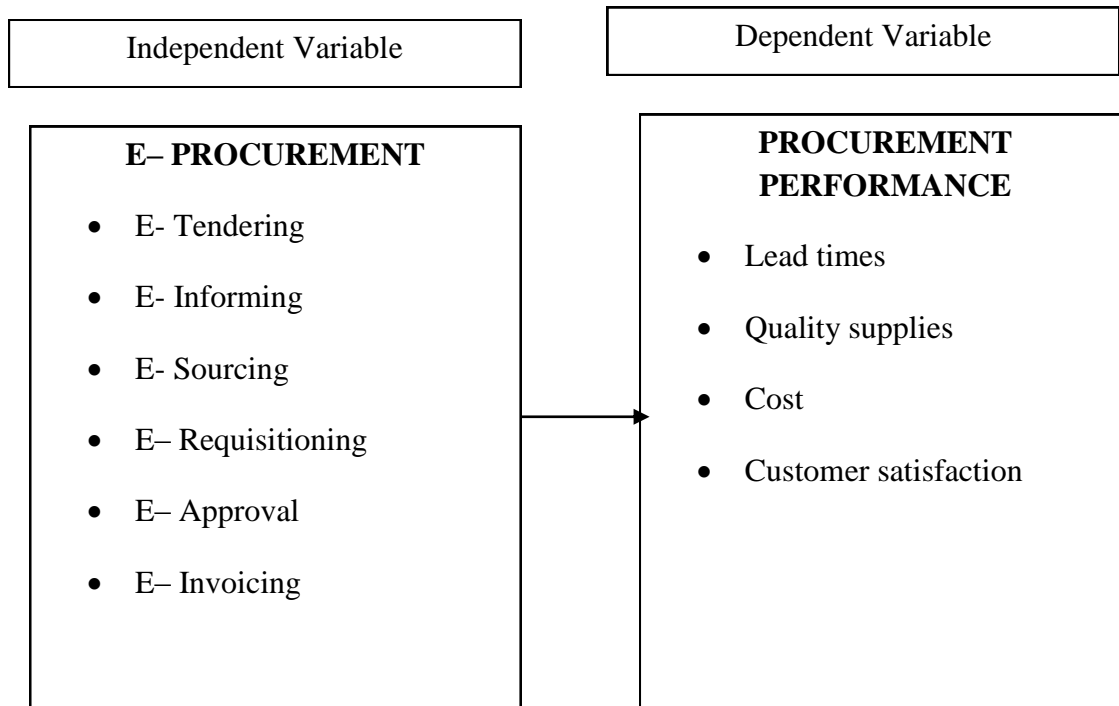
Matunga (2013) did a study on effects of e-procurement practices on effective procurement in public hospitals. The study established that some of the common e-procurement practices in public hospitals were e - tendering, e-quotations, and e-sourcing (Matunga, 2013). However, the e-procurement process was marred by various challenges including inadequate funding, lack of skills among employees to handle e-procurement processes, and resistance to change from traditional procurement to e-procurement platforms.

2.5. Summary

Reviewed literature shows that e- procurement is a strategic tool for enhancing procurement performance. The main aim of procurement is deliver required quantity of supplies to customers (both internal and external) at optimal price, quality and time. Procurement performance is thus measured in terms of delivery of quality supplies in time at the right price. Reductions in lead times, quality of supply, cost efficiency are the factors that lead to customer satisfaction. E-procurement can enable a company to be more responsive to changes in demand, which further leads to improved customer service. It is essential for a company to ensure that the procurement processes are market-driven and the company develops knowledge of how customer satisfaction can be achieved cost effectively based on coordinated procurement activities. The essence of adopting e-procurement is integrating, centralizing, and making procurement activities in an organization efficient. Through an e-procurement platform, procurement processes and transactions are expedited, made more transparent, and cost efficiency achieved.

2.6. Conceptual framework

Figure 1: Conceptual Framework



Source: Researcher's Conceptualization (2015)

The conceptual framework shows that the independent variable in this research is e-procurement. E-procurement is operationalized in terms of the various e-procurement procedures that organizations adopt. Such procedures include e-tendering, e-informing, e-sourcing, e-requisitioning, e-approval and e invoicing. These processes or procedures once implemented properly through an e-platform lead to improved procurement performance. Improved procurement performance in this study is operationalized as lower lead times, high quality supply, cost efficiency, and customer satisfaction.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter presents the research methodology adopted in the study. Kothari (2004) explained that research methodology is the steps that are adopted by a researcher in studying the research problem as informed by logic. The section looks into the research design, variables and location of the study, target population, sampling technique and sample size, the research instrument, validity, reliability, data collection methods and data analysis procedures.

3.2. Research Design

In this research a descriptive survey design was adopted, which involved the use of semi-structured questionnaires to collect data from a sample of respondents. The strategy is considered appropriate for this research since it helped to generate both qualitative and quantitative data that helps enhance research reliability and validity (Saunders, Lewis & Thornhill, 2012; Eisenhardt & Graebner, 2007). Moreover, a descriptive survey has the advantage of allowing the researcher to study the research problem from several perspectives (Yin, 2009).

3.3. Research Population

This study targeted all the supermarkets in Nairobi Kenya. While the unit of analysis is the supermarket, the units of observation are the senior officers in the procurement departments in the supermarkets. These target supermarkets in Nairobi are listed in annex 1. Due to the small size of the population of the study, a census survey was done. A census survey involves collection of data from all the units of the population of study.

3.4. Data Collection

This study relied on primary data collected from respondents drawn from six supermarkets in Nairobi. Primary data has an advantage because questions are tailored to elicit data for the specific purpose of the study.

Primary data from representatives from the various departments at the various supermarkets was obtained through a semi-structured questionnaire (Appendix 1), consisting of both open and closed ended questions that were designed to elicit specific responses for quantitative and qualitative analysis respectively. The questionnaire was administered through drop and pick later method and where necessary email addresses were used.

3.5. Data Analysis

The questionnaires were edited for completeness and consistency then coded for analysis. The coded responses were analyzed using descriptive statistics. The general information about respondents was summarized using descriptive statistics. Likert scale questions were used to obtain respondents rating of e-procurement practices and their contribution to Lead times, Customer satisfaction, and Costs. Data obtained through Likert scale ratings were analyzed through generations of mean ratings and standard deviations. The mean helps to show the general trend while the standard deviations were used to determine variance in the ratings of the respondents. The advantageous side of the Likert Scale is that they are the most universal method for survey collection, therefore they are easily understood. There were open-ended questions in the semi-structured questionnaire that were answered through narratives and were subjected to content analysis.

