

# FACTORS AFFECTING PERFORMANCE OF PUBLIC PROCUREMENT FUNCTION AT THE KENYA NATIONAL LIBRARY SERVICES

<sup>1</sup>Isiaho Veronica Khagoitsi, <sup>2</sup>Prof Mike Iravo

<sup>1</sup>Student in Msc in Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology, Kenya

<sup>2</sup>Senior Lecturer of Jomo Kenyatta University of Agriculture and Technology, School of Entrepreneurship,  
Procurement and Management, P.O Box 62000-00200 Nairobi, Kenya

---

**Abstract:** The Public Procurement system in Kenya has grown from a rudimentary stage during the colonial and post-colonial period to a vibrant regulated system that compares well with the international standards. State corporations play a major role in the development of the country through provision of public services and have become a strong entity in Kenya and very useful engines to promoting development. This study therefore sought to establish the factors that affect public procurement on the procurement performance of state corporations in Kenya a case study of Kenya National Library Services and it evaluated how supplier management, contract management, information communication technology and procurement policy affected public procurement on the procurement performance of State Corporations in Kenya. The theoretical review consisted of theories such as benchmarking model, agency and transactional cost economic theory, technology, organization and environment model and linear policy model. The study adopted a descriptive research design. The target population was 369 which consisted of a sample frame of the top, middle and operational level staff working at Kenya National Library Services. The study used stratified sampling where proportionate sampling was used to determine the specific sample size of each strata. Data collection instrument were structured questionnaire which was used to collect primary data. Journals, books and e-resources were used to obtain secondary data. Data analysis was done using SPSS version 21 and Excel 2013. The data was classified, tabulated, summarized then presented in tables, percentages, bar and pie charts. Multivariate regression analysis was employed to know the relationship between the dependent and the independent variables. Multivariate regression results have shown that four predictors can explain 65.6% of change in performance namely: supplier management, contract management, information communication technology and procurement policy. Following the results of the study, it is worthwhile to conclude that is a positive relationship between factors affecting public procurement and procurement performance. Through supplier management, contract management, ICT and procurement policy, Kenya National Library Services has been able to achieve better procurement performance. It is therefore clear that factors affecting public procurement in state corporations and other public sector institutions can be controlled to achieve improved procurement performance than the one forecasted to achieve

**Keywords:** Factors, Public Procurement, Kenya National Library.

---

## 1. INTRODUCTION

### Background of the Study:

Public procurement in Kenya has gone through a lot of reforms since independence. In 1959, the Supplies and Transport departments existed in government under the Ministry of Works. The Market Research, Inspection of Materials and Central Tender Board (CTB) were later established. The Central Tender Board was responsible for procurement and

tender award. Due to reforms involved the movement of the Central Tender Board within the government system. After independence, the public procurement was managed by Crown agents due to lack of capacity in the local market. In 1978, the East African Community developed procurement guidelines under the East African Supplies Manual. This document replaced the function of the Crown agents and it was used for all procurement in the Republic.

However, even with such clear procurement law, public procurement process is still shrouded by secrecy, inefficiency, corruption and undercutting (Onsongo et al, 2012). Clearly, there are some factors underlying procurement practice that still make it possible for practitioners to perpetrate these evils, which have an impact on procurement performance in many government organizations including Public Schools.

### **Profile of Kenya National Library Services:**

The Kenya National Library Service (KNLS) is a corporate body of the Kenyan government with a mandate to "promote, establish, equip, manage, maintain and develop libraries in Kenya". It was established in 1965 by an Act of Parliament of the Laws of Kenya to provide library and information services to the Kenyan public. In its service provision, KNLS plays a dual role of public library and National library of Kenya. The public library services are available in their 61 branches throughout Kenya, while the national library services are available at the headquarters in Nairobi. National library services in Kenya are offered by Kenya National Library Service through the National Library Division (NLD). It serves as the repository for legal deposits in accordance with the Books and Newspapers Act of the laws of Kenya which enforces the preservation of books, magazines, and other publications produced in the country. The Legal Deposit Act mandates all publishers to deposit two copies of their publications to the Director of Kenya National Library Service.

The National Library Division of the Library Service is charged with annually publishing the Kenya National Bibliography which contains a list of bibliographic resources, print or audio-visual acquired as legal deposit. The bibliography was first proposed in 1975. The bibliography was last published in 2010.

The National Library Division is also the sole issuer of International Standard Book Numbers and International Standard Music Numbers (ISMN) for print music. The NLD subscribes to thousands of e-journals, e-books and other e-resource sites and has a stock of specialized collection of government publications dating back to 1980. In addition it also acts as a data information centre for the World Bank.

This study intended to make an in-depth assessment of factors affecting public procurement so as to improve procurement performance. There is growing demand from taxpayers for service higher levels.

The study identified ways for enhanced procurement system which, if implemented, can contribute to socio-economic benefits for the Kenya National Library Services, public procurement, and Government.

It is expected that from the findings of this study, KNLS could put in place appropriate measures to improve procurement performance levels. The government could benefit from enhanced value for money due to improved revenue collection which could be used to finance other sectors of the economy. This study could form a basis of reference for what needs to be researched further and throw light to the need for future research in procurement. Its recommendations could enable the public at large to benefit through responsive service delivery, if implemented.

## **2. LITERATURE REVIEW**

### **Benchmarking Model:**

According to Praxion Research group limited (2010), they stated that benchmarking is an approach that is used for best practices. Some of these practices include strategies, policies, operations, processes, products and organizational structures. On the other hand, Have et al (2009) described benchmarking as a systematic comparison of organizational processes and performance in order to improve processes and/or create new standards. The four basic types of benchmarking are: Internal- within the organization. For instance, between business units, competitive- benchmarking operations and performance with direct competitors, functional- benchmarking similar processes within the broader range of the industry, and generic- comparing operations between unrelated industries. Benchmarking involves various steps; determining the scope, choosing the benchmark partners, determining measures, units, indicators and data collection methods, collecting data, analyzing the discrepancies, presenting the analysis and discussing implications in terms of new goals, making an action plan and/or procedures, and monitoring progress in ongoing benchmark. The benchmarking process involves various parameters as depicted below (Berenschot 2009).

According to Berenschot (2009), benchmarking is not easy. In that, if it is carried out by managers who are not committed, without proper tools for analysis and presentation and without predetermining measures, it ends up in dismay. Berenschot, further comments that if there is well-execution, benchmarking can trigger the need for highlighting new opportunities, improvement and solutions to problems. Benchmarking model, therefore, underscores the importance of having highly competent and substantive managers who are committed to the process.

