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INFLUENCE OF E-PROCUREMENT ON PERFORMANCE OF COMMERCIAL STATE CORPORATIONS IN KENYA MUKUNGA DANIEL ¹, DR. KARANJA NGUGI ² ^{1,2} Jomo Kenyatta University of Agriculture And Technology

Abstract

The study was guided by the following specific objectives; the influence of buyer/supplier collaboration on performance of commercial state Corporations in Kenya, the influence of optimization of inventory level on performance of commercial State Corporations in Kenya and the influence of procurement cost reduction on performance of commercial State Corporations in Kenya and the influence of customer service level on performance of commercial State Corporations in Kenya. A comprehensive literature review was carried out in Chapter two outlining previous research on same area of study. Based on comprehensive literature review a suitable conceptual framework which dramatically depicts the key areas of study was developed. This conceptual framework outlines the independent variables (customer service level, buyer/supplier collaboration, inventory level optimization and procurement cost reduction) and dependent variables (performance of commercial State Corporation). The study adopted a descriptive survey design. The total population is 119 state corporation, but the study targeted population included all 110 commercial state cooperation in Kenya, the sample size was 100% of the target population which included 110; one respondent per commercial State Corporation. The study relied on primary data collected through administering a structured questionnaire comprising closed and open-ended questions. The data was analyzed using descriptive analysis such as descriptive statistics, mean scores and standard deviations, frequencies distributions and percentages. The results was presented in form of table, pie charts, graphs and figures. The response rate was 100 respondents which gave 90.1% of the sample size. The inferential test indicates that that Procurement cost reduction influences the Performance of Commercial State Corporation most followed by Buyer/supplier collaboration, Customer service level and finally Procurement cost reduction. From the findings the study concludes that procurement cost reduction strategy has a direct relationship with e-procurement and finally improving the procurement performance of state corporations in Kenya. Supplier management, pooling of purchase requisitions and procurement-oriented product development are tasks that are typically assigned to strategic procurement. The findings in addition revealed that inventory level optimization. Buyer/supplier collaboration strategy has positive relationship with procurement performance in State Corporation. In line with this state corporation must view the embracement of e-procurement as a tool that will support procurement cost and processes as it generally contributes partner relationships, information sharing, and supply chain integrations as eprocurement contributes to supply chain performance. The study also recommends that management must be commitment to implement the E-procurement system and encourage staff to accept the new system.

Keyword: Buyer/supplier collaboration, Customer service level, E-procurement, Inventory level Optimization, Procurement cost reduction, Procurement performance and State Corporation.

Introduction

The study presents the influence of E-procurement on performance of commercial state corporations in Kenya. On the background information it will consider global, regional and local situations of performance of state cooperation in Kenya. Other areas of the study include statement of the problem, objectives, research questions and justification. 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 (Patterson *et al*, 2013).

This is supported by Shale (2014) who proposed that there is need to integrate the procurement and supply chain activities and that technologies to accomplish supply chain competitiveness. Information technology including e-procurement has the potential to play a pivotal role in business outcomes and competitiveness, it is critical for managers to understand which e-procurement applications best suit their firm's goals in achieving intra- and inter-firm integration. Although, e-procurement is still in its infancy, some companies have made impressive savings through radical streamlining of their buying activities. 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, (2014).

Over the years the world has seen a massive change in the management of businesses; From conventional multipurpose service functions and have seen organizations replying more on specialized in-house service functions or on outsourced services. The information technology (IT) sector has ably responded to the ongoing change in the needs of the business. It has helped many businesses in improving their operational efficiencies by providing electronic solutions and internet based solutions for their supply chain networks. From the late 1990s a raft of new ecommerce technologies emerged which promised to revolutionize working practices, threatening existing business models (Chan & Lu, 2004). Following this growth in use of e-commerce in business-to-business market, there has been significant adoption of new supply chain related technology and applications by organisations globally (Sheng, 2002).