Procurement performance was measured in terms of changes in lead times, cost and customer satisfaction. To establish whether e-procurement contributes to procurement performance in the supermarkets, a regression analysis was done. The regression model is as follows:-

$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 + b_6 x_6 + e$ Where: Y= Procurement performance; a= the Y intercept when x is zero; b1, b2, b3, and b4, are regression weights attached to the variables; **x1** =e-tendering; **x2** = e-informing; **x3** =e-sourcing; **x4**=e-requisitioning; **x5**= e-approval; **x6**= e-invoicing **a** and **b** are regression constants, **e** is the error term

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1. Introduction

This study investigated the contribution of e-procurement to procurement performance of supermarkets in Nairobi in Kenya. The aim of the study was to assess the adoption of e-procurement in the supermarkets in Nairobi, to evaluate procurement performance in the supermarkets in Nairobi and to determine the contribution of e-procurement to procurement performance in supermarkets in Nairobi. A census survey was done targeting 40 supermarkets drawn from Nairobi City CBD and its environs. This chapter presents the findings from the field and an analysis of the data.

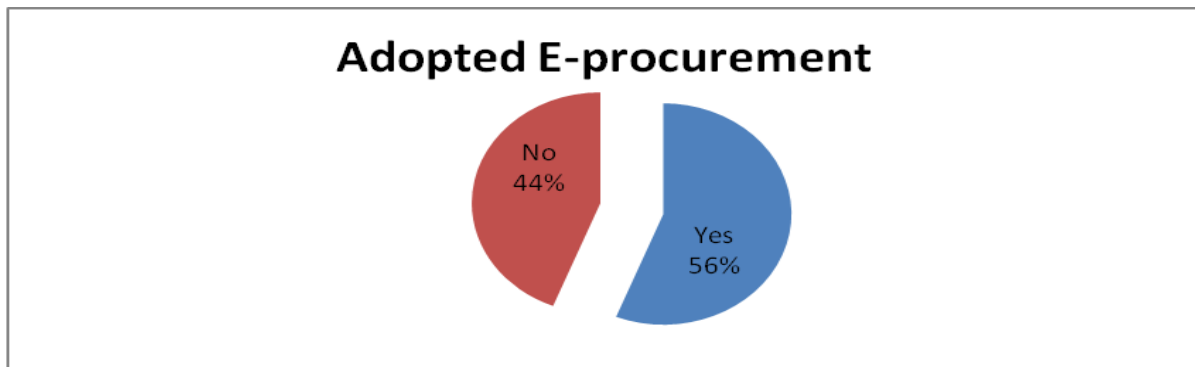
4.2. Response Rate and Demographic Data

This study targeted 40 supermarkets drawn from in and around Nairobi CBD. The data was collected from the head of procurement for each of the supermarkets. The supermarkets staff seems to be always busy. Therefore, the research adopted a drop and pick strategy for questionnaires. A total of 40 questionnaires were dropped and after two days the researcher did the rounds picking the filled questionnaires. Where the questionnaires had not been filled, the researcher discussed with those concerned and offered new deadlines in terms of when the questionnaires would be picked. Due to this patient approach, a total of 36 well filled questionnaires were collected. In four supermarkets, they were adamant and indicated that they do not fill questionnaires or the person who could fill was not available. Therefore, the study achieved a 90% response rate.

4.3. Strategic Leadership and Adoption E-Procurement in Supermarkets in Nairobi

Nairobi is the capital city of Kenya and the ICT hub of East Africa. It would thus be expected that uptake of ICT solution is high. The respondents were asked to indicate whether their company had adopted procurement or not. The responses are as provided in Figure 2.

Figure 2: Level of Adoption of E-Procurement in Supermarkets

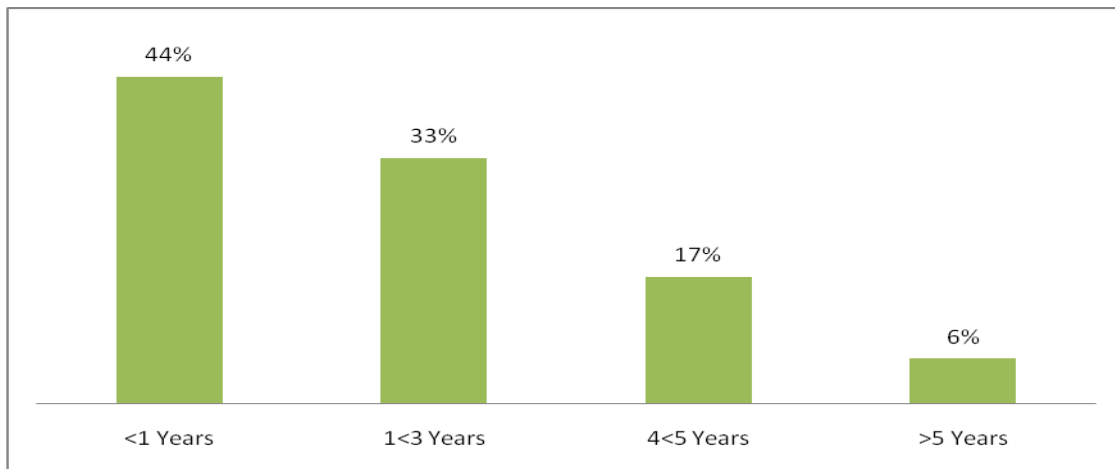


Source: Research Data

As shown in figure 2, the adoption of e-procurement in the supermarket sector in Nairobi is not across board. Out of 36 supermarkets that returned questionnaires, 56% indicated they had adopted e-procurement while 44% indicated that they had not. This findings tends to support Musau (2015)'s finding that e-procurement is still at the initial stages of adoption in Kenya (both in private and public organizations).

Based on the analysis of questionnaires, most of the leading supermarkets have adopted e-procurement. However, some of the fringe supermarkets, whereby it is only one shop and especially those operating away from the CBD, have not adopted e-procurement. For those that had adopted e-procurement, they were required to indicate the number of years since the company adopted e-procurement. The responses are as summarized and presented in figure 3.

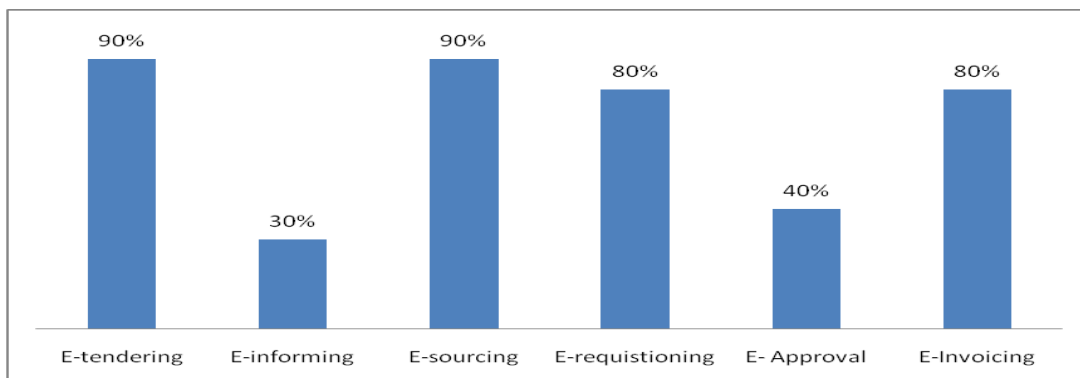
Figure 3: Number of Years since Supermarkets Adopted E-procurement



Source: Research Data

Most of the supermarkets that have adopted e-procurement did so in the recent past. As shown in figure 4, 44% of the supermarkets adopted e-procurement less than a year ago, 33% adopted e-procurement less than 3 years ago, and 17% adopted e-procurement less than 5 years ago while 6% adopted e-procurement more than 5 years ago. The respondents were asked to indicate the functions that are handled through e-procurement. The responses are presented in figure 4.

