



DETERMINANTS OF E-PROCUREMENT ADOPTION IN THE KENYAN PUBLIC SECTOR: A CASE OF KAKAMEGA COUNTY

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Accepted: May 29, 2017

ABSTRACT

This study aimed to survey e-procurement in the Public Sector with a view to investigate the determinants in adoption of e-procurement. Current literature on Public Procurement indicates a shift towards adoption of new technologies in Supply Chain processes that include e-procurement. These technological changes in the external business environment are eliciting various responses from Supply Chain actors in the public sector. The level of public sector response is influenced by various factors posing as determinants to adoption of e-procurement. The existing literature indicates some of the determinants arising while responding to these technological changes include lack of employee competence and the legal framework. These perceived determinants informed the purpose for this study. The study population included state corporations under the Ministry of Finance of Kakamega County. Due to time and financial constraints, the researcher carried out a simple random selection of three respondents from the procurement departments of all the 16 corporations giving a sample size of 80. Both primary and secondary data was used for the study. The research study used a questionnaire as a key instrument for primary data collection. Qualitative data was analyzed through content analysis. Quantitative data was analyzed through the use of frequency distribution, mean scores and standard deviations. From the study, it was revealed that employee competency and the legal framework was a challenge to e-procurement adoption in the organizations under review. The study recommended that among others, due to continuous turnover of the employees', continuous training for the incoming staff was required on e-procurement. In addition, formal recognition should be encouraged. Integration of the organizations system and those of the suppliers, demonstration of the positive impact of the system, and installation of linkages between all Governments agencies should be encouraged.

Key Words: *Employee Competency, Legal Framework, Adoption of e-procurement*

INTRODUCTION

From the late 1990s, a raft of new e-commerce technologies emerged which promised to revolutionize working practices, threaten existing businesses and potentially create new business models (Sinha, I.2000; Barua et al.,2001). Following this growth in use of e-commerce in business-to-business markets, there has been significant adoption of new supply chain-related technology and applications by organizations globally. The procurement function has been particularly affected by this trend with a predicted growth in e-procurement applications covering both transactional buying and strategic sourcing activities (Croom S, 2000). One of the factors behind this development has been the evolution of the procurement function towards a more strategic role in supporting both corporate goals and supply chain objectives.

Procurement is an internal service provided by a dedicated team of professionals. It operates at the interface between the organizations, the external provider, marketplace and the organizations' operational processes (Knudsen D, 2003). This means that the procurement processes and information needs to be available to all actors in the supply chain to optimize the benefits of e-procurement. The applications which form the e-procurement landscape are designed to automate the buying cycle, optimize spend, improve process and workflow, support bidding and tendering and facilitate more effective search for products and services via the internet. It has also been suggested that such technologies will lead to closer collaboration and integration within the supply chain (Garcia-Dastugue and Lambert, 2003), although this is not necessarily an objective where applied to indirect or non-production spend.

Indeed Kenya's Public Procurement and Oversight Authority (PPDA 2005) (PPDR, 2006), indicate that public procurement entities are different stages of implementation whilst many have no form of e-procurement. That most of the Public Procuring and Disposing Entities' (PDE) tender notices, evaluations and award notices are either not at all or not well published and not all records of the procurement process are kept. Procurement data storage and information dissemination can be improved by an e-procurement information system implemented on web technology which will allow data to be stored electronically. Since the internet is penetrating every corner of our society, an e-procurement information system will enable the public to have access to relevant information about public procurement on time and in a correct format at a minimum cost, providers will have access to the PDE's procurement plans and bidding documents through the internet hence competition among potential providers will increase. This will promote economic development (Tanner et al, 2008)

The Public procurement in the Kenyan has been undergoing reforms starting with the Public Procurement and Disposal Act 2005 that saw the creation of Public Procurement Oversight Authority. 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; however implementation of e-procurement has not significantly been visible over the period. A number of Public Procurement and Disposal entities may still be using manual procurement process and therefore may have not benefited from e-procurement. The adoption of e-procurement may have faced a number of determinants in its adoption and this study sought to find out some these determinants.

E-procurement refers to the use of electronic methods in every stage of the purchasing process from identification of requirements through payment and potentially to contract management (Davila et al., 2003). There are six forms of e-procurement: e-ordering/e-maintenance repair operate, web-based enterprise resource planning, e-sourcing, e-tendering, e-reverse auctioning/e-auctioning and e-informing (de Boer et al., 2002). Some of the benefits of adopting e-procurement include savings in purchasing transaction cost resulted from less paperwork, less mistakes and more efficient purchasing process (Croom and Brandon-Jones, 2007).

