

# EFFECTS OF INTERGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM IN STATE CORPORATIONS IN MURAG, A COUNTY: A CASE STUDY OF KANGEMA NEW KENYA CO-OPERATIVE CREAMERIES

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**Abstract:** The Kenyan e-procurement system, also known as Integrated Financial Management Information System (IFMIS) is an automated procurement system and a core component of public financial reforms in Kenya. It is used for public financial management and control, accounting, audit and reporting. It was first implemented in Kenya in 2013. The e-procurement system has been implemented in the ministries, departments and agencies. The e-procurement system has automated supplier Management, Requisition Management, Quotation & Tender Management, Contract Management, Order Management, Inventory Management, Receipting Management, Invoice and Payment Management; online approval hierarchy for Purchase Order and Accounts Payable and automation of procurement planning in line with the approved budget estimates. This article seeks to evaluate the effects of integrated financial management information system in Murang'a County. A case study of Kangema Kenya Cooperative Creameries. The specific objective of this study is to; determine the influence of budgeting process automation on effective management practices in KCC; to establish whether computerized human resource management has increased effective management practices in KCC; to evaluate the effect of Integrated Financial Management Information System (IFMIS) on financial reporting in KCC and to establish the challenges facing implementation of IFMIS towards effective management of IFMIS practice in KCC.

**Keywords:** Integrated Financial Management Information System, Contract Management, Challenges and Tender Management.

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## 1. INTRODUCTION

### Background of the Study

Financial management system refers to the operation of those systems and processes designed for budget making and budget implementation; the maintenance of accounting system which records financial decisions, flows and transactions, and the auditing of all aspects of these accounts (Pollitt, 2008). Financial management information systems (FMIS) on the other hand is the computerization of public expenditure management processes including budget formulation, budget execution, and accounting with the help of a fully integrated system for financial management of line ministries and other spending agencies (Diamond & Khemani, 2005). McKinney (2004) identifies three main activities relate to financial management. First, it determines the scope and content of fiscal policies; which is a process in which agency, community or relevant political parties set forth programs and provide the appropriation or resources required to accomplish them.

Secondly, it establishes general guidelines and standards to ensure that funds are spent honestly and wisely to achieve publicly determined purposes. Thirdly, it provides organizational structures and controls to effectively carry out fiscal duties and responsibilities.

Because of integration requirements, the FMIS is commonly characterized as an integrated financial management information system (Diamond & Khemani, 2005). According to Beschel and Ahern (2012), integrated financial management information systems (IFMIS) can facilitate timely and accurate reporting; allow internal controls to be exercised through the IFMIS, and therefore support more consistent compliance; and allow central agencies to oversee budget execution by line ministries, therefore facilitating the devolution of responsibilities to front line managers while retaining information at the centre

In developing countries such as Kenya, some have claimed that e-procurement is an important instrument for preventing corruption in the procurement of goods and services (Nurmandi & Kim, 2015). It has been alleged that to overcome the concerns relating to corruption in government procurement, information and communication technology (ICT) can play an important role to reduce corruption by promoting good governance (Jennings, 2001), enhancing relationships between government employees and citizens tracking activities, monitoring and controlling the government employees and reducing potentiality of corrupt behaviors. As such, the claim that e-procurement reduces corruption may probably be attributed to the allegation that adaptation of e-procurement systems increases transparency and efficiency especially in the public sector (Cabras, 2010). The National Treasury is the Kenyan government ministry that is charged with spearheading the public financial management reforms. Within the ministry, there is a department called the Integrated Financial Management Information System (IFMIS). This department has the mandate of designing, spearheading and managing the Integrated Financial Management Information System re-engineering process in all central governments and all government agencies (Mambo, Ombui & Kagiri, 2015).