Figure 4: Procurement functions handled through E-platforms



Source: Research Data

E-procurement encompasses use of ICT to execute various e-procurement functions. In the study, the respondents were asked whether they use e-platforms to tender, to inform, to source for supplies, to requisition, to approve suppliers and to invoice customers or to receive invoices from suppliers. Musau (2015) and Abdi (2012) in their respective researches found out that e-procurement had been adopted across the public and private sector. However, only certain functions were performed electronically while the rest were manual. The findings in this study as shown in figure 4, tend to confirm this because out of the 20 supermarkets that had adopted e-procurement, 90% use e-platforms to source for suppliers and to float tenders, 80% use e-platforms to requisition and for invoicing purposes, 40% use e-platforms for purposes of selection and approval of suppliers while 30% use the e-platforms for informing and engaging stakeholders. This study also tends to have similar results with Matunga (2013) who established that some of the common e-procurement practices in public hospitals were e-tendering, e-quotations, and e-sourcing.

To measure the extent of success in adoption of e-procurement in the supermarkets, the respondents were asked to rate various statements regarding adoption of e-procurement. The statements were to be ranked on a scale of 1-5 where 1 =Very Small Extent 2=Small Extent 3=Medium Extent 4=Great Extent and 5=Very Great Extent. To analyze the responses, mean ratings and standard deviations were calculated as presented in Table 1.

Table 1: Rating of statements of Successful E-procurement Adoption In supermarkets

E-Procurement Adoption	Mean Rating	Standard Deviation
My company has successfully adopted e- procurement system	3.23	1.09
All procurement processes in my organization are automated using an e-procurement system	1.03	0.46
Management has set clear e-procurement policy and objectives	3.56	1.33
All suppliers use the e-procurement platform	1.48	0.68
The e-procurement processes are efficient and effective	4.00	0.99
There are no challenges to the organization arising due to adoption of e-procurement system	2.44	1.23
Data on the e-procurement is constantly collected and acted upon	2.80	0.14

Source: Research Data

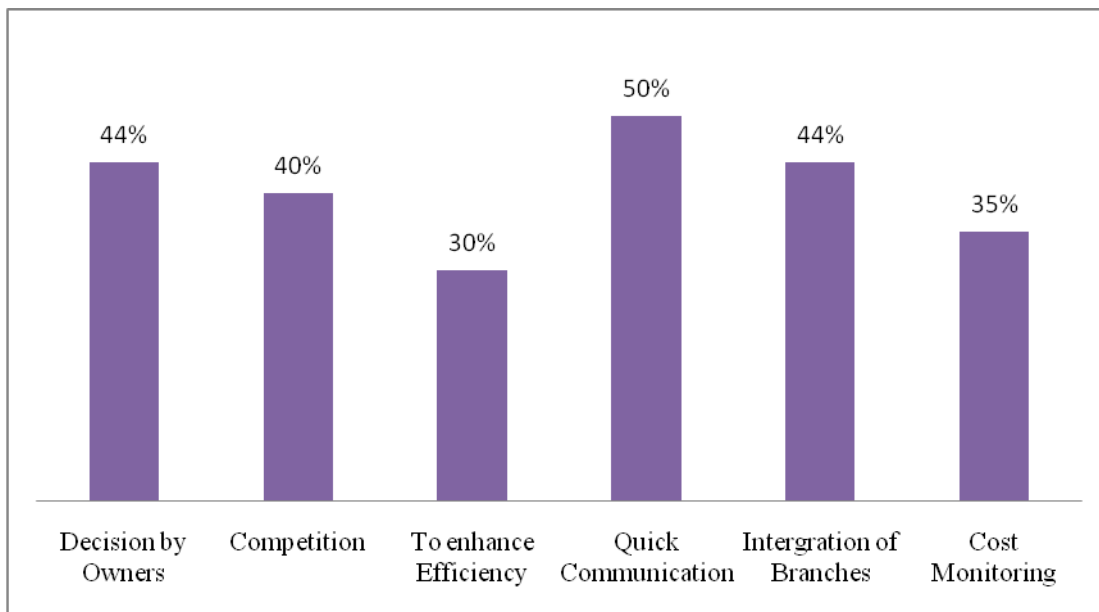
Considering the mean ratings presented in table 1, the respondents moderately agreed that their supermarkets had successfully adopted e-procurement (mean rating of 3.25). The standard deviation of 1.09 is high and indicative of high variance across the supermarkets. The respondents agreed to a very small extent (Mean rating of 1.03) to the statement that all procurement processes in my organization are automated using an e-procurement system. The standard deviation of 0.46 is low and indicates low variance in terms of situation across the supermarkets. This means that across the industry, only few procurement functions are executed through an electronic platform.

The respondents agreed moderately (mean rating of 3.56) that their management has clear e-procurement policies and objectives; however a high standard deviation of 1.33 indicates high variance in the rating by the respondents. The respondents agreed to a very small extent (mean rating of 1.48 and a standard deviation of 0.68) that all suppliers use the e-procurement platforms.

There was moderate agreement to the statement that e-procurement in the supermarkets in Nairobi is efficient and effective (mean rating of 4.00 and standard deviation of 0.99). There was agreement to a small extent (mean rating of 2.44) among respondents that there are no challenges arising in their organizations due to adoption of e-procurement. However, the standard deviation of 1.23 indicates high variance in the responses of respondents. The respondents agreed to a small extent (mean rating of 2.80 and standard deviation of 0.14) that data on the e-procurement processes is constantly collected and acted upon.

The respondents who have adopted e-procurement were asked to indicate some of the factors that led to adoption of e-procurement system in their organization. Different factors were mentioned by the respondents but the number of times mentioned among the 20 respondents in whose organizations e-procurement had been adopted is as presented in figure 5.

