

**FACTORS AFFECTING THE ADOPTION OF E-PROCUREMENT STRATEGY  
IN COUNTY GOVERNMENTS' (CASE STUDY OF MOMBASA COUNTY  
GOVERNMENT)**

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**ABSTRACT**

The phenomenon of e-procurement in the public sector is steeped in story, myth and legend, much of it arising from the smoke and mirrors of the dot.com era. The situation is complicated in the public sector by the desire of governments to be at the forefront of technological advances and for public procurement, including e-procurement, to be used as a vehicle for the achievement of a raft of public policy objectives Tonkin Christine (2003). This study is both quantitative and qualitative in nature; and anchored on one of the milestones of Intergrated Financial Management Information System (IFMIS) a policy strategy implemented by the Ministry of Finance through the National Treasury of the Government of Kenya. Mombasa County is the second most important county in Kenya (after Nairobi Capital City County), due to its strategic location to both Kenya and the Region. The county with a population of 1.2 million hosts Kenya's second largest city, Moi International Airport and is a tourism haven. This study was initiated to find out relevant eprocurement (Procure to Pay) county equipment's availability, the skills and competencies of county procurement staff, the institutional/organizational awareness of eprocurement procedures and the county executive management acceptance of eprocurement as a strategy; for effective and efficient integrity on procurement of goods and services in the county. The target population was the sixty eight (68) staff of procurement department and the relevant departments undertaking procurement within Mombasa county government main offices at the island. The sample size was thirty three (33) personnel staff directly involved in procurement processes. The data was collected from both primary and secondary sources. The

SPSS analysis method was used to interpret the data to arrive at both conclusions and recommendations. The findings showed that the most impacting factors for the adoption of eProcurement were the Information Technology and Communication (ICT) infrastructure and staff skills and competencies development (re-skilling the staff). This study will like to recommend to the County Government of Mombasa to prioritize the establishment of a comprehensive ICT infrastructure to integrate the stakeholders of eProcurement in the county to improve its adoption faster. The second other critical factor to implement is the training of staff on skills specifically targeting eProcurement implementation. This is called “re-skilling for eProcurement adoption” procedures. This can be done with other public and private consultants to create practical scenarios in eprocurement industry leaders.

**Key Words:** eProcurement, Mombasa county, public procurement, eprocurement adoption, devolved government, E-collaboration

### **Introduction**

According to Mitra, Laka and Abdulla, (2000), the most common forms of e-commerce in the Kenya market are e-procurement, eBanking and of late ebanking. Of the three, e-procurement, which is a user friendly; Internet based purchasing system, has generated a lot of interest due to its ability in improving efficiency and transparency. In a CKMN (2012) baseline survey on public procurement found out there are identified factors that contribute towards inefficiencies in procurement and gave specific recommendations. The following are the overall findings and recommendations: First poor planning. Very little procurement preparation seems to take place in the public sector. This precipitates several small volume procurement sessions that result in high acquisition costs in both price and effort. For regularly consumed items, it is far more efficient for orders to be consolidated on a monthly or bi-weekly basis. Secondly is corruption. There are legislative provisions for the rotation of contracts to pre-qualified suppliers, but these are seemingly not applied, and the same enterprises seem to get regular orders. In some instances, nepotism and ethnic affiliation plays a role in the award of contracts. The penalties may not be punitive enough to deter corruption. The penalty provided by the law should be specific to the offence to ensure deterrence. Thirdly, delays in payment. Legislation provides that payment should be done within 30 days. The reality is that payments may take as long as 180 days. Delays are caused by factors ranging from failure to adhere to legislated accounting stipulations, excessive bureaucracy, insufficient funds, and quarterly drawdowns by public institutions, corruption, staff absences, and poor work ethics. Most suppliers are not aware of the

penalty provision on delayed/outstanding payments, and those who are aware would be reluctant to apply it, in case it compromises future business with the public entity.

