

**INFLUENCE OF ELECTRONIC PROCUREMENT PRACTICE ON
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INFLUENCE OF ELECTRONIC PROCUREMENT PRACTICE ON ORGANIZATIONAL PERFORMANCE AT THE JUDICIARY, KENYA

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ABSTRACT

The purpose of this study was to investigate the influence of e-procurement practice on organizational performance at the judiciary; specifically, the effect of electronic sourcing and electronic inventory. The theoretical models were Technology Acceptance Model and Resource Based Theory. The study adopted a descriptive research design. The target population of the study was 215 employees working in the administration, personnel, accounts, procurement, planning and ICT department in the judiciary headquarters. A sample proportion of 60% was used, thus the sample size of the study was 141 respondents. The researcher used stratified sampling method. A pilot study was conducted by the researcher taking some questionnaires to the 15 staff working in the judiciary headquarters who were not be included in the final part of the sample. The reliability of the questionnaire was checked using Cronbach Alpha test. The questionnaires were administered by drop and pick method. Data collected was coded and analyzed using SPSS and present findings in both descriptive and inferential statistics. The results were presented in tables and figures. The study concludes that electronic sourcing has a positive and significant effect on organizational performance at the judiciary. In addition, the study concludes that electronic inventory has a positive and significant effect on organizational performance at the judiciary. From the results, the study recommends that the management of the judiciary should ensure enhanced use of electronic source to ensure efficiency and effectiveness in the Judiciary. In addition, the management of the judiciary should ensure proper internet connection, system integration and supplier training to enhance performance.

Key Words: e-procurement practice, electronic sourcing, electronic inventory, organizational performance

INTRODUCTION

The arrival of the Internet as a means of doing business has served as a medium for major changes in the operation and status of organizational procurement. It is evident that Information Technologies have totally transformed the way organizations and governments operate (Nelson *et.al* 2001). They further assert that, majority of organizational expenses consists of money used to purchase various products and services. In order to decrease the total costs spent on purchasing process, internet technologies are used and E-Procurement has become popular to implement in the latest era by both governments and enterprises. Although the opportunities for improvement seem to flourish, both private and public sector organizations are still guarded as far as the adoption of electronic technologies is concerned (Zheng, *et al.* 2004). Enterprise Resource Planning (ERP) followed in the 1970s, and then came the commercial use of the Internet in 1980s. This was followed by the universal application of the World Wide Web in the 1990s (Office of Government Commerce, 2002).

E-Procurement refers to the use of Internet-based, integrated, information and communication technologies (ICTs) to carry out individual or all stages of the procurement process including search, sourcing, negotiation, ordering, receipt, and post-purchase review (Croom & Brandon- Jones, 2004). The electronic procurement system or e-procurement as it is called involves purchase and sale of products, supplies and services through the various networking systems such as electronic data interchange and internet. E-procurement does not mean just online purchasing decisions. It involves connecting the suppliers and employees of the organizations into the purchasing network companies that embark on e-procurement buying programs will be able to aggregate purchasing across multiple departments or divisions without removing individual control, reduce rogue buying, can get the best price and quality products from a wide range of suppliers. For the suppliers, E-procurement is a boom because they can be very proactive in their business proceedings.

E-procurement actually automates the purchasing and procurement process of a company and integrates the buyers and suppliers through relevant IT systems, which together forms a value network for the company. The automation of the end to end procurement work flow has taken over the traditional purchase order software. It helps to improve the organizational efficiency and control over the procurement activities and the need. The advent of cloud computing concepts and using the cloud process for e-procurement has automated the procurement process further. The management of agreements and contracts, price list verification product, comparisons, article selection has not only become simplified but also speedy Chau, (2006).

There are some fundamental things the purchasing institution aims to achieve when it comes to purchasing. These include reducing the time, increasing volume with a few preferred suppliers to get better pricing, reducing the time employees spend looking for a product, service or suitable supplier, cost of administering purchases, reducing cycle times as well as limiting choices to only a number of pre-qualified suppliers to ensure quality. E-procurement has been advocated as a tool that can improve competence and organizational performance through data transmission, buyer/supplier collaboration, systems management and billing management. Previous research has shown that e-procurement may indeed contribute to improved organizational performance (Croom and Jones, 2007; Hawking *et al.* 2004).

E-procurement has brought to prominence in recent years by the popularization and commercialization of internet. In addition to the customer oriented procurement of the internet, e-procurement is practiced through electronic markets and electronic data interchange (EDI). This creates the need for an efficient electronically enabled supply chain and value chain management (Weiss & Thurbon, 2006).

According to the Epiq Technologies (2010) report, adoption of e-procurement technology in an organization enables a firm to organize its interactions with its most crucial suppliers, a set of built-in monitoring tools to help control costs, assure maximum supplier performance and keeping an open line of communication with potential suppliers during a business process. The system allows managers to confirm pricing and leverage previous agreements to assure each new price quote is more competitive than the last. E-Procurement helps with the decision-making process by keeping relevant information neatly organized and time stamped.