Figure 5: Factors Contributing to Adoption of E-Procurement

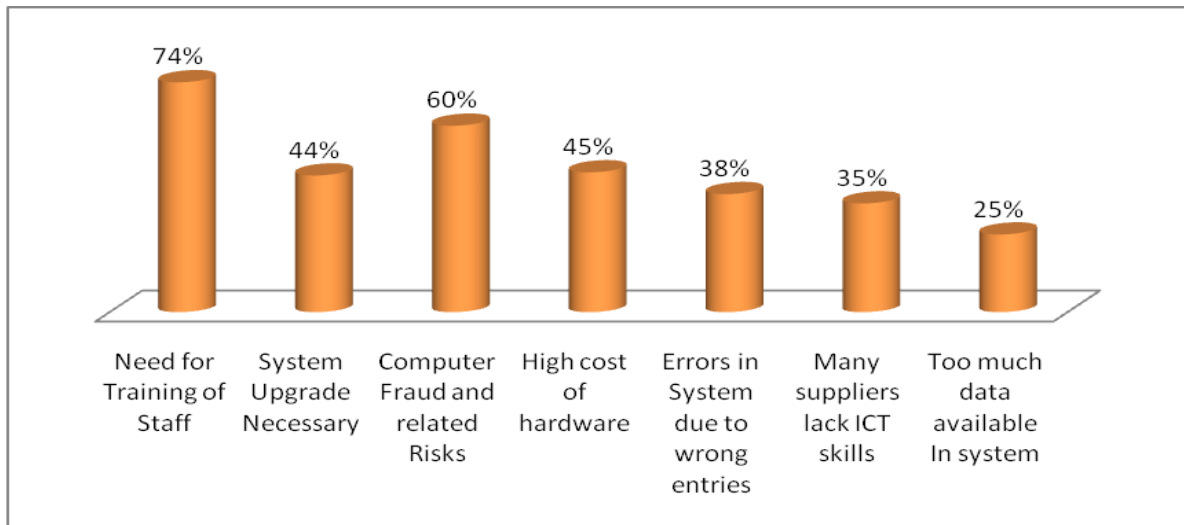


Source: Research Data

Some of the reasons why the supermarkets adopted e-procurement are as shown in figure 5. Organization had more than one reason for adopting e-procurement. The percentages provide the number of times a given factor was mentioned among the respondents. Quick communication is a leading factor as to why supermarkets in Nairobi adopt e-procurement. This is followed by decision by owners and need to integrate the branches of a supermarket. Out of the supermarkets that adopted e-procurement, 40% indicate it was in response to competition, 35% indicated that it is a strategy to monitor procurement and inventory costs while 30% indicated that the decision was informed by need to enhance efficiency in operations.

The process of adopting e-procurement is hampered by a number of challenges and hurdles. The respondents were asked to indicate any procurement challenges that their organization faced since adoption of e-procurement system. The challenges mentioned by respondents are presented in Figure 6.

Figure 6: Challenges Experienced Since Adoption of E-Procurement Systems



Source: Research Data

Figure 6 show that the supermarkets in Nairobi that adopt e-procurement face a number of challenges. The greatest challenge at 74% is the need to train staff that arises due to introduction of computer systems. Although some of the supermarket staff are employed while having basic ICT training, a majority are not very tech savvy. Therefore, when introducing ICT platforms, it requires that the staff have to be trained to be able to use the system. Another key challenge at 60% is computer fraud and related risks.

Computer fraud can be internal or instigated by outsiders. Some fraudulent employees can enter the wrong information into the system thus compromising data integrity. There are physical as well as logical computer security risks. Such logical risks include viruses, Trojans and hackers that lead to corruption of computer files or theft of such files. Once an organization adopts an e-procurement platform, they also have to invest in computer security.

Other challenges mentioned by respondents are the need for regular system upgrade (44%), which often means cost of upgrade and retraining of staff. There are high costs of software and hardware (45%), errors in system due to wrong entries (38%), many suppliers not being ICT savvy hence not utilizing the e-procurement platforms (35%) and the amounts of data that are accumulated over time that the organization may not know what to do with it yet it takes up storage capacity on the system (25%).

The challenges mentioned are in line with the findings by Makau (2014) who established that adoption of e-procurement in parastatals in Kenya was determined by technology, public procurement regulation, Employee's competence, and Managerial commitment. Matuga (2013) argued that these challenges are the ones that lead to low adoption of e-procurement or the selective adoption i.e. only certain functions are executed through electronic platforms.

4.4. E-Procurement and Procurement Costs

The respondents were asked to indicate the unit procurement costs in their organization. Many respondents did not address this question. However, the few that respondent indicated that procurement costs vary depending on the good or item procured. Many products are delivered by supplier to the supermarkets for sale. On such inputs, the only cost element is in terms of procurement either accepting or rejecting requests by suppliers who want their good stocked in the supermarket. Therefore procurement costs are limited to salaries for the number of procurement officers, paperwork and in some cases cost of transporting certain supplies to the supermarket. The respondents were asked to indicate by what percentage procurement costs had reduced due to adoption of e-procurement. This question equally received limited response with many respondents indicating that they were not clear in terms of amount of cash saved.

As many explained, even after the adoption of e-procurement platforms, the same process of suppliers expressing interest in the supermarket stocking their product, delivering a sample and then procurement communicating whether their product had been accepted or not remained standard. To measure the extent of influence of e-procurement in the supermarkets on procurement costs, the respondents were asked to rate various statements regarding procurement costs and e-procurement on a scale of 1-5. To analyze the responses, mean ratings and standard deviations were calculated as presented in Table 2.

Table 2: Rating of statements on E-procurement and Procurement Costs

E-Procurement and Costs	Mean Rating	Standard Deviation
E-procurement has enhanced transparency hence reduction in corruption related costs	2.75	1.11
E-procurement has led to reduction in wastage costs e.g. use of many papers	4.30	0.15
E-procurement has led to a lean procurement unit given less employees are required	2.03	0.91
E-procurement has reduced transport and postage costs	2.82	1.11
E-procurement platforms provide cheaper mechanisms of interacting with suppliers	4.52	0.42
E-procurement has significantly reduced failure costs; suppliers deliver more quality and customized goods	2.27	1.11
E-procurement has reduced costs of sourcing for suppliers	3.04	0.05

Source: Research Data

The analysis of data as presented in table 2 show that the respondents to a small extent agreed that e-procurement has enhanced transparency hence reduction in corruption related costs (mean rating of 2.75). The standard deviation of 1.13 is high and indicative of high variance in responses across the supermarkets. The respondents agreed to a great extent (Mean rating of 4.30 and standard deviation of 0.15) to the statement that E-procurement has led to reduction in wastage costs e.g. use of many papers.

The respondents agreed to a small extent (mean rating of 2.03 and standard deviation of 0.91) that E-procurement has led to a lean procurement unit given less employees are required. The respondents agreed to a small extent (mean rating of 2.82) that E-procurement has reduced transport and postage costs; however a high standard deviation of 1.11 indicates high variance in the rating by the respondents. The respondents agreed to a great extent (mean rating of 4.52 and a standard deviation of 0.42) that E-procurement platforms provide cheaper mechanisms of interacting with suppliers.

There was agreement to a small extent, mean rating of 2.27, among respondents that E-procurement has significantly reduced failure costs; suppliers deliver more quality and customized goods. However, the standard deviation of 1.11 indicates high variance in the responses of respondents. The respondents agreed to a moderate extent (mean rating of 3.04 and standard deviation of 0.05) that E-procurement has reduced costs of sourcing for suppliers.

4.5. E-Procurement and Lead Times

The respondents were asked to indicate how long it takes between requisition for goods and actual delivery of goods within the supermarket. Respondents indicated that many goods in the supermarket are stocked by different suppliers.