This model provide proper guide to organizations on how to use best practices that will help to effectively implement the supplier management practices.

Through benchmarking with other institutions, State Corporations can be able to employ better and effective supplier selection strategies, supplier selection process, supplier appraisal strategies, supplier performance strategies, supplier relationship management strategies and payment methods which will enable organizations acquire after sale services from suppliers. These also, may have a significant positive effect towards strengthening supplier management practices in the organizations which will lead to creation of favourable environment for better performance in State Corporations. The study thus used the benchmarking model to establish the effect of supplier management affects public procurement on the procurement performance of State Corporations in Kenya.

#### **Agency and Transaction Cost Economics:**

Agency theory is concerned with agency relationships. Two parties have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Rungtusanatham et al., 2007). According to Kaplan Financial Limited (2012), agency theory and transaction cost economics theory essentially addresses the same problems and issues. Where, agency theory focuses on the individual agent while the transaction cost economic theory focuses on the individual transaction. Agency theory tend to look at the tendency of the company directors to act in their own best interests. Transaction cost economic theory on the other hand considers the directors (or managers) may arrange transactions in an opportunistic way. The corporate governance issue or problem surrounding the transaction cost theory is, however, not the protection of ownership rights of shareholders, but rather the effective and efficient accomplishment of transactions by firms as seen in contract management.

The important assumptions underlying agency theory are that: Potential goal conflicts exist between principals and agents. Whereby, each party acts in its own self-interest; existence of information between principals and agents is asymmetry frequently; agents are more risk antagonistic than the principal and efficiency is the effectiveness criterion (Ekanayake, 2004; Rungtusanatham et al., 2007). The two probable problems stemming from these assumptions that may arise in agency relationships include a risk-sharing problem and an agency problem. An agency problem seem to appear when agents' objectives differ from the principals' goal and it is difficult to verify whether agents have aptly performed the delegated work. (Rungtusanatham et al., 2007).

In order to resolve risk-sharing and agency problems in the principal-agent relationships, the agency theory prescribes two ideal types of management mechanisms that will govern these relationships (Rungtusanatham et al., 2007). The first one is the outcome-based management mechanism. With this kind of mechanism, both agents and principals can observe outcomes, and the principals reward agents based on measured performance outcomes (Ekanayake, 2004). The outcome-based management mechanism emphasizes results regardless of how the agents had achieved them. The second management mechanism is behaviour-based. When this mechanism is put to play, principals can use behaviour controls to monitor agents' efforts and behaviours which otherwise are unknown to the principals. The later (behaviour-based management mechanism) emphasizes activities and tasks in agents' processes that lead to the outcomes of the agents (Ekanayake, 2004). Understanding the agency and transaction cost economic theory will help in managing contracts well.

#### **Technology, Organization and Environmental Model:**

The TOE framework was developed in 1990 by Tornatzky and Fleischer. It identifies three aspects of an entrepreneurial context that influences the process by which it adopts and implements a technological innovation: technological context, organizational context, and environmental context. Technological context describes both the internal and external technologies relevant to the firm. This includes current practices and equipment internal to the firm, as well as the set of available technologies external to the firm. Organizational context refers to descriptive measures about the organization such as scope, size, and managerial structure. Environmental context is the arena in which a firm conducts its business, its industry, competitors, and dealings with the government (Tiago & Maria 2010).

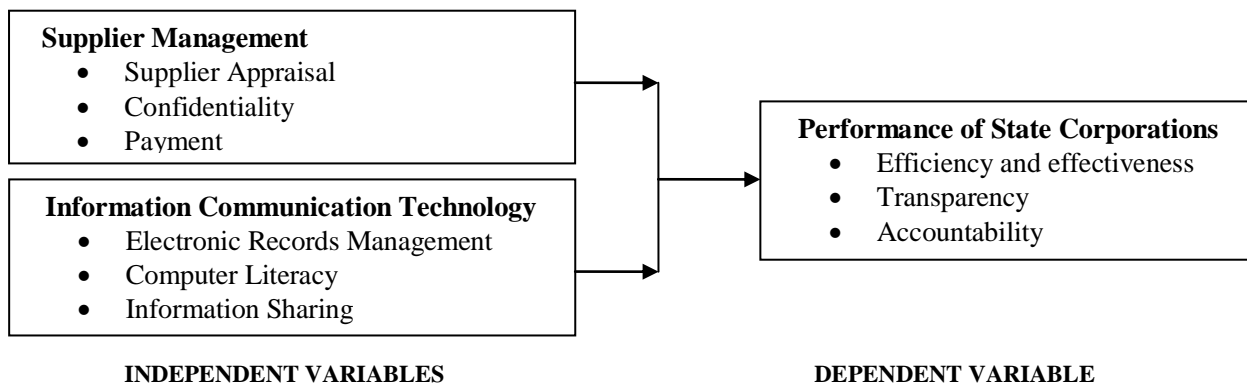
The TOE framework as originally presented, and later adapted in IT adoption studies, provides a useful analytical framework that can be used for studying the adoption and assimilation of different types of IT innovation. The TOE framework has a solid theoretical basis, consistent empirical support and the potential of application to IS innovation domains, though specific factors identified within the three contexts may vary across different studies (Tiago and Maria 2010). The use of ICT based procurement systems in public institutions is influenced by technological innovation: technological context, organizational context and environmental context. All these contexts determines the level of Computer literacy in the institutions, level of automation, type of procurement systems to be used in the institutions, nature of the ICT infrastructure and how e-procurement is employed in the institution. The study thus used this theory to assess the effect of information communication technology on procurement performance of state corporations in Kenya.

**Linear Policy Model:**

This model was developed by Grindle & Thomas (2000) and is also known as rational model. This model is the most widely-held view regarding the way in which policy is made. It outlines policy-making as a problem solving process which is rational, balanced, objective and analytical. In the model, decisions are made in a series of chronological phases, starting with the identification of a problem or issue, and ending with a set of activities to solve or deal with it. The policy model phases include; recognizing and defining the nature of the issue to be dealt with; identifying possible courses of action to deal with the issue; weighing the advantages and disadvantages of each of these alternatives; choosing the option which offers the best solution; implementing the policy and possibly evaluating the outcome (Grindle & Thomas, 2000).

This model assumes that policymakers approach the issues rationally, going through each logical stage of the process, and carefully considering all relevant information. If policies do not achieve what they are intended to achieve, blame is often not laid on the policy itself, but rather on political or managerial failure in implementing it (Juma & Clarke, 2005). Failure can be blamed on a lack of political will, poor management or shortage of resources that eventually hinders formulation and effective implementation of procurement practices (Juma & Clarke, 2005). Linear Policy Model determines the process under which policies are made and implemented in an organization. The model assumes that failure in policy implementation can be blamed to poor management and shortage of resources and this implies that management support and budgetary allocation plays a key role in supporting policy implementation. Implementation of procurement policies is greatly determined by procurement planning, management support, budgetary allocation, and preparation of procurement progress reports, procurement records management and the employed procurement methods. The study thus used this model to determine the effect of procurement policies on the procurement performance in State Corporations in Kenya.