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 e-commerce technologies emerged which promised to revolutionize working practices, threatening existing business models (Chan and 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).

Procurement may be defined as the acquisition of goods and services (i.e. purchasing) and hiring of contractors and consultants to carry out works and services. Public sector procurement refers to procurement by or on behalf of ministries, departments of central government, organs of local

government and state corporations (Arrowsmith et al., 2000). Procurement in the public sector aims to achieve multiple objectives. These include: economy, efficiency, fairness (i.e. nondiscrimination among potential suppliers), accountability, transparency and, where more than one country is involved, respect for international obligations (Odhiambo & Kamau, 2003). Besides its business objectives, public procurement is an instrument for the attainment of broader national socio-economic objectives such as supporting employment of citizens and income creation through preference for local suppliers; promotion of indigenous small, medium and micro enterprises (SMMEs); and, enhancement of regional integration through improvement of cross-border trade.

According to (Oke et al, 2006) e-procurement in Kenya is at the early adoption stage. Very few county governments, companies and 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 labor market. Kakamega County considers ICT as a key pillar in the success of Kenya vision 2030 which aims at transforming the country into an industrialized nation by. To this end, a fully-fledged ICT board has been set up by the county government to spearhead the ICT revolution in the Kakamega county which is a positive signal for e-procurement (Oke et al, 2006). By April 2015, there were 50 registered ISPs, 10 of which were active approximately 1,500 internet users and over 100 cyber cafes. There were also about 10,000 personal computers in active use in the county.

Statement of the Problem

Despite the numerous benefits of e-procurement public procurement entities continue to face determinants. These determinants may exist at the organizational level while executing public procurement. Although these determinants may be addressed through e-procurement, however adoption of e-procurement itself may have been a challenge. There is emerging evidence on the realities of e-procurement and some of the difficulties which adoption entails (Angeles and Nath, 2007).

Overall, it appears that e-procurement is still in its early stages of adoption in the corporate world. A recent Aberdeen Group (2001) study of spending analysis practices of 157 firms revealed that only a few firms truly know and understand how much they spend, on which products, and with which suppliers (Bushell, 2004). Day, Fein, and Ruppertsberger, G. (2003) noted users' reluctance to be subjected to significant changes in business processes as a major barrier to the implementation of e-procurement systems.

A number of recent studies have also looked into difficulties faced by firms in launching e-procurement. In a recent survey of 102 international active e-marketplaces and procurement service providers, Kheng and Al-Hawandeh (2002) investigated the adoption of e-procurement in Singapore and presented stumbling blocks to this initiative from the point of view of Singaporean firms. Huber, Sweeney, and Smyth., (2004) found the following perceived barriers to electronic procurement: a "wait-and-see" attitude among firms in selecting e-marketplaces and procurement service providers; Concerns over security and confidentiality of the data needed to be exchanged in electronic environments; Reluctance to share data with

trading partners; the "non-feasibility of custom-made products" for pooling initiatives; Lack of standardization; and Uncertainty over trust and commitment among trading partners.

In Kenya, research on e-procurement has focused on implementation rather than the adoption process of e-procurement. For instance Metoh (2006) did a study on the factors affecting implementation of electronic procurement system in the public sector: a case of National Aids Control Council. This study did not conclusively address the underlying determinants in the adoption process of e-procurement.

The current literature is mainly founded on the private sector and a few founded on the local public sector. The basis of this study is therefore primarily founded on the some of the determinants found in the existing literature seek to assess the actual and planned levels of e-procurement adoption, with a view of carrying out detailed study of determinants of adoption of e-procurement in the Public sector in Kenya and specifically State Corporations under the Ministry of Finance of Kakamega County.

