

**THE IMPACT OF ELECTRONIC PROCUREMENT ON FLEET MANAGEMENT  
:A CASE STUDY OF NATIONAL MEDICAL STORES**

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**UGANDA CHRISTIAN  
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**DECLARATION**


I Adrili Joy, declare that this report is my original work and has never been presented by any other researcher at any university.

Signature.....

Date...04<sup>th</sup>/SEPTEMBER/2024

## APPROVAL

This dissertation was done under my supervision and has been submitted for the examination with my approval.

Signature.....  - NATUWERE MAUREEN  
Date..... 4/09/24.....

## ABSTRACT

The study investigated the impact of electronic procurement on fleet management at National Medical stores. It specifically; examined the effect of Electronic Procurement on Fleet Management at National Medical Stores to find out the challenges that affect the implementation of Electronic Procurement on Fleet Management at National Medical Stores and to determine the relationship between Electronic Procurement and Fleet Management at National Medical Stores. Utilizing a cross-sectional strategy, the researcher collected data using both qualitative and quantitative methods.

There were 100 respondents in the study's target population, and 80 respondents were chosen at random to make up the sample size. The Krejcie Morgan table from 1970 was used to determine the sample size. Techniques for both non-purposive and purposeful sampling were used to choose the sample. The primary sources of data that were investigated were primary and secondary sources. Data were collected from journals, articles, textbooks, periodicals, and research publications, among other sources. The Questionnaire was used as data collection instruments for the study. The researcher went on to analyze data using SPSS to formulate frequency tables and charts on which data was presented.

The findings in objective one revealed that electronic procurement has facilitated collaboration broad array of critical customer interactions in the organization as supported by 70% of the respondents with a mean score of 4.01. The findings in objective two summarized that propensity to adopt e-procurement has been hindered by the cost of investing in compatible systems. This generated an acceptance of 63% and a mean score of 3.37. It was finally concluded that that propensity to adopt eprocurement has been hindered by the cost of investing in compatible systems. The study further concluded that that Electronic procurement has helped in coordinating the activities to manage the supply chain management in the procurement department by early planning of the organizations procurements.

It was recommended that National Medical Stores should effectively design measures on how they can cope up and manage electronic procurement systems for ease access to medical supplies, equipment and related items. It was emphasized that the government of Uganda through the Ministry of Finance and Ministry of Health should ensure that the electronic procurement is adopted to avoid problems associated with longer lead times and poor services delivery by incapable suppliers. The researcher emphasized that Universities should organize workshops and train upcoming procurement officers on the best ways to handle their electronic procurement to increase on value for money of all procurements handled in their entities of work.

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# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

This study sought to investigate the impact of electronic procurement on fleet management. The independent variables (factors) examined included, Electronic Data Transmission, Electronic Buyer Supplier Collaboration. Fleet management as the dependent variable was measured in terms of Timely Delivery of Services, Operational efficiency of services and Order Fulfillment. Besides introduction of the study, this chapter also presented the background to the study, statement of the problem, general objective, objectives of the study, research questions, conceptual framework, significance, scope, and operational definitions of terms and concepts.

### 1.1 Background to the study

Lyons, 2006 states that per the definition from the Chartered Institute of Purchasing and Supplies, eProcurement refers to "the electronic integration of information and communication technology used to enhance both internal and external purchasing and supply management processes." The procurement process using e-Procurement platforms, such as e-Tendering, e-Marketplace, e-Auction/Reverse Auction, and eCatalogue/Purchasing, covers only one or more stages of the procurements. On the other hand, eProcurement can be viewed in a wider perspective as an end-to-end solution for integration and streamlining scores of procurement processes within the organization (Croom & Brandon-Jones, 2004). Business management has trended over the years from the accustomed internally generated multi-purpose service activities or specialized in-house service functions to contracted-out services.

Information Technology: through the provisioning of internet-based solutions for supply chain networks and electronic solutions have been able to enable many firms to enhance their operational efficiencies in respect of electronic procurement. A variety of new e-commerce technologies emerged during the late 1990s, which genuinely transformed work patterns and threatened old business structures (Chan & Lu, 2004). As a consequence of the spread of e-commerce through the business-to-business sector, organizations worldwide have adopted new supply chain-related technologies and applications in significant numbers (Sheng, 2002). Kheng and Al-Hawandeh 2002 Kheng and Al-Hawandeh conducted a survey to analyze the adoption of Eprocurement in Europe and Singapore. These authors identified various barriers to this initiative, including technical problems relating to conversion data exchange and information. Some of these were "perceived inefficiency in finding information online through search engines, lack of common standards hindering the easy integration of electronic catalogs from multiple suppliers, and perceived safety of procurement transaction data in terms of privacy and security. Thirdly; it required a significant investment in software, hardware, and personnel training to participate in E-procurement which is prohibitive affecting performance of organization.

Even with the recent high growth of internet sales for a number of African nations, business to business and business to customer internet commerce is still relatively low (Walker and Harland, 2008). The possible business benefits arising from the adoption of electronic procurement, countries that are OECD members are adopting the practice to a lesser degree and at a slower pace than expected (Pires and Stanton, 2005).

Regionally, the reason behind this was that ICT was considered one of the pillars for the realization of Kenya's vision 2030 aimed at transforming Kenya into an industrialized nation by the year 2030. The government of Kenya has set up the ICT Board to spearhead the country's ICT revolution, something that acts as a positive signal for e-procurement. E-procurement is still in its early adoption stages. These have been attributed to the astronomical costs involved in setting up the infrastructure, as well as the skill gap that exists in the labor market.

In Uganda, recent survey has brought out the fact that some of the main reasons holding back the adoption of e-procurement in Uganda are high costs involving slow speeds, low band width capacity and satellite connections. Be that as it may, some companies have been able to enjoy competitive advantage early enough by connecting, largely due to substantial financial capacity. Many businesses have embraced technology since the high-capacity and high-speed fiber optic cable laid in the country is bound to increase internet efficiency and make e-procurement a reality, therefore.

**Fleet Management** is a business operation activity that allows companies relying on transport systems to divest or reduce risks involved in purchasing vehicles; it improves efficiency, reduces overall staffing and transport costs, maintains 100% legal compliance with the duty of care among many others (Keown, Martin, Petty, & Scott, 2002). Services related to fleet management include financing, maintenance, telemetry tracking and diagnostics, driver and speed monitoring, fuel management, and management related to health and safety. Regarding the case study, National Medical Stores emanated from an Act of Parliament dated 1993 and operates as an autonomous corporation. The company is responsible for purchasing, storing, and distributing drugs and other consumables used in medical therapies to the Government of Uganda's public health facilities. The regional offices of National Medical Stores that are kept updated include the following: Lira, Northern Uganda; Hoima, Western Uganda; Mbarara, Southwestern Uganda; Jinja, Southeastern Uganda; Tororo, Eastern Uganda, and Arua, West Nile. The organization also works in collaboration with various ministries in the government, such as the Ministries of Industry and Trade, Agriculture, Animal Industry, and Health in Uganda.

From the above background, this organization carries out a number of purchasing activities on line hence the desire to investigate the impact of electronic procurement on fleet management at National Medical Stores.

## **1.2 Statement of the problem**

For an organization to make an efficient delivery of materials, it has to respond to short-term changes in demand or supply quickly and to handle external disruptions smoothly. Nation Medical Stores therefore, has taken the tall of joining the band wagon to employ electronic procurement to ensure an efficient supply chain system and be responsive to changes due in its procurement exercises for drugs in the nation. Responsiveness requires that accurate information is available to facilitate decision-making. Electronic procurement helps in cost reduction, improved transparency, and accountability, easy information sharing and consequently allows Timely flow of information facilitated by collaborative inter linkages. This can be only achieved by employing barcoding in logistics systems, EDI for branch-to-branch communication, enterprise solutions such as ERP, and the use of the Internet together with Web Services for partner-to-partner communication without obstacles.

Therefore, this has enabled purchasing members at National Medical Stores (NMS) to be responsive to agencies' needs and act in a timely manner sometimes (McCarthy and Golicic 2002).

Despite all these efforts put in place by the National Medical Stores, It is so absurd that the organization is currently on its losing end experiencing persistent delivery of expired drugs and misguided stock which has come as a result of ineffective electronic procurement presenting to them unseen suppliers as according to (Plus News East Africa, 2008; Office of the Prime Minister, 2007) and this therefore has led to its underperformance. It is therefore against this back ground that the researcher sought to investigate how electronic procurement affects fleet management at national medical stores.

## **1.3 Purpose of the study**

The purpose of the study was to examine the impact of electronic procurement on fleet management at National Medical Stores.

### **1.3.1 Specific Objectives of the study**

The study aimed at achieving the following:

- i. To examine the effect of Electronic Procurement on Fleet Management at National Medical Stores.
- ii. To find out the challenges that affects Electronic Procurement on Fleet Management at National Medical Stores.
- iii. To determine the relationship between Electronic Procurement and Fleet Management at National Medical Stores.

#### **1.4 Research Questions**

The research Questions were:

- i. What is the effect of Electronic Procurement on Fleet Management at National Medical Stores?
- ii. What are the challenges that affect Electronic Procurement on Fleet Management at National Medical Stores?
- iii. What is the relationship between Electronic Procurement and Fleet Management at National Medical Stores?

#### **1.5 Scope of the study**

##### **1.5.1 Content scope**

The content scope generally focused on the impact of electronic procurement on fleet management at National Medical Stores and examined various objectives such as to examine the effect of Electronic Procurement on Fleet Management at National Medical Stores. to find out the challenges that affects the implementation of Electronic Procurement on Fleet Management at National Medical Stores and to determine the relationship between Electronic Procurement and Fleet Management at National Medical Stores.

##### **1.5.2 Geographical scope**

The researcher carried out this study at National Medical Stores; the headquarters located at 46-48 Lumumba Avenue, in Kampala Central Division, Nakasero Hill, in the central business district of Kampala, the capital and largest city in Uganda. This area was considered a place

for the study since there was easy accessibility of information concerning electronic procurement which enabled the researcher to carry out his research

### **1.5.3 Time scope**

The study covered a period of 7 years; from 2011 to date. This was due to data availability and comparison. This was also considered a period good enough that enabled the researcher to acquire the necessary information in line with the study.

### **1.6 Significance of the study**

The findings of this study may assist organizations in acknowledging the modern concept of electronic procurement which when applied may help organizations in reducing costs. The study findings may benefit many stakeholders including; organizations, procurement managers, academicians and researchers.

**To organizations,** the findings may enable management especially the Procurement department to carry out effective electronic procurement so as to fuel fleet management of an organization in terms of timely delivery. This is because the study may highlight the benefits of electronic procurement to fleet management.

**To academicians,** the contribution of this study can add to existing knowledge on fleet management and electronic procurement. It will allow the academicians and researchers to refer to such literature whenever needed. In addition, it might be most likely correct that the study cannot fill all gaps in research on electronic procurement, which might call for the conduction of more studies.