Fourth issue found is Information communication technology. There is limited use of Information Communication Technology (ICT) in the procurement processes Kaaya (2004). Computers are often used to draft letters, prepare spreadsheets, and compile tenders. The use of procurement software as a management tool cannot be overstated. Software that links the procurement process to the accounting authority would make the process much more efficient. The fifth finding is statutory amendments: The current legislation governing public contracting contains loopholes, which encourage corruption, and an amendment of the law should be part of the reform process. Provisions requiring amendments include that pertaining to the termination of procurement proceedings to curb conflict of interest. The sixth issue is public participation. The public lacks automatic standing before the Public Procurement Administrative Review Board or the High Court as a form of redress on procurement issues. In practice, the proceedings of the Review Board are not open to the public but to the disputants only. As such, accountability to the public is lacking.

Lastly, organizational payment procedures lack proper payment procedures facilitate corruption PPOA (2007). For instance, some payments are done before the delivery of goods or full payments are issued for partial delivery. In other circumstances, there is selective payment of suppliers based on which supplier has paid the highest amount of “kick-backs”. There is need for sufficient, clear and documented payment processes to seal this loophole. Effective procedures that enhance transparency, good management, prevention of misconduct, accountability and control contribute to preventing not only corruption but also the waste of public resources. Through corrupt practices, market competition is hindered; and the price paid by the administration for goods and services is artificially raised, which has a direct impact on public expenditures and therefore on taxpayers’ resources CMKN (2012). Further studies have shown that several models have been tried by different countries to implement e-procurement. These are seller centric, buyer centric, e-marketplaces or third party managed. In some countries, these models are summarized into three: public, the mixed model and public-private partnerships.

The proposed model for the Kenyan public sector is the public model where the government will own all the investment risks as well as benefits. This model favours the SMEs doing business with public sector, offers easier integration and since its government owned, it will gain a lot of

support from to managers (website; UoNb 2014). Private organizations in Kenya too, have successfully embraced the use of e-procurement technology.

For instance Nation Media group through their digital platform commonly known as N-Soko enables their clients to purchase products online Gitahi (2011). Awino (2011) conducted an investigation of selected strategy variables on firm's performance. The study focused on supply chain management in large private manufacturing firms in Kenya. It was established that most of the SCM strategies of large manufacturing firms in Kenya are not owned by individual firms but also other organizations within the SC that provide the required linkages towards the overall corporate performance of the manufacturing industry.

### **Statement of the Problem**

Ten years ago, Kenya government pledged to make an e-government a reality. In a Cabinet paper with the title, E-Government Strategy: The Strategic Framework, Administrative Structure, Training Requirements and Standardizations Framework, the Government promised, in three years, electronic administration of business, including company registration, name search facilities, application for passports, PIN (personal identification number) application, license and permit applications and income tax returns completed online, among other things, including eprocurement (DN 2008). According to available data from government websites, certain legal framework has been put in place to propel Public Sector to the first stage of e-procurement - e-tendering. This include creation of Laws to protect the use of electronic platform for business – The Electronic Transactions Bill 2007, The Public Procurement and Disposal Act, Cap 42C, 2010 and creation of regulating bodies like PPOA, PPRB, Ethics and Anti-corruption Commission and National Construction Authority. According to reports by Government of Kenya and Treasury; County Governments in their Fiscal period 2013/14 could not absorb more than 60% of their Development Allocations. At the same time performance of public contracts in Kenya has for decades, dominated public debate on financial accountability DN (May 2013). Recently, the public complained of non-participation in contracts by the women and youth in award of 30% of all county tenders as per government policy in the 2030 Development goals agenda. The Governors have been in constant conflict with the bodies created by the constitution to implement the framework of county governments.