**Conceptual Framework:**



**3. RESEARCH FINDINGS AND DISCUSSIONS**

**Introduction:**

This chapter focuses on the analysis of the data collected and the interpretation of the findings made in the study. The findings were arranged as per the objectives of the study. The purpose of this study was to examine the factors affecting public procurement on the procurement performance of State Corporations in Kenya a case of Kenya National Library Services. The specific objectives of the study were; to determine how supplier management affect public procurement on the procurement performance of State Corporations in Kenya; to find out whether contract management affect public procurement on the procurement performance of State Corporations in Kenya; to assess how information communication technology affect public procurement on the procurement performance of State Corporations in Kenya; establish whether procurement policy implementation affect public procurement on the performance of State Corporations in Kenya. The research findings were presented in pie and bar charts and also in form of tables.

**Response rate:**

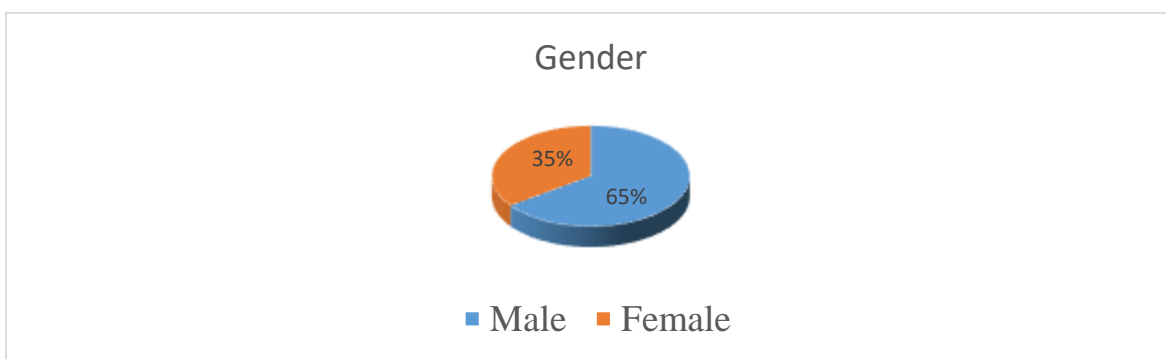
The sample size of the study was 192 respondents. 192 questionnaires were issued for filling. Out of these 140 questionnaires which had been fully completed were received by the researcher. This represented a response rate of 73%. According to Mugenda and Mugenda (2003), a response rate that is 50% is adequate to be used in research, 60% is good and above 70% is very good. Since the response rate of this study was 73% the research found it very good and proceeded to making interpretations and conclusions.

**General information:**

The researcher wanted to find out the gender, age, level of education, years of service and the department of service of the respondents. The results were as shown below.

**Gender of respondents:**

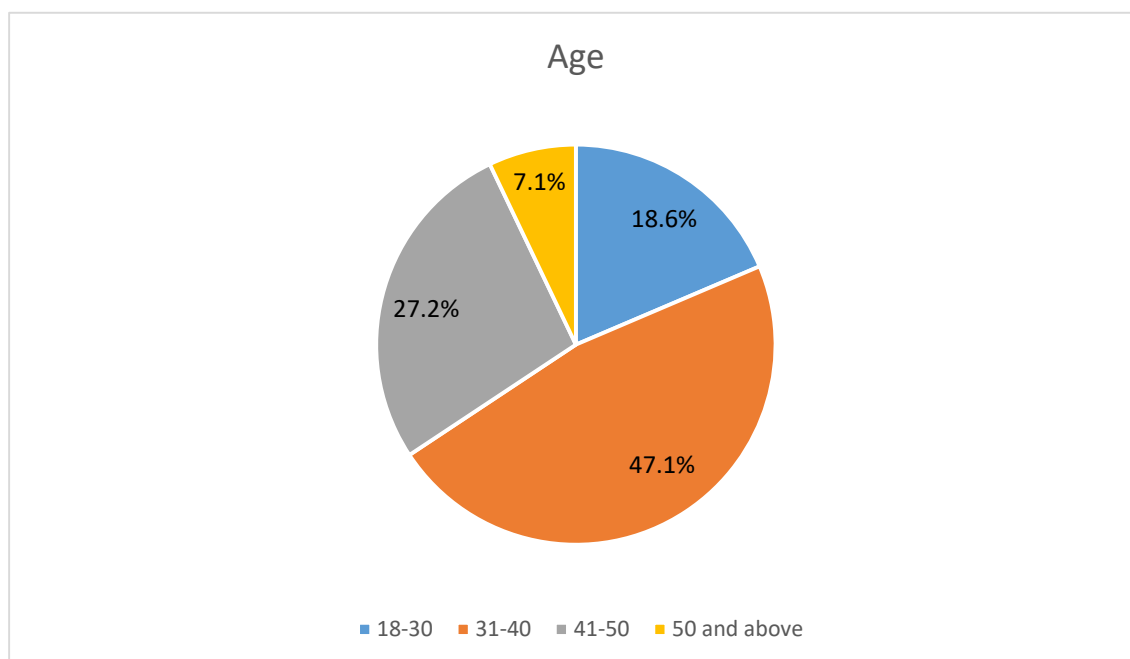
The respondents were required to indicate their gender. From the findings according to figure 3.1, majority of the respondents were male with a response rate of 65% while the female had a response rate of 35%.



Gender of respondents

**Age**

The researcher wanted to find out the age bracket of the respondents to this study. According to figure 3.2, the study found out that majority of the respondents were at the age bracket of 31-40 with a response rate of 47.1% while 27.2% of the respondents indicated that they were of the age bracket 41-50. 18.6% and 7.1% indicated they were of the age 18-30 and 50 and above respectively.