It may also act as a benchmark to the researcher's future research undertaking.

## 1.7 Conceptual framework

In regard to the conceptual framework, the researcher will focus on both the independent Variables and dependent variables as illustrated below.

### ELECTRONIC PROCUREMENT

#### Independent Variable

- E-Data Transmission
- E-Buyer Supplier Collaboration
- E-Billing Management
- E-System Management

### FLEET MANAGEMENT

#### Dependent Variable

- Timely Delivery of services
- Operational efficiency
- Order fulfillment
- Quality services

- Social economic climate
- Government policies
- Procurement procedures

*Source: Adopted from (Gattorna, 2015) and modified by the researcher*

The conceptual frame work was structured in a way that the dependent variables depend on the independent variables. For example; Electronic data transmission, Electronic Buyer supplier collaboration and Electronic billing management ensured that National Medical Stores enhanced Timely delivery of services, Operational efficiency, and order fulfillment of goods as well as quality services at the organization. The intervening variables such as social economic climate, government policies and procurement procedures may affect both the dependent and the independent variables.

## 1.8 Limitations of the study

- i If questions in the questionnaires are not answered on time, then the entire process of the study is retarded. In that respect, we'll allow ample time for the procedure of data collection and therefore take possible delay into account. Since the response rate by telephone and post was too poor, as a follow-up call, the researcher called and visited them many times.

- ii This research was costly in nature, funds availed to the researcher were limited to properly conduct this research. For this case, the researcher economized and fit the study within that reachable budget.
- iii The time span given for the research was too congested given that other University programs were running; this made it complex in fulfilling the research obligations within one year and also executing other academic demands, let alone meeting personal commitments at the same time. In this case effective planning to effect to cater for the shortfall in time and all research activities were done on schedule.

## 1.9 Definitions of key terms

**E-Procurement:** This refers to the process by which some or all of the procurement process- from information and communication technologies sourcing, negotiation, ordering, reception, to post-procurement review-is accomplished using ICTs, expecting significant cost and time savings (Lysons ,2006).

**Billing management:** A member's invoice or statement of an e-procurement network is generated, sent and calculated by a billing management system. Moreover, the billing system is used by suppliers to share operating expenses for a given order of to calculate ordering charges. To generate invoices automatically billing management capabilities have to connect directly to back office invoicing systems; therefore, transaction fees are often the largest source of e-procurement revenue.

**Buyer/Supplier collaboration:** This cooperation of buyers and suppliers is made possible and supported through Internet-based technologies that are enabling different stages of contract and project management (Sprague, 2000).

**System Management:** System management: Mean response time, pattern of traffic, utilization, and source of transactions in the e-procurement system are the configuration and monitoring tasks that fall into the category of maintaining the system (Swaminathan et al., 2003).

**Fleet Management** is a function that will enable businesses with transportation dependence to avoid or reduce the risks associated with vehicle investment, boost productivity, reduce overall staffing and transport costs, achieve 100% compliance with the legal requirements of duty of care, and many more (Keown, Martin, Petty, & Scott, 2002).

A **conceptual framework** refers to interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena (Pires and Stanton, 2005).

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter presented existing literature on the impact of electronic procurement on Fleet Management at national medical stores. It was based on the following specific objectives such as to examine the effect of Electronic Procurement on Fleet Management at National Medical Stores. To find out the challenges that affects Electronic Procurement on Fleet Management at National Medical Stores and to determine the relationship between Electronic Procurement and Fleet Management at National Medical Stores.

#### **2.1 The Concept of Electronic Procurement in an Organization**

According to Muwanga (2011), e-procurement can be described as a technology solution that facilitates corporate buying over the Internet. It is, in fact, a hosted service or Internet/Intranet-based purchasing tool that enhances trade efficiency across the whole supply chain, makes trading easier and provides strategic e-commerce capabilities in real time; a process that enhances the negotiation between the suppliers and buyers and encourages sourcing and procurement activities through Internet technology (Gimenez and Lorenzo 2004); The procurement of goods and services electronically within an organization (Turban and King, 2006. Procurement operations get automated, thereby enabling online sourcing, the selection of vendors, carrying out procurement procedures, tracking shipment status, and processing payments.

It has been used to cut the general cost of the purchase and in the last period, there is E-Procurement that has being practiced by both governments and companies. Still, it is possible to make improvements some organizations in the public and the private sector remains selective when it comes to the use of regarding the use of electronic technologies for learning (Zheng, et al. 2004). Electronic purchasing is among the electronic technologies that have had a measure of impact on business.

And over the last ten years the governmental and private sectors have pay more attention to the use of e-procurement sector associations. This curiosity has been answered but with so many conditions, however. Since e-procurement is still a relatively new concept (Dai & Kauffman, 2001; Koorn, Smith & Mueller, 2001), There are a number of advantages in the use of the Internet for e-Procurement as compared to more traditional inter-organizational technologies. Introduced in the 1960s, the Electronic Data Interchange, for instance, allowed buyers and their suppliers automated purchasing operations. The ERP was introduced in the 1970s while Internet commerce began in the 1980s.

## **2.2 The Concept of Fleet Management**

Fleet management is a function that enables businesses with transportation needs to eliminate or reduce risks related to investment in vehicles, improve productivity, reduce overall staffing and transport-related costs, ensure 100% compliance with legal requirements, duty of care, and many other benefits associated with fleet management. Fleet management can be expanded to include other services such as financing, maintenance, tracking and diagnostics, driver and speed monitoring, fuel management, and health and safety management.

## **2.3 The effect of Electronic Procurement on Fleet Management at National Medical Stores**

Quick process to information; Information technology has a role to reduce errors in the Information passed along the supply chain by avoiding manual data entry from hand written, removing paper transactions-purchase orders, invoices, consignment notes and to speed up the management integration, ship and distribute data with product development at each mode of supply chain management resulting in real cost saving hence enhancing effective fleet management (Subramania, 2003).

Fisher, E.,(2004), asserts that electronic procurement has facilitated collaboration broad array of critical customer interactions including designing specifications, engineering changes, and bills of materials updates, quality reporting and order/shipping tracking in the procurement department. Also, it provides access to information when and where the need arises, minimizing travel costs and reducing time (Storey .J. Emberson .C. Reade .D, 2005) shifts through large amounts of data and provides exceptions or out-of-range business parameters to identify key

out ages such as low sales on the fast-moving item and out of stock units. Electronic procurement helps in coordinating the activities to manage the supply chain management in the procurement department since Information serves as the (eyes and ears and sometimes a portion of the brain) of management in a supply chain, capturing and analyzing the information necessary to good decisions. For instance, IT systems at personal computer manufacturers may tell procurement manager how many processors are currently in stock (Simchi, 2007). Supply chain management software applications suits such as functional applications, planning inventory management and allocation, warehousing, transportation, demand, planning of forecasting, and customer service provide real-time analytical systems to manage the flow of products and information throughout the supply network of trading partners and customers Wynstar .R. Axeleson .B. and Van Weele .A. (2000).

Basheka, B. C. (2008) says that there has been a rise in efficiency in the costs; this is because even though suppliers and the procurement department are interacting through technology, EDI purchase orders and invoices are not being used by suppliers but CPFP is used. This will give manufacturers and suppliers a platform to liaise in coming up with shared projections which will, in turn, drive the replenishment process along the supply chain management. This would ultimately result in the abolition of the purchase order system and invoice, enabling the management of fleet efficiently. (2002, Delhi)

As a result, eprocurement has made fleet management and the purchasing process more effective and efficient. Efficient procurement practice has created an improvement in performance at public sector enterprises while complementarities have made market transparency, economic participation, and full access to government information more enhanced at the public sector level accordingly. There are a number of advantages in the use of the Internet for e-Procurement as compared to more traditional inter-organizational technologies. Introduced in the 1960s, the Electronic Data Interchange, for instance, allowed buyers and their suppliers automated purchasing operations. The ERP was introduced in the 1970s while Internet commerce began in the 1980s.

Brugman, M.J. (2006), E-procurement reduces paper work ; Tools and techniques like EDI, electronic fund Transfers, electronic publishing help to automate and process documents electronically between suppliers and procurement customers. EDI is a computer to computer exchange has the capability and practice of communicating information in organizations electronically instead of traditional form of mail and fax (Mishra, 2004). The technologies have the ability to reduce human intervention yet overseas minutely the flow of parts and

products along the entire length of the supply chain which helps dramatically in cutting logistics costs and boosting customer satisfaction Simchi-Levid, Keminsky. Pi Sinchi-Levi. E (2007).

The most cardinal general electronic procurement objective, which many firms have set, is reducing the purchase price and, therefore, the overall cost of procurement. Optimization of internal processes is also highly valued. Demand aggregation and central coordination top the information technology priorities for most businesses. Besides reducing the purchase price, electronic procurement has been able to develop process efficiency and cost/expenditure transparency accordingly (Howard Bariira , 2012).

Procurement, according to Hunja (2003), is a process for which IT support and automation in every stage are of great benefit, since buying operations typically require a substantial amount of information processing and communication. However, prior to the Internet, only the production information phase and nonproduction procurement-electronic catalogs-or automated operational activities in the settlement phase, such as payment, were regularly functions supported by the available IT systems. This especially held good for situations in which high volume and frequency justified the high set up cost of EDI (Sokol 1995). In addition, many of these systems were not interactive and proprietary. As far as capital and maverick buying, where procedures are essentially paper-based and/or manual, the incidence of IT support during the negotiating phase is usually quite small (Oliver 1996, Segev and Beam 1997).

Arrowsmith and M. Trybus (2006) noted that in comparison with the paper means of communication, Internet- and Web-enabled technologies enable individuals to interact with others in a real-time manner while making information available to other instantly. Documents, faxes and computerized equipment's such as electronic data interchange or EDI. The research done by Epic Technologies (2010) reveal that the use of e-procurement technologies in an organization may align its relationships with key suppliers, a set of integrated monitoring tools to ensure effective supplier performance and cost and communication during a business process with potential suppliers. Currently, the Administrators may use the system to verify prices and in the process use previous agreement where every current pricing quote has to be better than the previous one. E-procurement aids in decision-making through the effective maintenance of timely, well-organized, and pertinent information both from the buyer and the seller. Since most of them are template-driven, therefore all transactions are traceable and uniform in nature.

## **2.4 The Challenges that affect Electronic Procurement on Fleet management at National Medical Stores**

As a matter of fact, according to Greunen D. V. et al. 2010, ICT is one of the prime drivers of change for any sector. The same authors attribute this trend to the increasing demands of the consumer which involves flexible, customized, accessible, interactive products and primary communication, along with rapid changes in technology itself. While e-business technologies have loads of potentials to change the ability to be productive for an organization, the willingness to adopt them depends on various factors such as lower transaction costs, better customer service, defensiveness in the face of competitor adoption and customer demands that suppliers link their systems in order to conduct business.