Objectives of the Study

The general objective of this study was to investigate the perceived determinants of e-procurement adoption in the Kenyan Public Sector. The specific objectives were:-

- To determine whether Employee Competency determines e-procurement adoption among Ministry of Finance of Kakamega County State Corporations
- To investigate whether The legal framework determines e-procurement adoption among Ministry of Finance of Kakamega County State Corporations

LITERATURE REVIEW

Theoretical Review

E -Technology Perspective Theory

E-procurement lacks an overarching definition and encompasses a wide range of business activities. For example, (Choi and Rungtusanatham, 2001,) state that e-procurement remains a first generation concept aimed at buyers, which should progress into e-sourcing and ultimately into e-collaboration. E-collaboration allows customers and suppliers to increase coordination through the internet in terms of inventory management, demand management and production planning (Lee, 2003). This facilitates the so-called frictionless procurement paradigm (Brousseau, 2000). This research recognizes the extensive nature of e-procurement and uses the definition provided by (Min and Galle 2002,) where e-procurement is a business-to-business (B2B) purchasing practice that utilizes electronic procurement to identify potential sources of supply, to purchase goods and service, to transfer payment, and to interact with suppliers. The authors believe that this definition provides the scope to investigate the basic level of e-procurement in the Irish ICT manufacturing sector.

The internet has been widely adopted by companies with the aim of improving performances both in internal processes and in processes going beyond their boundaries (Barratt and Rosdahl, 2002). Despite the fact that business-to-business (B2B) trade has enjoyed a quieter existence online than business-to-consumer (B2C) (Barratt & Rosdahl, 2002) the benefits of e-procurement in a B2B setting are significant (Min and Galle, 2001,). Indeed it has been claimed that e-procurement has become the catalyst that allows companies to finally integrate their supply chains from end-to-end, from supplier to the end user, with shared pricing, availability and performance data that allows buyers and suppliers

to work to optimum and mutually beneficial prices and schedules (Morris et al, 2000).

Theory of Constraints (TOC)

The theory of constraints (TOC) was invented by Eliyahu Goldratt in 1984 in his book 'The Goal', Israeli physicist turned business guru, developed a revolutionary method for production scheduling which was in stark contrast to accepted methods available at the time, such as MRP (Goldratt, 1994). The theory of constraints (TOC) adopts the common idiom "A chain is no stronger than its weakest link" as a new management paradigm. This means that processes and organizations are vulnerable because the weakest person or part can always damage or break them or at least adversely affect the outcome. It is further stated by Goldratt (2004) that the analytic approach with TOC comes from the contention that any manageable system is limited in achieving more of its goals by a very small number of constraints, and that there is always at least one constraint. Hence the TOC process seeks to identify the constraint and restructure the rest of the organization around it.

Goldratt and Fox (1987) state that the secret to success lies in managing these constraints and the system as it interacts with these constraints, to get the best out of the whole system. The theory of constraints (TOC) is a management philosophy that has been effectively applied to Manufacturing processes and procedures to improve Organizational effectiveness. Klein and DeBruine (1995) in their study noted that TOC has developed rapidly in terms of both methodology and area of applications.

In the field of project management, most of the work is carried out in the application of Logistics Paradigm. The methodology used in the project management is critical chain project management to find the critical chain and to find the project

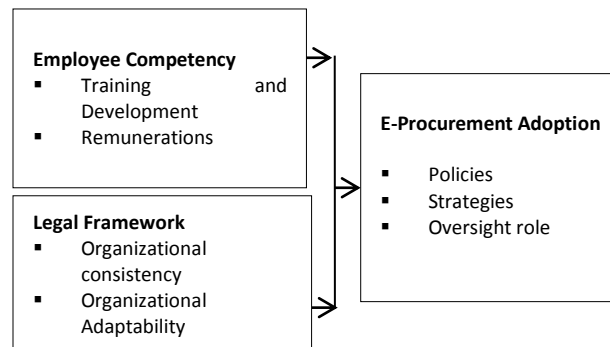
buffers and the feeding buffers (Newbold, 1998). There are three TOC Paradigms that have evolved over the last twenty-five years according to Blackstone (2001) and these are; logistics, global performance measures and thinking process. Recently, these paradigms have been referred to as decision making, performance measurement system and thinking process (Boyd & Gupta, 2004).

According to Goldratt and Fox (1987), the Logistics Paradigms are looking for system constraints in order to increase throughput. The Logistics Paradigm of the TOC has evolved from the scheduling software called Optimized Production Technology (OPT). This included using Drum-Buffer-Rope (DBR) scheduling technique. Goldratt and Fox (1987) further states that performance measurement paradigm shows that all company performance measures are driven by the global goal of making money now and in the future. Throughout the methodology philosophy, the three measurements of throughput, inventory investment and operating expense serve to focus the improvement activity so as to achieve a global optimum. Throughput is defined as the rate at which the system generates money through sales. Inventory investments are defined as all the money the system invests in purchasing things the system intends to sell. Operating expense is defined as all the money the system spends in turning inventory into throughput (Goldratt & Fox, 1987). According to Sood (2003), measurements are also related back to general accounting methods for tax and reporting purposes. All measurements and activity are linked to increasing throughput, reducing inventory investment and lowering operating expense.