The major borne of contention by Governors' is delay in release of development county funds (because of un-reconciled immediate previous Fiscal Year returns) and laborious procurement

processes Ngobilo (2013). After March 2013 Kenyan General Elections won by the Jubilee Coalition (which campaigned on the promise of 'e-government' for Kenyans if it wins elections), public sector was invigorated to go digital in many government service and goods delivery functions. At the same time the New Kenyan 2010 Constitution - required that new devolved governments (called County Government's) must be started in 47 regions. These county governments' have to be funded by the National government from the Exchequer funds. The

Budgetary allocation of these County Governments' has increased from Kshs 210 Billion in 2013/2014 financial year to Kshs 233 Billion in 2014/2015 financial year. The National government had to place appropriate methods of planning, controlling and monitoring the expenditure and procurement of their goods and services for the sake of 'value for money' projects. The most efficient, fair transparent framework to carry out the devolution of funds and monitor their usage was to go eGovernment - electronic based monitoring and control system of administration. It's against this background that this research is done to establish how the

Mombasa County Government is adopting to this new government initiative with focus on; the institutional capacity, County E-procurement Management, E-procurement System Infrastructure and Budget/Cost of Technology to implement eProcurement.

## **OBJECTIVES OF THE STUDY**

### **General Objective**

The research aims to establish factors that affect the adoption of eprocurement strategy in County Governments; case study of Mombasa County Government.

### **Specific Objectives**

The underlying research objectives for this study are therefore;

1. To determine the existing technical skills in the county to implement eprocurement
2. To establish the availability of information technology equipment's in the county to implement eprocurement.
3. To establish the county management support on implementation of eprocurement
4. To determine sufficiency of budget allocation for implementation of eprocurement

### **Research Questions**

1. How well are procurement staff skills and competency developed to implement eprocurement strategy?
2. How well are county procurement information technology equipment customized for adoption of eprocurement strategy?
3. What is the role of executive management in the adoption of eprocurement strategy?
4. How adequate are the funds from the county to facilitate adoption of eprocurement strategy?

### **Literature Review**

The Government of Kenya procurement system has evolved over time from the Supplies Manual of 1978 - which was supplemented by Treasury Circulars, to the current standardized system introduced by the Public Procurement and Disposal Act (PPDA) of 2005 and the Procurement Regulations of 2006. The public procurement reform is part of the overall public sector reforms and the transformation agenda as highlighted in Government of Kenya Vision 2030.

### **Theoretical Review**

There are various theories which have been used both for private and public sectors to explain the relationship of governance and budgetary reallocation and monitoring/supervision. The theories used to adduce to this research are; technology acceptance theory, Institutional theory, Human resource theory and Management theory.

### **Technology Acceptance Theory**

Over the last 40 years, while private and public sector organizations have been utilizing Information Technology (IT) systems to streamline and automate their purchasing and other processes, it is only in the past decade that e-Procurement systems have attracted attention. While there is debate about how recently e-Procurement has emerged Dai & Kauffman (2001); Koorn, Smith & Mueller (2001), there is no doubt that the use of the Internet in e-Procurement provides several advantages over earlier inter-organizational tools. For example, Electronic Data Interchange has been providing automated purchasing transactions between buyers and their suppliers since it was launched in the 1960s.

Enterprise Resource Planning (ERP) followed in the 1970s, and then came the commercial use of the Internet in 1980s. It was only in the 1990s that the World Wide Web - the multimedia capability of the Internet - became widely enabled and provided the essential resource for the

automation of procurement OGC (2002).

### **Institutional Theory**

An institution is any standing social entity that exerts influence and regulation over other social entities Kim et al (2003). The institutional theory is the traditional approach that is used to examine elements of public procurement Ombaka (2009). Scott (2002) identifies three pillars of institutions as regulatory, normative and cultural cognitive. The regulatory pillar emphasizes the use of rules, laws and sanctions as enforcement mechanism, with expedience as basis for compliance. According to Scott (2004), institutions are composed of cultural-cognitive and regulative elements that, together with associated activities and resources give meaning to life. Eprocurement facilities and procedures into new e-government systems and business processes, two by gaining control of the current situation in government organisations, where electronic information may often be lost or kept in an unstructured and uncoordinated manner, to enable identifying, evaluating and integrating of existing electronic documents of continuing value within the ERM infrastructure as it develops and three by implementing electronic systems for the management of electronic documents and records within government organisations, so that these can be accessed, maintained and retrieved in a manner which retains authenticity and integrity; and by harmonizing electronic with residual paper-based record-keeping systems.