With the continuous advancement in technology and the transformation of business dynamics the world has seen an easy accessibility to reliable electronic support services available worldwide with an equal demand in almost all sectors. E-procurement which is one of the major instruments of procurement is still very new to many businesses around the world however it is now catching

up in the race as many business managers and practitioners are beginning to realize its importance. According to (Subramani, 2014), the e-business paradigm has created an immense opportunity for firms to consolidate their buying processes. E-procurement opened new horizons for managing and operating businesses and it has given the stakeholders continuous options to make appropriate decisions on procurement of feedstock, engineering items, utilities or services.

Very few companies and commercial state corporations have the pre-requisite ICT infrastructure that is necessary for the implementation of e-procurement. 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 labour market. The government of Kenya considers ICT as a key pillar in the success of vision 2030 which aims at transforming the country into an industrialized nation by the year 2030. The high costs of satellite connections, slow speeds and low band width capacity have delayed the adoption of e-procurement though some companies through their massive financial capacity were able to gain a competitive advantage in terms of getting connected early enough. However, this could be a thing of the past. Many companies embraced the technology thanks to the landing of the high speed and high capacity fiber optic cable in the country. 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 initiated an e-procurement project that aims at having an e-procurement system running in a few selected ministries before full implementation in all government departments (Republic Of Kenya, 2010).

According to Githumbi et al. (2013) government of Kenya is in attempt to pace in with globalization through computer and use of internet in the state corporations. Through the communication amendment bill 2008, Kenyan government stipulates how it intends to regulate the use of ICT and provide legal protection for users and business in the market. The government considers ICT as a key pillar in the success of vision 2030 which aims at transforming the country into an industrialized nation by 2030 in which state corporations shall be key players. The government aim to drive the economy by embracing modern technology in all its operation including state corporations and to a great extent in procurement which consumes about 10% of Kenyan GDP (ROK, 2014). A government owned corporation, state owned company, state owned entity, state enterprise, publicly owned corporation, government business enterprise, and commercial government agency and parasternal is a legal entity created by a government to undertake commercial activities on behalf of an owner government (ROK, 2009). Their legal status varies from being a part of government into companies with a state as a regular stock holder (ROK, 2010). There is no standard definition of a government owned corporation (GOC) or state owned enterprise (SOE), although the two terms can be used interchangeably Kamanda (2001).

The definition characteristics are that they have a distinct legal form and they are established to operate in commercial affairs Makau (2010). While they may also have public policy objectives, GOCs should be differentiated from other forms of government agencies or state entities established to pursue purely non-financial objectives. Government owned corporations can be fully owned or partially owned by government (ROK, 2010). As a definitional issue, it is difficult to determine categorically what level of state ownership would qualify as an entity to be considered as "state-owned" Since governments can also own regular stock, without implying

any special interference Onyango (2010). The public procurement in Kenya has been undergoing reforms starting with the public procurement and disposal act, 2005 that saw the creation of public procurement oversight authority (ROK, 2010). The next step was the implementation of e-procurement for the public sector. According to e-government strategy paper 2004, e-procurement was one of the medium term objectives which were to be implemented by June 2007, but the process has been very slow (ROK, 2009).

A corporation is a statutory entity created by the government to conduct commercial activities on behalf of the government. It is also referred to as a parasternal or state business because it is the part of the economy that is entirely controlled by the government for the purpose of providing essential government services. Kenya has one hundred and twenty two parastatals that are categorized according to their functions i.e. regulatory, service, and commercial and manufacturing, and so on. According to the act of Parliament, State Corporations Act Cap 446, established to aid in the creation, regulation and connection of state corporations. Section 3 of the President act, the president, can through the order, creates an organization state mandated for the performance of roles specified in that act. He then assigns ministerial responsibility for any the corporation and all issues that relate to it directly to the Deputy-President and other cabinet secretaries. In section 5 of the same act, every state enterprise shall be empowered by the existing authority to enable it to perform its functions. State Corporations Act (2010). Moreover, the constitution created State Corporations Advisory Committee (SCAC) that was given the mandate to provide advice to the government on matters pertaining general administration of State Corporations as clearly spelled out in section 27 of the Act. (www.scac.go.ke).