Age

**Education level**

The respondents were requested to indicate their highest academic level. The findings are as shown in table below

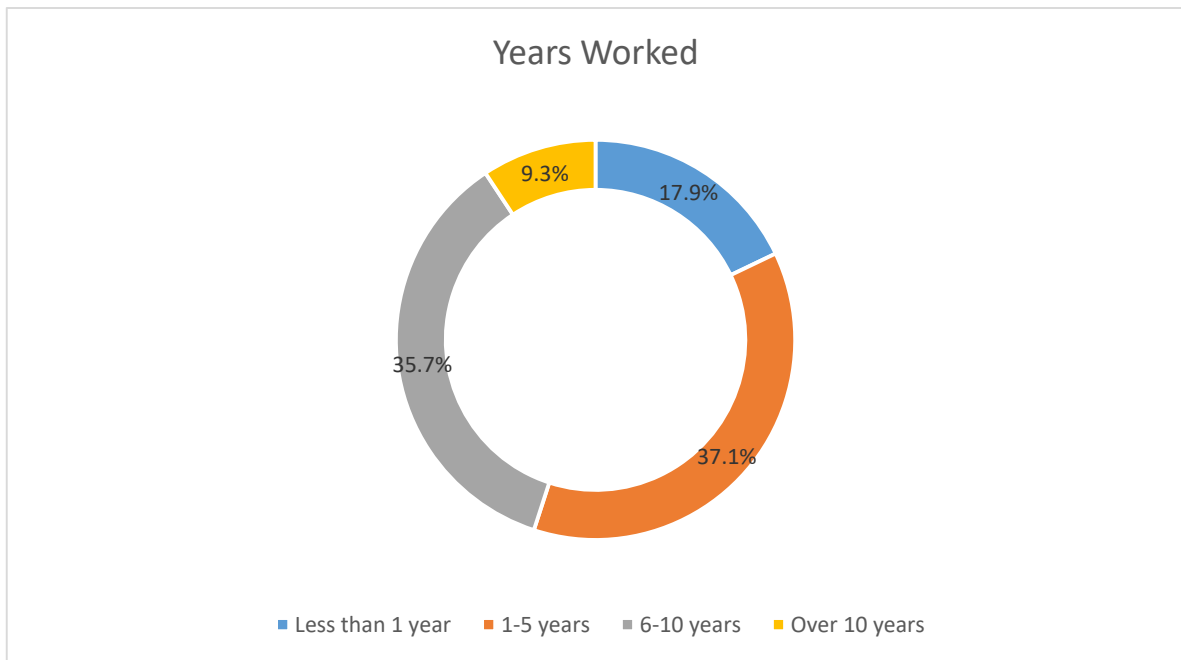
**Education Level:**

Response	Frequency	Percentage
Advance diploma	1	0.7
Diploma	51	36.4
Degree	77	55
Masters	8	5.8
Doctorate	3	2.1
<b>Total</b>	<b>140</b>	<b>100</b>

The study found out that majority (55%) of the respondents had a bachelors’ degree while 36.4% had a diploma. However few had a masters’ degree (5.1%), doctorate (2.1%) and 0.7% of the respondents had an advanced diploma according to table 3.1 above. It can therefore be concluded that more than half of the respondents had the understanding of procurement performance.

**Years Worked:**

The study sought to find out the number of years the respondents had worked in the organization. The results obtained were as shown below;



**Years Worked**

The study found out that those who had worked for 1-5 years were the majority having a representation of 37.1%. However there was a little margin with those who had worked for 6-10 years who had a representation of 35.7%. 17.9% had worked for less than a year while 9.3% had worked for over 10 years.

**Department of service:**

The respondents were asked to indicate the department they were working for in the organization. The results were as shown in table below;

**Table 3.2: Department of service**

Response	Frequency	Percentage
Human resources	13	9.3
Library services	51	36.4
Procurement	7	5
ICT	12	8.6
Research and development	5	3.6
Marketing	12	8.6
Project	8	5.7
Finance	13	9.3
Customer service	9	6.4
Security	10	7.1
Total	140	100

According to table above majority (36.4%) of the respondents were from library services. Each HR and finance had a representation of 9.3%, marketing and ICT had 8.6% representation each, 7.1% from security, 6.4% from customer service, 5.7% are working in project department. 5% in procurement and 3.6% in research and development.

**Supplier management:**

**Whether suppliers are often appraised:**

The respondents were asked whether the organization often appraise its suppliers. The responses were presented below;

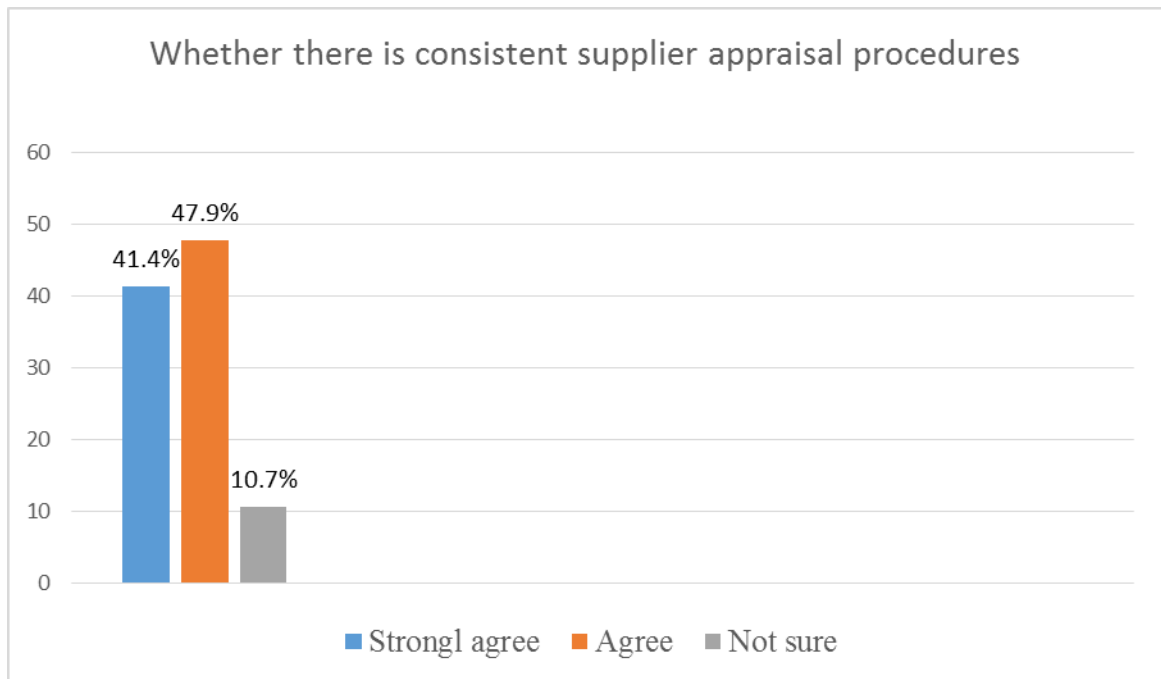


**Whether suppliers are often appraised**

From figure 3.4 above, majority (53.6%) of the respondents agreed that suppliers are often appraised. 46.4% strongly agreed that suppliers are often appraised.