In Kenya, e-procurement is at the early adoption stage (Oke *et al.*, 2006). This has been attributed to the astronomical costs that are involved in the setting up of the infrastructure as well the skill gap that exists in the labor market. ICT is considered as a key pillar in the success of vision 2030 by the government of Kenya which aims at transforming the country into an industrialized nation by the year 2030. ICT board has been set up by the government

to spearhead the ICT revolution in the country which is a positive signal for e-procurement (Oke *et al.*, 2006)

The high costs of slow speeds low, band width capacity and satellite connections have delayed the adoption of e-procurement though some companies through their massive financial capacity have been able to gain a competitive advantage in terms of getting connected early enough. Landing of the high capacity and high speed fiber optic cable in the country made many companies embrace technology as the cable is expected to boost the efficiency of internet making e-procurement a reality (Public Procurement Oversight Authority, 2009). The government through the ministry of finance has also initiated an e-procurement project whose aim is to have e-procurement system implemented in a few selected ministries before full roll out to other government departments (Republic of Kenya, 2014).

Several changes have taken place concerning ICT though not properly through a legal framework over the first 10 years of inception. Notable changes have been formation of the Multi- Stakeholder Kenya ICT Action Network. Through the network, a policy process deemed to be inclusive has been catalyzed, resulting in the country's first draft ICT policy document which was approved by Cabinet in February, 2006, (Republic on Kenya, 2006). Though electronic commerce is viewed as involving many ministries, Communication Commission of Kenya (CCK) is responsible for revitalizing and transforming the economy into modern market oriented through e-commerce (Republic of Kenya, 2006). Many firms in Kenya and world over have registered dismal performance in terms of business growth and profit making because of insufficient and unsustainable procurement procedures. Employees have been fired because of low performance rate persistent lateness and wrong attitude towards work (Johnson, 2008).

It was in view of all these shortcomings that the Kenya government in conjunction with other stakeholders like the International Trade Centre, World Bank and the Africa Development Bank, thought of looking for a way to eliminate the deficiencies by initiating the procurement reform process. As Mose (2012) notes, the reform process was meant to create a system that allowed proper delegation of authority, procurement threshold, planning and development of supplies manual. The primary focus was to address the issue of procurement laws, establish appropriate procurement Institutions and entities, and create adequate and timely monitoring and evaluation mechanism. This marked the birth of Public Procurement Regulation (2001) and later the Public Procurement and Disposal Act (2005).

The procurement function in Kenya has been characterized by massive scandals and indignity which have been attributed to poor handling of procurement information thus leading to excessive corruption. There is need to have a robust automated procurement system which is interlinked and this will lead to enhanced competitiveness and lowered costs (Chesire and Kimutai, 2015). Research conducted by Humphrey, *et al.* (2003) revealed that conducting e-commerce is mostly meant for provisions that enable the firms identify trading partners that they could contact off- line with a view to doing business. The follow- up to an initial contact generally is to taking place through other channels such as e- mail, hyperlink, the telephone, fax or the post.

According to Mitra *et al.* (2000), the most common forms of e- commerce in Kenya market are e-procurement, e-banking and of late ebanking. Of the three, e-procurement which is user friendly; internet based purchasing system (Nikolaos *et al.*, 2006) has generated a lot of interest.

Statement of the Problem

Procurement in plays a significant role in the efficient functioning of the Judiciary. However, there has been major complains on the wastage of resources, corruption and the lack of value for money despite the existence of guiding laws and regulations (Chesire & Kimutai, 2015). Despite the benefits of e-procurement as recognized by managers such as better coordination with suppliers, quicker transaction times, higher flexibility, better supplier integration, and lower costs (Kheng & Hawamdeh, 2002), it is clear that adaption of e-procurement is still very low (Gunasekaran & Ngai, 2008).

Information sharing is rigid because of the bureaucratic structures and overreliance on manual ways of communication which affects supply chain management performance because of delay of information from one entity to the other and hence the importance of the adoption of information technology (Mwirigi & Were, 2014). There is the need to have a robust automated procurement system which is interlinked and this will lead to enhanced competitiveness and lowered costs (Ogot *et al.*, 2009).

According to the Annual Judiciary report (2014), the incipient corruption in the administrative cadres in the Judiciary is one of the factors contributing to poor performance. For instance, according to Auditor General's report (2014), a tender specification for 34,400 square feet at a cost of Sh50 million in the Judiciary translated into a lease agreement for 47,890 square feet at a cost of Sh70 million to the Kenyan tax payer, which is a 27.58% increase in the initial cost. The report also quoted the advance payment of contractors, including a Sh43 million payment to a contractor for the construction of a court in Mavoko before land was secured (Annual Judiciary report, 2014). In addition, it is difficult to trace historical records relating to various procurements that have been undertaken by the Judiciary.

Orina (2013) in her study on E-procurement readiness factors in Kenya's Public sector found that resistance to change, lack of enthusiasm, staff skills, and to some extent procurement policies led to a failure of e-procurement adoption in public institutions. Hatice and Mehmet (2012) did a study on the e-procurement policies; the study surveyed the health sector in Turkey. Angeles & Nath (2007) explored the challenges to E-procurement in private sector and identified system security integration, standardization and immaturity of E-procurement market services as key challenges in E-procurement policies implementation.

This study sought to breach a gap in the previous study by investigating the influence of e-procurement practice on organizational performance at the judiciary.

Objectives of the Study

- i. To determine the influence of electronic sourcing on organizational performance at the judiciary
- ii. To assess the influence of electronic inventory on organizational performance at the judiciary

Justification of the Study

The findings help the other Republic of Kenyan institution in advancing in the implementation of the e-procurement systems thus helping to improve the performance level with their various suppliers. Procurement managers in different Kenyan government ministries can use the information from the study to come up with informed decisions on the

changes needed to enhance e – procurement policies and systems implementation in their respective ministries

The study is of great importance to supply chain and procurement consultants through enlightening them on the impact of e-procurement implementation, through shredding focus on the importance of system security, cost implication and supplier enablement factors and role of e-procurement policies.