On the other hand, perceived barriers to e-procurement, investment in compatible systems, training employees and a reluctance to adopt the more open approach to tendering are the indications that have nestled the tendency to adopt e-procurement, thus negatively impacting fleet management (Gupta M and Narain R (2012).

The organization's prior buying process was significantly impacted by the implementation of this new computerized system. These include roadblocks in the recently implemented procedure. Due to a lack of requisite skills and training, the majority of suppliers accustomed to the previous system have had challenges in adjusting to the new one. This indicates that the majority of suppliers have been prevented from going out of business as a result of not having the prerequisites needed to utilize the new system, as well as the expense of purchasing the system and paying for training (Smith D and Mueller C (2001). Another matter for consideration is the level of cooperation. As cited from Liker, J.K. and Choi, T.Y. (2004), most of the staffs in the procurement department are not able to properly communicate with suppliers on this new system. It is due to the contrast between the earlier, direct contact by paper work, to an online and indirect one.

Saeed and Leith 2003, tested the buyers' perceptions with respect to the impact of electronic procurement on procurement risks and identified three such dimensions: Firstly, the transaction risks arising due to the purchase of wrong products due to incomplete or misleading information; These are security risks arising from unauthorized access to trading platforms and from poor security measures used during the transmission or storage of data related to the transaction; and lastly, there are the privacy risks arising from the improper collection of information and lack of transparency. Despite this, the spread of the internet has

imposed critical challenges on procurement business in terms of cyber vandalism, virus, and malware attacks, data hacking, and internet fraud (Huber et al. 2004).

One of the challenges the businesses are experiencing due to the introduction of the new system is cost, as observed by MacManus S. A. (2002). The business has to incur considerable expenses in buying the new technology, its installation, and training. Other costs to be incurred will be on contracting outside experts to maintain the system and its continual updates to ensure maximum output. Complexity of the system will be another major challenge. Due to the complexity of the new system, the staff in the organization will need periodic training to update themselves with any new developments taking place in the system. The company will therefore allocate more of its budget to the repeated training programs most of which will be outsourced.

According to Ordanini, A. and Rubera, G. 2008, "inaccessibility refers to the fact that because of electronic procurement, businesses that rely on this to offer web-based access and support often fail to exploit the opportunity to reach a large pool of users who are poor or reside in remote areas or those with low levels of literacy. Most of the costs can be traced to non-value-added activities such as manual data entry again, correcting errors, premium purchases due to inability to find competitive suppliers, ineffective supplier and product evaluation and search, and the lengthy approval and agreement processes that needed to be conducted before orders could be placed. The following short-comings; Muffatto and Payaro, 2004; Angeles and Nath, 2007 lack of standardization and system integration problems; e-procurement is an relatively recent business application, it is hence rare to come across with a shortage of benchmark able reference models; immaturity of software and lack of some of the core features, like managing tax structures across multiple geographic jurisdictions, invoicing, and payment reconciliation.

Gupta M, Narain R Extra challenges are the immaturity of e procurement service providers, inadequate preparation on the part of suppliers, and resistance from the users and the solution. Less experienced service providers may not be able to provide a full range of services, especially for more complex or sophisticated projects of e-procurement implementation. Besides, immature suppliers create an important barrier for many businesses. After all, suppliers have to learn how to make catalogs, receive purchase orders electronically, and invoice using some type of methodology.

In 2004, Croom S. and Brandon-Jones A. It is the resistance to use of the e-procurement solution by the end users which is positively related to employee behavior at the organization. Still, many organizations are unable to uproot the problem of maverick buying despite the deployment of the e-procurement solution. This can be prevented with intensive end user training and education programs.

Businesses should also be aware of the complexity and problems that exist in integrating the e-procurement solution with other systems. Businesses using e-procurement solutions have seen purchasing transaction costs reduced by 42%, says Davila (2003). Other studies published in 2003 by Croom and Brandon show that the implementation of e-procurement has a cost reduction potential of 75% for the procurement process and 16–18% for indirect purchases.

Orori J.M. (2011) observed that in reality, there were numerous challenges in the actual implementation of e-procurement. Sometimes, the benefits accrued from such implementation would even be difficult to quantify. Businesses should make use of various measurement techniques to fully monitor and understand the benefits distribution according to their level and sphere of influence. Since there are numerous parties and stakeholders within the system, the impact is easily not measurable in e-procurement systems. This is the reason, to date, limited proof of benefits of e-procurement exists.

Moreover, success in the e-procurement context differs from other contexts, and hence the need to develop a specific metric, which for that matter is not available as of now (Seddon et al. 1999; Chua et al. 2005). Most businesses are also not willing to adopt an e-procurement system because this mostly requires a huge investment in terms of changing current technology, and there is no certain proof of its impact (Subramaniam and Shaw 2002; De Vila et al. 2003). Some companies, according to, do find the correct platform in conducting e-procurement. One may say that this may be due to the high cost of establishing the proper IT system to enable access to the entire benefit of the e-procurement process.

## **2.5 The relationship between Electronic Procurement and Fleet Management at National Medical Stores**

Jessop, D. & Jones D. (2008), argues that electronic procurement enables Quick process to information and it has a role to reduce errors in the Information passed along the supply chain by avoiding re-keying data from hand written removing paper transactions-purchase orders,

invoices, consignment notes and to speed up the management integration and dispatch and distribute data with product development at each mode of supply chain management resulting in real cost saving and this therefore improves on their performance

Panayides, P.M. and So, M. (2005), asserts that it has facilitated collaboration broad array of critical customer interactions including designing specifications, engineering changes, and bills of materials updates, quality reporting and order/shipping tracking in the procurement department which has enhanced performance of the organization. Also it provides access to information when and where need arises, minimizing traveling costs and reducing time (Storey .J. Emberson .C. Reade .D, 2005) shifts through large amounts of data and provides exceptions or out of range business parameters to identify key out ages such as low sales on fast moving item and out of stock units.

Presutti, W.D. (2008), asserts that electronic procurement helps in coordinating the activities to manage the supply chain management in the procurement department since Information serves as the (eyes and ears and sometimes a portion of the brain) of management in a supply chain, capturing and analyzing the information necessary to good decisions which also enhances performance of the organization. For instance IT systems at personal computer manufacturer's may tell a procurement manager how many processors are currently in stock (Rasheed H S (2004)).Supply chain management software applications suits such as functional applications, planning inventory management and allocation, warehousing, transportation, demand, planning of forecasting and customer service provide real time analytical systems to manage the flow of product and information throughout the supply network of trading partners and customers Wynstar .R. Axeleson .B. and Van Weele .A. (2000).

King, D. and Chung, M.H. (2000) mentioned the cost effectiveness. There is still technology, namely electronic procurement, intervening between the procurement department and the suppliers. Suppliers look into replenishment and collaborative planning forecasting, CPFP, not EDI purchase order and invoices. This would give a better avenue for the manufacturer and supplier to collaborate in developing mutual forecasts that will, in turn, drive the replenishment process down the pipeline of the supply chain management. This will eventually negate the use of purchase orders and invoices to guarantee the performance of the organization.

With electronic means, the purchase procedure is effective and efficient. At the public sector level, the state-owned enterprises have been doing better because the procurement process is effective. Technology has increased market openness, economic incorporation based on

complementarities, and free access to government information at the public sector level. (Vaast, E. and Walsham, G. (2009). Less restrictive selection criteria applied, procurement technologies enable public administrations to identify and select goods and services from several vendors within a virtual market to which competent suppliers and goods have access. Digital signatures are used throughout the whole process to ensure that legally, the transactions are done.

Reduces paper work; Tools and techniques like EDI, electronic fund Transfers, electronic publishing help to automate and process documents electronically between suppliers and procurement customers (Eng., T.Y.,2004). EDI or electronic data interchange is the capability and practice of electronically exchanging data between computers in an organization and has replaced the old mail and fax systems that improved the performance of the organization. These technologies are powerful enough to minimize human participation while keeping track of the movement of products and parts along the entire supply chain. This has reduced the logistical costs and enhanced customer satisfaction Vaidya K, (2006).

Walters, P.G.P. (2008), asserts that one very general electronic procurement goal stated by most companies is the reduction of purchase price and the total cost of buying; optimization of internal process is also considered a very important goal. Aggregation of demand and Central coordination are stated as the top information technology objectives of most companies. With the help of electronic procurement, purchasing costs were reduced that enhanced organizational performance. Besides, it helped increase process efficiency and transparency of cost/expenditure.

Procurement processes are ideally suited for IT support and automation at all levels since these generally involve a high volume of information processing and communication. However, prior to the Internet, the production information phase was often the only one for which available IT systems were supporting; likewise, non-production procurement, electronic catalogs, or automated operational activities during the settlement phase, including payment, had often been the only ones supported, in particular when high volume and frequency justified the high setup cost, EDI. Many of the systems were also non-interactive and proprietary. In the capital and equipment purchase, where the procedures tend to be paper-based and/or manual, little IT support is available when it comes to the negotiation phase. Indeed, Chavezand, R. and McKittrick, A. 2010.

For instance, Amit, R. and Zott, C. (2001) point out those web-enabled technologies, such as the Internet and Web, provide real-time interactivity along with the facility of real-time

accessibility of information to others, which earlier traditional media of communication, such as paper documents, fax machines, and even electronic systems like EDI, did with better performance.

## **2.6 Summary of related literature**

Electronic procurement has enhanced efficiency and effectiveness of the procurement process. An efficient procurement process in the public sector organizations has resulted in improved performance in public sector organizations.

One issue that firms are facing due to the implementation of the new system includes cost. The company will have to bear lots of expenditure for purchasing, installing, and training employees on the new system. The costs will also be incurred for hiring outside experts to keep the system maintained and continuously updated so that productivity can be ensured at an optimum level. System complexity is another major challenge. This new system will be too complex for the company's staff, which will have to be retrained periodically to acquaint them with new developments in using the system. The company will thus have to allocate more of its budget to this mostly outsourced and continuous training program.

## **CHAPTER THREE**

## **METHODOLOGY**

### **3.0 Introduction**

This chapter presented the methodology that guided the research and this included research design, study area and population, study sample, data collection methods, data analysis, research procedure, data analysis and presentation, ethical consideration.

### **3.1 Research Design**

The researcher used a Cross-sectional design where both qualitative and quantitative designs were considered. Gall (2003) defined Cross-sectional design as where the researcher use different groups of people who differ in the variable of interest but share other characteristics, such as socioeconomic status, educational background, and ethnicity. This design was used because it allowed collecting data at one point in time hence minimizing costs and time. The study used both qualitative and quantitative approaches. Gall (2003) defined qualitative research as a form of systematic inquiry into meaning which is useful to a researcher in getting holistic pictures from historically unique situation. The researcher used this method because Interviews are not limited to particular questions and are redirected or guided by researcher in real time, the direction and frame work of research was revised quickly when fresh information and findings emerged. Sarantakos S (2005) explain quantitative data as a phenomenon for collecting numerical data that are analyzed using mathematically based methods. The researcher used this because it was time saving in calculating and analyzing results as well as summarizing vast sources of data. For qualitative data, the researcher described the relationship between Electronic procurement and Fleet management and the quantitative data reflected the statistical analysis of the relationship between variables.