According to the above UK scenario, it means institutions have to build such an infrastructure, which will involve co-ordination of records management, and information management issues across several aspects of eGovernment strategy. In the Kenyan context, the eprocurement concept is partly executed under the broad idea of Intergrated Financial Management Information Systems (IFMIS). This is a Strategy Paper developed and being implemented by the Treasury under its Strategic Plan 2013-2018. The Strategy is premised on the following components: Re-engineering for Business Results; Plan to Budget; Revenue to Cash; Procure to Pay; Record to Report; ICT to Support, and Communicate to Change, National Treasury GOK (2012).

### **Human Resource Theory**

The emphasis in electronic records management shifts from direct management of the record as physical artifact towards design of the infrastructure in which the record are created, captured and managed by a mix of the individual end user, software systems, and management

procedures. For records management and IT staff, this is likely to involve the acquisition of a new range of skills; new records management skills are required by records managers and IT

staff to manage new kinds of systems in new contexts. For organisations, this involves the development of multi-skilled and multi-purpose project and operational teams, bringing together a range of different skills and expertise – some new and relatively untested.

According to UNDESA (2011), capacity building and business development of institutional supporting staff and training procuring entities facilitate the links to successful eprocurement implementation in the organization. At the same time, supporting the development of procurement professionals is essential for data integrity and security. The organisations ultimate objective is supporting, training and developing the supplier marketplace to participate in the system implementation and use. A study by Kirungu (2012) elaborates that capacity training and building in Public Procurement for all stakeholders a must. The stakeholders to be developed are; Policy makers, Regulators, Procuring entities and Suppliers/Providers.

According to the UK eGovernment Magazine (2001), the capacity building are in areas of; (1) policy and strategy issues; to support an integrated strategy and plan within and between departments (2 ) information policy issues; authentication and the retention of knowledge of authentication, privacy and data sharing; openness and freedom of information, (3) systems design issues; in the development of new IT systems and networks, (4 ) interoperability issues, including a common approach to the use and description of electronic records through metadata standards, and the ability to develop integrated resource discovery and information retrieval systems and (5) skills and competency development; for all types of user and for records managers, in generating and describing electronic information.

### **Management Theory**

Management is the process of designing and maintaining an environment in which individuals, working together in groups; efficiently accomplish selected aims Belch (2002). In its expanded form, this basic definition means several things. First, as managers, people carry out the managerial functions of planning, organizing, staffing, leading, and controlling. Second, management applies to any kind of organization. Third, management applies to managers at all organizational levels. Fourth, the aim of all managers is the same to create surplus. Finally, managing is concerned with productivity this implies effectiveness and efficiency. The characteristics in the organizational context seem to be the primary focus of many studies in the



context of business organizations.

Top management support, firm's size, skills and knowledge and organization policy are considered to be factors that influence firms' willingness to adopt of E-procurement. Jeyaraj et al. (2006), found that top management support to be one of the best predictors of organizational adoption of IS innovations. Top management can stimulate change by communicating and reinforcing values through an articulated vision for the organisation. Top management support is critical for creating a supportive climate for the adoption of new technologies Premkumar, G. and Roberts, M. (1999) and Grover et al. (1993).

### **Conceptual Framework**

According to Mugenda and Mugenda (2003), a conceptual framework refers to a conceptualization of the relationship between variables in the study and shown below. Other than showing the direction of the study, a researcher can also be able to show the relationships of different constructs that he/she investigates.