The study is of help to other scholars and academicians who may wish to use its findings as a basis for further research on filling the gaps in this subject. The main aim of the study is to establish if there is a significant impact of e-procurement policies on performance of Judiciary headquarters in Kenya. The study is of help to other scholars and academicians who may wish to use its findings as a basis for further research on filling the gaps in this subject.

LITERATURE REVIEW

Theoretical Review

Technology Acceptance Model

Technology Acceptance Model (TAM) was introduced by Davis *et. al.* (1989) to help explain, as well as predict the factors that affect behavioral intention to use information or computer systems by tracing the impact of external factors on internal beliefs, attitudes, and intentions. It suggests a causal linkage between two key variables perceived usefulness and perceived ease of use, users' attitude, behavioral intention, and actual system adoption and use (Davis, 1989).

Perceived usefulness captures the user's perception that a specific innovation such as information technology that will improve organization work performance. PEOU captures the user expectation about the effort required to use information technology innovations (Davis *et. al.* 1989). Moreover, attitude toward use (AT) is determined by PU and PEOU. Furthermore, behavioral intention to use (BI) is jointly determined by attitude towards use and perceived usefulness and the actual system use is determined by BI (Gentry & Calantone, 2002).

This theory is relevant to variable e-sourcing is TAM is superior for explaining variance in behavioral intention within a procurement context and the authors believe that this is at least partially due to TAM's use of two specific beliefs of Perceived Usefulness and Ease of Use that apply to all attitudes in varying contexts (Gentry & Calantone, 2002).

Resource Based Theory

The quest for Information Technology has long been a central tenet of the field of procurement and supply chain management (Pressutti, 2003)). Within this field, resource-based theory (RBT) has emerged as a promising new framework for analyzing the sources and sustainability of Information Technology (Baily, 2008)). According to RBT, Information Technology- measured as economic rent (Caridi *et al.*, 2004) derives from strategic resources. Such Information Technology is sustainable to the extent that the resources on which it is based are valuable, rare, inimitable, and non-substitutable (Bales & Fearon, 2006).

Further, RBT rests on the premises that resources controlled by firms are heterogeneous and relatively immobile (Percy & Guinipero, 2008). The imperfect mobility of resources (including inimitability and non-substitutability) is due to a variety of isolation mechanisms (Roth, 2001) which include co-specialization of assets (Teo & Benbasat, 2003) unique

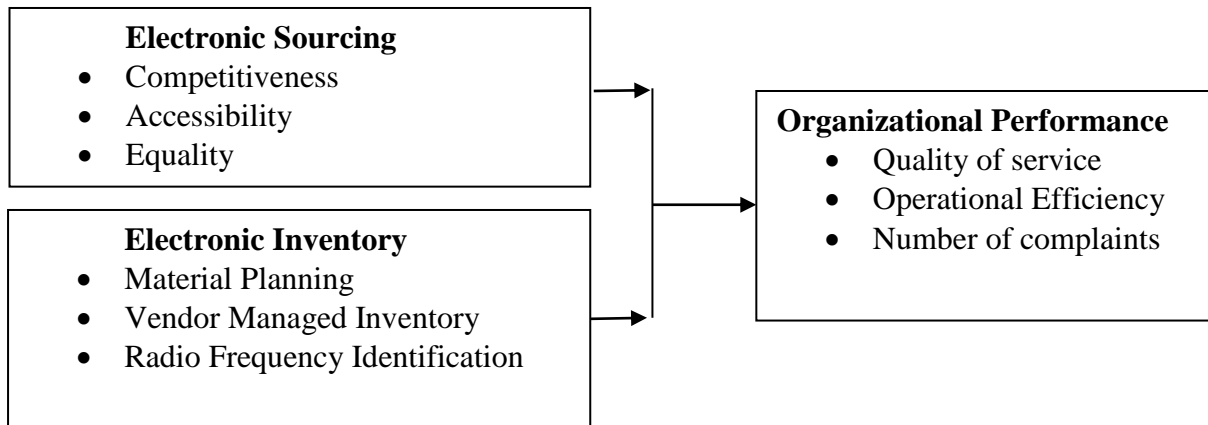
historical conditions (Berger & Calabrese, 2005), causal ambiguity (Liao *et al*, 2007), social complexity (Barnes *et al*, 2002), and tacit knowledge and skills (Puschmann & Alt, 2005),).

Given that organizational learning and resource-based theory both seek the objective of creating and sustaining competitive advantage as far as information technology is concerned, it seems logical for organizational learning to be identified as a strategic resource within the resource-based view. Resource-based theory (RBT) explains how organizations can gain a sustainable competitive advantage by exploiting and developing resources such as competencies, assets, know-how and capabilities that are unique and which are not imitable by competitors (Rivard *et al.*, 2006). Moreover, RBT postulates that the services rendered by the organizations unique bundle of resources and capabilities may lead to value creation (Amit & Zott, 2001).