According to the E-government Strategy Paper 2004, e-procurement was one of the medium term objectives which were supposed to be implemented by June 2007, but the implementation process was observed to be very slow (GoK, 2004). Although a number of public sector agencies are actively pursuing e-Procurement, evidence from the business press reveals that many of the efforts are not meeting original expectations. In fact, the implementation rate of public procurement systems has been slow and many government agencies tend to overstate the degree to which they are involved in e-Procurement (MacManus, 2002). Despite the benefits that can be achieved from a successful e-Procurement implementation in the public sector, the business press has reported a number of failures of e-Procurement initiatives in a number of public sector agencies not only in developing countries but also in the developed ones too like USA, UK and New Zealand in recent years.

E-Procurement has been perceived as likely to result in large investments of time and money, without absolute certainty that its full potential will be achieved every time (Heywood, 2002). The plan to introduce e-procurement in all Kenya's public entities was argued as a way of curbing corruption and reducing tendering delays which was set to be rolled out in 2013 after the completion of a pilot study (PPOA, 2009). Several developments have necessitated changes that aim at strengthening the system as well as improve service delivery (Ndolo & Njagi, 2014). The need to offer youth and women more business opportunities in government tenders have led to the strengthening of the preference and reservation clause, the 30% rule. The emergent of Public Private Partnership (PPP) arrangements as the government seeks to tap into private resources has led to more private interest on government business. Government to government procurement has also led to more confusion in the ever controversial issue. Citizens interest on government opportunities has also increased tremendously as business opportunities becomes scarce and stiff competition reaching great heights. The above scenario has seen increased procurement corruption and fraud related complaints to the ethics and anticorruption commission, more procurement reviews/appeals as well as contract nullifications by the Public Procurement Administrative Review Board (PPARB) (Government of Kenya, 2013)..

The e-procurement system in Kenya is anchored on the Integrated Financial Management System (IFMIS). The Government of Kenya aims to achieve the following objectives through the implementation of an e-procurement system. The objectives include the following: to enhance transparency in public procurement; achieve cost savings; reduce inventory costs; achieve internal arbitrage and ensure consistent and sustainable contract development (PPOA, 2009). President Uhuru, during the launch of the e-procurement system in Nairobi said that by introducing transparency and accountability through the e-Procurement, there were expectations that it would eliminate the abuse of the country's procurement system (Pymnts, 2014). Besides the online system, the President said the National Treasury was establishing a digital payment system that would accept payments to the government (Pymnts, 2014).

A wide range of organizations are struggling to adopt information and communication technology in their procurement functions (Bilali & Bwisa, 2015). Furthermore, IFMIS systems are complicated, expensive and difficult to manage and maintain. Adoption barriers could stem from major areas of infrastructure, strategy, people or culture (Kumar, 2009). It is thus clear that the road to implementing successful IFMIS in Kenya, like in any other developing country is paved with difficulties. The public procurement system in Kenya has been faulted for being time consuming, rogue, inflexible and not corrupt free (Mokaya, 2013). Often the complaints emanate from disgruntled bidders and politicians who would be happy to influence the process in their favor. However, this is not always the case since sometimes raised concerns have stood to be the truth. Several developments have necessitated changes that aim at strengthening the system as well as improve service delivery; for example implementation of the new constitution which brought in the concept of county government procurement, this has been a big battlefield between the central government and the county governments (Ndolo & Njagi, 2014). The hurdle in the implementation of e-procurement system in Kenya is no surprise. Statistics have indicated that for most governments, e-procurement system implementations have a 30% possibility of success (Panda & Sahu, 2012). This may be attributed to the virtue that implementation of Government-to-Business, (G2B) services, such as public e-procurement, takes time and is expensive, since it entails complex, laborious and expensive interoperation of interspersed and/or disparate applications, such as ERP systems, ordering, invoicing, billing systems, etc, at both national and international level. Therefore, reduction of development costs and time is a vital prerequisite for the realization of public e-Procurement services (Croom & Brandon-Jones, 2007). However, there is no specific framework for identification and testing of critical success factors in various cultural and environmental contexts (Panda & Sahu, 2012).