### **3.2 Study Population**

The study was based at National Medical Stores and from the total Population of 100 respondents as reflected by the payroll of February 2017, this population was considered a good number for the study although the researcher majorly concentrated on; the top management, Accountants, Procurement officers and IT staff, quality assurance personnel, records among others. This was considered a considerate number in providing reliable and articulate information regarding the study.

### 3.3 Sample Size

The researcher employed Simple random sampling alongside purposive sampling method in this study to obtain data from the respondents. Out of the population of one hundred (100), the researcher used a sample of 80 respondents as determined by Slovene's formulae (Amin, 2005). This sample size was appropriate as it exhaustively enabled triangulation of the findings to what take place in National Medical Stores as far as Electronic Procurement was concerned and this number of people was enough to provide adequate and relevant information for the study.

$$\text{From } n = \frac{N}{1 + Ne^2}$$

Where  $n$  is the sample size

$N$  is the total population

1 is a constant

$e$  is the Margin of error

Therefore;

$$n = \frac{100}{(1 + 100 \times 0.05^2)}$$

$$n = \frac{100}{1.25}$$

$$= 80 \quad \text{the sample size (n) = 80}$$

**Table 1: Distribution of Respondents**

RESPONDENTS	Population	Sample size(S)	Sampling technique
Top management	3	3	Purposive sampling
Procurement department	5	5	Purposive sampling
I T department	29	23	Simple random sampling
Logistics department	10	8	Simple random sampling
Accountants	5	5	Purposive sampling
Quality Assurance	8	6	Simple random sampling

Stores department	30	24	Simple random sampling
Records department	10	6	Purposive sampling
<b>TOTAL</b>	<b>100</b>	<b>80</b>	

*Source: Secondary data*

### 3.4 Sampling Techniques

Both probability and non-probability sampling strategies were utilized. While non-probability purposive sampling focuses on how the sampling methods are done by merely selecting those units that are to be studied based on the judgment of the researcher, simple random sampling selects samples from a larger size of a population where every individual is subjected to an equal chance of being selected. The researcher employed simple random sampling because it was easy to put together samples for the investigation.

The researcher conducted a purposeful sampling, as it gave reason to draw conclusions about the sample under study that might be generalized.

### 3.5 Sources of Data

The study used both primary and secondary sources that helped a researcher in obtaining data for the study.

#### 3.5.1 Primary sources

Primary data is information that a researcher has observed or collected from direct experience in the course of their work (Ahuja, 2001). Certain primary sources were fieldwork in which a researcher formally interacted via structured questionnaires with the study's chosen respondents. These were provided to the respondents, who had a stiff one-hour deadline to reply. This afforded the researcher first-hand knowledge regarding the study.

### **3.5.2 Secondary sources**

Data source can either be primary or secondary; it is considered secondary source when it is obtained from already existing materials such as books, journals, reports, and internet, and for this case, secondary data was mainly obtained from records kept so as not to alter the facts. Shank, 2002 it was supplemented by data extracted from books, weekly audit magazines, newspapers, and other sources available in libraries. This brought the researcher closer to the subject in great detail, based on what other scholars had to say. The reason the researcher used this method is because it was cost-effective.

### **3.6 Data Collection Methods**

Data collection was done using quantitative data methods. Quantitative data was collected using questionnaires.

#### **3.6.1 Questionnaire**

Discussion in-paper: A discussion in which the responses by participants are to be recorded on paper, as will be instructed by the researcher. The questionnaires were of two kinds: an open-ended type, in which the participants responded as they felt right, and a closed-ended type, in which the researcher had provided the answers and the participant chose a choice (strongly agree, agree, strongly disagree) (Massey, 2005). The researcher used this method because it was time saving.

### **3.7 Data collection instruments**

#### **3.7.1 Self-Administered Questionnaires**

The researcher partly used the Self-Administered questionnaires to source information from the respondents. These questions were closed-ended ones, meaning that the respondent directly answered them by simply filling out the form. Used questions were well phrased to ensure they were as clear and self-explaining. This consequently helped save much time and resources to interview a large group of respondents within the stipulated timeline (Lohr, 2010).

### **3.8 Data processing and analysis**

#### **3.8.1 Data Processing**

After collection, the data was then edited. Coding was required to ensure that all information recorded was accurate, complete, and intelligible. Data editing was done to ensure that the information from the respondents was accurate, reliable, and consistent. After editing the data, numerical terms were assigned to the responses, followed by tabulation in order to have easy data analysis. (Amin, 2004)

#### **3.8.2 Data analysis**

The objectives of the study were achieved by analysing data using SPSS computer application on two levels namely, at the descriptive and inferential statistics levels. At the primary level of analysis, electronic procurement concepts were described statistically by using frequencies and percentages while at the secondary level of analysis, correlation analyses were conducted to test the relationship between the variables of the study.

#### **3.8.3 Data presentation**

After the questionnaires were returned with the completed surveys, the researcher processed the quantitative data by inputting them into the SPSS computer program. With the help of that computer program, the responses were analysed and frequency tables of response choices were developed. Later, the data were summarized in the form of graphs and tables with percentages and frequency counts. Finally, the researcher graphed and charted the data using MS-Excel and performed simple calculations.

### **3.9 Data Validity and Reliability**

#### **3.9.1 Reliability**

Reliability is the extent to which a research instrument yields findings that are consistent each time it is administered to same subjects (Mugenda and Mugenda, 2003).the measurement of reliability provides consistency in the measurement variables (Kumar, 2000). Cronbach alpha is the basic formula for determining the reliability based on internal consistency (Kim & cha, 2002). The standard minimum value of alpha of 0.7 is recommended Gupta (2004) as the minimum level for item loadings. Higher alpha coefficient values means there is consistency among the items

in measuring the concept of interest. Suppose that we assume a sum of k components (k-items or test lets)  $x=y_1+y_2+\dots+Y_k$ .

$$\text{Crobanch's } \alpha = \frac{K}{K-1} \left( 1 - \frac{\sum_{i=1}^K \sigma_{Y_i}^2}{\sigma_X^2} \right)$$

### 3.9.2 Validity

According to Mugenda & Mugenda, 2008, validity refers to the degree in which the test item sample represents the content the instrument is intended to measure, i.e., the traits or qualities that the instrument is supposed to measure. Not only should data be dependable, but they should also be correct and true. A measurement is dependable if it is valid as argued by Creswell, 2003. The term content validity was used to refer to the degree at which any measuring instrument provides adequate coverage of the underlying subject being studied, and that is what was applied in this research. This research will ensure content validity through the checking of the instruments for data collection by an IFMS evaluation group comprising experts. The experts will comment on each item in the instrument and grade their relevance as follows: NOT, marginally relevant, moderately relevant, and highly relevant. The content validity formula by Yin (2003) will be used in this study. The formula is; content validity index = (no. Of judges declaring item valid) / (total no. of items). It was recommended that instruments used in research was to have CVI of about 0.78 or higher and three or more experts could be considered evidence of good content validity (Yin, 2003).

Content Validity Index was computed using the formula;

$$\text{CVI} = \frac{\text{Number of items rated as relevant}}{\text{Total number of items in the questionnaire}}$$

### 3.10 Research procedure

Upon research approval, the researcher obtained an introductory letter signed from the Head of Department of Uganda Christian University that was presented to the administration of National Medical Stores seeking permission to carry out a study.

Once permission was granted, questionnaires were distributed to respective respondents on appointment.

### **3.11 Ethical Consideration**

Approval by the university administration and recommendation were made for the researcher. Information submitted by respondents was assured of anonymity by the researcher. The researcher carried out proof-reading of raw data for quality control purposes; this was to remove duplication and misinterpretation.

## CHAPTER FOUR

### PRESENTATION AND DISCUSSION OF FINDINGS

#### 4.0 Introduction

This chapter provided a detailed description of the results obtained from primary data. Findings are presented in table forms, pie-charts and graphs as shown below. A discussion of the findings is made giving the implication of the statistics to the study.

#### 4.1 Response rate

**Table 2: Response rate**

Response	Frequency	Percentage (%)
Fully filled questionnaires	70	87.5
Questionnaires not filled	10	12.5
Total	80	100.0

*Source: Primary data*

The researcher administered 80(100%) questionnaires, and out of which 70(87.5%) were fully filled by the respondents, while 10(12.5%) questionnaires were not filled due to commitments elsewhere. However, with a response rate of 87.5% of the target sample, the researcher was confident the information provided would be reliable. This therefore served as a way forward for which further findings were obtained to get up to date information regarding the impact of electronic procurement on fleet management of national medical stores. The results were therefore treated with utmost faith that conveys people's views.

#### 4.2 Socio-demographic characteristics

This section shows the social background of the participants in the study. It is noted that both men and women were involved in this study and all data presented is from both genders who were the target population used in the study. The section presents the sex, age group, the education level of education of the respondents and the years of operation in the company

#### 4.2.1 Gender of Respondents Table 3:

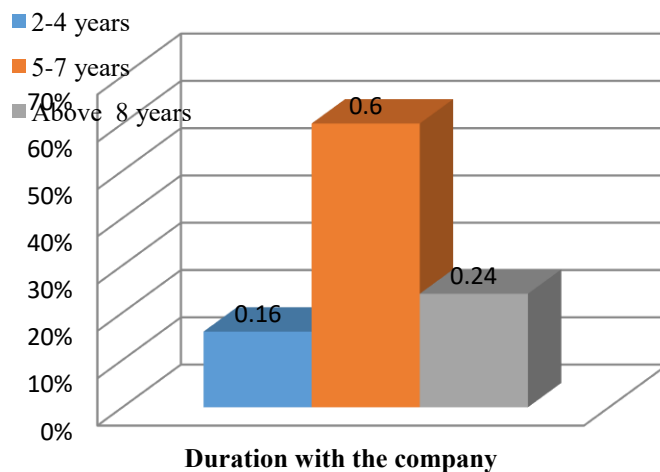
Respondents by gender

Gender		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Male	28	40	40	40
	Female	42	60	60	100
<b>Total</b>		<b>70</b>	<b>100</b>	<b>100</b>	

*Source: Primary data*

Figure 1 below shows the gender of the respondents as they were approached during the research. It also describes them in their percentages.