An organization resources and capabilities are valuable if, and only if, they reduce costs or increase revenues compared to what would have been the case if the organization did not possess those resources (Barney, 1997). These resources and capabilities can be physical assets, human capital and organizational capital. Physical capital includes tangible resources such as financial resources, technology, and machinery. On the contrary, human capital and organization capital are intangible resources. Human capital deals with expertise, skills, and relationships, for example, while organizational capital deals with issues such as structure, processes, reputation, managerial attributes, information and knowledge possessed by the organization.

This theory captures the importance of electronic inventory since resources can enable the organization to conceive and implement strategies for improving efficiency and effectiveness. Moreover, the organizations can access and exploit external resources from the environment such as trading partners and customers (Parker & Castleman, 2009).

Conceptual Framework



Electronic Sourcing

Barbara and Maxfield (2013) observed that, to keep pace with competition and deliver against strategic objectives procurement must employ state-of-the-art technologies including e-sourcing. Farrington and Lysons (2012) define E-sourcing as: the uses of internet to make decisions and form strategies regarding how and where services or products are obtained.

Traditional geographical limitations are no longer present in e-sourcing since sending and receiving e-mail and other information from the World Wide Web is fast and efficient. With e-sourcing, organizations are able to increase the sources of their potential suppliers at no cost as they do not only depend on those vendors and suppliers they can physically visit their premises since they interact on-line and they are able to get whatever information that they need with the pressing of a button of their computers. They can source for their inputs from any part of the world in the comfort of their offices. They interact via the internet and partner with suppliers and buyers online, and this enhances their operations (Dinda, 2010). Computers can be used to track supplier details and purchases, and all this requires minimal investment in form of computers and internet airtime or subscription (Saleemi, 2006).

As one sources for supplies via the internet queries can be raised online with potential suppliers and clarifications provided in form of feedback almost immediately before orders are placed or samples can be requested for. This promotes faster procurement of goods and services from the best suppliers (Chopra *et al.* 2006). Loukis *et al.* (2009) on Performance of Greek firms through use of ICT concluded that it made a positive and statistically significant contribution to both output and labour productivity. Adam *et al.* (2004) in a study conducted on Pension Funds in Tanzania, concluded that automation of business operations generally tends to improve processing speed, accuracy and reduced cost per transaction. It also enabled organizations to systematically identify suppliers, acquire inputs, store, analyse, distribute and re-use information and knowledge from a wide range of sources in order to enhance organizational performance and competitiveness.

Gargeya and Jin Su (2012) viewed strategic sourcing as a comprehensive process that integrates different functions of a firm including engineering, purchasing, operations, logistics and marketing as well as selection, motivation, evaluation and development of suppliers through which a firm will be in better position. Chopra and Meindl (2013) noted that Sourcing strategy should state clear factors that have the greatest influence on value proposition. for example, if most spending for a firm is on materials with only a few high value transactions, improving efficiency of procurement transactions will provide little value, whereas improving design and collaboration and co-ordination with the supplier will provide

significant value. In contrast, when sourcing items with many low value transactions is done, increasing the efficiency of procurement transactions will be very valuable.

Sourcing is researching the market for potential input sources, securing the continuity of these sources, searching for alternative sources and keeping the relevant knowledge up to date (Vollman, Berry, & Whybark, 2004). Basically, the objective of all companies is sustainable and competitive selling of goods and/or services. Input is needed in order to produce these goods and services. This input can be tangible, like raw materials or personnel, or intangible, like skills or information. They all originate from certain source and this is where sourcing activities come into place. If sourcing costs can be reduced, this can improve returns on investment by increasing both profit margins and asset turnover rate (Dobler & Burt, 1996; Leenders & Fearon, 1997). During the past two decades, the purchasing function has changed from playing a supporting role to becoming a strategic activity, and now makes a significant contribution to the competitive advantage of an organization (Quayle, 2002; Carr & Smeltzer, 1997).

Strategic sourcing includes extensive range of activities namely creating an overall strategy for sourcing, evaluating and selecting suppliers, procuring materials/services and managing supplier relationships (Anderson and Katz, 1998). Strategic sourcing is increasingly seen to be a business capability of firms. Strategic sourcing also consists of the strategic processes of planning, evaluating, implementing and controlling all sourcing activities by a company to achieve its long-term goals. (Smeltzer *et al.*, 2003) find that all strategic sourcing strategies emphasize the integration of business practices such as supplier assessment, supplier certification and measurement, therefore sourcing if properly structured can efficiently combine the fundamental competencies of a given firm with the skills and abilities of its suppliers. Sourcing decisions are vital for any organizations that want to leverage on its core competencies and outsource other activities in order to gain and retain competitiveness.

Electronic Inventory

Schroeder (2000) established that transaction, precautionary and speculative are the main motives for a firm to hold inventory. To avoid unforeseen breakdowns, hold ups and any other disruptions in running of operations Lyson (1996) states that inventory serves as an insurance policy. According to the assessment, overstocking, poor supplier relationships and poor utilization of information technology are a few of the elements that curb inventory management thus influencing the performance of the procurement function.

Emphasized by Dobler and Burt (2006) as it is the case of cash, stock amount to the monetary value held by a firm and similar control measures. It is essential to have a sound inventory management system as it assists in preventing stock outs, overstocking, deterioration, obsolescence and high carrying cost. An ideal inventory management system is for the essence for decision making in the procurement function and the company as a whole. Strategic supplier relationships, an inventory management system and effective use of information communication technology are important to a company which expects its procurement function to operate efficiently and offer quality services.