The procurement function of the commercial State Corporation has been facing challenges ranging from late payment to suppliers to cases of inflated prices of sourcing services and products. Further, Kingori (2014) opine that there have been increased cases of short-term view in the procurement function through action such as improper disposal of waste products, operations of the government suppliers in unsafe environment and also in some cases the use of child labour in the production process and this calls upon the commercial state Corporations to embrace procurement sustainability in their operations. This, therefore, forms the basis of this particular kind of study that seeks to come up with electronic procurement practices and how it enhances performance.

Statement of the Problem

Online e-procurement platforms —as one of the purchasing system—to be adopted by organizations or institutions, provide greater transparency in organizational spending (demanded by constituents), boost efficiency and provide commodity savings. These advantages are especially attractive given tighter budgets and pressures on government institutions procurement resources to do more with less (Presutti, 2014). In Kenya, the total value of Public Procurement in Central Government is currently estimated at 10% of the GDP. In 2014, the GDP of Kenya was estimated to be Kshs 2,105 billion thereby putting the total expenditure on procurement by the Government at around Kshs. 210.5 billion annually. It can therefore be concluded that even a 10% savings due to improvements in procurement performance and controls would result to a yearly gain to the exchequer of about Kshs. 21.05 billion (PPOA, 2014).

Productivity of state corporations was quite low in 2013 while at the same time they continued to absorb excessive portion of the budget, becoming a principal cause of long term procurement

problems. State Corporations' operations had become inefficient and non-profitable, partly due to multiplicity of objectives, stifled private sector initiatives and failing of joint ventures requiring the government to shoulder major procurement burdens (McCrudden, 2014). 31% of state corporations rely on old records in selecting their suppliers, while 69% search through internet catalogue in selecting suppliers (Shale, 2014). According to Mwai (2015), there has been registered complaint from the organization's user departments, customers and Suppliers that the delay in procurement of goods and services and the quality of most of these goods procured do not meet the specifications and required standards for the intended purpose. Therefore this research will aim to determine how E-procurement influenced performance of commercial state Corporation.

Research Objectives

The research aimed to examine the Influence of E-procurement on performance of commercial state corporations in Kenya. The research aimed to fulfill the following specific objectives;

- 1. To examine the influence of buyer/supplier collaboration on performance of commercial state Corporations in Kenya.
- 2. To determine the influence of inventory level optimization on performance of commercial State Corporations in Kenya.
- 3. To explore the influence of procurement cost reduction on performance of commercial State Corporations in Kenya.
- 4. To establish the influence of customer service level on performance of commercial State Corporations in Kenya.

Theoretical Review

Transaction Cost Theory

This theory supports the objective on the influence of buyer/supplier collaboration on performance of commercial state Corporations in Kenya. According to Njiraini *et al* (2006) transaction cost arises every time a product or service is being transferred from one stage to another where new sets of technological capabilities are needed to make the products or services. Companies will therefore adopt ICT if the transaction cost is lee than the cost of manual process of procurement. Based on this theory Nepelski, (2006) argue that ICT lowers the cost of searching, selecting and monitoring suppliers. All of these technologies lead to an increase in the number of employees each manager can manage and hence to a reduction in the number of layers in an organization. This mitigates the control loss problem, and extends the range of positive economies of scale.

According to Emayi *et al* (2013) transaction cost economics focuses on the organization of transaction that occur whenever a good or services is transferred from a provider to a user across technologically separate interface. The theory sees institutions and markets as different possible forms of organizing and coordinating economic transactions. When external transaction costs are higher than the company's internal bureaucratic costs then the company will grow because the company is able to perform its activities more cheaply than if the activities were performed in the market place. Njiraini *et al* (2006) says that transaction costs relating to public procurement are those costs that enterprises incur in trying to access a contracts and reducing overall procurement costs. In most cases, communication costs are higher for MSE than large organizations which

hinder effective, fair and open competition among suppliers but ICT has played great part in reducing such costs. Mumo *et al* (2013) observes that ten years after the e-government directorate was set to manage ICT in the government, Kenyans are still struggling with the manual access of government services making it difficult for the private sector to engage profitably with the government.