There is a manager in charge of each line of product. Equally, the suppliers have their own people who keep records of how their stocks are moving in the supermarkets. Once a product hits the re-order level the suppliers are communicated to deliver more products. Often, across all the supermarkets, it was indicated that it takes less than a day (actually hours in some cases) for the supplier to deliver new stocks.

There are other products that are imported by the supermarkets. Such products require sometime between requisition and delivery. There are products that are quickly delivered within 24 working hours once an order is placed with the overseas suppliers. In other cases, where goods have to be shipped, it may take as long as a month for goods to be delivered. When dealing with overseas suppliers and bulk goods suppliers in the local market, e-procurement plays an important role in terms of quickly placing an order, wiring money and following up on the order processing until goods are delivered either at the port or at the supermarket's warehouse.

Most branches are enabled to place orders with prequalified suppliers for most common place products that suppliers deliver on a pay on sale terms. For goods that are not delivered by local suppliers and have to be delivered from the centralized warehouse, e-procurement comes in hand to ensure goods are delivered to branches as soon as possible once requisition or order is placed. The use of e-procurement platforms to link branches in supermarkets is in tandem with Rankin et al. (2006), who explained that internally, e-procurement helps towards centralization of procurement activities.

To measure the extent of influence of e-procurement in the supermarkets on lead times, the respondents were asked to rate on a scale of 1-5 various statements regarding e-procurement and lead times in their organization. The mean ratings and standard deviations were calculated as presented in Table 3.

Table 3: Rating of Statement on E-Procurement and Lead Times

E-Procurement and Lead Times	Mean Rating	Standard Deviation
E-procurement has enhanced inventory management practices in your organization	3.92	0.17
E-procurement has reduced delays in suppliers delivering goods	3.20	0.87
E-procurement led to Just in Time (JIT) procurement thus emergency procurement is quickly handled in your organization	2.56	0.96
E-procurement has real time sharing of information between the organization and suppliers	3.69	0.22
E-procurement platforms have helped integrated different department or branches hence reducing requisition time and product delivery times	4.54	0.82
E-procurement has significantly improved the tendering processes	3.63	0.46

Source: Research Data

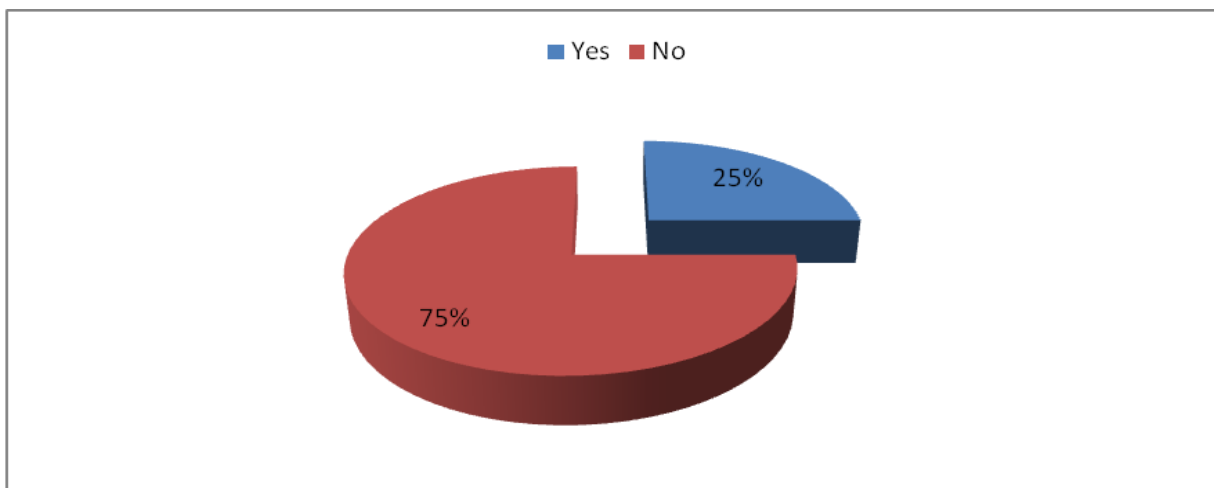
Considering relation between e-procurement and lead times, the respondents agreed moderately that; E-procurement has enhanced inventory management practices in your organization (mean of 3.92) and that E-procurement has reduced delays in suppliers delivering goods (mean of 3.20). Additionally, the respondents agreed to a moderate extent that E-procurement has real time sharing of information between the organization and suppliers(mean of 3.20) and that E-procurement has significantly improved the tendering processes (mean of 3.63).

The respondents agreed to a small extent that E-procurement led to Just in Time (JIT) procurement thus emergency procurement is quickly handled in your organization (mean of 2.56). On the other hand the respondents to a great extent agreed that E-procurement platforms have helped integrated different department or branches hence reducing requisition time and product delivery times (mean of 4.54).

4.6. E-Procurement and Customer Satisfaction

The respondents, being procurement managers were asked whether they receive complaints about the procurement process in the organization. The responses are as provided in Figure 7.

Figure 7: Whether Complaints are received about Procurement Process



Source: Research Data

Most of the respondents (75%) indicated that they do not receive any complaints about the procurement process. Those who explained indicated that the procurement process in the supermarkets is very straight forward. There are a variety of goods stocked and various suppliers are asked to deliver goods on a pay on sale basis.

All the procurement managers do is to ensure the products to be supplied are of the right quality and at the right price. In most cases, there are long established relationships between the supermarket owners and the suppliers thus procurement managers only manage the reorder levels and place orders as necessary. Some respondents indicated that some suppliers think procurement managers are biased when they reject their products. However, this often happens when there are too many varieties of a similar product and display space is limited. Additionally, due to some mishaps, some goods may be late in terms of delivery to branches or to the organization leading to complaints.

To measure the extent of influence of e-procurement in the supermarkets on customer satisfaction, the respondents were asked to rate various statements on a scale of 1-5 regarding e-procurement and customer satisfaction in their organization. To analyze the responses, mean ratings and standard deviations were calculated as presented in Table 4.

Table 4: Rating of statements on E-procurement and Customer Satisfaction

E-Procurement and Customer Satisfaction	Mean Rating	Standard Deviation
All company employees make requisitions online and they are satisfied with the process	3.78	0.71
Our customers consistently get quality products when they need them	4.26	0.85
Customer orders are processed and delivered promptly and in full every time	4.70	0.04
e- procurement has led to integration of processes, which has reduced lead times in the organization	3.62	0.97
Tenders advertisement and short listing of suppliers is done online and all suppliers are happy with it	2.38	0.85
A software that links production, supplies and sales would help to improve operational efficiency	1.81	0.91
The e-procurement platform enables organization to gather information that helps in systems improvement	3.42	0.92
The company accepts goods rejected by customers and promptly replaces them or makes a credit note	2.96	1.04
Customer experiences are constantly monitored and actions are tailored to enhance them	2.57	0.88
All employees managing e-procurement transactions are well trained professionals	3.51	1.00
Regular communication between the different departments helps ensure operational efficiency and effectiveness	4.57	0.98

Source: Research Data

Considering the internal and external customer satisfaction, the respondents ranked various statements as presented in Table 4. The respondents moderately agreed to the statement that all company employees make requisitions online and they are satisfied with the process (mean of 3.78, standard deviation of 0.71).