**Figure 1: Conceptual framework**

### **INDEPENDENT VARIABLES**

Staff skills and competencies levels:

- Staff behavior,
- Trainings
- Experience

Technology and equipments adequacy:

- Availability
- Efficiency
- Reliability

Budgetary/Cost allocations:

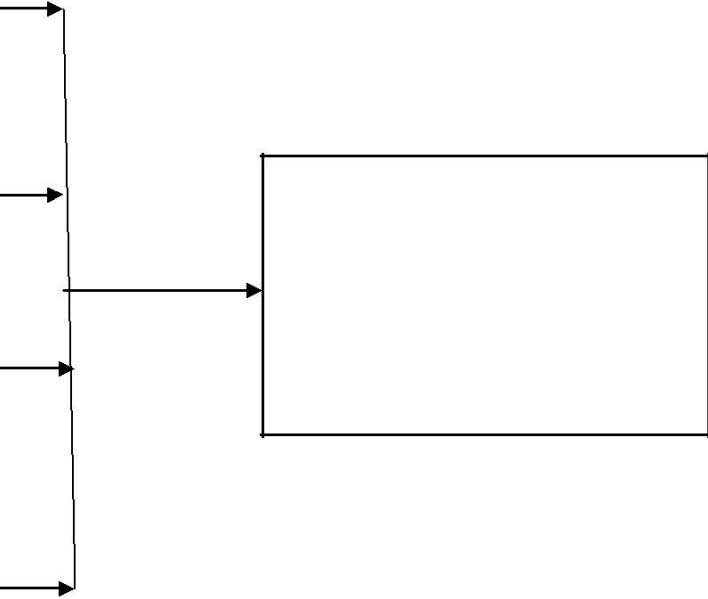
- Estimates
- Allocation,

County management commitment:

- Re- engineering policy development
- Implementation
- Performance measurement

**DEPENDENT VARIABLE**

**E-Procurement  
Adoption**



### **Procurement staff skills and competencies development**

E-procurement consists of change for the organization and specifically for the employees of the procurement unit Malgorzata (2008). Training of staff in procurement practices and the use of eProcurement tools are critical to the success of an e-Procurement initiative WB (2003).

The staffs of an organization need to acquire the necessary skills that can enable them to operate effectively and efficiently while using the new e-procurement system. When staffs are not adequately trained and knowledgeable in the strategy, they may not own the e-procurement system and this may contribute to failure.

The success of e-Procurement initiative depends on users and buyers making use of the new process and system Mose (2013).The study will research on the trainings done for employees of the county in both procurement department and the related departments like finance, IT and administration.

#### **Eprocurement (IT) equipment**

Availability of the required equipment's influences not just the process of the strategy implementation but also the integrity and quality of information exchanged between purchaser and the supplier of goods and services. Information quality was seen to capture the commerce (web) content issue. In the context of e-procurement success, web content should be personalized, complete, relevant, easy to understand, and secure if one expects buyers or supplier to initiate transactions via the Internet and to return to the site on a regular basis Gitahi (2011).

Arbin (2008), notes in his research findings that, the biggest reason why companies implement an e-procurement system is the demand to reduce maverick costs and increase compliance in choosing suppliers. The equipments should be viewed in relation to the interfacing with the related departments, suppliers and access of authorized external stakeholders like the Treasury, Auditor General, Committee on Revenue Allocation and others online. This includes computers (models and software plus distribution per staff member), servers, routers, web connectivity.

#### **Budgetary/cost analysis of eprocurement allocation**

Implementing E-Procurement in developing and less developed countries may require the need to consider hybrid approaches combining on-line and off-line approaches UNDESA (2011). This means, e-Procurement may require a combination of centralized and decentralized approaches depending on the particular features of each country and geographic region. The conditions for implementing E-Procurement were related more to governance and capacity development than to

the availability of technology. World Bank (2003) notes that it would be a mistake to invest massively on infrastructure for E-Procurement if there is no installed capacity to handle the various phases of the purchasing process; it is also important to count on political will towards transparent approaches and towards engaging the supplier community and civil society. The implementation of an E-procurement system is not a short-term ICT project but a business process re-engineering project that should have a long-term plan over 10 to 20 years period; it is not just a “quick-fix” system implementation plan.

Normally the process of implementing any information technological systems in an organisation is very expensive. This is because other than being time consuming, the procurement of the appropriate system and consultants is tedious and in most cases due to its sophistication of systems the bidding is normally off-shore and involves foreign currency. This exercise also involves procurement of computers, servers, operationalization of IT department, software upgrades to support the adoption exercise OECD (2011).