The TOC Thinking Processes is the major component of TOC that underpins all the other parts of the methodology. Goldratt (1984) states that managers make three decisions when dealing with

constraints: What to change? What to change to and how to cause the change? The TOC logical thinking process has evolved to answer these generic questions. Past studies have shown that it is often managerial policies that most often the main constraint and the thinking process also helps in these situations (Spencer & Wathens, 1994).

Conceptual Framework



Independent Variables Dependent Variable

Figure 1: Conceptual Framework

Source: Author, 2012

Employee Competency

Procurement staff must be competent enough to use the applications of software that offers the organization management skills to manage their activities for example, distribution chain and value addition in a company (Beth et al. 2003). This technology is based on databases, which are easily reached on real time foundations. ERP systems perfectly provide the procurement management and the management itself with the opportunity to produce steadfast, consistent, and timely information necessary for attainment of organizational goals.

In 2003, a note in Harvard Business Review indicated that `...despite years of process breakthroughs and elegant technology solutions, an agile, adaptive supply chain remains an elusive goal. Maybe it's the people who are getting in the way.` (Beth et al. 2003). It is commonly believed that

instead of considering the supply chain to be a 50/50 mix of infrastructure and information systems technology, rather any supply chain is more like 45/45/10 mix of human behaviour, systems technology and asset infrastructure (Gattorna 2006).

Andraski and Novack (1996) indicated that people are "... the most important element of the logistics marketing concept." Daugherty et al. (2000) noted: "To take supply chain performance to the next level, companies will have to tap into this human element more intensively. Many companies have pushed hard on technological and infrastructure improvements and investments. The next wave of improvements and investment should center on the people who manage and operate the supply chain."

As e-Procurement includes new technologies and changes in traditional procurement approaches, the need to train staff in procurement practices and the use of e-Procurement tools are critical to the success of an e-Procurement initiative (WB, 2003). End-users can realize the immediate benefits of the e-Procurement system once they understand the operational functionalities (CGEC, 2002). This means that training should be given a high priority, alongside the need for public sector agencies to identify the skills required by all those engaged in procurement (ECOM, 2002).

It is evident that employees has a great role in adoption of e-procurement and their skills ,competencies and training may influence to a large extent how e-procurement is adopted and implement in an organization. The human element in a business environment cannot be for overemphasized because without which, any organizational objectives such as e-procurement may not succeed.

Legal Framework

Legal framework is a basis of any business transaction whether in Public sector or private businesses. It defines the obligations and responsibilities of the partners transacting business with the objectives of fulfilling each other's desired goals. Kheng and Al-Hawandeh (2002) found that the laws governing B2B commerce, crossing over to e-procurement, are still undeveloped. For instance, questions concerning the legality and force of e-mail contracts, role of electronic signatures, and application of copyright laws to electronically copied documents are still unresolved.

The Public Procurement and Disposal Authority recognize that the existing PPDA 2005 and PPDR 2006 legal framework in Kenya may not have adequately covered aspects of e-procurement transaction. (PPOA., The long term policy framework for Public Procurement 2009) The weakness in this frame work therefore may inhibits the adoption and growth of e-procurement initiatives. Understanding the determinants and limitation of e-procurement adoption in the public sector is important due to complexities of government policies and bureaucracy. Without such understanding, government may not be able to achieve the benefits of e-procurement. This could assist in future planning and adoption of e-procurement.

In an effort to create order in public procurement, PPOA through the support of the Kenya Government and the Public Financial Management Reform (PFMR) Programme, has since its establishment in 2007 endeavored to implement a new legal and regulatory regime to guide public procurement. Key achievement towards implementing a new legal and regulatory framework in public procurement is evident in the many guidelines PPOA has developed to guide procurement practices and pricing of common user items. The guidelines include Public Procurement Market Price Index, General and Disposal Manual,

Procurement Manual for Works, Procurement Manual for Information and Communication Technology, Procurement Manual for Insurance Services, Procurement Manual for Non- Intellectual Services, among others

Since coming into being, PPOA has conducted procurement assessments and reviews in about 100 major procuring entities. The principal goal of the reviews has been to help entities develop capacity building programs which enable them better apply the provisions of the Act and the Regulations. Procurement Assessments, on the other hand, have been carried out to check the level of performance of the procurement function in the selected entities to establish their strengths, weaknesses and areas that require assistance and improvement. The assessments focus on key indicators such as institutional arrangements or structures, procurement process, mandatory reporting requirements, stores, inventory control and management (R.O.K, 2012).