Inventory management entails all the unified management of those internal activities associated with the acquisition, storage, issue, use and internal distribution of inventory used in the production and provision of services. It is the activity of determining the rate, quantities and the procedures of materials to be stocked in an organization and regulation of receipts and issues of those stocks (Sople, 2010). Many firms have had a persistent problem

in establishing the right inventory levels and they have thus turned to computerizing their systems so as to achieve a balance between responsiveness and efficiency.

Allan and Remko (2002) researched on how to establish inventory levels of gifts and decorative accessories in beauty shops and established that companies that make good use of Electronic Data Interchange (EDI) are far much better equipped to succeed than those which rely on outdated methods of inventory control. Godwin (2003) also did a research on the performance driven in production planning and inventory control to process choice, and established that inventory tracking system might constitute a wasteful use of financial resources. But for the other firms operating in industries, it can result in effective inventory management. It has been established that there are many benefits that accrue from efficient utilization of computerized inventory control systems, the major one being meeting anticipated customer requirements (Eskow, 2005).

The materials requirement planning (MRP) concept was developed following the introduction of high speed computers. MRP does the work of the materials manager to control inventory of items to lean the supply chain. The forecast of inventory items is controlled by the production item on which their demand is dependent. MRP is typically applied to manage inbound material movement in the enterprise and is based on the production requirements and scheduling (Sople, 2010). A materials requirement plan is derived from the master production schedule (MPS), inventory records and the product structure.

The product structure refers to a diagram or a list of materials and their quantities; usually called a bill of materials (BOM) needed to produce one item of output (Brason Steve *et al*, 2005). Lysons and Farrington (2006), point out that an MRP system has a Master production schedules (MPS). The MPS uses the inputs from marketing and sales to forecast demand for quantities of the final product over a planned time horizon known as time buckets. The bill of materials (BOM) also known as the product structure lists all the items that comprise each assembly and subassembly that make up the final product. The inventory file is the record of individual items of inventory and their status.

Vendor Managed Inventory (VMI) Systems is a new concept widely used in the industry with encouraging results. In VMI, the supplier takes charge of the inventory management of products and manages the replenishment process based on the consumption pattern of the consumer. They use inter-organizational software packages or place the supplier's representative at the customer's place. VMI, the supplier is given the responsibility for monitoring and controlling inventory at the retailer's distribution centre and in some instances at the retail store level as well. Specific inventory targets are agreed and it is the responsibility of the supplier to ensure that suitable inventory is always available. Such arrangements depend on accurate and timely information, and suitable computerized systems have only become available in recent years.

The main advantage lies in the reduction of the operating costs and also the delay in the payment for the products in question. Running a VMI system provides the opportunity to develop a much closer and hopefully more binding relationship with the supplier as well as giving much better visibility of real demand. This can make the planning of production much easier and can lead to significant reductions in inventory holding right through the supply chain (Allan *et al.*, 2006). Using the right technology, a firm would tend to offer better services to its customers as well as reducing the operational costs because in VMI systems, there will be real time sharing of information among the customers, the firm and the suppliers

Radio Frequency Identification (RFID) systems provide a powerful technology for tracking the movement of goods throughout the supply chain. RFID systems use tiny tags with

embedded microchips containing data about an item and its location to transmit radio signals over a short distance to special RFID readers then pass the data over a network to a computer for processing. The RFID tag is electronically programmed with information that can uniquely identify an item plus other information about the item such as its location, where and when it was made and its status during production. Embedded in the tag is a microchip for storing the data. The rest of the tag is an antenna that transmits data to the reader (Ken *et al*, 2010).

In inventory control, RFID systems capture and manage more detailed information about items in the warehouse or in production. If a large number of items are shipped together, RFID systems track each pallet, lot or even unit item in the shipment. This helps the firm to improve their ability to see exactly what stock is stored in warehouses or on retail store shelves. Of course, the largest benefit can be achieved from implementing RFID at the product level. For example, with RFID, you can store information in your data base about when particular package of beef was packed, which cow it came from, which farm it was from and where it was slaughtered. Such data could be provided in real time across the supply chain as pallets roll into the warehouse or items roll off the shelves (Simchi-Levi, *et al*, 2009). Retailers are expected to be the main beneficiaries of RFID implementation. Researchers have found that retailers will mainly benefit in three primary areas: reduced inventories, store and warehouse labour reduction, and reduction in stock out.

Organizational Performance

The primary goal of organizational performance is to increase organizational efficiency and effectiveness. Also organizational performance targets continuous improvement to improve organizational efficacy, which involves the process of setting organizational goals and objectives in a continuous cycle. At the organizational level, performance usually involves softer forms of measurement such as customer satisfaction surveys which are used to obtain qualitative information about performance from the viewpoint of customers while at individual and employee level organizational performance usually involves processes such as statistical quality control (Kaplan & Norton, 2001).

Performance is the extent to which an organization achieves a set of pre-defined targets that are unique to its mission. Key performance drivers include: Strategic focus, customer value, leadership and team performance, culture, value and ethics process excellence, talent management and knowledge management. Steps of organizational performance initiative are: Evaluation, planning, implementing and continuity. Critical success factors consist of access to appropriate expertise, planning, creative solutions and flexible process management (Karla, 2011).

The measurement of performance is the cornerstone of business practice because it assists in evaluation of the achievement of fundamental business goals and sets the scope and direction of possible improvement actions. Measurement of performance is relative depending on the industry a business is in therefore organizations must identify their own parameters by which to measure their performance (Pearce and Robinson, 2005).