The long-term benefit of the E-procurement system will come from analyzing the information collected in the system over the years of operation to better understand spending patterns, the marketplace and processes applied. Governments need to give considerations, to the information required for analytical and reporting requirements and interaction with other system to obtain to most value from the procurement information management systems provided by e-procurement practices.

### **Executive Management collaboration and support of the strategy**

The executive management team is responsible for setting the vision and goals, bringing about collective commitment for change in process and organizational structures, and formulating the policies and strategies necessary to put an e-Procurement initiative in place WB (2003). Therefore, if the e-procurement system does not have the full support of the top management team, there is every reason for it to fail. It is important to make sure that the top management has given full support for the adoption of e-procurement. Senior managers should provide considerable attention and support to ensure that the procurement reform has been well understood in the agency, S & A (2003).

Significantly, for the organization to continuously measure the key benefits since it is vital to the successful delivery of a business project. Measurement drives behavior and is a key to making the change a success Birks et al. (2001). Establishing goals and baselines is very important.

These established goals will enable the organization measure how much has already been achieved as far as e-procurement system adoption is concerned.

## **RESEARCH METHODOLOGY**

### **Research Design**

This study utilized descriptive survey design. According to Cohen et al. (1992), survey design gathers data at a particular point in time with an intention of describing the nature of existing situation and determining the relationships that exist between specific events. Kombo and Tromp (2006) note that, the major purpose of descriptive survey is to state of affairs, as it exists.

Descriptive research portrays an accurate profile of persons, events, or situations Kombo (2006) in their current state. Inferential statistics were used to map the relationship between variables in the study. This two approaches are vital to enable and understanding of the factors affecting eProcurement. The design is appropriate to the study as it seeks to answer questions concerning the current e-procurement status in the public sector and more so in local devolved county governments.

### **Target Population**

Target population is defined as universal set of the study of all members of real or hypothetical set of people, events or subjects to which an investigator wishes to generate this result Mugenda and Mugenda (2003). According to Babbie (2005), the population for a study is that group (usually of people) about whom we want to draw conclusions. Therefore target population for the purpose of this study are the sixty two (62) staff workers of the county government of Mombasa stationed at the old Mombasa municipality offices at Nkrumah Road.

They include staff in the department of supply chain, information Technology (IT), IFMIS office, cash office, stores/inventory and the county parliament offices. They are targeted because; they are in the frontline in the implementation eProcurement procedures and processes. Sampling is the process by which a relatively small number of individuals, objects or events are selected and analyzed in order to find out something about the entire population.

According to Mugenda (2002), a representative sample size is that with at least 30 percent of the population under study. Thus, the research uses 30 percent of the above total population that computes to thirty three (33) staff members of supply chain and other departments of the local government of Mombasa County. This sample size translates to 53 percent of the total targeted population of the staff members in all the departments targeted.

### **Sampling Technique**

During sample collection for the study, the researcher used both probability and non – probability sampling techniques.

Thus, the researcher used the purposive sampling technique is a non- probability sampling technique to select all the procurement officials at the five county government departments who were believed to be in a better position to respond to the research questions. The criteria that the researcher used in selection of subjects included their level of responsibility or authority, stake in procurement transactions, non-substitutability of the officials and ability to comprehend the questions put forth and to answer them. This sampling enabled representation of each of the county department and allowed generalization of a larger population with a margin of error that is statistically determinable Mugenda & Mugenda (2003).

### **Research Instruments**

Keiser (2006) explains that research prefers using methods that provide high accuracy, explanatory power, with low cost, rapid speed and maximum management demands with convenience. Based on the above, both primary and secondary data was collected for this study. The secondary data include a review of key public procurement publications and literature on the subject. The primary data was predominantly collected through structured interview and questionnaires administered to selected respondents.