**Whether there is consistency in supplier appraisal procedures:**

The researcher wanted to find out whether there is a consistent supplier appraisal procedures in the organization. The responses are as shown below.

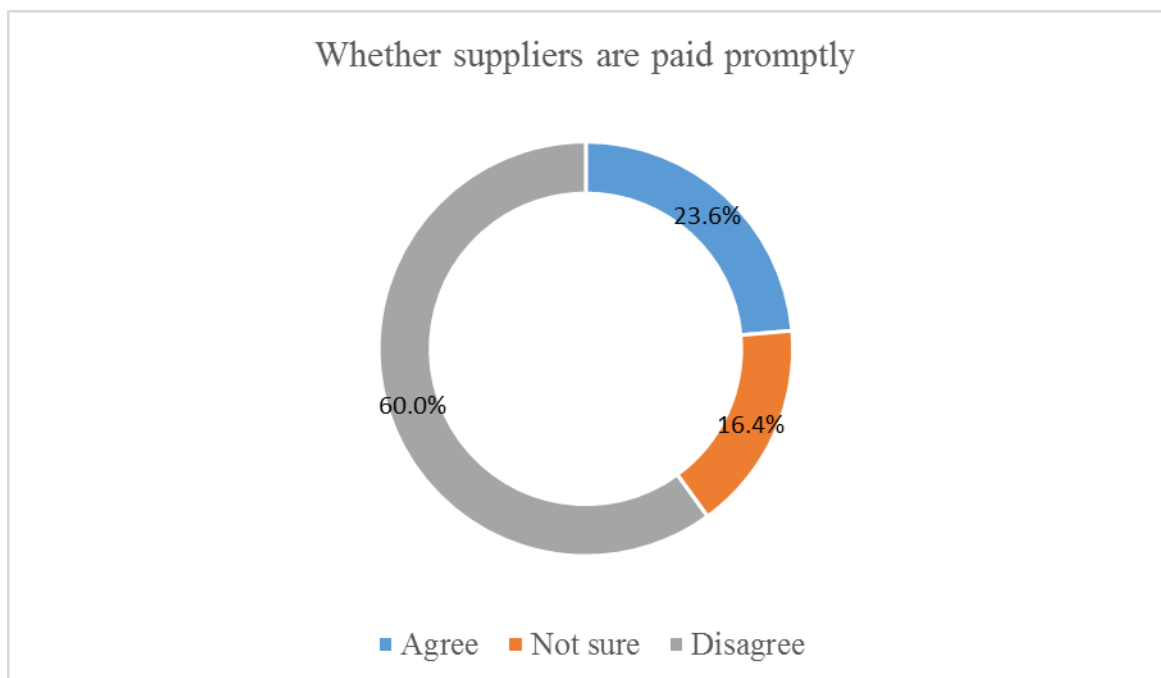


Whether there is consistency in supplier appraisal procedures

From above, majority (47.9%) of the respondents agreed that there is consistency in supplier appraisal procedures, 41.4% strongly agreed while 10.7% were not sure whether there is consistency in supplier appraisal procedures in the organization.

**Whether suppliers are paid promptly:**

In a scale of 1-5 where 1 is strongly agree, 2-agree, 3-not sure, 4-strongly disagree and 5 is disagree the respondents were asked to indicate whether the suppliers are paid promptly. The results are as shown below;



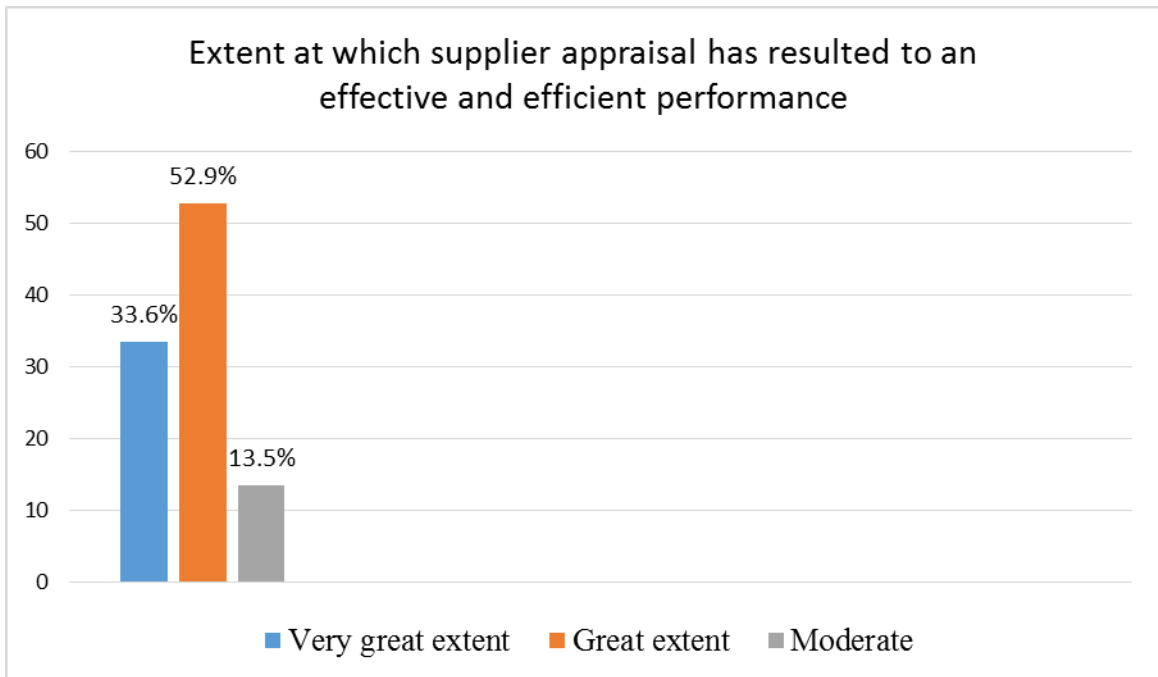
Whether suppliers are paid promptly

According to figure above it is clear that suppliers at KNLS are not paid on time. This was supported by 60% of the respondents who disagreed that suppliers are paid promptly. Other results indicates that 23.6% agreed that suppliers are paid promptly while 16.4% were not sure.