E-procurement has been researched on by various scholars with a view to identify the critical success factors for its implementation. Consequently, different studies have come up with different critical success factors. For instance, some identified three e-procurement success factors namely supplier and contract management; end-user behavior and e-procurement business processes as well as information and e-procurement infrastructure (Rebecca & Ravi, 2007). There are others who identified the critical success factors as: Technology; Process and People (Nasi, 2005). As a result, there is no uniformity on what actually constitutes the critical success factors. Probably, this may be due to the differences in the various contexts in which the studies were conducted or may be the methodologies used. Whatever the reason, one thing comes out clearly; there is no universal framework of the critical success factors (CSFs) for measuring success/failure of e-procurement implementation in different contexts. Due to lack of a uniform process of identifying and measuring CSFs, there is a scope limitation for e-procurement implementations (Panda & Sahu, 2012). It is thus important to identify the critical success factors in any particular context. Therefore, the level of implementation success needs to be established in the given context and its relationship with the identified CSF established. This is therefore the gist of this study in KCC.

### **Problem Statement**

It has been argued that developed countries have a higher probability of successfully implementing and adopting e-procurement systems than developing countries due to different factors such as the digital divide between the rich and poor countries (Walker & Harland, 2008). Even so, lack of a uniform process of identifying and measuring CSFs has caused a scope limitation for e-procurement implementation and success measurement (Panda & Sahu, 2012). For this reason, it would be difficult for any research that may be interested in assessing successful implementation of e-procurement in any particular context without a defined set of the critical success factors. In addition, the lack of a defined set of CSFs may result into a misguided priority during implementation whereby attention may be given to other factors which may not necessarily be the CSFs in that specific context.

The e-procurement system has been implemented in the ministries, departments, agencies and 47 county governments. The e-procurement system has automated supplier Management, Requisition Management, Quotation & Tender Management, Contract Management, Order Management, Inventory Management, Receipting Management, Invoice and Payment Management; online approval hierarchy for Purchase Order and Accounts Payable and automation of procurement planning in line with the approved budget estimates. Despite this directive, evaluation of success in implementation of e-procurement by the Kenya government lacks a defined framework of the CSFs. This is because prior studies on this area have not clearly identified and rated the success factors. A study on e-procurement adoption by Government parastatals in Kenya from a suppliers' perspective concluded that attitude and supplier capacity can lead to adoption or non-adoption of e-procurement (Kinoti, 2013). A research on e-procurement readiness factors in Kenya's Public sector to determine the extent of e-procurement levels in public institutions in Kenya concluded that technology, organization's finance, leadership and integrity, legal framework and technical preparedness, international law and employee attitude, procurement policy and national procurement law, e-procurement adoption and staff information

technology adequacy and online marketplace and Government support are critical in successful implementation of e-procurement by Kenya government (Orina, 2013). Bartol (2009) concluded that resistance to change; poor ICT infrastructure and lack of human resource capacity were key impeding proper service delivery in public sector.

While all the previous studies have focused on the effects of implementation and challenges affecting implementation of IFMIS, few or no studies seem to focus on investigating the effects of integrated financial management information system on effective management in the New KCC. This study fills the existing gap by assessing how implementation of an integrated financial management information system contributes towards effective management practices in KCC.

### General Objective

The general objective of the study is to assess the effects of integrated financial management information system in state corporations in Murang'a County. A case study of Kangema new KCC.