Research questionnaire was used as the main instrument for data collection. The questionnaire was structured to provide for open and closed ended questions. The structure of the questionnaire comprises of four parts, the first part constituting the particulars of respondent, the second part has questions on general information, the third part has questions about the e-procurement implementation status and lastly the fourth part focuses on key considerations on e –procurement implementation. The questionnaire was developed on the concept of research hypothesis and shall be self-administered by the researcher through hand delivery.

### **Data Collection Procedure**

The research data was collected from both primary and secondary sources. Descriptive approach was to be applied to collect primary data. This is the use structured open/closed ended questionnaire, or interview schedules from the selected respondents on eprocurement. Secondary data on the other hand, was sourced from the journals, periodicals, brochures in the library or in staff possessions given when attending in-house seminars/trainings on IFMIS or eProcurement.

In the distribution of questionnaires to the employees selected (respondents), a cover letter explaining the purpose of the questionnaire, written by the researcher and endorsed by the Director of Supply Chain Management of the County of Mombasa.

### **Data Processing, Analysis and Presentation**

According to Kothari (2004), data analysis is the computation of certain indices or measures along with searching for patterns of relations that exists among data groups.

It involves qualitative statistics; analyzing information in a systematic manner in order to come to a successful conclusion and recommendations. To facilitate the analysis, the questionnaires were coded according to each variable of the study to ensure accuracy and minimal error margin during analysis.

Descriptive statistics such as mean and standard deviation were used to describe the basic features of the data and to provide simple summaries about the sample and the measures. Data analysis was by Statistical Package for Social Sciences (SPSS) program. Pearson coefficient correlation, multiple regression analysis will further be used to show the relationship between the dependent variable and the independent variables and validate the statistical data further Kothari (1984).The data will be presented using tables and charts to give a clear picture of the research findings at a glance.

### **RESEARCH RESULTS/FINDINGS**

The study was done to establish the factors affecting eProcurement adoption in county governments, a case study of Mombasa County Government. The study involved four variables; staff skills and competency, ICT infrastructure availability for eProcurement adoption, adequacy in budget allocation and executive management collaboration. The study variables were calculated for the four variables and they ranged from a high of 3.71 to a low of 1.72. The 4-point Likert scale adopted by the study in ranking the variables; 0.1 – 1.0 represents ‘unimportant’; 1.1– 2.0 represents ‘least important’ ; 2.1 – 3.0 represents ‘ important’; and 3.1 – 5.0 represents ‘Most important’.

The four research independent variables are thus analyzed as per the respondents views.

### **Research Results Analysis**

Research results include the respondents’ responses to factors affecting adoption of eprocurement in the Mombasa county government main offices. The questionnaires included the County Assembly account section, which is closely collaborating with the other county

procurement and finance sections in data, payments and ICT. The research analysis, was done using thirty (30) questionnaires distributed to the employees, general questions directed to the relevant employees in this area to back-up the employees' responses.

Following the mean average of the Linkert scale previously discussed in the study, the variables importance are critically discussed below.

### **Existing Eprocurement Skills in the Organisation**

According to a paper prepared jointly by Asian Development Bank, Inter-American Development Bank and the World Bank in 2004 titled 'Procurement Harmonization Project, Readiness Assessment' findings indicate that, in jurisdictions that have successfully adopted e-GP, there Have usually been significant government efforts to make provision for the education and training of executives, managers and staff with procurement responsibilities. The range of education and other training programs can be done by; government agencies, private sector organisations or tertiary institutions.

Staff skills and competencies within the county procurement departments, was the first variable because it is one factor, which influences most the electronic records management, software systems management, infrastructure design and eventually adoption of the eprocurement strategy. According to the study the mean score for this variable was 1.7, which is the lowest. Due to trainings and seminars in other e-government procedures, the respondents view this variable as less impactful on eprocurement adoption. The respondents views are quite strong to comments like; Eprocurement helps for fast data processing, Eprocurement helps in reduction of operation costs, Eprocurement provides communication with suppliers of goods and services and Eprocurement helps in keeping of company and suppliers information for future use (3.67, 4.10, 3.87 and 3.90 respectively).