Furthermore, an important accomplishment by the PPOA can be seen in the Authority's action to develop and implement an e-procurement strategy. The strategy has made it possible to post tenders online thus ensuring transparency and accountability in public procurement. Moreover, e-procurement has also enhanced access to public procurement by vulnerable groups (R.O.K, 2012). The Authority has also enhanced access to public procurement information by developing a modern and interactive website which provides important information to the public and stakeholders on public procurement. In addition, stakeholders consultative forums are held annually to share information on how to improve the public procurement system. Further, contract awards worth Ksh 5million and above reported by the procuring entities get posted on the Authority's

website as are reports on finalized procurement reviews (R.O.K, 2012).

Empirical Review

Research into the uptake and application of e-procurement has focused on a number of themes, as identified by Schoenherr & Tummala (2007) who noted that early research into e-procurement focused on EDI (Ramasehan, 1997), the automation of formerly manual to automated processes and the impact on the business environment (Orr, 2000). Articles appearing in 2001 dealt primarily with market transformation issues inherent in the electronic revolution, advantages of e-procurement, and recommendations and advice on successful implementations (Rajkumar, 2001).

From a sector perspective, Schoenherr & Tummala & Tummala (2007) noted that a diverse range of sectors have been researched, however, it is interesting to note that only 13% of articles relate to the government sector. Alongside these general inhibitors a number of specific inhibitors have been identified which relate to a specific sector. For example Panayiotou et al (2004) has noted that the inhibiting factors affecting the adoption of e-procurement in the Greek public sector includes the complexity of goods/services procured, the need for transparency in procurement, the determinants posed by public policy and the regulatory and legal constraints faced by public sector organizations.

The literature (Henriksen & Mahnke, 2005) reveals that these barriers and requirements tend to increase within the public sector, mainly due the impact of different economic and social factors, which influence the public domain with respect to the private sector (Gichoya, 2005). These differences have resulted in a number of specific regulations and standards that have been developed for public e-Procurement: which requires

that a bureaucratic procedure be followed due to the nature of the institutions involved (Leukel & Maniatopoulos, 2005) and embraces audit, accountability and compliance standards with national and international rules to ensure supply competition and transparency in the awarding of contracts (OGC, 2005). Croom & Johnston (2003), in their research of e-procurement in the UK public sector estimate that savings of the order of 5 – 20% are achievable in the cost of materials, with savings of the order of 50 – 70% can be achieved in relation to administration. More recent research by Puschmann & Alt (2005), in the private sector, noted that the introduction of e-procurement resulted in administrative savings of the order of 50 – 80%, however, they conclude that this range of potential savings may not be applicable to other sectors (e.g. the public sector) given the difficulties in reducing staff numbers.

Another example of the diversity of opinions regarding the scale of potential e-procurement cost savings relates to inventory. For example, Min & Galle (2002) estimated that inventory could be reduced by 20 – 25% and that order cycle times could be reduced to 5 days. Presutti (2003) concurs with this level of potential savings by noting that sourcing cycle times could be reduced by 25 – 30%. However, Croom & Johnston (2003) suggest even greater savings in this area with processing times reduced from 5 days to 2 hours through the use of e-procurement.

RESEARCH METHODOLOGY

The study adopted a descriptive survey design. A descriptive research design determines and reports the way things are (Mugenda & Mugenda, 2003). The target population for this study was the public sector in Kenya. However, the study was limited to the Ministry of Finance of Kakamega County in Kenya. The study population was state corporations under the Ministry of Finance of

Kakamega County. The study adopted a stratified sampling technique where the study population was stratified into management and non-management strata.

Both primary and secondary data was used for the study. The questionnaire was used for data collection in the study. Data was coded in SPSS version 20 and analyzed using descriptive and inferential statistics.

DATA ANALYSIS AND FINDINGS

The field responses were that out of the 80 respondents surveyed, 70 questionnaires administered were filled and returned giving a response rate of 81%. Respondents were asked about their gender. From the results, majority (58%) were male while 42% were female. On the level of education, Most (47%) of respondents had undergraduate degrees while 30% had master's degree and 23% had diplomas as their highest level of education. On how long they had worked in their respective institutions, majority (67%) of the respondents had worked for between 6 and 10 years in their institutions while 33% had worked for between 11 and 20 years. The respondents had been in the organization long enough and therefore would be in position to provide actual information for this study. On respondents' current job role, majority (63%) of the respondents were in non-management functions, while 37% were in managerial functions. On whether institutions represented by the respondents had already adopted e-procurement. From the results, 89% of these organizations had adopted e-procurement while 11% had not adopted.