**Extent at which supplier appraisal has resulted to an effective and efficient performance:**

The research wanted to find out the extent at which supplier appraisal effective and efficient performance in the organization has been experienced. The study found out as shown below;

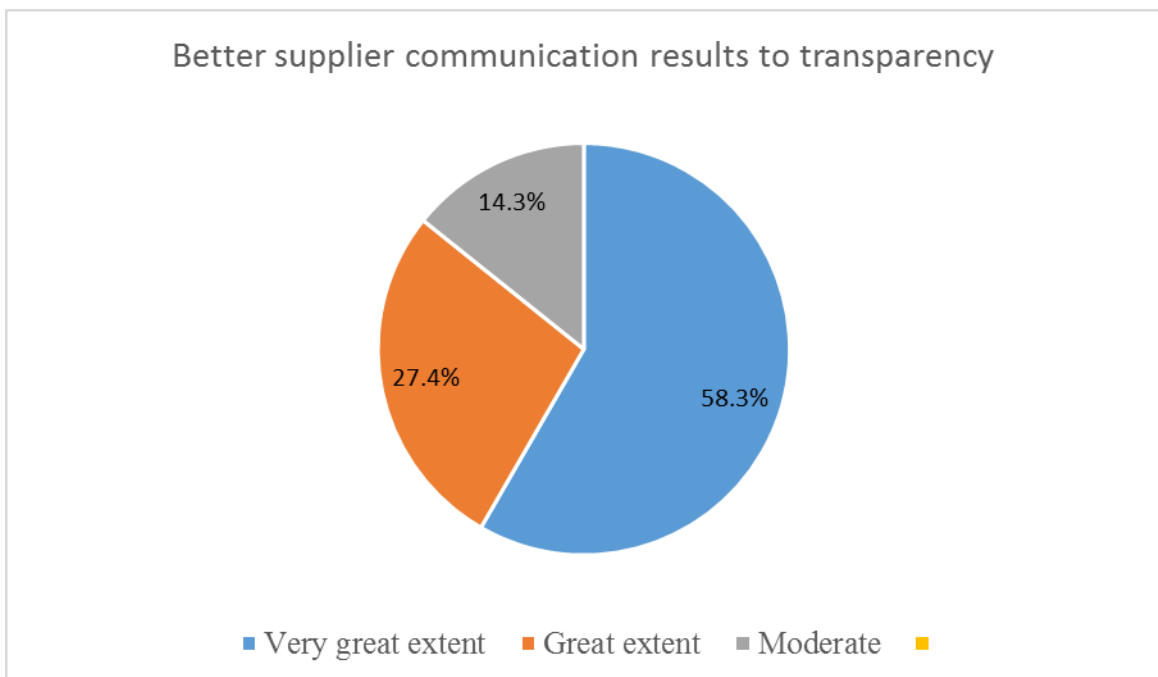


Extent at which supplier appraisal has resulted to an effective and efficient performance

According to the findings in figure 3.7 above majority (52.9%) of the respondents said that supplier appraisal has a great extent effect on performance, 33.6% said that supplier appraisal has a very great extent to performance while 13.5% said that it has a moderate effect on procurement performance.

**Effect of better supplier communication results to transparency:**

The researcher wanted to find out the extent at which better communication to suppliers results to transparency. The results were as shown below;



Effect of better supplier communication results to transparency

The study found out that majority (70%) of the respondents suggested that better communication had a very great extent to transparency, 32.9% said that it had a great effect on transparency while 1.4% said that it had a moderate effect on transparency.

**Prompt supplier payment has resulted to effectiveness in procurement performance:**

The researcher wanted to find out the extent at which prompt supplier payment has resulted to effective performance. Below shows the results of the findings;

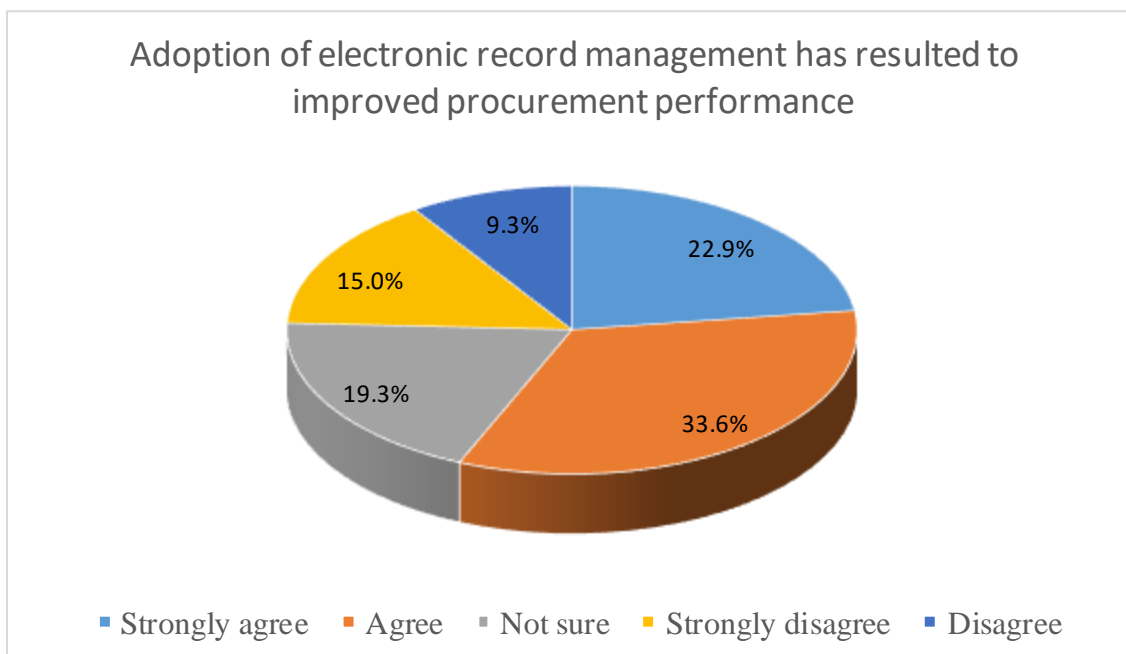
**ICT**

**Whether the organization has adopted ICT**

The researcher wanted to find out if the organization has adopted ICT in its performance. From the findings all (140) respondents indicated that the organization has adopted ICT, it can be concluded that the organization is digitalized.

**Adoption of electronic record management has resulted to improved procurement performance.**

In a scale of 1-5 where 1 is strongly agree, 2-agree, 3-not sure, 4-strongly disagree and 5 is disagree the respondents were asked to indicate if adoption of electronic record management has resulted to improved procurement performance. The results are as shown below;



**Adoption of electronic record management has resulted to improved procurement performance**

From figure above, 33.6% agreed that adoption of electronic record management system has resulted to improved procurement performance, 22.9% strongly agreed, 19.3% were not sure, 15% strongly disagreed while 9.3% disagreed.