**Figure 1: Gender of Respondents**



*Source: Primary Data*

According to figure 4.1 above, out of the 70 respondents who were selected for the study, 42 were female which represent 60% and 28 were male, representing 40%. This therefore shows that the bigger percentage of the employees more engaged in electronic procurement at National medical stores were females as compared to the male counterparts. It therefore, means that majority of female were interested in the study than the male since the female took the highest percentage as compared to male. The reason for this was because the organization considered women as people who had acquired more knowledge on the use of electronic procurement and were more ethical to the procurement guidelines

#### 4.2.2 Age groups of the respondents

**Table 4.1: Age groups of the respondents**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid Less than a year	0	0	0	0
20-29	18	25	25	25
30-39	35	50	50	75
40-49	14	20	20	95
Above 50years	3	5	5	100
<b>Total</b>	<b>70</b>	<b>100</b>	<b>100</b>	

**Source: Primary data**

According to the table 4.4 above, out of 70 respondents selected for the study 25% of the respondents comprised of 20-29 years, 50% of the respondents comprised of 30-39 years while 40-49 years had 20% and 5% were 50 and above years. This is a clear indication that the organization's employees are youthful with vigor to work. The second majority 30 – 39 years are characteristically professionals with experience regarding electronic procurement in the organization. The researcher further contends that the respondents aged 50 and above years were mainly in senior management positions and decision makers of the National Medical Stores since they are considered intellectually wealthy in regard to corporate management. This implies the respondents in the study enabled the researcher to collect an inclusive study as it gathered information from people of different generations who normally have varying opinions.

#### 4.2.3 Level of Education

**Table 5: Education level of respondents**

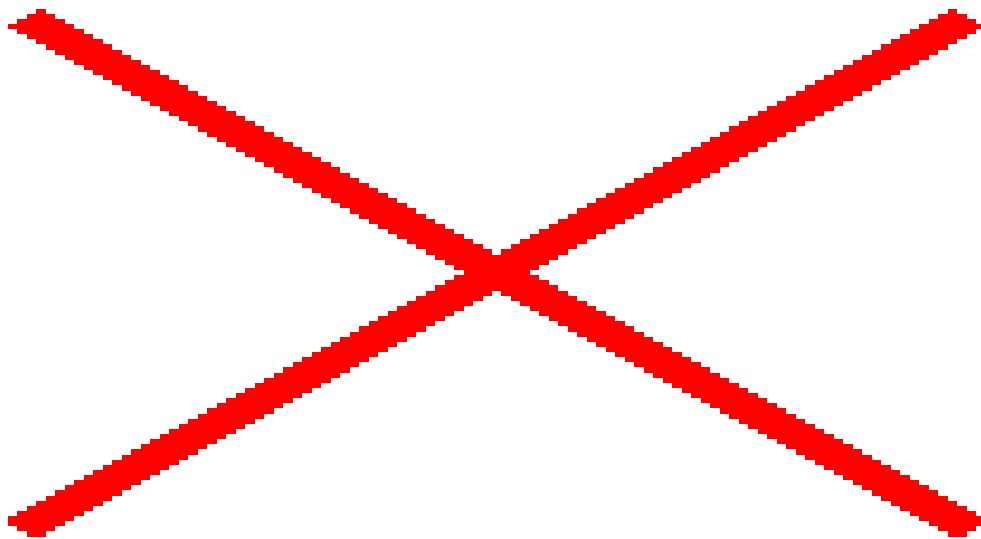
Level of Education	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid Certificate	06	8	8	8
Undergraduate	42	60	60	68
Masters	13	18	18	86

Others	9	14	14	<b>100</b>
<b>Total</b>	<b>70</b>	<b>100</b>	<b>100</b>	

**Source: primary data**

The respondents who were approached had different qualifications and this affected the knowledge each had about supplier development. Their levels of education are presented in figure 2 below

**Figure 2: Level of education of the respondents**



**Source; Primary data**

As presented in figure 2 above, the findings revealed that majority of the respondents comprised 42(60%) percentage and were Degree holders as compared to the second majority with masters' degrees at 13(18%). Further, the study shows that the minority are Certificate holders comprising of 6(8%) as compared to 9(14%) others. From the findings, most of the National Medical staff are highly qualified, and are only attached to departments in their areas of expertise with relevant skills and experience. The study further revealed the level of professionalism in the company is high; the education level therefore moves hand in hand with the level of professionalism which all together combines to ensure high level of performance in the organization. With such level of technical knowhow, the researcher was sure of gathering information from a group of highly informed individuals making the findings of the research highly reliable.

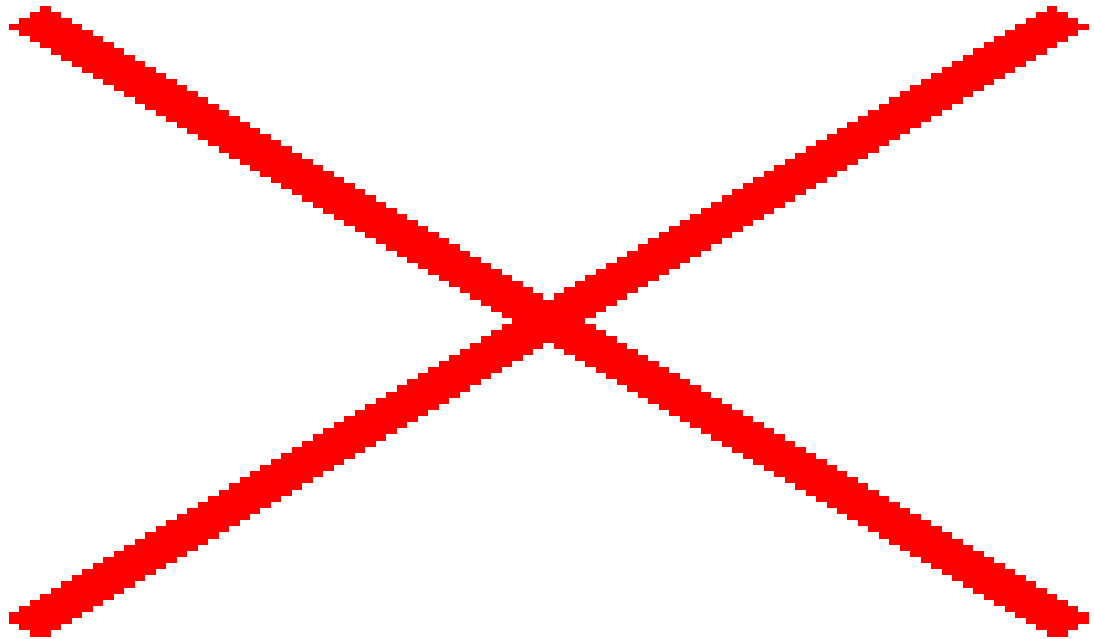
#### 4.2.4 Duration of Service

**Table 6: Duration of Service**

<b>Duration</b>	<b>Frequency</b>	<b>Percentage</b>
Less than one year	0	0%
1-2 years	11	16%
3-5years	42	60%
More than 5 years	17	24%
<b>TOTAL</b>	<b>70</b>	<b>100%</b>

*Source: Primary Data*

**Figure 3: showing duration with the company**



***Source: Primary Data***

The graph above displays the time period which respondents have spent working with the organization. According to the figure 3 above, none of the respondents had worked in the organization for less than one year, 16% of the respondents had served for 2- 4 years, while the majority 60% had served for 5 - 7 years and 24% have been working for more than 8 years as compared to no representation at all of less than one year. This is a clear indication of staff members having considerable experience and knowledge alongside other abilities. From the study it can be seen that the rate of labor turnover is very low as companies only keep faith in the well performing workers. The percentage of the respondents according to the data gives a clear picture that the period which most respondents spent was relevant for the organization to have reliable personnel. These are believed to have been indoctrinated into the company policy of how to handle organizational activities. If the company trusts this group of individuals then it means they know what to do as concerns their line of duty. This therefore encouraged the researcher as he was sure of acquiring the right information from the right people.

**4.2.5 Respondents' Department of work**

The respondents were from different departments and these included; Procurement, Store keepers, top management team, Logistics officers Auditors, accounts. The data

from the various departments was analyzed as given below in the table **Table 4.7: Showing respondents for the study**

	<b>Position held &amp; Departments</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	Top management	4	5.7	5.7	5.7
	Store Keepers	37	52.9	52.9	58.6
	Logistics Officers	20	28.5	28.5	87.1
	Accountants	3	4.3	4.3	91.4
	Human Resource Personnel	6	8.6	8.6	100
	<b>Total</b>	<b>70</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source: Primary data*

When asked about their positions in the organization, of the respondents that participated in the study 5.7% were working as Top management, operators were the majority of respondents at 52.9%, the marketers came second at 28.5% the accountants were 4.3% and the Human resource personnel had 8.6% from the response above, it implies that the respondents selected for the study were mostly those the researcher was sure would give accurate and reliable information on the subject of study.

#### **4.3 Findings on the effect of Electronic Procurement on Fleet Management at National Medical Stores.**

The aim was to determine the effect of Electronic Procurement on Fleet Management at National Medical Stores. Respondents were provided with a number of statements and asked to indicate to what extent they agreed with them, using the scale: 1 point = strongly disagree; 2 points = Disagree; 3 points = Not sure; 4 points = Agree; and 5 points = Strongly agree.

A standard deviation greater than 1 implies a significant variance meaning there was no consensus in the responses while a standard deviation less than 1 shows that there was no significance variance hence consensus in responses.

**Table 8: Showing Descriptive statistics on the effect of Electronic Procurement on Fleet Management at National Medical Stores.**

No	Effect of Electronic Procurement on Fleet Management	1	2	3	4	5	Mean	SD
1	Has Top management embraced the use of e-Procurement in all procurement activities of this organization to ensure timely delivery of services	10 14.3 %	4 5.7%	12 17.1 %	38 54.3 %	6 8.6%	3.37	1.182
2	Electronic procurement has reduced errors in the Information passed along the supply chain	8 11.4 %	5 7.1%	11 15.7 %	36 51.4 %	10 14.3 %	3.50	1.176
3	Electronic procurement has facilitated collaboration broad array of critical customer interactions in the organization	4 5.7%	9 12.9 %	8 11.4 %	42 60.0 %	7 10.0 %	3.56	1.030
4	It has minimized traveling costs and reduced time for company operation	5 7.1%	11 15.7 %	10 14.3 %	25 35.7 %	19 27.1 %	3.60	1.244
5	Electronic procurement helped in coordinating the activities to manage the supply chain management	9 12.9 %	6 8.6%	12 17.1 %	22 31.4 %	21 30.0 %	3.57	1.347
6	E-procurement reduces paper work in the organization.	6 8.6%	2 2.9%	13 18.6 %	21 30.0 %	28 40.0 %	3.90	1.218

No	Effect of Electronic Procurement on Fleet Management	1	2	3	4	5	Mean	SD
7	Has enabled the organization to organize its interactions with its most crucial suppliers	3 4.3%	4 5.2%	12 17.1 %	30 42.9 %	21 30.0 %	3.89	1.043
8	E-Procurement helped in the decision-making process of this organization	2 2.9%	7 10.0 %	9 12.9 %	33 47.1 %	19 27.1 %	3.86	1.026
9	It has controlled costs in the organization	9 12.9 %	4 5.7%	9 12.9 %	39 55.7 %	9 12.9 %	3.50	1.189
<b>Overall Average</b>							<b>3.62</b>	<b>1.166</b>

*Source: Field data 2018*

From the study findings on the statement “Whether top management has embraced the use of e- Procurement in all procurement activities of National Medical stores to ensure timely delivery of services”, the responses were as follows; majority of the respondents 54.39% agreed, 8.6% strongly agreed, 17.1% were not sure, 5.7% disagreed and 14.3% strongly disagreed. A mean score of 3.37 implies that most of the respondents on average were not sure about the statement. This is due to lack of knowledge about the use of the new electronic systems which has not been properly implemented in the organization. However the highest total of 62.99% who agreed implied that National Medical Stores is using the system to ensure timely delivery of services. However, the views of the respondents were in line with the argument of (Panayides, 2003) who pointed out that organization that has implemented electronic procurement has ensured timely delivery of services which has improved on their performance.