Employee Competency in E-Procurement

On whether respondents had attended any form of training related to e-procurement, majority (57%) of the respondents had attended e-procurement related training while 43% had not attended any

training. For those who had attended training, all said that the training helped in improving their skills on e-procurement. These findings are in line with World Bank survey which argued that since e-Procurement includes new technologies and

changes in traditional procurement approaches, the need to train staff in procurement practices and the use of e-Procurement tools are critical to the success of an e-Procurement initiative (WB, 2003).

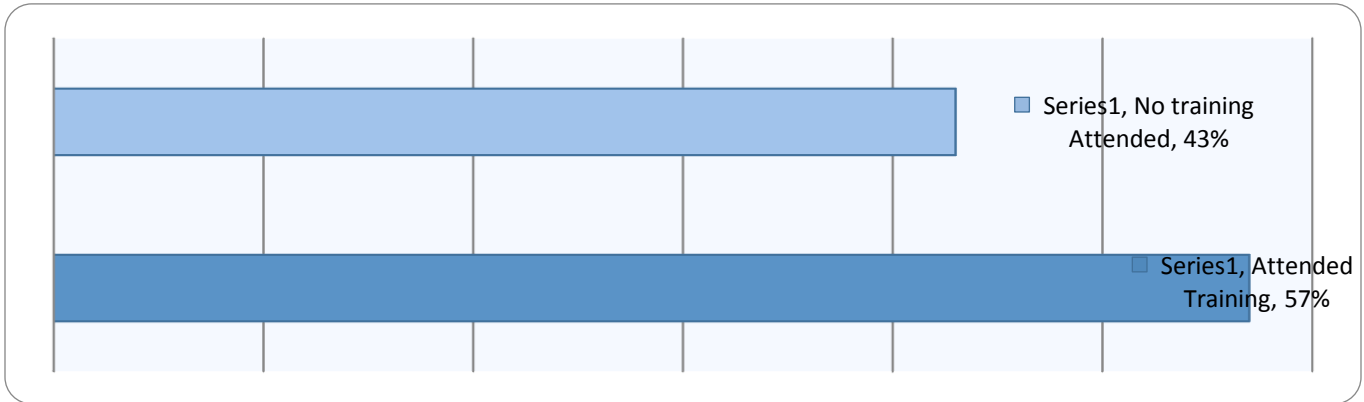


Figure 2: Attendance of any Training Related to E-Procurement

On whether these organizations were committed to providing their staff with the necessary competencies and skills to ensure the success of e-procurement, the results showed that 88% of respondents saying that their organizations were committed while 12% saying there was no commitment to e-procurement skills development.

According to CGEC, (2002), end-users can realize the immediate benefits of the e-Procurement system once they understand the operational functionalities. This means that training should be given a high priority, alongside the need for public sector agencies to identify the skills required by all those engaged in procurement.

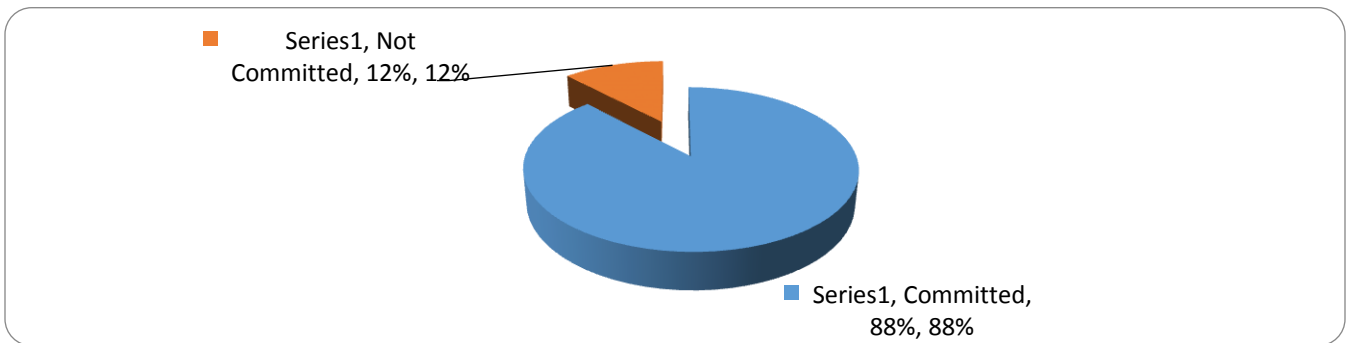


Figure 3: Commitment by the organization to provide e-procurement competencies

On respondent’s opinion on the extent to which they think staff competencies have been a hindrance to e-procurement adoption in their organizations, from the results, most (41%)