**Having computer literate staff, performance has improved in your organization**

The respondents were asked if having computer literate staff has resulted to improved performance. The results as shown in table below indicated that majority (73.6%) strongly agreed that computer literate staff have resulted to improved performance while 26.4% agreed. It can be concluded that having computer literate staff results to improved performance.

**Having computer literate staff, performance has improved in your organization**

Response	Frequency	Percentage
Strongly agree	103	73.6
Agree	37	26.4
Total	140	100

**Better information sharing systems have improved communication between the organization and stake holders:**

The researcher wanted to find if having better information sharing systems in the organization has improved communication between the organization and stake holder. In a scale of 1-5 where 1 is strongly agree, 2-agree, 3-not sure, 4-strongly disagree and 5 is disagree the respondents were asked to indicate. The results are as shown in table below;

Better information sharing systems have improved communication between the organization and stake holders

Response	Frequency	Percentage
Strongly agree	65	46.4
Agree	54	38.6
Not sure	21	15
Total	140	100

From table above, the findings were that majority of the respondents, (46.4%), strongly agreed that better information sharing systems have improved procurement performance between the organization and the stakeholders, 38.6% agreed while 15% were not sure.

**Adoption of electronic records management in your organization has resulted to efficient and effective performance:**

The researcher sought to find whether adoption of electronic records management in the organization has resulted to efficient and effective performance. The results are as shown in table below;

Adoption of electronic record management in your organization has resulted to efficient and effective performance

Response	Frequency	Percentage
Very great extent	29	27.9
Great extent	58	41.4
Moderate	18	12.9
Little extent	15	10.7
Not at all	10	7.1
Total	140	100

From the findings in table above, 41.4% indicated that adoption of electronic records management has a great extent on efficiency and effectiveness on performance, 27.9% said that it has a very great extent, 12.9% indicated it has a moderate extent, 10.7% has a little extent on effectiveness and efficiency on performance while 7.1% indicated that it had no extent on the effectiveness and efficiency.

**Extent at which information sharing has improved transparency**

In a scale of 1-5 where where 1-very great extent, 2- great extent, 3-moderate extent, 4-little extent and 5- not at all the researcher wanted to find out the extent at which information sharing has improved performance. The results are as shown in table below;

Extent at which information sharing has improved transparency

Response	Frequency	Percentage
Very great extent	38	27.1
Great extent	67	47.9
Moderate extent	35	25
Total	140	100

The study found out that 47.9% indicated that information sharing has a great extent on transparency while 27.1% indicated that it had a very great extent and 25% indicated that it had a moderate extent as indicated in table 3.6 above.

**Computer literacy of staff has led to improved procurement performance:**

In a scale of 1-5 where where 1-very great extent, 2- great extent, 3-moderate extent, 4-little extent and 5- not at all the researcher wanted to find out the extent at which computer literate staff has led to improved procurement performance. The results are as shown in table 3.7 below;

**Computer literacy of staff has led to improved procurement performance**

Response	Frequency	Percentage
Very great extent	89	63.6
Great extent	51	36.4
Total	140	100

The study found out that 63.6% indicated that computer literate staff have a very great extent on improved performance and 36.4% suggested that computer literate staff have a great extent on improved procurement performance as shown in table 3.7 above. It can be concluded that computer literate staff results to improved procurement performance.

**4. SUMMARY, CONCLUSIONS AND RECCOMENDATIONS**

**Introduction:**

This chapter presents the discussion on key data findings, conclusion drawn from the findings highlighted and recommendations made there-to. The conclusions and recommendations drawn are focused on addressing the purpose of the study.

**Summary of Key Findings:**

**Supplier management:**

The majority (53.6%) of the respondents agreed that suppliers are often appraised. 46.4% strongly agreed that suppliers are often appraised while 47.9% of the respondents agreed that there is consistency in supplier appraisal procedures, 41.4% strongly agreed while 10.7% were not sure whether there is consistency in supplier appraisal procedures in the organization.

KNLS do not pay their suppliers promptly, however majority (52.9%) of the respondents said that supplier appraisal has a great extent effect on performance, and 33.6% said that supplier appraisal has a very great extent to performance while 13.5% said that it has a moderate effect on performance.

Supplier appraisal has a great extent on performance. This was supported by 52.9% of the respondents.

**ICT:**

The organization is fully digitalized and have employed computer literate staff which has led to improved performance. E-record management systems have resulted to an improvement in performance. Better information sharing systems have improved performance.

**Conclusion:**

From the study findings, it can be concluded that;

1. The organization due to the nature of activities such as lifting, walking and bending have adopted the traditional system of employing more males than females. However there is a slight improvement on bringing more females on board.
2. It is fully digitalized.

**Recommendation:**

Since supplier payment is a key issue when it comes to performance of an organization in terms of how available are the raw materials, it is also recommended that the organization work on supplier payment issues since the study found out that the suppliers are not paid on time.

**Suggestion for further studies:**

More studies recently have concentrated on the factors affecting procurement to lead to performance. However, a lot of findings have been made thus making this factors well known. Due to that, further studies should now concentrate on now the identified factors in relation to performance.