Performance assessment can be both qualitative and quantitative which involves an analysis of financial and operational performance in a firm (Fred, 2009). For effective performance measurement, a balanced presentation of both financial and non-financial measures is required since no single measure can provide a clear performance target or focus attention on critical areas of the business (Liu, 2011). There is no one acceptable parameter for measuring performance and Organizational performance is concerned with the overall productivity in an

organization in terms of stock turnover, customers, profitability and market share. Ogolla (2012) argues that financial performance measures consist of return on assets, return on equity, profit, market share while non-financial performance measures consist of corporate social responsibility, innovation, and responsiveness and employee development.

Hartle (1995) asserts that performance management should link with business strategy, employee development and total quality management. According to Gathungu and Mwangi (2012) sensing the capabilities of the firm is useful in identification and assessing opportunity within firm's environment. This involves exploring technological opportunities, probing markets and listening to customers. The objective measures tend to be quantitative while the subjective measure tends to be qualitative. Distinctive organizations utilize diverse strategies to assess their performance. Performance assessment is done regarding budgetary and non-budgetary indicators (Bakar & Ahmad, 2010).

Empirical Review

Kimutai, and Ismael, (2016) study sought to establish the effect of cost reduction on supply chain performance, ascertain the strategic supplier relationships and the supply chain risks affecting supply chain performance in state owned firms. The study was a cross-sectional survey and an analysis of purchasing activities in state corporations at given period. The target population in this study included staff in top level management, supply chain, ICT, Finance and customer service at Kenya Generating Co. Ltd drawn from the one hundred and eighty seven (187) state corporations. Stratified random sampling was adopted for commercial and non-commercial State Corporation based on government shareholding in various ministries within Nairobi County. The study found that Organization cost reduction is important in customer service, return on investment and total cost while organization cost reduction is slightly important in impacting return on investment and speed of delivery. Organization ICT integration is important in impacting customer service, total cost and return on investment while it is slightly important in impacting speed of delivery and return on investment. The study confirmed that there exists a short term between Kengen and its suppliers, Kengen has a relatively stable relationship with its suppliers.

Kihanya, TWafula, Onditi, and Munene, (2015) examined the role Strategic Sourcing on Organization's Performance. Descriptive research design was used in conducting this study. The target population for the study were the employees of Jomo Kenyatta University of Agriculture and Technology, Main Campus. A sample size of 89 employees, with stratum of top level management, middle level management, first line management and low level management was selected from the various departments. The study findings were interpreted and discussed. The findings of this study suggested that strategic sourcing enables the organization to achieve strategic advantage and at the same time act as a means in which a business condition or problem can be alleviated in a more efficient and effective manner.

Munanu, (2017) examined the effects of strategic sourcing on organization performance: a case study of administration police training college quartermaster stores Embakasi. Purposive examining strategy was utilized to choose the chiefs while straightforward irregular was utilized to choose the rest of respondents. Quantitative data was analyzed using descriptive statistics (frequencies and percentages). The findings revealed that strategic sourcing at Administration Police Service positively contributed to cost efficiency. The study established that outsourcing at APS somehow positively contributed to improved productivity. It was established that strategic sourcing at positively contributed to profitability.

Onchoke, and Wanyoike (2016) study survey sought to determine the relationship between internal inventory control and procurement performance in agrichemical distributors in Nakuru Central. The respondents in this study were the employees in Agrochemical Distributors in Nakuru Central Sub-County. Findings of the study revealed that Internal Inventory Security Procedural Practices, Inventory Auditing and Computerized Inventory Control both individually and collectively have significant positive influence on Procurement Performance.

Samuel, and Ondiek, (2014) examined inventory management automation and the performance of supermarkets in western Kenya. The findings of the study revealed that inventory management automation affected the performance of the supermarkets and that there was a positive linear relationship between inventory management automation and the performance of the supermarkets. The linear regression model used revealed that 56.7% of the supermarkets' performance could be explained by inventory management automation ($r^2 = 0.567$). The extent of inventory management was found to be high among the supermarkets, with an overall mean score of 3.94, and the performance was also found to be high with an overall mean score of 4.1 both variables being rated on a scale of 1 to 5.

Gitau, (2016) examined the effect of inventory management practices on operational performance of warehousing firms in Mombasa County. Correlation survey was applied to show the link between the inventory management variables and operational performance. There was a significant relationship between inventory management practices and operational performance which was shown by a significance level 0.033 which was less than the 0.05 that was accepted in checking the significance level explained by the three independent variables of inventory management systems, strategic supplier partnerships and information communication technology.

RESEARCH METHODOLOGY

Descriptive research design was adopted due to qualitative and quantitative approach of the study. The target population of the study was employees working in the administration, personnel, accounts, procurement, planning and ICT department in the judiciary headquarters. The population of this study was 235 respondents comprising employees working in the various departments of the judiciary headquarters. For populations that are large, Cochran (1973) developed the formula to yield a representative sample for proportions. A stratified random sampling method was used for the selection of respondents of the study in which the population was divided into homogeneous subgroups before sampling.

Data was collected using questionnaires. For the qualitative data emanating from the dichotomous yes or no questions, simple percentages were used and these led to descriptive statistics. The statistics generated were descriptive statistics and inferential statistics. The specific descriptive statistics include percentages and frequencies while the inferential statistics include multiple linear regression model and Pearson correlation. The multiple linear regression models were used to measure the relationship between the independent variables and the dependent variable which explained in the model.