respondents said that staff competencies hindered e-procurement adoption to a small extent, 36% said it was to a moderate extent while 23% said it was to a great extent.

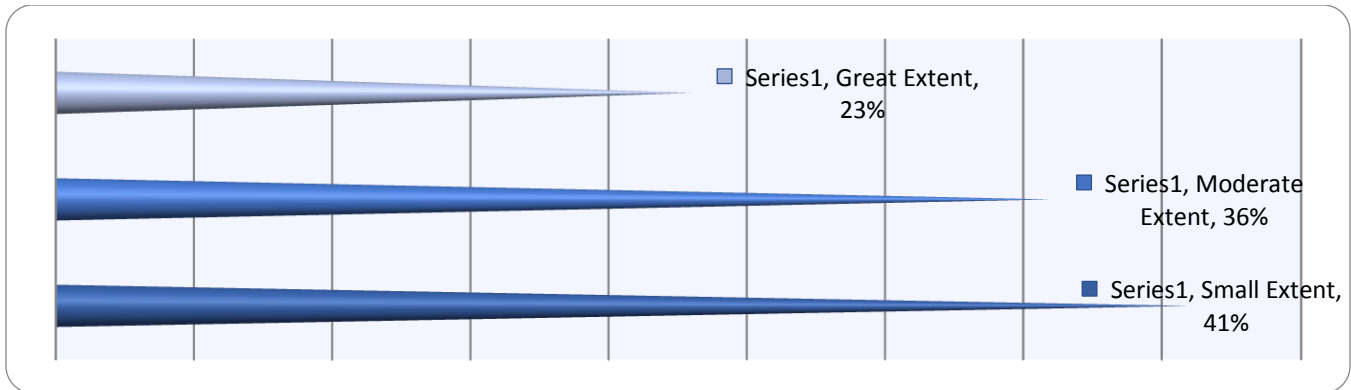


Figure 4: Extent to which staff competencies are a challenge to e-procurement adoption

The Legal Framework in E-Procurement Adoption

On the respondent's opinions on the legal frameworks governing e-procurement in Kenya, a scale of 1-5 was used. The scores "strongly disagreed" and "disagreed" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ($1 \leq \text{disagree} \leq 2.5$). The scores of 'neutral' represented in decision by the respondents. This was equivalent to 2.6 to 3.5 on the Likert scale ($2.6 \leq \text{neutral} \leq 3.5$). The score of "agree" and "strongly agree" represented 'agree' with the statements provided. This was equivalent to 3.6 to 5.0 on the Likert Scale ($3.6 \leq \text{agree} \leq 5.0$). Data was presented in means and standard deviation.

Table 1 below indicates that majority respondents disagreed (mean=1.9855) that email contracts were legal in their organizations. In addition, majority respondents also disagreed (mean=1.2391) that electronic signatures were enforceable in their organization. Majority of respondents also disagreed (mean=1.2754) that electronic signatures were enforceable in the organizations. Finally, majority disagreed (mean=2.2319) that PPOA had adequately addressed the legality of e procurement in the public sector. This is in line with Kheng and Al-Hawandeh (2002) who found that the laws governing B2B commerce, crossing over to e-procurement, are still undeveloped. For instance, questions concerning the legality and force of e-mail contracts, role of electronic signatures, and application of copyright laws to electronically copied documents are still unresolved.

Table 1: Legal Framework Governing E-Procurement in Kenya

	N	Mean	Std. Deviation
E-mail contracts are legal	39	1.9855	1.12039
Electronic signatures are enforceable in the ministry	39	1.2391	.42811
Electronically copied documents are covered by the copyright laws	39	1.2754	.48032
PPOA has adequately addressed the legality of e procurement in the public sector	39	2.2319	.93035

On the whether the extent to which inadequacy of legal framework was a challenge to e-procurement adoption, majority (63%) of respondents said that inadequacy of a legal framework was to a great extent a challenge to e-procurement adoption in their organizations, with 20% saying it was to a very

great extent. The Public Procurement and Disposal Authority recognize that the existing PPDA 2005 and PPDR 2006 legal framework in Kenya may not have adequately covered aspects of e-procurement transaction.