They also moderately agreed to the statements that the e-procurement platform enables organization to gather information that helps in systems improvement (Mean rating of 3.42 and standard deviation of 0.92), and all employees managing e-procurement transactions are well trained professionals (mean rating of 3.51, and standard deviation of 1.00). However, considering the standard deviation on the latter statement, there was high variance in the answers of the respondents.

The respondents to a great extent agreed to the statements that: Our customers consistently get quality products when they need them (Mean rating of 4.26 and standard deviation of 0.85), and Customer orders are processed and delivered promptly and in full every time (Mean rating of 4.70 and standard deviation of 0.04). Additionally, the respondents to a great extent agreed to the statement that regular communication between the different departments helps ensure operational efficiency and effectiveness (4.57, 0.98). The high rating for communication is a good indicator because as Heywood (2002) noted, communication is a critical element that ensures compliance in a procurement system. Further, quick and regular communication ensures an organization is able to communicate with the supplier and customer in real time and finds amicable resolutions to any arising concerns (Davila *et al.*, 2003)

On the other hand the respondents agreed to a small extent to the statement that; e-procurement has led to integration of processes, which has reduced lead times in the organization (mean rating of 2.62 and standard deviation of 0.97), tenders advertisement and short listing of suppliers is done online and all suppliers are happy with it (mean rating of 2.38 and standard deviation of 0.85).

They also agreed to a small extent to statements that the company accepts goods rejected by customers and promptly replaces them or makes a credit note (mean ranking of 2.96 and standard deviation of 1.04) and customer experiences are constantly monitored and actions are tailored to enhance them (mean rating of 2.57 and standard deviation of 0.88). The respondents agreed to a very small extent to the statement that software that links production, supplies and sales would help to improve operational efficiency (mean rating of 1.81 and standard deviation of 0.91).

4.7. Relationship between E-procurement practices and Procurement performance

The study proposed that there exist a relationship between adoption of e-procurement and performance of procurement in supermarkets in Nairobi. Regression analysis was used to come up with the model that can explain the relationship between variables. The regression model is as follows:-

$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + b_5 x_5 + b_6 x_6 + e$ Where: Y= Procurement performance; a= the Y intercept when x is zero; b₁, b₂, b₃, and b₄, are regression weights attached to the variables; x₁ =e-tendering; x₂ = e-informing; x₃ =e-sourcing; x₄=e-requisitioning; x₅= e-approval; x₆= e-invoicing a and b are regression constants, e is the error term.

4.7.1 Coefficient of Determination

The study sought to establish the extent of influence of the independent variables on the dependent variables. This was done by generating the coefficient of determination presented in table 5.

Table 5: Coefficient of Determination

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
dimension0	1	.58 ^a	.33	.26	.59	.33	5.82	4	47	.00
a. Predictors: (Constant), e-tendering, e-informing, e-sourcing, e-requisitioning, e-approval, e-invoicing										

Source: Research Data

The "R Square"(coefficient of determination) is a measure of how much the variance in the dependent variable is explained by the model. In other words, the coefficient of determination indicates the extent to which the dependent variable is influenced by the independent variables as given in the regression model. As shown in table 5, the value "R Square" is 0.33. This means that the extent of influence of independent variables in the model on the dependent variable is 33%. Such a percentage indicates a moderate level of prediction, that is, 33% of the variations in procurement performance could be explained by the changes in e-tendering, e-informing, e-sourcing, e-requisitioning, e-approval, e-invoicing, leaving 67% unexplained (error term).

The finding captured through the coefficient of determination in the study is proper because as discussed by Omondi and Namusonge (2015), there are other factors that influence procurement performance. Some of the other best practices identified by Omondi and Namusonge (2015) that influence procurement performance are hiring of trained personnel, cost control, customer orientation, proactive approach in management and use of innovative technology.

As per the findings in this study, e-procurement functions only explain 33% of procurement performance. While the 33% level of influence of e-procurement on procurement seems realistic, an ANOVA test was used to test whether the model adopted is a good fit. The findings are as presented in Table 6.

Table 6: Regression Model ANOVA Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.23	4	2.06	5.83	.001 ^a
	Residual	16.60	47	.35		
	Total	24.83	51			
<p>a. Predictors: (Constant), e-tendering, e-informing, e-sourcing, e-requisitioning, e-approval, e-invoicing</p> <p>b. Dependent Variable: Customer Satisfaction</p>						

Source: Research Data

The table 6 shows that the independent variables are statistically significant in predicting the dependent variable. This is because the P value denoted by sig shows whether the variance is significant or not. In this study, the ANOVA of the model is significant given $P=0.001 < 0.005$ (i.e., the regression model is a good fit of the data). To establish the statistical significance of individual independent factors, the regression coefficients were determined and are as presented in table 7.

Table 7: Regression Coefficients

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.99	.40		2.48	.02
E-tendering (x1)	.10	.04	.11	2.23	.01
E-informing (x2)	.05	.12	.06	.41	.69
E-sourcing (x3)	.31	.09	.47	3.44	.00
E-requisitioning (x4)	.06	.03	.07	2.46	.00
E-approval (x5)	.04	.13	.08	2.17	.43
E- Invoicing (x6)	.02	.17	.11	2.33	.57

Source: Research Data

In table 7, the standardized and un-standardized coefficients show the contribution of each independent variable. The significance level in last column shows whether the contribution of the independent variable is statistically significant. The t value shows the likelihood that the value of the individual variable in the regression model is not zero (=0). The smaller the t value the higher the likelihood that the value of the variable is higher than 0. Based on the results presented in table 4, the general form of the equation to predict performance of procurement in a supermarket based on the e-procurement functions it adopts is as follows:

Supermarket Procurement Performance = 0.99 + 0.10 e-tendering + 0.05 E-informing + 0.31 e-sourcing + 0.06 e-requisitioning+ 0.04 e-approval + 0.02 e-invoicing.

The prediction model was obtained from the Coefficients table (Unstandardized coefficients), as shown above. The Unstandardized coefficients indicate how much the dependent variable varies with an independent variable, when all other independent variables are held constant. For instance, the predictor model means that for every one unit change in e-tendering, procurement performance changes by 0.098 units. Based on the model e-tendering, e-sourcing and e-requisitioning have the highest influence on procurement performance. Eadie *et al.*, (2007) explained that e-sourcing is important because it redefines supplier management and relationships. The e-tendering and e-sourcing platforms are good because from such platforms, suppliers can send information requests and receive feedback that aids tender bid preparation processes (Eadie *et al.*, 2007). These factors could explain why the processes influence procurement performance the most.