DATA ANALYSIS AND PRESENTATION

From the 141 questionnaires 136 were completely filled and returned hence a response rate of 96.5%. The response rate was considered as suitable for making inferences from the data collected.

Descriptive Statistics Analysis

Electronic Sourcing and Organizational Performance at the Judiciary

The first specific objective of the study was to determine the influence of electronic sourcing on organizational performance at the judiciary. The respondents were requested to indicate their level of agreement on various statements relating to electronic sourcing and organizational performance at the judiciary. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 1.

From the results, the respondents agreed that tender evaluation process has been made easier by e-sourcing. This is supported by a mean of 4.070 (std. dv = 0.722). In addition, as shown by a mean of 3.877 (std. dv = 1.086), the respondents agreed that applications are received on time due to e-sourcing process. Further, the respondents agreed that equality has been made achievable by e-sourcing process. This is shown by a mean of 3.789 (std. dv = 0.876). The respondents also agreed that e-sourcing has ensured accessibility of tendering process by all interested suppliers. This is shown by a mean of 3.631 (std. dv = 0.904).

With a mean of 3.631 (std. dv = 0.633), the respondents agreed that the number of procurement applications has been increased as a result of e-sourcing. Further, with a mean of 3.526 (std. dv = 0.840), the respondents agreed that Electronic sourcing has made supplier selection process very competitive.

Table 1: Electronic Sourcing and Organizational Performance at the Judiciary

	1	2	3	4	5	Mean	Std. Deviation
Electronic sourcing has made supplier selection process very competitive	10.5	10.5	15.8	42.1	21.1	3.526	0.840
E-sourcing has ensured accessibility of tendering process by all interested suppliers	7.0	10.5	22.8	31.6	28.1	3.631	0.904
Equality has been made achievable by e-sourcing process	7.0	10.5	7.0	47.4	28.1	3.789	0.876
The number of procurement applications has been increased as a result of e-sourcing	10.5	7.0	15.8	42.1	24.6	3.631	0.633
Applications are received on time due to e-sourcing process	0.0	14.0	22.8	24.6	38.6	3.877	1.086
Tender evaluation process has been made easier by e-sourcing	7.0	7.0	7.0	29.8	49.1	4.070	0.722
Aggregate						3.720	0.854

Electronic Inventory and Organizational Performance at the Judiciary

The second specific objective of the study was to determine the influence of electronic inventory on organizational performance at the judiciary. The respondents were requested to indicate their level of agreement on various statements relating to electronic inventory and organizational performance at the judiciary. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 2.

From the results, the respondents agreed that electronic inventory ensures proper material planning. This is supported by a mean of 3.719 (std. dv = 0.945). In addition, as shown by a

mean of 3.701 (std. dv = 0.908), the respondents agreed that radio frequency identification has ensured inventory usage is tracked before replenishing. Further, the respondents agreed that supplier tracking of supplies availability has ensured timely delivery. This is shown by a mean of 3.631 (std. dv = 0.904). The respondents also agreed that radio frequency identification ensures proper usage of the Judiciary inventory. This is shown by a mean of 3.596 (std. dv = 0.937).

With a mean of 3.561 (std. dv = 0.776), the respondents agreed that e-inventory has enabled the Judiciary to operate smoothly without delays caused by material shortage. Further, with a mean of 3.508 (std. dv = 0.611), the respondents agreed that vendor managed inventory was introduced to ensure supplier are made aware on the inventory consumption levels.

Table 2: Electronic Inventory and Organizational Performance at the Judiciary

	1	2	3	4	5	Mean	Std. Deviation
Electronic inventory ensures proper material planning	7.0	8.8	14.0	45.6	24.6	3.719	0.945
Vendor managed inventory was introduced to ensure supplier are made aware on the inventory consumption levels	10.5	14.0	3.5	57.9	14.0	3.508	0.611
Radio frequency identification has ensured inventory usage is tracked before replenishing	10.5	7.0	19.3	28.1	35.1	3.701	0.908
E-inventory has enabled the Judiciary to operate smoothly without delays caused by material shortage	17.5	3.5	8.8	45.6	24.6	3.561	0.776
Supplier tracking of supplies availability has ensured timely delivery	7.0	10.5	22.8	31.6	28.1	3.631	0.904
Radio frequency identification ensures proper usage of the Judiciary inventory	10.5	7.0	19.3	38.6	24.6	3.596	0.937
Aggregate						3.611	0.841

Organizational Performance at the Judiciary

The respondents were requested to indicate their level of agreement on various statements relating to organizational performance at the judiciary. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 3.

From the results, the respondents agreed that quality of service has been improved by good usage of electronic means. This is supported by a mean of 3.929 (std. dv = 0.851). In addition, as shown by a mean of 3.928 (std. dv = 0.563), the respondents agreed that there reduced complaints from both staff and clients on material consumption. Further, the respondents agreed that there is operational efficiency at the Judiciary due to high quality of products used. This is shown by a mean of 3.807 (std. dv = 0.831). The respondents also agreed that efficiency has mainly be caused by non-interruption on material availability. This is shown by a mean of 3.701 (std. dv = 0.935). With a mean of 3.684 (std. dv = 0.997), the respondents agreed that service delivery has constantly increased due to improved goods availability.