Electronic Market Hypothesis (EMH)

This theory supports the objective on the influence of procurement cost reduction on performance of commercial State Corporations. The EMH is built on the rock-solid foundation of transactions costs analysis, which has proved to be a very accurate predictor of firm behavior. Electronic Market Hypothesis (EMH) predicts that by reducing coordination cost, Information technology will shift the organization from hierarchical to market based form of economic activity (Malone, Yates and Benjamin, 1987). EMH predicts IT transformation will occur in stages from hierarchies to biased electronic market and from biased markets to unbiased electronic market. This transformation has taken place over time and organizations have shifted from brick markets to mortar markets or internet based procurement and Business-to-Business (B2B) electronic markets (Granados at el, 2006). Internet based procurement are open systems that allows firms to transact with suppliers and customers in virtual markets without investments in dedicated systems. According to a recent report, the total value of goods and services sold and bought via B2B electronic markets had reached \$2.7 trillion by year 2004, representing some 27% of the overall B2B market and at least 3% of global sales transactions (Gartner Group, 2006). This growth was slated to occur in the context of global market for B2B transactions worth \$953 billion, growing to about \$7.29 trillion by 2004 (Gartner Group, 2006.

Resource-Based Theory

This theory supports the objective on the influence of inventory level optimization on performance of commercial State Corporations. The quest for Information Technology has long been a central tenet of the field of procurement and supply chain management (Pressutti, 2013). Within this field, resource-based theory (RBT) has emerged as a promising new framework for analysing the sources and sustainability of Information Technology (Baily, 2008)). According to RBT, Information Technology- measured as economic rent (Caridi *et al*, 2014) - 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, 2010). Further, RBT rests on the premises that resources controlled by firms are heterogeneous and relatively immobile (Pearcy & Guinipero, 2015. The imperfect mobility of resources (including inimitability and nonsubstitutability) is due to a variety of isolation mechanisms (Roth, 2011) which include cospecialization of assets (Teo & Benbasat, 2013).

Innovation Diffusion Theory

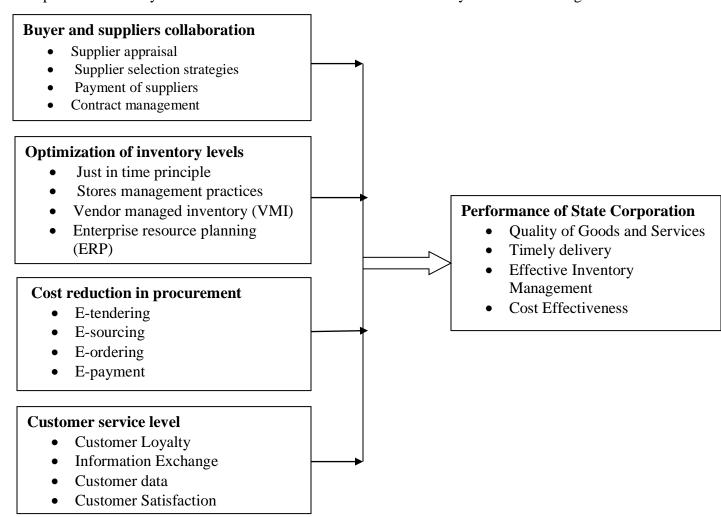
This theory supports the objective the influence of customer service level on performance of commercial State Corporations. The Innovation diffusion theory (Rodgers, 1995) is a model grounded in business study. Since 1940's the social scientists coined the terms diffusion and diffusion theory (Dean, 2004). This theory provides a framework with which it can make predictions for the time period that is necessary for a technology to be accepted. Theories are the characteristics of the new technology, the communication networks and customer's expectation. Innovation diffusion can be seen as a set of four basic elements: the innovation, the time, the

communication process and the social system. As the adoption of e- Procurement as an innovation generates uncertainty, the procurement organization must be aware of the relative

advantage and risk of implementing such innovation on customer service.