**REFERENCES**

- [1] Amayi, F. K. (2011). Factors Affecting Procurement in the Public Service: a Case Study of the State Law Office. Eldoret: Moi University.
- [2] Bartik L (2009). Supply chain management practices in public institutions. Procurement Journal. Vol 28
- [3] Batenburg, R., & Versendaal, J. (2006, January). Alignment Matters -Improving business functions using the procurement alignment framework, Utrecht.
- [4] Berenschot, W. J. (2009). Riot politics: communal violence and state-society mediation in Gujarat, India (Doctoral dissertation, Universiteit van Amsterdam
- [5] Bowersox, D. J., Closs, D. J., & Cooper, M. B. (2007). Supply Chain Logistics Management (2nd Ed.). New York: McGraw-Hill.
- [6] Browne, T. (2004), Transaction Costs and Contracting the Practitioners Perspective. Public Performance and Management Review. Vol. 28 No. 3, 326-351.
- [7] Brühlhart, M. (2009). An Account of Global Intra-industry Trade, 1962–2006. The World Economy, 32(3), 401-459.
- [8] Charles P (2007). Supply chain postponement and speculation strategies: how to choose the right strategy", Journal of Business Logistics, Vol. 21 No.2.
- [9] Chitkara, A. (2005). Performance of Masimo verses two other newer generation pulse oximeters (POs) for SpO2 and PR during motion and low perfusion in volunteers. Anesthesiology, 103, A879.
- [10] Chopra, S., Meindl P., & Dhamram V. K. (2007). Supply Chain Management: Strategy, Planning and Operation, (3rd Ed.). Noida: Pearson Pentice Hall.
- [11] Christopher, M. (2005). Logistics and Supply Chain Management: Strategies for Reducing Cost and Improving Service, (3rd Ed.). London: Prentice Hall.
- [12] Cohen, M. A., & Lee, H. L. (2008). Strategic analysis of integrated production-distribution systems: Models and methods. California: Informs.
- [13] Cooper, D.R., & Schindler, P.S. (2006) Business Research Method, (9th Edition) Boston: McGraw-Hill Irwin.
- [14] Evenett, S. J., & Hoekman, B. M. (2005). Government procurement: market access, transparency, and multilateral trade rules. European Journal of Political Economy, 21(1), 163-183.
- [15] Findlay, C. (2009), The case for procurement outsourcing. Journal of Procurement. Vol.33, No.7. pp. 144-146.
- [16] George,K.(2008). Procurement of technical works. Journal of Procurement. Vol.22, No.2. pp. 146-143.
- [17] Government of Kenya (2005). The Public Procurement and Disposal Act. Nairobi; Government Printers.
- [18] Government of Kenya (2015).The Public Procurement and Asset Disposals Act (2015).Nairobi; Government Printers.
- [19] Gordon J., & Murray N., (2009). Public Procurement Strategy for Accelerating the Economic Recovery, Supply Chain Management: An International Journal, Vol. 14 Iss: 6, pp.429 – 434.
- [20] Grimsey, D., & Lewis, M. K. (2004). The governance of contractual relationships in public-private partnerships. The Journal of Corporate Citizenship, (15), 91.
- [21] Grindle,M.& Thomas,T. (2000). Managing supplier relationships. Journal of Business Logistics. Vol. 28 No.1, pp.111- 35.

- [22] Handfield, R.B. (2001). Purchasing and supply chain management (2<sup>nd</sup> Ed). New Jersey: Pearson Publishers
- [23] Have, T. T., Colcher, A., Horn, S. S., Weintraub, D. Nazem, S., Siderowf, & A. D., Duda, J. E., (2009). Montreal cognitive assessment performance in patients with Parkinson's disease with "normal" global cognition according to mini-mental state examination score. *Journal of the American Geriatrics Society*, 57(2), 304-308.
- [24] Hotterbeekx, J.M.H (2013). Determining contract management professionalism within Rijkswaterstaat, Master thesis project, TUE. School of Industrial Engineering.
- [25] Hunja, R. (2011). Obstacles to public procurement reform in developing Countries. *Journal of supply chain Management*. Vol.35, No.9. pp. 149152.
- [26] Hrebiniak, L.G. (2006). "Obstacles to Effective Strategy Implementation". *Organizational Dynamics*, 35, 12-31.
- [27] Kirungu K.H. (Dec 2002). An Investigation of Possible Constraints to Efficient Management of the Supply Chain in Government Hospitals. A Case Study for Kenyatta National Hospital. Mombasa: Government Training Institute.
- [28] Lardenoije, E. J., Van Raaij, E. M., & Van Weele, A. J. (2005). Performance Management Models and Purchasing: Relevance Still Lost. *Researches in Purchasing and Supply Management*, the 14th IPSERA Conference, (pp. 687-97). Archamps.
- [29] Kothari, C.R. (2004). *Research Methodology, Methods and Techniques* (Second Revised Edition); New Age International Publishers Ltd.
- [30] Leenders, R. M., & Fearon, E. H. (2002). *Purchasing and Supply Management*, (12th Ed.). Chicago: McGraw-Hill Companies.
- [31] Lysons, K. (2007). *Purchasing and supplies chain Management*. (5<sup>TH</sup> Ed). New Jersey: Pearson publishers.
- [32] Maina, E. T. (2011). Factors Influencing the Implementation of the Public Procurement and Disposal Act, 2005 in Kenya: a Case on the Ministry of Education. Nairobi: JKUAT.
- [33] Muge P (2009). Procurement practices in public institutions in Kenya. *Supply chain management journal*. Vol 22
- [34] Mugenda, O. M. & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- [35] Ngechu, M. (2004). *Understanding the Research Process and Methods*. Kenya: University of Nairobi.
- [36] Oluka, P.N. & Basheka, B.C. (2012). Determinants and constraints to effective procurement contract management in Uganda, a practitioner's perspective.
- [37] Orodho, C.R. (2002). *Elements of Education and Social Science Research Methods*. (2<sup>nd</sup> Edition). New Delhi: Kanezja Publishers.
- [38] Orodho, A. J. & Kombo, D. K. (2002). *Research Methods*. Nairobi: Kenyatta University Institute of Open Learning.
- [39] Oyugi, L. N. (2010). Role of research institutions in influencing development policies: The Kenyan experience. In A paper presented at the international conference organized by the Secretariat for Institutional Support for Economic Research in Africa (SISERA), Dakar (pp. 28-29).
- [40] Puschmann, T., & Alt, R. (2005). Successful use of e-procurement in supply chains. *Supply Chain Management: an international journal*, 10(2), 122-133.
- [41] Rungtusanatham, M., Rabinovich, E., Ashenbaum, B., Wallin, C. (2007). Vendor managed inventory, supply chain Management. Vol.16, No.9. pp. 144174
- [42] Sanjeeve, A.S (2009) critical factors that influence e- procurement adoption success in the public sector, *Journal of Public Procurement*, volume 6, issues 1 & 3, 70-99 2006.
- [43] Schapper, F., (2007). Spatio-temporal characterization of few-cycle pulses obtained by filamentation. *Optics express*, 15(9), 5394-5405.
- [44] Smith, R. & Conway, G. (1993). *Organization of Procurement in Government Departments and their Agencies*. London: HM Treasury Consultancy and Inspection Services Division

- [45] Sobczak M (2008). Quantitative model. Journal of Business Logistics, Vol. 22
- [46] Talluri W (2008). Benchmarking the performance of English Universities", Benchmarking International Journal, Vol. 14 No.1, pp.102-22.
- [47] Thomas, P., & Rainer A. (2005). "Successful use of e-procurement in Supply Chains". Supply Chain Management: An International Journal, Vol. 10 Iss: 2 pp. 122-133.
- [48] Van Weele, A. J. (2006). Purchasing & Supply Chain Management: Analysis, Strategy, Planning and Practice, (4th Ed.). Australia: Thomson.
- [49] Williams, K., & Dair, C. (2007). A framework for assessing the sustainability of brownfield developments. Journal of Environmental Planning and Management, 50(1), 23-40.
- [50] Wisegeek (2013). Procurement strategies. [www.wisegeek.com](http://www.wisegeek.com)