Table 3: Organizational Performance at the Judiciary

	1	2	3	4	5	Mean	Std. Deviation
Service delivery has constantly increased due to improved goods availability	10.5	7.0	7.0	54.4	21.1	3.684	0.997
There is operational efficiency at the Judiciary due to high quality of products used	7.0	10.5	12.3	35.1	35.1	3.807	0.831
There reduced complaints from both staff and clients on material consumption	10.4	28.1	10.5	10.5	40.5	3.928	0.563
Quality of service has been improved by good usage of electronic means	7.0	10.5	7.0	33.3	42.1	3.929	0.851
Efficiency has mainly be caused by non-interruption on material availability	10.5	10.5	12.3	31.6	35.1	3.701	0.935
Aggregate						3.749	0.818

Inferential Statistics

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (electronic sourcing, electronic inventory,) and the dependent variable (organizational performance at the judiciary) dependent variable. Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients. The current study employed Taylor (2018) correlation coefficient ratings where by 0.80 to 1.00 depicts a very strong relationship, 0.60 to 0.79 depicts strong, 0.40 to 0.59 depicts moderate, 0.20 to 0.39 depicts weak.

Table 4: Correlation Coefficients

		Organization Performance	Electronic Sourcing	Electronic Inventory
Organization Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	136		
Electronic Sourcing	Pearson Correlation	.849**	1	
	Sig. (2-tailed)	.002		
	N	136	136	
Electronic Inventory	Pearson Correlation	.857**	.289	1
	Sig. (2-tailed)	.001	.061	
	N	136	136	136

From the results, there was a very strong relationship between electronic sourcing and organizational performance at the judiciary ($r = 0.849$, p value =0.002). The relationship was significant since the p value 0.002 was less than 0.05 (significant level). The findings are in line with the findings of Gitau, (2016) who indicated that there is a very strong relationship between electronic sourcing and organization performance.

Moreover, the results revealed that there is a very strong relationship between electronic inventory and organizational performance at the judiciary ($r = 0.857$, p value = 0.001). The relationship was significant since the p value 0.001 was less than 0.05 (significant level). The findings conform to the findings of Onchoke, and Wanyoike (2016) that there is a very strong relationship between electronic inventory and organization performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables and the dependent variable

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928	.861	.862	.10582

a. Predictors: (Constant), electronic sourcing, electronic inventory, electronic invoicing and e-payment and supplier procurement system enablement

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.861. This implied that 86.1% of the variation in the dependent variable (organizational performance at the judiciary) could be explained by independent variables (electronic sourcing, electronic inventory, electronic invoicing and e-payment and supplier procurement system enablement).

Table 6: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	172.027	4	43.007	843.27	.000 ^b
Residual	6.568	131	.051		
Total	178.595	135			

a. Dependent Variable: Organizational performance at the judiciary

b. Predictors: (Constant), electronic sourcing, electronic inventory, electronic invoicing and e-payment and supplier procurement system enablement

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 843.27 while the F critical was 2.441. The p value was 0.000. Since the F -calculated was greater than the F -critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of electronic sourcing, electronic inventory, electronic invoicing and e-payment and supplier procurement system enablement.

Table 7: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	0.134	0.039		0.872	0.001
	Electronic Sourcing	0.387	0.112	0.384	3.545	0.000
	Electronic Inventory	0.486	0.107	0.482	4.121	0.001

a Dependent Variable: Organizational performance at the judiciary

The regression model was as follows:

$$Y = 0.134 + 0.387X_1 + 0.486X_2 + \varepsilon$$

According to the results, electronic sourcing has a significant effect on organizational performance at the judiciary ($\beta_1=0.387$, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the findings of Gitau, (2016) who indicated that there is a very strong relationship between electronic sourcing and organization performance.

The results also revealed that electronic inventory has significant effect on organizational performance at the judiciary, ($\beta_1=0.486$, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings conform to the findings of Onchoke, and Wanyoike (2016) that there is a very strong relationship between electronic inventory and organization performance.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that electronic sourcing has a positive and significant effect on organizational performance at the judiciary. The study revealed that competitiveness, accessibility and equality influence organizational performance at the judiciary. This implies that a unit improvement in electronic sourcing influences organizational performance at the judiciary.

In addition, the study concludes that electronic inventory has a positive and significant effect on organizational performance at the judiciary. The study revealed that material planning, vendor managed inventory and radio frequency identification influence organizational performance at the judiciary. This implies that a unit improvement in electronic inventory influences organizational performance at the judiciary.

Recommendations

The study found that electronic sourcing has a positive and significant effect on organizational performance at the judiciary. The study therefore recommends that the management of the judiciary should ensure enhanced use of electronic source to ensure efficiency and effectiveness in the Judiciary.

In addition, the study found that electronic inventory has a positive and significant effect on organizational performance at the judiciary. This study therefore recommends that the management of the judiciary should formulate and implement measures to ensure effectiveness in electronic inventory

Suggestions for Further Studies

This study focused on the influence of e-procurement practice on organizational performance at the judiciary. Having been limited to the judiciary, the findings of this study cannot be generalized to the private organizations in Kenya. The study therefore suggests further studies on the influence of e-procurement practice on organizational performance at private organizations in Kenya.

Further, the study found that the independent variables (electronic sourcing, electronic inventory, electronic invoicing and e-payment and supplier procurement system enablement)

could only explain 86.1% of organizational performance at the judiciary. This study therefore suggests research on other factors affecting organizational performance at the judiciary.

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