On the statement “Electronic procurement has reduced errors in the Information passed along the supply chain,” 51.4% agreed with this argument and an additional 14.3% strongly agreed. 15.7% were not sure while 11.4% and 7.1% strongly disagreed and simply disagreed respectively with a mean score of 3.5%. A total

agreement rate of 65.7% shows that most respondents concur with this argument. This is because has electronic procurement has helped in minimization of risks that are supply chain related which ensure that supplies and medical equipment are delivered as and when required by the organization at low cost ensuring value for money as stressed by (Alt, R. (2005).

On the statement “Electronic procurement has facilitated collaboration broad array of critical customer interactions in the organization,” the majority 60.0% of the respondents simply agreed with this issue and an additional 10% strongly agreed, those who simply disagreed however came second at 12.9% and in third were those who were not sure about the argument and lastly were those who strongly disagreed at 5.7%. It was summarized with a mean of 3.56 which concurs with the majority of the response who simply agreed. This argument is very practical as Electronic procurement has facilitated collaboration broad array of critical customer interactions in the organization since they are educated and trained on the usage of electronic procurement as well as the manner of operating their business that helps them to achieve client satisfaction and this therefore has increased access of medical items at National medical store which has helped the country save lives of its precious people. (Rasheed, 2004).

On the statement “It has minimized traveling costs and reduced time for company operation,” 35.7% was the majority of respondents who simply agreed and a further 27.1% strongly agreed. 15.7% simply disagreed and 14.3% were not sure and finally 7.1% was the representation of those who strongly disagreed. This argument generated a mean score of 3.6 to indicate that this statement is merely accepted. This is because transport and shipment costs for medical supplies are minimized by the organization as they are covered by the supplies which increases value for money on such procurement of medical items which resources can be diverted to other fields which increases on productivity, reduces risks as stipulated by (Steinberg ,R,2003)).

On the statement “Electronic procurement helped in coordinating the activities to manage the supply chain management,” the response rate was as below; 31.4% were the majority who agreed to the statement and close-by were those who strongly agreed at 30%. Those who were not sure had 17.1% and those who merely and strongly disagreed had 8.6% and 12.9% respectively giving a mean of 3.57 which

shows that this statement was simply agreed upon. This is because the electronic procurement terms prescribe the legally binding agreements logistics would enter into such that in case of failure to service which increases capacity to do work and therefore the organization realizes value for its financial resources.

On the statement “E-procurement reduces paper work in the organization,” 40% strongly agreed and 30% merely agreed. 18.6% were not sure and 8.6% and 2.9% strongly disagreed and simply disagreed respectively. A mean score of 3.9 crowned that the argument is generally agreed and in agreement with (Whicker, 2006)). Since most of the work is done electronically by the use of computers, electronic procurement helps in reducing the errors associated with paper work and reduces on the time spent on making petty procurements by the organization.

On the statement “e-procurement has enabled the organization to organize its interactions with its most crucial suppliers,” a total of 72.9% agreed with the statement with 30% of them strongly agreeing and the 42.9% simply agreeing. 17.1% were not sure and 5.2% and 4.3% merely disagreed and strongly disagreed respectively. The question then generated a mean score of 3.89% which implies the statement is overall agreed upon. Basing on the fact that the organization procures most of its materials, equipment and supplies from abroad, e-procurement has enabled the organization to keep in touch with its most crucial suppliers and has been able to build strategic relationships with its suppliers who intern provide advise for the organization in matters pertaining quality and service delivery as stated by (Vaast, E. & Walsham, G., 2009).

On the statement “E-Procurement helped in the decision-making process of this organization,” 47.1% agreed with this argument and an additional 27.1% strongly agreed and 12.9% were not sure. 12.9% disagreed with statement though only 2.9% of them strongly disagreed. This statement brought out a mean score of 3.86 which shows that the statement is generally agreed. Basing on the argument that under electronic procurement, buyers have a wide variety of items to choose from, some which are posted online for instance the supplier can deliver photos of the items that are needed by the organization through the use of electronic websites where the buyer is availed with the ability to make choice from a variety of items offered basing on the

quality standards, durability and other related specifications as may be needed by the procuring entity. This is in relation to an argument stated by Chung, M.H. (2000).

On the statement “It has controlled costs in the organization,” the majority simply agreed with 55.7% and those who simply agreed had the lowest percentage. All the other respondents tied at 12.9% for strongly disagree, not sure and those who strongly agreed. This brings the total percentage of those who agree to 78.6% and a supportive mean score of 3.5 which both show that the statement is generally accepted. This is in line with the statement of (Vaast, E. and Walsham, G. (2009), who stated that, the costs encountered in the supply chain to do with ordering, holding costs, stowage costs among others are most specially reduced through electronic procurement.

Similarly the respondents were asked on the other achievements obtained since the implementation of E- procurement System at National Medical Stores and most of them argued that they have reduced on the cost of operation, ensured efficiency and easies decision making in the organization which was in line with Vaidya K, (2006).

Generally, respondents agreed to a lower degree on all statements concerning the effect of Electronic Procurement on Fleet Management at National Medical Stores with an overall mean score of 3.62. An overall standard deviation of 1.166 indicates that, there was no consensus in the responses.

#### **4.4 The Challenges that affect Electronic Procurement on Fleet Management at National Medical Stores**

The aim was to establish the challenges that affect electronic procurement on fleet management at National Medical Stores. Respondents were also provided with a number of statements and asked to indicate to what extent they agreed with them, using the scale: 1 point = Strongly disagree; 2 points = Disagree; 3 points = Not sure; 4 points = Agree; and 5 points = Strongly agree.

A standard deviation greater than 1 implies a significant variance meaning there was no consensus in the responses while a standard deviation less than 1 shows that there was no significance variance hence consensus in responses.

**Table 9: Showing Descriptive statistics on the challenges that affect Electronic Procurement on Fleet Management at National Medical Stores**

No	Challenges of electronic procurement on fleet management	1	2	3	4	5	Mean	SD
1	The propensity to adopt e-procurement has been hindered by	9 12.9 %	1 1.4 %	6 8.6 %	43 61.4 %	11 15.7 %	3.66	1.166

No	Challenges of electronic procurement on fleet management	1	2	3	4	5	Mean	SD
	The cost of investing in compatible systems.							
2	Lack of the necessary skills and training to handle the new system has affected most suppliers who are used to the older system	4 5.7%	5 7.1 %	5 7.1 %	45 64.3 %	11 15.7 %	3.77	0.995
3	Most of the employees in the procurement department have not be in position to collaborate well with the suppliers using the new system	8 11.4 %	3 4.3 %	5 7.1 %	39 55.7 %	15 21.4 %	3.71	1.193
4	The organization has incurred high costs in the acquisition, installation and training on use of the new system.	11 15.7 %	2 2.9 %	4 5.7 %	45 64.3 %	8 11.4 %	3.53	1.224
5	Has transaction risks resulting from wrong products purchased due to incomplete or misleading information affected fleet management	6 8.6%	5 7.1 %	2 2.9 %	47 67.1 %	10 14.3 %	3.71	1.079

6	The electronic procurement system has been too complexity thus affecting fleet management	7 10.7 %	4 5.7 %	2 2.9 %	37 52.9 %	20 28.6 %	3.84	1.199
7	Lack of system integration and standardization issues affected e-procurement.	6 8.6%	7 10. 0%	3 4.3 %	24 34.3 %	30 42.9 %	3.93	1.289
8	Immaturity of suppliers and lack of preparation has affected fleet management	9 12.9 %	3 4.3 %	3 4.3 %	24 34.3 %	31 44.3 %	3.93	1.355
<b>No</b>	<b>Challenges of electronic procurement on fleet management</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>SD</b>
9	Resistance of end users towards operating the e-procurement has affected fleet management in the organization	6 8.6%	5 7.1 %	2 2.9 %	47 67.1 %	10 14.3 %	3.71	1.079
	<b>Overall Average</b>						<b>3.80</b>	<b>1.202</b>

*Source: Field data 2018*

From the study findings on the statement “The propensity to adopt e-procurement has been hindered by the cost of investing in compatible systems,” majority of the respondents 54.39% agreed, 8.6% strongly agreed, 17.1% were not sure, 5.7% disagreed and 14.3% strongly disagreed. A mean score of 3.37 imply that most of the respondents on average were not sure about the statement. Electronic procurement is associated with adaptation challenges for instance costs to do with purchase and licensing of electronic software and also training capable personnel to run the system in the organization’s databases this is as argued by (Rasiah, 2010).

On the statement “Lack of the necessary skills and training to handle the new system has affected most suppliers who are used to the older system,” 5.7% strongly disagreed and 7.1% simply agreed and further 7.1% were not sure. 64.3% merely agreed and an additional 15.7% strongly agreed and a mean score of 3.77 generated shows that the statement is simply agreed. This stretches from the fact that most

procurement entities are used to the older systems of ordering and procurement of items. Adopting eprocurement has been a challenge as most people in the organization do not trust the system and the software for various reasons.

On the statement “Most of the employees in the procurement department have not been in position to collaborate well with the suppliers using the new system,” 55.7% simply agreed with a further 21.4% supporting strongly. 11.4% strongly denied this assumption and an additional 7.1% also simply didn’t agree leaving 4.3% as that for those who were not sure and the statement was summed up with a 3.71 mean score to confirm the general agreement to the statement as stipulated by (Orori ,2011)). Some suppliers of the organization are not pleased by the system and are not willing to collaborate. They prefer providing services and items as by the old procurement measures. These adjustments are way too hard to cope up with which affects fleet management at National Medical Stores.

On the statement “The organization has incurred high costs in the acquisition, installation and training on use of the new system,” 67.1% and 14.3% agreed simply and strongly respectively while 2.9% were not sure 7.1% simply disagreed and a further 8.6% strongly re-echoed this disagreement. Finally a mean of 3.71 as well clarifies that interests enable the company cover for the cost of inflation over time as pointed by (Rubera, G. (2008). The world today is faced with persistent inflation and for any business transaction, in the medical world and in regards to electronic procurement and more so training the workforce towards the adaptability of these electronic purchasing systems, NMS has been challenged with costs to do with installation and acquisition of the software to aid in fleet management through electronic procurement.