The corresponding *p*-value indicates that the relationship between e-tendering and procurement performance is statistically significant. The relationship between e-sourcing and procurement performance is also statistically significant. Equally, the relationship between e-requisitioning and procurement performance is statistically significant at the 95% confidence level i.e. $p\text{-value} < 0.05$. There exists a significant linear relationship between e-tendering and procurement performance, e-requisitioning and procurement performance as well as e-sourcing and procurement performance. On the other hand, the relationship between e-informing, e-approval and e-invoicing as independent variables to procurement performance in supermarkets in Nairobi as the dependent variable is not significant even at a 90% significance level i.e. $p < 0.1$.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings while drawing the implications of the findings that lead to drawing of research conclusions. Based on the conclusions arrived at, the study recommendations are drawn specific to adoption of e-procurement in the supermarket sector of the retail industry and the retail industry at large.

5.2 Summary of Findings

This study sought to assess the adoption of e-procurement in the supermarkets in Nairobi, to evaluate procurement performance in the supermarkets in Nairobi and to determine the contribution of e-procurement to procurement performance in supermarkets in Nairobi. Considering adoption of e-procurement in supermarkets in Nairobi, the study established that a little more than half of the supermarkets had adopted e-procurement practices. Most of the supermarkets adopted e-procurement recently with the majority of the supermarkets having adopted e-procurement less than a year ago.

Among the procurement functions executed through e-platforms, majority of the supermarkets use e-platforms to source for suppliers and to float tenders, followed by use e-platforms to requisition and for invoicing purposes followed by use of e-platforms for purposes of selection and approval of suppliers while the least number of supermarkets use the e-platforms for informing and engaging stakeholders. On the extent to which the supermarkets had successfully adopted e-procurement, the respondents moderately agreed that their supermarkets had successfully adopted e-procurement.

There are different reasons why organizations adopted e-procurement practices. From the findings factors that influence adoption of e-procurement are quick communication, decision by owners, need to integrate the branches of a supermarket, response to competition, need to monitor procurement and inventory costs and the need to enhance efficiency in operations. Once e- procurement has been adopted there are certain challenges that the supermarket face. Some of the key challenges are the need to train staff that arises due to introduction of computer systems, computer fraud and related risks, the need for regular system upgrade, high costs of software and hardware, errors in system due to wrong entries, many suppliers not being ICT savvy and the amounts of data that are accumulated and takes up storage capacity on the system.

Considering the contribution of E-Procurement and Procurement Costs in supermarkets, the respondents indicated that this could be minimal because many products are delivered by supplier to the supermarkets for sale. The procurement costs are limited to salaries for the number of procurement officers, paperwork and in some cases cost of transporting certain supplies to the supermarket. On the relationship between e-procurement and lead times, respondents indicated that many goods in the supermarket are stocked by different suppliers. Once a product hits the re-order level the suppliers are communicated to deliver more products. Often, across all the supermarkets, it was indicated that it takes less than a day (actually hours in some cases) for the supplier to deliver new stocks. However, there are other products that are imported by the supermarkets.

When dealing with overseas suppliers and bulky goods' suppliers in the local market, e-procurement plays an important role in terms of quickly placing an order, wiring money and following up on the order processing until good are delivered either at the port or at the supermarket's warehouse.

For supermarkets with branches, most branches are enabled to place orders with prequalified suppliers for most common place products that suppliers deliver on a pay on sale terms. For goods that are not delivered by local suppliers and have to be delivered from the centralized warehouse, e-procurement comes in hand to ensure goods are delivered to branches as soon as possible once requisition or order is placed.

On the relationship between e-Procurement and Customer Satisfaction, most of the respondents indicated that they do not receive any complaints about the procurement process.

On the relationship between various e-procurement practices and procurement performance the study established that there exists a significant linear relationship between e-tendering, e-requisitioning and e-sourcing (independent variables) and procurement performance in supermarkets in Nairobi (the dependent variable). On the other hand, the relationship between e-informing and e-invoicing as independent variables to procurement performance in supermarkets in Nairobi as the dependent variable is not significant even at a ninety percent significance level.

5.3 Conclusions

The objectives of this study were to assess the adoption of e-procurement in the supermarkets in Nairobi, to evaluate procurement performance in the supermarkets in Nairobi and to determine the contribution of e-procurement to procurement performance in supermarkets in Nairobi. Considering adoption of e-procurement in supermarkets in Nairobi, the study established that adoption of e-procurement is still relatively low at 56% of the supermarkets. The time of adoption shows that most supermarkets adopted e-procurement practices less than a year ago. This means that the process of adoption of e-procurement in the supermarket sector in the retail industry in Kenya is a process in progress.

Looking at the rating of how successful supermarkets have been in adopting e-procurement the respondents gave a moderate ranking. This means that the adoption process is far from optimal and a lot need to be done to enhance the migration of procurement functions to the e-platforms. Judging the contribution of e-procurement to procurement costs management, the ratings indicate that respondents agreed moderately to role of e-procurement in reducing procurement costs in supermarkets. The two cost areas that supermarkets seem to be benefiting the most when they adopt e-procurement is reduction of wastage e.g. use of many papers and reduced costs of sourcing for suppliers.

On the relationship between e-procurement and lead times, the respondents moderately agreed with most statements indicating that e-procurement improves lead times. From the ratings, e-procurement enhances efficiency in supermarkets more so through enabling integration of departments and branches. However, e-procurement contributes marginally towards Just in Time (JIT) procurement thus emergency procurement is quickly handled. On the relationship between e-Procurement and Customer Satisfaction, e-procurement contributes greatly towards better communication between the different departments and branches thus it helps ensure operational efficiency and effectiveness. The most critical practices that contribute greatly to procurement performance in supermarkets are e-tendering, e-requisitioning and e-sourcing.

5.4. Recommendations

For policy makers, especially in the ICT sector, it is recommended that they come up with policies and programs that will enhance use of ICT in the retail industry in Kenya. The supermarkets face various challenges in adoption of e-procurement, the government and other stakeholders need to work on incentives that encourage adoption and use of ICT for Business.

The government is encouraging e-procurement in the public sector, through private sector alliance and other such bodies it should encourage e-procurement even in the private sector. This can be done through a public-private partnership in equipping SMEs with ICT skills for engaging in e-procurement processes.

The findings seem to suggest that the cost reduction after adoption of e-procurement is minimal. The supermarkets or retail industry adopting e-procurement ought to scale down on traditional procurement activities if the benefits of e-procurement are to be realized. Many supermarkets still have traditional procurement processes running parallel to the e-procurement processes. While the complementarities may be desirable, there might be need to scale down on traditional processes so that the e-procurement processes pick up. For organizations adopting e-procurement, based on the findings in this study, it is recommended that they focus on streamlining e-tendering, e-requisitioning and e-sourcing. This is because a strong and significant relationship exists between those e-procurement processes and procurement performance in supermarkets.