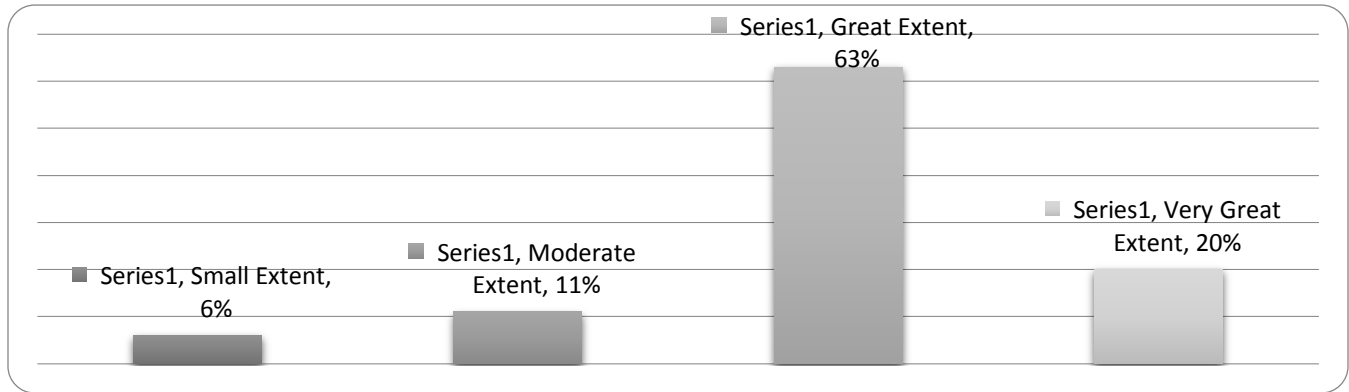


Figure 5: Extent to which inadequacy of legal framework is a challenge to e-procurement adoption

SUMMARY FINDINGS, CONCLUSION AND RECOMMENDATIONS

From the study, it was revealed that employee competency and the legal framework was a challenge to e-procurement adoption in the organizations under review.

On Employee Competency, majority of the respondents had attended e-procurement related training. For those who had attended training, all said that the training helped in improving their skills on e-procurement. The results showed that majority of respondents saying that their organizations were committed to e-procurement skills development. From the results, most respondents said that staff competencies hindered e-procurement adoption to a small extent, while others thought it was to a moderate extent.

On Legal Framework majority respondents disagreed that email contracts were legal in their

organizations. In addition, majority respondents also disagreed that electronic signatures were enforceable in their organization. Majority of respondents also disagreed that electronic signatures were enforceable in the organizations. Finally, majority disagreed that PPOA had adequately addressed the legality of e procurement in the public sector. From the results, majority of respondents said that inadequacy of a legal framework was to a great extent a challenge to e-procurement adoption in their organizations.

Conclusions

From the findings of this study, it was concluded that Employee Competency hindered smooth adoption of e-procurement in the public sector. Although majority of organizations were committed to e-procurement skills development, training was still not at 100%. It was evident that employees had a great role in adoption of e-procurement and their skills, competencies and training may have influenced to a large extent how e-procurement was adopted and implement in an organization.

In addition, The legal framework was also a challenge in the implementation of e-procurement in the public sector. Although a new legal and regulatory framework in public procurement in Kenya had been developed, it had done little to enhance uptake of e-procurement in the public sector. In general, PPOA had not so far adequately addressed the legality of e procurement in the public sector.

Recommendations

On the extent to which employee competency was a challenge in E-Procurement adoption, this study recommended that due to continuous turnover of the employees', continuous training for the incoming staff was required. In addition, for those organizations that had already been ISO accredited, training was compulsory and should be

implemented. This should cover e-procurement and therefore mitigate the effects of this barrier.

On the extent to which The legal framework was a challenge to e-procurement adoption, formal recognition backed by legislation of the electronic procurement transactions should be encouraged to accelerate the' rate of Implementation of the System within the public sector.

Areas for further study

This study was carried out in the Ministry of Finance of Kakamega County State Corporations. There was need to carry out further studies in other state corporations in other ministries to compare the results with those found in this study. In addition there is need to determine other factors that pose a challenge in e-procurement adoption other than those covered in this study.

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