On the statement “Has transaction risks resulting from wrong products purchased due to incomplete or misleading information affected fleet management,” 52.9% simply agreed with this argument and an additional 28.6% strongly agreed. 10.7% and 5.7% were the percentages of those who strongly disagreed and simply disagreed and a paltry 2.9% were not sure. This was summed up with a mean score of 3.84 which is a strong indicator that the argument is consistent with the topic as well as in accordance with the argument of MacManus S A (2002); it is quite easy to clear a small debt hat to clear big ones. Respondents have pointed out issues that sometimes the items that

are ordered through the help of the electronic systems do not correspond with those that are delivered in terms of quality and specification. Therefore, it is against this point that most procuring entities have failed to trust the system on the results delivered in relation to procurement and supply chain.

On the statement “The electronic procurement system has been too complexity thus affecting fleet management,” 34.3% agreed and 44.3% strongly agreed and 4.3% being the composition of those who were not sure and those who merely disagreed. 12.9% strongly disagreed giving a mean score of 3.93 showing strong correlation with the argument as postulated by (Gilligham M. 2012). The respondents argue that the system is too difficult to understand and it is hard to make procurement or related transactions using electronic procurement which has a significant undesirable impact on fleet management.

On the statement “Lack of system integration and standardization issues affected e-procurement,” 45.7% strongly agreed and 37.1% simply agreed. 2.9% were not sure and for those who disagreed; 8.6% did strongly and 5.7% merely this brought a mean score of 4.06 which rhymes with the argument that it is strongly agreed as Smith D & Mueller C (2001) emphasized. The National Medical Stores has no system assimilations in place to handle the complexity and diversity of electronic procurement which has greatly affected fleet management and service delivery at NMS.

On the statement “Immaturity of suppliers and lack of preparation has affected fleet management,” 44.3% were the majority who strongly agreed followed by 34.3% who simply agreed. 4.3% of the respondents were not sure and a further 4.3% simply disagreed and the remaining 12.9% strongly disagreed to the statement bringing a mean score of 3.93 indicting that this statement is generally acceptable. Since most suppliers find considerable challenges in e-procurement, they chose to do away with the system which has affected the systems impact on fleet management and procurement in general at National Medical Stores.

On the statement “Resistance of end users towards operating the e-procurement has affected fleet management in the organization,” 52.9% simply agreed with this

argument and an additional 28.6%strongly agreed.10.7% and 5.7% were the percentages of those who strongly disagreed and simply disagreed and a paltry 2.9% were not sure. This was summed up with a mean score of 3.84 which is a strong indicator that the argument is consistent with the topic as well as in accordance with the argument of Gupta M and Narain R (2012), It is quite easy to clear a small debt hat to clear big ones. The respondents at NMS pointed out that sometimes the system delays procurement processes, slows down the cycle and the supply chain which shifts a lot of considerable risk to the end users of the products or medical services that are being offered by National Medical Stores which has greatly contributed to lack of items in medical stores which has subjected most patients into deep suffering due to the inability to receive medical services.

Generally, respondents agreed on statements concerning the challenges of electronic procurement on fleet management at National Medical Stores with an overall mean score of 3.80. An overall standard deviation of 1.202 indicates that, there was no consensus in the responses.

#### **4.5 Findings on the relationship between Electronic Procurement and Fleet**

##### **Management at National Medical Stores**

The aim was to examine the relationship between Electronic Procurement and Fleet Management at National Medical Stores. Respondents were also provided with a number of statements and asked to indicate to what extent they agreed with them, using the scale: 1 point = Strongly disagree; 2 points = Disagree; 3 points = Not sure; 4 points = Agree; and 5 points = Strongly agree.

A standard deviation greater than 1 implies a significant variance meaning there was no consensus in the responses while a standard deviation less than 1 shows that there was no significance variance hence consensus in responses.

**Table 10: Descriptive statistics on the relationship between Electronic Procurement and Fleet Management at National Medical Stores**

No	Electronic Procurement and Fleet Management	1	2	3	4	5	Mean	SD
1	Electronic procurement enables Quick process to information in this organization.	3 4.3%	1 1.4%	8 11.4%	42 60.0%	16 22.9%	3.96	0.892
2	The system has facilitated collaboration broad array of critical customer interactions in the organization.	4 5.7%	1 1.4%	7 10.0%	44 62.9%	14 20.0%	3.90	0.935
3	Electronic procurement has helped in coordinating the activities to manage the supply chain management in the procurement department	2 2.9%	2 2.9%	6 8.6%	34 48.6%	26 37.1%	4.14	0.905
4	There has been Cost efficiency in the organization due to electronic procurement	1 1.4%	4 5.7%	9 12.9%	27 38.6%	29 41.4%	4.13	0.947
5	Electronic procurement has enhanced efficiency and effectiveness of the procurement process.	1 1.4%	4 5.7%	8 11.4%	28 40.0%	29 41.4%	4.14	0.937
6	Electronic procurement reduces paper work in this organization	4 5.7%	1 1.4%	10 14.3%	29 41.4%	26 37.1%	4.03	1.049
7	There has been reduction of the purchasing price and the total cost of procurement in the organization	5 7.1%	1 1.4%	8 11.4%	30 42.9%	26 37.1%	4.01	1.097

No	Electronic Procurement and Fleet Management	1	2	3	4	5	Mean	SD
8	Adoption of e-procurement technology in an organization enables a firm to organize its interactions with its most crucial suppliers	4 5.7%	2 2.9%	10 14.3 %	29 41.4 %	25 35.7 %	3.99	1.070
9	It has controlled costs and assured maximum supplier performance in the organization	6 8.6%	4 5.7%	5 7.1%	33 47.1 %	22 31.4 %	3.87	1.179
<b>Overall Average</b>							<b>3.96</b>	<b>1.053</b>

*Source: Field data 2017*

From the study findings on the statement, “Electronic procurement enables Quick process to information in this organization,” 60.0% of the respondents agreed with the statement, 22.9% strongly agreed, 11.4% were not sure 1.4% disagreed and 4.3% strongly disagreed. A mean score of 3.96 imply that most of the respondents agreed with this statement. This implies that, National Medical Stores has been able to manage procurement of items electronically and has been in position to considerably manage shipment of medical supplies, equipment and other related materials as may be required by the organization as according to (Greunen et al, 2010)

On the statement “The system has facilitated collaboration broad array of critical customer interactions in the organization,” 62.9% merely agreed and a further 20% strongly agreed. 10% were not sure while 1.4%and 5.7% merely and strongly disagreed respectively giving a mean score of 3.9. Such a mean score implies that most of the respondents agreed with the general assertion. Through collaborations, the organization has been able to make best procurement decisions which have helped boost logistics for health commodities and desirable management of fleet throughout the procurement supply chains.

On the statement “Electronic procurement has helped in coordinating the activities to manage the supply chain management in the procurement department,” the majority were those who merely agreed with 48.6%, 37.1% strongly agreed and the remaining 5.8% disagreed both scoring 2.9%. It generated a mean score of 4.14 which was evidence that most people strongly agree. This also confirms the argument of (Zhu, K.X. (2009). This is because plans are drawn in line with the resources the organization which is sure of the value for money. There is therefore early planning for the next set of plans since electronic procurement coordinates activities in the procurement and supply of the needed items for the organization.

On the statement “There has been Cost efficiency in the organization due to electronic procurement,” 39.6% was the second majority who merely agreed and the majority was for those who strongly agreed at 41.4% .those who strongly disagreed had a composition of 1.4% and those who simply agreed had 5.7%. The remaining 12.9%was the composition of respondents who were not sure of the relevance of the statement. This generated a mean score of 41.4% which signifies that most people strongly agree with this statement. Carrying/holding costs, storage, transportation and other related costs are minimized on the side of the procuring entity since a higher percentage of the burden is lifted onto the supplier which has enabled proper management of procurement and fleet until they reach the hands of National Medical Stores for disposal to user departments and other health entities.

On the statement “Electronic procurement has enhanced efficiency and effectiveness of the procurement process,” those who strongly agreed took the highest percentage at 41.4% slightly winning those who merely agreed who stood at 40% earning spot number two. 11.4% were not sure about this argument and 5.7% and 1.4% simply agreed and strongly disagreed respectively. With electronic procurement, it has made NMS to achieve efficiency in operations and effectiveness in delivery of health related services since the risks are managed by the other party as according to (Dawe, 2004).

On the statement “Electronic procurement reduces paper work in this organization,” those who merely agreed took the highest percentage at 41.4% those who strongly agreed came second at 37.1% earning spot number two. 14.3% were not sure about

this argument and 1.4% and 5.7% simply agreed and strongly disagreed respectively. The mean score was 4.03 implying that the statement is generally agreed and also in line with (Deloitte, 2012) who said computerized procurement systems reduce on the paper work and increase the level of accuracy in performance of duties which increases the quality of work and value for money in the organization since paper work is reduced and all the errors associated as pointed out by Ford (2001).

On the statement “There has been reduction of the purchasing price and the total cost of procurement in the organization,” those who disagreed had a response rate of 7.1 and 1.4% for strongly disagree and merely disagree, the percentage of those who were not sure was 11.4% and those who simply agreed had the highest percentage with 42.9% and those who strongly agreed were 37.1% this shows that the majority of the respondents agreed with the statement though merely as backed with a mean score of 4.01. This argument is valid in that, the procuring entity is at an advantage to negotiate for the best price possible since there is a wide variety of items and relatively wider range of suppliers for the same items at affordable costs. Therefore with electronic procurement, it is always a win-win situation for the entity running the procurements as pointed out by (Daugherty, 2009).

On the statement “Adoption of e-procurement technology in an organization enables a firm to organize its interactions with its most crucial suppliers,” 5.7% of the respondents strongly disagreed with the argument and a further 2.9% of the respondents merely disagreed. This left those who simply agreed and those who strongly agreed to take the remaining bulk of the total respondents with the former taking 41.4% and the later 37.1% all summing to a mean of 3.99 implying that the majority agreed with the statement. Using this mode of projection saves the organization from paying higher taxes since it does not consider the profits that would be generated in the process but only the quality of the items delivered whether they correspond with the specifications and takes a considerable look further on the value for money achieved by the entity procuring the items.

On the statement “It has controlled costs and assured maximum supplier performance in the organization,” 8.6% strongly disagreed, 5.7% merely disagreed and 7.1% were not sure. However, 47.1% simply agreed and 31.4% strongly agreed forming a mean

of 3.87 which is strong evidence that the majority of the respondents merely agreed with the assertion and coinciding with the assertion of (Kalimullah et al, 2010). Electronic procurement measure that has been put in place to boost the performance of the suppliers for the organization

Generally, respondents agreed to a moderate degree on all statements concerning the relationship between electronic procurement and fleet management at National Medical Stores with an overall mean score of 3.96. An overall standard deviation of 1.053 indicates that, there was no consensus in the various responses.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

#### 5.0 Introduction

This chapter presented the outcome of the study, the conclusion drawn from the result of the study and recommendation based on the conclusion. The study was conducted basing on three specific objectives such as; to find out the effect of electronic procurement on fleet management at National Medical Stores; to examine the challenges of electronic procurement on fleet management at National Medical Stores and to find out the relationship between electronic procurement and fleet management at National Medical Stores.