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APPENDIX 1: LIST OF SUPERMARKETS IN NAIROBI

1. Nakumatt holdings,
2. Uchumi Supermarkets,
3. Tuskys Supermarkets,
4. Naivas Supermarkets,
5. Chandarana Supermarkets,
6. Tumaini Supermarket,
7. Ebrahim & Co Supermarkets,
8. EastMatt Supermarkets,
9. Karrymart Supermarkets,
10. City Mattresses,
11. Fairlane Supermarket,
12. Jack and Jill Supermarkets,
13. Kantaria Commercial Stores,
14. Metro cash and carry,
15. Rongai Mattresses,
16. Select n Pay supermarket,
17. Western provision stores,
18. Westlands General Stores,
19. Valley Market,
20. Accacia Supermarket,
21. Access supermarket,
22. Alliance supermarket,

23. Amici supermarket,
24. Bettcam Savers supermarket,
25. Broadways Supermarket,
26. Clear Cut Supermarket,
27. Corner supermarket,
28. Deepak Casha and Carry,
29. Discount Supermarket,
30. Crown supermarket,
31. Fairose Supermarket,
32. Fontana Supermarket,
33. Green Forest Supermarket,
34. Happy Valley Supermarket,
35. Guest Care Supermarket,
36. Jawa's Supermarket,
37. Jazeer Supermarkets,
38. Gigiri Supermarket,
39. Woolworths
40. Ukwala Supermarkets,

QUESTIONNAIRE

Dear Respondent

This questionnaire is part of a research project to understand the contribution of e-procurement to procurement performance in the Retail Industry in Kenya. You were purposely selected because of your understanding of procurement processes in your organization. Your responses are important in helping me develop an academic research report. However, your decision to take part is voluntary.

If you accept to take part, the questionnaire should take you about fifteen minutes to complete. The information you provide will be treated in strict confidence. You will realize that you are not asked anywhere on the questionnaire for your name or address. The answers from your questionnaire and others will be used as the main data set for my research project in partial fulfillment of requirements for the award of Master in Business Administration from the University of Nairobi.

Thank you for your help.

Yours Sincerely

.....

SECTION A: PERSONAL DETAILS

(Please fill in provided space or tick as applicable)

- 1. What is your department.....

- 2. What is your full job title.....

- 3. The number of years you have been employed in this firm
<3 years 3<5 years 5<10 years >10 years

SECTION B: Strategic Leadership and Adoption E-Procurement

- 4. Has your company adopted e-procurement?
Yes No

- 5. How many years have passed since your company adopted e-procurement?
<1 years 1<3 years 4<5 years >5 years

- 6. Which of the following procurement functions are handled through the electronic platform?
 - E- Tendering Yes 1 No 0
 - E- Informing Yes 1 No 0
 - E- Sourcing Yes 1 No 0
 - E- Requisitioning Yes 1 No 0
 - E- Approval Yes 1 No 0
 - E- Invoicing Yes 1 No 0

7. Answer the following questions on a scale of 1 to 5.

Where 1 =Very Small Extent 2=Small Extent 3=Medium Extent 4=Great Extent and 5=Very Great Extent

No.	E-Procurement Adoption	VSE	SE	ME	GE	VGE
		1	2	3	4	5
A	My company has successfully adopted e-procurement system					
B	All procurement processes in my organization are automated using an e-procurement system					
C	Management has set clear e-procurement policy, objectives and targets					
D	All suppliers use the e-procurement platform					
E	The e-procurement processes are efficient and effective					
F	There are no challenges to the organization arising due to adoption of e-procurement system					
G	Data on the e-procurement processes is constantly collected and acted upon					

8. What are some of the factors that led to adoption of e-procurement system in your organization?

9. What procurement challenges has your organization faced since adoption of e-procurement system?

SECTION C: E-Procurement and Procurement Costs

10. What are the unit procurement costs in your organization?

11. By what percentage have procurement costs reduced since the adoption of e-procurement?

12. Answer the following questions on a scale of 1 to 5.

Where 1 =Very Small Extent 2=Small Extent 3=Medium Extent 4=Great Extent and 5=Very Great Extent

No.	E-Procurement and Costs	VSE	SE	ME	GE	VGE
		1	2	3	4	5
A	E-procurement has enhanced transparency hence reduction in corruption related costs					
B	E-procurement has led to reduction in wastage costs e.g. use of many papers					
C	E-procurement has led to a lean procurement unit given less employees are required					
E	E-procurement has reduced transport and postage costs					
F	E-procurement platforms provide cheaper mechanisms of interacting with suppliers					
G	E-procurement has significantly reduced failure costs; suppliers deliver more quality and customized goods					
H	E-procurement has reduced costs of sourcing for suppliers					

13. How can management improve e-procurement processes towards greater cost efficiency?

SECTION D: E-Procurement and Lead Times

14. How long does it take between requisition for goods and actual delivery of goods within the supermarket? _____

15. By what percentage have lead times changed since adoption of e-procurement?

16. Answer the following questions on a scale of 1 to 5.

Where 1 =Very Small Extent 2=Small Extent 3=Medium Extent 4=Great Extent and 5=Very Great Extent

No.	E-Procurement and Lead Times	VSE	SE	ME	GE	VGE
		1	2	3	4	5
A	E-procurement has enhanced inventory management practices in your organization					
B	E-procurement has reduced delays in suppliers delivering goods					
C	E-procurement led to Just in Time (JIT) procurement thus emergency procurement is quickly handled in your organization					
E	E-procurement has real time sharing of information between the organization and suppliers					
F	E-procurement platforms have helped integrated different department or branches hence reducing requisition time and product delivery times					
G	E-procurement has significantly improved the tendering processes					

17. What is the contribution of e-procurement to inventory management in your organization?

SECTION E. E-Procurement and Customer Satisfaction

- 18. Do you receive complaints about the procurement process in the organization?

- 19. By what percentage have the complaints reduced since the adoption of e-procurement processes?

- 20. On average, how many complaints about quality of goods do you receive in a week?

- 21. By what percentage have customer complaints about quality of goods reduced since adoption of e-procurement?

- 22. Answer the following questions on a scale of 1 to 5.

Where 1 =Very Small Extent 2=Small Extent 3=Medium Extent 4=Great Extent and 5=Very Great Extent

No.	E-Procurement and Customer Satisfaction	VSE	SE	ME	GE	VGE
		1	2	3	4	5
A	All company employees make requisitions online and they are satisfied with the process					
B	Our customers consistently get quality products when they need them					
C	Customer orders are processed and delivered promptly and in full every time					
D	e- procurement has led to integration of processes, which has reduced lead times in the organization					
E	Tenders advertisement and short listing of suppliers is done online and all suppliers are happy with it					
F	A software that links production, supplies and sales would help to improve operational efficiency					
G	The e-procurement platform enables organization to gather information that helps in systems improvement					

H	The company accepts goods rejected by customers and promptly replaces them or makes a credit note					
I	Customer experiences are constantly monitored and actions are tailored to enhance them					
J	All employees managing e-procurement transactions are well training professionals					
K	Regular communication between the different departments helps ensure operational efficiency and effectiveness					

23. In what ways is customer satisfaction in your firm linked to E-procurement

24. What can be done through the e-procurement platforms to enhance customer satisfaction?

THANK YOU FOR YOUR COOPERATION