Conceptual Framework

Conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study (Mugenda, 2003). According to Young (2014) a conceptual framework is a diagrammatic representation that shows the relationship between dependent variable and independent variables of a study. In the study, the conceptual framework will look at Influence of E-procurement on performance of state corporations in Kenya. The illustration of the variables for this study is as shown in figure 2.1.



Independent Variables

Dependent Variable

Figure 1: Conceptual framework

Research Gaps

Much research work has been done focusing on implication of ICT adoption in an organization performance. These researches outline cost efficiencies as the key implication of ICT adoption. Irungu (2012) did a research on "influence of E- Procurement on performance of aviation industry", Nedelko (2008) also did a research on "the role of E- Procurement in supply chain". All this research focuses on how E- Procurement affect various aspects in supply chain and therefore there's need for further research on how specific aspects of E- Procurement influence firms performance. This research therefore will go beyond looking at the effects of E-Procurement in organization performance and look at how aspects of buyer/supplier relationship, optimization of inventory level, procurement cost reduction and customer service influence performance of the firm.

Summary of the Literature Review

The concept of globalization has proved to be one of the key enabler of adoption of E-Procurement in organizations and specifically in procurement department. The use of E-Procurement enhance performance and is been used as a strategy to make organization remain competitive in rapidly changing environment. This chapter has been subdivided into five sections. Section one provide an introduction on what is contained in this chapter. Section two has analyzed the theories applicable to this study. It has looked at three key theories which include, transaction cost theory, electronic market hypothesis and diffusion of innovation theory. Section three looks at E- Procurement and its application in procurement outlining the literature review from other scholars. Section four provides the conceptual framework and discusses each aspect of E- Procurement. Section five provides critique of the literature review.

Research Methodology

The study adopted a descriptive survey design. The population in this study comprised all 119 state corporation as stated at state corporation Act, Chapter 446 of the Law of Kenya as at 9 October 2013. The focus was on departments which are directly involved in E-procurement activities, such as inventory management department, ICT department and finance department. A sampling frame is the source material or device from which a sample is drawn. According to orodho (2003) a sampling frame is a list of all those within population who can be sampled. The sample for this study was procurement managers in 110 commercial state cooperation in Kenya. (Directorate of state corporations, 2013). For the purpose of this research, the sample size was 110 commercial state cooperation which represented 100% of the total population and the respondent was one procurement staff according to (Ronan, 2010). The number of respondents was 110 employees. The study targeted the total population through census survey and therefore no sampling will be required. The study relied on primary data collected through administering a structured questionnaire comprising closed and open-ended questions, developed in line with the objectives of the study. The questionnaires was administered through drop and pick system. Ample time was allowed for the respondent to fill the questionnaire. The questionnaires was be pre-tested to establish the reliability and validity of the data collection instrument. The reliability of the questionnaire was measured statistically using Cronbach's Alpha. The process of data analysis involved several stages: the completed questionnaires will be edited for completeness and consistency, checked for errors and omissions and then coded. The collected data was entered into the statistical packages for social sciences for analysis. The data was analyzed using

descriptive analysis such as descriptive statistics, mean scores and standard deviations, frequencies distributions and percentages. The results was presented in form of table, pie charts, graphs and figures. In order to establish the influence of E-procurement on performance in Commercial state Corporation in Kenya, regression analysis was employed.

Results and Discussion

The research targeted 110 respondents to survey. All of them were supplied with questionnaires but 100 questionnaires administered were filled and returned. Therefore the response rate was 90.9%. A pilot study was undertaken to pre-test data collection instrument for validity and reliability. The researcher selected a pilot study of 6 individuals from the organizations to test the reliability of the research instruments. The experts were required to assess if the questionnaires helps in determining Influence of E-procurement on performance of commercial state corporations in Kenya. The reliability of the questionnaire that was measured statistically using Cronbach's Alpha. Internal consistency techniques were applied using Cronbach's Alpha. The study showed that alpha coefficient for the four items was above 0.739 suggesting that the items had relatively high internal consistency. It was also noted that a reliability coefficient of 0.70 or higher is considered acceptable in most social research situations. According to Mugenda & Mugenda, (2003) coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability. The findings show that there is a moderate correlation among the items. These findings clearly show that the research instrument used in the study was reliable.