#### 5.1 Discussion of the major findings

##### 5.1.1 Social demographic factors

From the finding of the study, the researcher realized that the majority of females were interested in the study than the males since they (females) took the higher percentage as compared to males. There was a clear indication that employees were of youthful age, as up to 74% of the respondents were below the age of 40 and those above 40 were 26% as they were considered capable of working through the employment ranks in the organization. The study further revealed that the level of professionalism at National Medical Stores was at its highest as it was established from the presentation, that 8% of the respondents had qualified at Certificate level, undergraduate holders were 60%, master's degree holders were 18% and respondents with other qualifications which could not be verified were represented with 14%. These levels of qualifications were the key to excellence, as they ensured effective responses to employee's queries to enhance the achievement of value for money.

##### 5.1.2 Findings on the effect of electronic procurement on fleet management at National Medical Stores

From the findings, it was summarized by a total acceptance rate of 60.0% of the respondents simply agreed with this issue and an additional 10% strongly agreed, for both who strongly agreed and agreed, a mean score of 4.01 shows that electronic procurement has facilitated collaboration broad array of critical customer interactions

in the organization (Burand, 2008). This is because people are educated and trained on the usage of electronic procurement as well as the manner of operating their business that helps them to achieve client satisfaction and this therefore has increased access of medical items.

### **5.1.3 Findings on the challenges that affect electronic procurement on fleet management at National Medical Stores**

Furthermore, the study summarized that propensity to adopt e-procurement has been hindered by the cost of investing in compatible systems. This generated an acceptance of 63% and a mean score of 3.37 which is an indicator that this argument is very relevant at the organization and in line with the argument of (Bembeger and Meshoulam, 2012).

### **5.1.4 Findings on the relationship between electronic procurement and fleet management at National Medical Stores**

It was found out that Electronic procurement has helped in coordinating the activities to manage the supply chain management in the procurement department by early planning of the organizations procurements as it generated a total acceptance rate of 53.2% and a mean score of 4.40. This stems from the argument of the electronic procurement helps in the establishment of plans on procurement and other issues relating to fleet management.

## **5.2 Conclusion**

### **5.2.1 Findings on the effect of electronic procurement on fleet management at National Medical Stores.**

From the findings, it was concluded that electronic procurement has facilitated collaboration broad array of critical customer interactions in the organization as supported by 70% of the total respondents who agreed and with a mean score of 4.01 also signifying relevance of the statement.

### **5.2.2 Findings on the challenges that affect electronic procurement on fleet management at National Medical Stores**

Furthermore, the study concluded that the propensity to adopt e-procurement has been hindered by the cost of investing in compatible systems. This generated an acceptance of 63% and a mean score of 3.37 which is an indicator that the cost of investing in

compatible systems is higher which adds on the cost take away most of the organization's revenue.

### **5.2.3 Findings on the relationship between electronic procurement and fleet management at National Medical Stores**

Furthermore, the study concluded that Electronic procurement has helped in coordinating the activities to manage the supply chain management as it generated a total acceptance rate of 53.2% and a mean score of 4.01 since electronic procurement helps in the establishment of plans on procurement and other issues relating to fleet management.

## **5.3 Recommendations**

### **5.3.1 to the organization.**

From the study the researcher recommends that National Medical Stores should effectively design measures on how they can cope up and manage electronic procurement systems for ease access to medical supplies, equipment and related items and as well as reduce on the holding/carrying costs, transit/shipment costs/ cold chain costs and stowage costs for delivery of quality services to those awaiting their consumption.

### **5.3.2 to the government**

The study recommended that the government of Uganda through the Ministry of Finance and Ministry of Health should ensure that the electronic procurement is adopted to avoid problems associated with longer lead times and poor services delivery by incapable suppliers.

### **5.3.3 to the University**

It was emphasized that Universities should organize workshops and train upcoming procurement officers on the best ways to handle their electronic procurement to increase on value for money of all procurements handled in their entities of work.

## **5.4 Area of further research**

The effect of electronic procurement on enhancing health services delivery in Uganda.  
The influence of Electronic data transmission on the performance of government entities in Uganda

The contribution of Electronic Buyer-Supplier Collaboration on fleet management at national Medical Stores

Purpose of procurement practitioners on efficient service delivery in Uganda

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## APPENDICES

### APPENDIX 1: QUESTIONNAIRE

**Dear Respondent,**

I am **Adrili Joy** a student of Uganda Christian University, pursuing Bachelors' Degree in Business administration. As a requirement for successful completion of the course, I am carrying out a research on the topic ***"The impact of electronic procurement on fleet management at National Medical Stores"***.

You have been specifically selected to participate in the study and your information will be treated with a high degree of confidentiality and will be purely for academic purposes. The success of this study will greatly depend on your response, you are requested to spare some time and answer these questions.

Your cooperation will be highly appreciated. Thank You.

#### INSTRUCTIONS

*(Please tick the box that expresses your level of satisfaction on the study variables).*

#### SECTION A: DEMOGRAPHIC DATA OF THE RESPONDENTS

*Please tick the appropriate Answer*

##### 1) Position held in the Organization

Top level manager	<input type="checkbox"/>	Procurement Officer	<input type="checkbox"/>	Logistics Officer	<input type="checkbox"/>	Store Keeper	<input type="checkbox"/>
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Others (Specify).....

##### 2) Gender

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
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##### 3) What is your level of Education Qualification?

Certificate	<input type="checkbox"/>	Diploma	<input type="checkbox"/>	Degree	<input type="checkbox"/>	Masters	<input type="checkbox"/>	Others(specify)	<input type="checkbox"/>
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##### 4) What age bracket do you fall?

20-29 years	<input type="checkbox"/>	30-39 years	<input type="checkbox"/>	40-49 years	<input type="checkbox"/>	More than 50 years	<input type="checkbox"/>
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**5) Period you have worked in National Medical Stores**

Less than		2-4 years		5-7 years		Above 8 years	
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**SECTION B: THE EFFECT OF ELECTRONIC PROCUREMENT ON FLEET MANAGEMENT AT NATIONAL MEDICAL STORES**

Kindly express your feeling by ticking the appropriate box to show your level of satisfaction

Scale	5	4	3	2	1
Response	Strongly	Agree(A)	Not Sure(NS)	Disagree(D)	Strongly

Put a tick that best expresses your opinion

Agree (SA)

Disagree (SD)

No.	STATEMENT	SA	A	NS	D	SD
1	Using the rating above, Has Top management embraced the use of e- Procurement in all procurement activities of this organization to ensure timely delivery of services?					
2	Electronic procurement has reduced errors in the Information passed along the supply chain in the organization. What is your					
3	Electronic procurement has facilitated collaboration broad array of critical customer interactions which has enhanced					
4	It has minimized traveling costs and reduced time for company operation . What is your argument on this?					
5	Has Electronic procurement helped in coordinating the activities to manage the supply chain management?					
6	E-procurement reduces paper work in the organization. Use the above scale to judge this assertion.					
7	Adoption of e-procurement technology in an organization enables a firm to organize its interactions with its most crucial suppliers. What is your argument on this?					

8	Has E-Procurement helped in the decision-making process of this organization?					
9	It has controlled costs and assured maximum supplier performance in the organization. What is your argument on					
10	E-procurement reduces paper work in the organizations. Use the above scale to judge this assertion.					
11	Electronic procurement has enhanced efficiency and effectiveness of the procurement process as well as fleet					

What are other achievements obtained since the establishment of E- procurement System at National Medical Stores?

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**SECTION C: THE CHALLENGES THAT AFFECT ELECTRONIC PROCUREMENT ON FLEET MANAGEMENT AT NATIONAL MEDICAL STORES**

Kindly express your feeling by ticking the appropriate box to show your level of satisfaction

Scale	5	4	3	2	1
Response	Strongly	Agree(A)	Not Sure (NS)	Disagree(D)	Strongly

Put a tick that best expresses your opinion

Agree (SA)

Disagree (SD)

No.	STATEMENT	SA	A	NS	D	SD
1	The propensity to adopt e-procurement has been hindered by the cost of investing in compatible systems. What is your					
2	Basing on the argument, lack of the necessary skills and training to handle the new system has affected most suppliers who are used to the older system. What is your argument on					
3	Most of the employees in the procurement department have not be in position to collaborate well with the suppliers using					
4	The new system. Use the above scale to judge this assertion. The organization has incurred high costs in the acquisition, Installation and training on use of the new system. Use the					
5	Has transaction risks resulting from wrong products purchased due to incomplete or misleading information					
6	Affected fleet management? The electronic procurement system has been too complexity thus affecting fleet management. What is your argument on					

7	Has Lack of system integration and standardization issues affected e- procurement on fleet management?					
8	Immaturity of suppliers and lack of preparation has affected fleet management. What is your argument on this?					
9	Using the rating above, How has Resistance of end users towards operating the e-procurement affected fleet management in the organization					

What are other problems you are facing when using E-procurement system in this organization?

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What are the various strategies that National Medical stores can use to curb the challenges affecting electronic procurement on fleet management?

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**SECTION D: THE RELATIONSHIP BETWEEN ELECTRONIC PROCUREMENT AND FLEET MANAGEMENT AT NATIONAL MEDICAL STORES**

Kindly express your feeling by ticking the appropriate box to show your level of satisfaction

Scale	5	4	3	2	1
Response	Strongly	Agree(A)	Not Sure (NS)	Disagree(D)	Strongly

Put a tick that best expresses your opinion

Agree (SA)

Disagree (SD)

ITEM	STATEMENT	S	A	N	D	SD
		A	S			
1	Electronic procurement enables Quick process to information in this organization. What is your argument on this?					
2	The system has facilitated collaboration broad array of critical customer interactions in the organization. Use the above scale					
3	To judge this assertion. Electronic procurement has helped in coordinating the activities to manage the supply chain management in the					
4	There has been Cost efficiency in the organization due to electronic procurement?					
5	Electronic procurement has enhanced efficiency and effectiveness of the procurement process. Use the above scale					
6	Using the scale above rate whether electronic procurement reduces paper work in this organization					
7	There has been reduction of the purchasing price and the total cost of procurement in the organization. What is your argument					
8	Adoption of e-procurement technology in an organization enables a firm to organize its interactions with its most crucial					
9	It has controlled costs and assured maximum supplier performance in the organization. What is your argument on					

10	This? Has E -Procurement helped in the decision-making process of this organization?					
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*Thank you for your cooperation and time*