### Specific Objectives

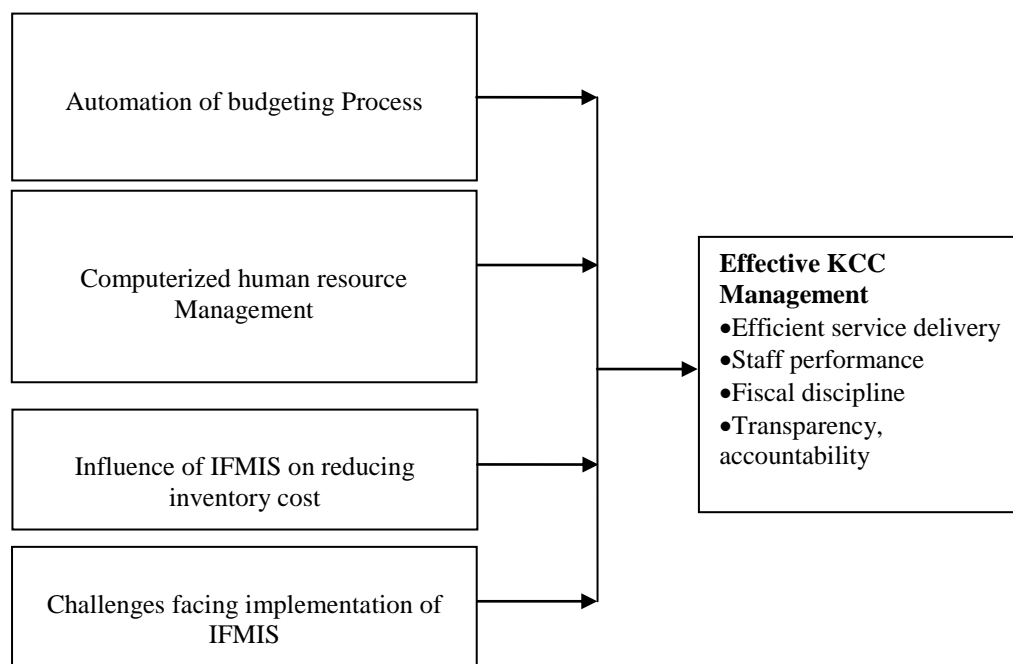
- I. To determine the influence of budgeting process automation on effective management of IFMIS practices in KCC.
- II. To establish whether computerized human resource management has increased effective management of IFMIS practices in KCC
- III. To establish the influence of IFMIS on reduction of inventory cost towards effective management of IFMIS practices in KCC
- IV. To establish the challenges facing implementation of IFMIS towards effective management of IFMIS practices in KCC

## 2. LITERATURE REVIEW

Literature review focuses on the relevant theoretical and empirical literatures.

### Conceptual Framework

Conceptual framework is a logically developed and described network of interrelationships among variables of study that tries to explain the theory underlying these relationships, their nature as well as direction of these relationships. The conceptual framework shows how the relationship of the independent variables in this study relates to the dependent variable graphically.



Independent variables

Dependent Variable

**Independent variables**

**Dependent Variables**

**Fig.2.1:** Conceptual framework as adopted from Eisenhardt & Martin (2000), Porter's (1990) and Ansoff (1965) model.

### Critical Success Factors for Implementation of E-Procurement

Critical Success Factors (CSFs) represent the areas or functions where events and actions must occur to ensure successful competitive performance for an organization (Butler & Fitzgerald, 1999). There is no universal framework of the critical success factors (CSFs) for measuring success/failure of e-procurement. Different studies in different contexts have established different success factors. Lack of a uniform process of identifying and measuring CSFs has caused a scope limitation for e-procurement implementation and measurement (Panda & Sahu, 2012). For this reason, there is need to identify CSF for successful implementation of e-procurement in the Kenyan context.

A study to understand the business-to-business e-procurement described the success factors and challenges to e-procurement implementation in the corporate setting (Rebecca & Ravi, 2007). The study identified three e-procurement success factors namely supplier and contract management; end-user behavior and e-procurement business processes; and information and e-procurement. In addition, the study also identified three challenges-to-implementation factors namely lack of system integration and standardization issues; immaturity of e-procurement-based market services and end-user resistance; and maverick buying and difficulty in integrating e-commerce with other systems (Rebecca & Ravi, 2007).

Critical success factors have been defined to effectively achieve organizational improvement through IT as: Technology: Such as websites, ERP, system security and digital signature; Process: A thorough business process reengineering is needed along with the; adoption of standards and coding acknowledged internationally. It is necessary to raise awareness and train the employees on themes such as sharing knowledge through IT, networking and change management (Nasi, 2005).