Table 1: Reliability Coefficients

Scale	Cronbach's Alpha	No. of Items	Comments
Buyer/supplier collaboration	0.79	7	Accepted
Inventory level optimization	0.80	7	Accepted
Procurement cost reduction	0.82	8	Accepted
Customer service level	0.77	8	Accepted

Model Summary

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable. The four independent variables that were studied, explain 90.9% of the performance of commercial State Corporation in Kenya as represented by adjusted R square. This therefore means that other variables not studied in this research contribute 9.1 % of the influence performance of commercial State Corporations in Kenya. Therefore, further research should be conducted to investigate the other variables and factors (9.1%) that influence performance of commercial State Corporation in Kenya.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.967ª	.915	.909	.5699

Table 2, shows the regression and residual (Error) Sum of squares. The variance of the residuals (or errors) is the value of the mean square which is 1008.96. As can be observed in table 2, the predictors X1-X4 represent the independent variables, which are the factors influence performance of commercial State Corporation in Kenya. Table 2 also provides the data to compute R2. this is sum of squares-regression divided by sum of squares total R squared. SS-regression/SS-total 4035.871 /4=1008.96. Table 2 reports that the summary of ANOVA and F-statistic which reveals the value of F (1.305) is significant at 0.05 confidence level. The value of F is large enough to conclude that the set independent variables X1-X4 are the factors enhancing

Table 3: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4035.871	4	1008.96	1.305	0.05
Residual	414.535	110	2.229		
Total	4450.406	113			

performance of commercial State Corporation in Kenya.

Regression Coefficient

The possible value of Y when all independent variables are equal to zero is 6.072. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in buyer/supplier collaboration will lead to a 0.362 increase in Performance of Commercial State Corporation; this means that there is a significant relationship between buyer/supplier collaboration and Performance of Commercial State Corporation. The *P*-value was 0.01 and thus the relationship was significant. A unit increase in Inventory level optimization will lead to a 0.423 increase in Performance of Commercial State Corporation; this means there is a significant relationship between Inventory level optimization and Performance of Commercial State Corporation. The *P*-value was 0.00 and thus the relationship was significant.

A unit increase in Procurement cost reduction will lead to a 0.271 increase in Performance of Commercial State Corporation; this means that there is a significant relationship between Procurement cost reduction and Performance of Commercial State Corporation. The *P*-value was 0.04 and thus the relationship was significant. Lastly, a unit of Customer service level to change will lead to a 0.123 increase in Performance of Commercial State Corporation; this means there is a significant relationship between Customer service level and Performance of Commercial State Corporation. The *P*-value was 0.02 and thus the relationship was significant.

In this infers the inventory level optimization influences the Performance of Commercial State Corporation most followed by buyer/supplier collaboration, Procurement cost reduction and finally Customer service level. The researcher conducted a multiple linear regression analysis so as to determine the relationship between the Performance of Commercial State Corporation and the four independent variables. The regression model was; $\mathbf{Y} = \mathbf{\beta_0} + \mathbf{\beta_1} \mathbf{X_1} + \mathbf{\beta_2} \mathbf{X_2} + \mathbf{\beta_3} \mathbf{X_3} + \mathbf{\beta_4} \mathbf{X_4} + \mathbf{\Sigma}$ Whereby: $\mathbf{\beta_0}$ is the regression intercept; $\mathbf{\beta_1}$ - $\mathbf{\beta_4}$ is the regression coefficients; \mathbf{Y} is the dependent variable (Performance of Commercial State Corporation); $\mathbf{X_1}$ is the inventory level optimization; $\mathbf{X_2}$ buyer/supplier collaboration; $\mathbf{X_3}$ is Procurement cost reduction and $\mathbf{X_4}$ is and

Customer service level. As per the SPSS generated coefficient table 4.8, the equation (Y = β 0 + β 1X1 + β 2X2 + β 3X3 + β 4X4 + ϵ) becomes: Y= 0.423X1+ 0.362X2+ 0.271 X3+ 0.123 X4 +6.072