### **Executive Management Collaboration for Eprocurement Implementation**

According to a study by the global bank, the executive management team is responsible for setting the vision and goals, bringing about collective commitment for change in process and organizational structures, and formulating the policies and strategies necessary to put an e-Procurement initiative in place WB (2003). The PPD Act of 2005 and the Public Procurement and Disposal (County Governments) Regulations 2013 requires that county procurement entities shall independently as a devolved unit be responsible for all its procurement and asset disposal



decisions. These decisions need to be formulated in a systematic, corporate and structured manner.

It is ironical therefore, that, procurement is not generally viewed as a strategic support activity within the public sector. Instead, the executive management of public organisations view it as an administrative function that focuses on carrying out and recording transactions. But in the private sector this department is very critical in both reducing costs, quality management and customer satisfaction. Development of relevant policies to guide the processes and procedures of procurement are strategic in the private sector. Recently however, public institutions have realised that procurement is very strategic in overall service delivery. According to the study, the average mean score was the second lowest at 2.42 and Linkert scale classifies this as 'important'.

The research findings show that the respondents have reserved opinions in executive management collaboration. Although the regulations are very clear that the adoption of eprocurement is integral part of the law, the respondents feel that the input of the executive is inconsequential to the strategy.

### **Information Communication Technology Facilitation**

Premkumar (2003) found out that IT infrastructure to be an important determinant of Information Systems adoption and by extension electronic procurement. The research results of the study indicate an average mean of 2.80 on aspects related to infrastructure. According to Linkert scale adopted in the study this variable is considered 'important'. Arasa and Achuora (2012) supported this argument - who established that technological factors and eprocurement infrastructure implementation in the Kenyan apparel industries are linear with an R of 0.873. This confirms what we found in this research. ICT infrastructure is the fulcrum of adoption any transformative electronic business model in the present global procurement. This should be the driving force for county government of Mombasa eprocurement adoption strategy.

### **Budgetary Allocation for eProcurement adoption**

The consortium of PricewaterhouseCoopers and Philip Lee Solicitors (2001) findings indicated that the cost benefit of adopting eprocurement investment from initial year to two would likely provide an IRR greater than 20%. They argue that the investment should reap increasing rewards progressively in the future by virtue of the cumulative effect of the initiatives

implemented in the earlier years. Failure to do so will result in the anticipated financial returns not materializing during the implementation phase.

The study established that the budget allocation is the most important aspect of eprocurement strategy adoption with a mean average of 3.71. It is in the view of the respondents that adequate budgetary allocation be set aside for the strategy adoption.

### **Conclusion**

Although the four independent variables were seen to have critical influence to the adoption of eprocurement strategy in Mombasa county Government at the literature review stage, there is considerable levels of individual interventions for each. The findings are that budget allocation for the various aspects of eprocurement adoption provide the most impactful change at a higher mean. The rest of the variables have subsequent changes to the strategy in the order of ICT infrastructure, executive management collaboration and lastly staff skills. At the same time, research study established that there exists a certain level of knowledge about eprocurement among the staff of Mombasa county government. However, full adoption of eprocurement does not exist in the various departments of the county government.

### **Recommendations**

Following the findings of the research, adequate budget allocation and infrastructure development takes the lead as the important factors in the adoption of the eprocurement strategy. The infrastructure includes both internal and external (suppliers). First the County government should create working committees to lead the infrastructure development and solicit for funds from the relevant bodies to implement the right hardware and software. The executive collaboration with the committees' are crucial to spearhead the implementation processes. The staff skills both internally, and suppliers skills should be developed to ensure synchronized implementation and adoption of the strategy. Countries that implemented eProcurement meticulously institutionalized the various procedures along with the stakeholders of the strategy.

Overall the research only sampled the views of the internal stakeholders (Mombasa county government staff), but it is all inevitable that the outside stakeholders (suppliers, banks and other service providers) need to be consulted and their views collaborated with the research observations. It is critical to look at this area to determine other underlying factors through further research. Critical success is also hedged on high level top management support in positively organizing and managing implementation perspective of an e-Procurement initiative.

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