Table 4: Regression Coefficient

Model	Unstandardized Coefficients		Standardized T Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	6.072	3.061		1.652	.106
Buyer/supplier collaboration	0.362	0.073	0.204	2.221	0.01
Inventory level optimization	0.423	0.079	0.623	5.344	0.00
Procurement cost reduction	0.271	0.058	0.375	3.063	0.03
Customer service level	0.123	0.039	0.472	5.328	0.02

Conclusion

From the findings the study concludes that procurement cost reduction strategy has a direct relationship with e-procurement and finally improving the procurement performance of state corporations in Kenya. Supplier management, pooling of purchase requisitions and procurement-oriented product development are tasks that are typically assigned to strategic procurement. The findings in addition revealed that inventory level optimization. Buyer/supplier collaboration strategy has positive relationship with procurement performance in State Corporation. The findings emphasize that continuous inventory replenishment policy takes a regular order.

Finally, the study concludes that the finding also emphasized that the advent of electronic procurement have been viewed as athe key stone of supply chain collaboration. Moreover, it has been repeatedly reported that electronic procurement is an important enabler for information sharing, however, its impact on complex collaborative practices including joint decision making and incentive alignment has not been established yet.

Recommendations

This study is a milestone for future research in this area, particularly in Kenya. Future research will need to be carried in other industries and countries in order to show if the link between e-procurement and procurement performance can be generalized.

On procurement cost reduction methods, E-sourcing does more than establish an electronic venue for buyers and sellers to meet. The study recommends state corporations to adopt alternative integrated procurement cost reduction strategies to supersede the traditional cost approach with the associated problems of uneven working relationship between parties in the supply chain. On buyer/supplies collaboration, since the study have found that buyer and suppliers collaboration enhances Supplier relationship competencies and channel relationships at commercial State Corporations, the study recommends that the firms to introduce E-procurement systems, for it shall empowers the organization on strengthening its supplier relations and it is easy to use.

On inventory level optimization, the study recommends the management to use economic order quantity on purchases for it shall enhance procurement performance. Further the study recommends that the firms to practice inventory optimization strategy so as to maintain the right order levels. On Customer service level, suppliers delivering the correct quantity and quality of product on time enhances high customer service level hence performance of commercial State. The study recommends firms to adopt Enterprise resources planning (ERP) systems for it shall integrate and co-ordinate the various internal functional hence serving the customers better.

References

- Al-Debei, M. (2012) Implementations of ICT Innovations: A Comparative Analysis in terms of Challenges between Developed and Developing Countries, International Journal of Information, Business and Management 4(1) pp 224-252
- CIPS Australia (2005), "How do we measure up? An Introduction to Performance Measurement of the Procurement Profession", Retrieved July 17, 2008, from Chartered Institute of Purchasing and Supply.
- Government of Kenya (2004), Status of the economy, Government press, Nairobi.
- Irungu, I. (2012) "Influence of information and communication technology on performance of aviation industry" unpublished Masters Research project, university of Nairobi.
- Kaul, M. and Odedra, M., (2011). "Government initiatives in information technology application: A Commonwealth perspective". Report on the Information Technology Policy Workshop 12-16 November 2000. Marlborough House, Pall Mall, London, UK: Commonwealth Secretariat, pp. 33-47
- King'ori M. (2013), "The effect of e-procurement on supply chain management" unpublished masters research project, university of Nairobi.
- Makau, J. K. (2014). "Challenges facing adoption of electronic procurement in public sector in Kenya: A case of Nairobi Water and Sewerage Company". International Journal of Social Sciences and Entrepreneurship, 1 (11), 267-286.
- Mugenda, O.M & Mugenda, A.G (2003), Research Methods, Quantitative and Qualitative Approaches, Acts Press, Nairobi.
- Mwai, P. (2013), "Information and communication technology and service delivery in Kenya power", unpublished masters research project, university of Nairobi.
- Nelpselski, D.(2012) "impact of E-procurement on the number of suppliers" Discussion, Germaninstitute of economic research, Berlin.
- Ngugi, J., Mugo, H. (2012), "Internal factors affecting procurement process of supplies in the public sector" 5th international public procurement conference, USA, pp 2313-2343
- Noor I., Guyo, W. & Amuhaya, I. (2013), "Factors Affecting Implementation of E-Procurement Practices in Public Service in Kenya", International Journal of Science and Research pp 307-312.
- Public Procurement Oversight Authority (2007), Assessment of procurement system in kenya, Nairobi. PPOA.
- Nedelko,Z.(2015) "The role of information and communication technology in supply chain" journal on Logistics & Sustainable Transport 1(3)
- Nelpselski, D.(2006) "impact of E-procurement on the number of suppliers" Discussion , Germaninstitute of economic research, Berlin.

- NePP (2004), *Delivery of e-procurement: guidance*. Available http://www.nepp.org.uk/80256d890046730A
- Ngugi, J., Mugo, H. (2012), "Internal factors affecting procurement process of supplies in the public sector" 5th international public procurement conference, USA, pp 2313-2343
- Njiraini, P., Moyi E., (2010), "Supporting MSEs to Access Public Procurement Market in Kenya," DP/65/2006, KIPPRA, Nairobi
- Njoroge . K. K. (2010) "Factors Influencing E-Procurement Practices in Construction Industry in Kenya". Jomo Kenyatta University of Agriculture and Technology
- Nograšek, J.(2012), Change Management as a Critical Success Factor in e-Government Implementation, University of Ljubljana, Faculty of Administration, Institute for Informatization of Administration, Gosarjeva 5, 1000 Ljubljana, Slovenia
- Noor I., Guyo, W. & Amuhaya, I. (2013), "Factors Affecting Implementation of E-Procurement Practices in Public Service in Kenya", International Journal of Science and Research pp 307-312.
- Nyandimo, J.A. (2011), "ICT and Public Procurement in Kenya", Unpublished MBA thesis, University of Nairobi.
- Oginda, E. (2013), "Challenges of implementing procurement strategy at the kenya power and lighting company limited" unpublished masters research project, university of Nairobi.
- Panda, P., Sahu, J. & Gupta, P. (2010), "promoting transparency and efficiency in public procurement: E-procurement initiative by government of India" 7th international conference on E-governance, India Institute of management, Bangalore, pp22-24
- Parida, U., Parida V., (2005), "*E-procurement: An Indian and Swedish Perspective*", Master's Thesis, Luleä University of Technology.
- Public Procurement Oversight Authority (2007), Assessment of procurement system in kenya, Nairobi. PPOA.
- Public Procurement Oversight Authority (2009), Corruption prevention guideline in public procurement, Nairobi, PPOA.
- Sacheva, S. (2009). *Change Management for e-Governance*. I-Ways Journal of E-Government Policy and Regulation 32, IOS Press, 109-117.
- Smith, A. (2004), "E-procurement and automatic identification: enhancing supply chain management in the health industry" international journal of electronic health 1(2) pp176-198
- Srinivasan, S. S., Anderson, R., and Ponnavolu, K. (2002), "Customer Loyalty in E-commerce: An Exploration of its Antecedents and Consequences", Journal of Retailing, 27: 279-295.
- United Nations Conference on Trade and Development (2013), *Promoting local it sector development through public procurement*, UNCTAD, United Nations, Geneva.
- Vasiliauskiene, L. &Snieska,v. (2009) "impact of transaction cost on outsourcing contract" economics and management journal pp1018-1025.
- Veit, J. D., (2011), "E-Procurement Adoption at the Municipal Level: Influence of Organizational, Technological and Environmental Factors", available online http://www.researchgate.net/publication/221182652
- Venkatesh, V. and Bala, H. (2008). "Technology Acceptance Model 3 and Research Agenda on Interventions", Decision Science, 39 (2), pp 273-312.
- Wakoli, P. (2012), "The influence of improved ICT on procurement service delivery among state corporation", University of Nairobi, MBA research project.