Another study was conducted on e-procurement adoption by Government parastatals in Kenya from a suppliers' perspective (Kinoti, 2013). The study examined how the supplier attitudes, capacity, transparency and integrity affected their propensity to adopt it. The findings indicated that the model examined in the study was significant with an R<sup>2</sup> of 95%. The study indicated the existence of a strong positive relationship between capacity and propensity to adopt. The conclusion by the study was that attitude and supplier capacity can lead to adoption or non-adoption of e-procurement (Kinoti, 2013).

Research was done on E-procurement readiness factors in Kenya's Public sector to determine the extent of e-procurement levels in public institutions in Kenya (Orina, 2013). From the findings, the study showed that resistance to change, lack of enthusiasm, staff skills, and to some extent procurement policies impacted the readiness of e-procurement in public institutions.

### Policies and Regulations and Success/Failure of E-Procurement System

There is a fundamental and accepted difference between public procurement and private procurement at the public procurement policy level (Murray, 2007). Due to the different characteristics of the public-sector compared to those of the private sector, public procurement is often a process of political decisions on how the government obtains public goods and services at economical costs.

A look into the policy framework for different regions in their e-procurement gives a mixture of findings. For instance, recent studies indicate that unlike Europe, Asia is yet to adopt a specific-procurement regional policy or legal framework. However, aspects of legal validity of e-procurement can be found in the "e-ASEAN Reference Framework for Electronic Commerce Legal Infrastructure" (UN ESCAP, 2006). Even so, this instrument is not a compulsory. On the contrary, it acts only as a guideline. For individual country cases, many Asian nations, such as China, Malaysia, the Philippines, and the Republic of Korea, undertook a massive reform of public procurement legal environment as part of their national e-government action plan (UN ESCAP, 2006; Vaidya et al., 2009). In public procurement, there is need for public procurement managers to insulate and protect themselves against the possible conflicting demands of various stakeholders (Ancarani, 2009).

In terms of application of rules, a wide range of variations have been found, and these variations are heavily driven by a hierarchical downward flow of verbal and non-verbal instructions based on varying degrees of interpretation of respective rules and standard procedures (Khan, 2013). To sum it up, the public sector's regulatory restrictions and organizational dimensions are some of the biggest deterrents to e-commerce (MacManus, 2002).



### **Capacity Building and Success/Failure of E-Procurement System**

Capacity building is a critical factor that affects the success of IFMIS implementation. This is more so in developing countries with limited capacity of IT. The situation in these countries is further complicated by poor terms of employment and public sector's salary structure which usually are unable to attract and retain duly qualified staff (Aberdeen Group, 2001). It is during the early stage of the need assessment process that capacity building and training should be scoped. In the process, the various user groups should be identified, the level of knowledge assessed, recruiting needs identified and the scope of the training curricula defined targeting the various key audiences (Balogun, 2003). The training should start from the very beginning of the reform, starting by those who are likely to be the most immediately affected by the IFMIS reform. A wider and permanent training programme should also be put in place.

Considerable human resources requirements and capacity building needs across the entire government are involved in IFMIS implementation. Before such projects can be truly viable in developing nations, it is vital to adequately address the low level of computer literacy first (Davenport & Brooks, 2004). The scarcity of staff with the requisite IT expertise cannot be just remedied by training and hiring. The current private sector employment conditions outdo those in the public sector incentivising candidates with the requisite IT expertise. This creates a risk that the highly trained staff leaves for much better employment opportunities (Gallagher, 2007).

Capacity building has been pointed out as a never-ending process given the nature of institutions and organizations (Davenport & Brooks, 2004). It rather needs to be continuous and permanent. This therefore calls for the establishment of a sound permanent authority within the government, empowered to carry forward the functions.

Observation has also been made that, as documents on the functional requirements –which will often serve as a blueprint for later phases of the system –are difficult to amend at a later stage, it is critical to spend adequate time on the design phase of the project (Parr & Shanks 2000). Given that IFMIS core systems should fit the local context and environment, a key issue for consideration is whether to use Off-The-Shelf (OTS) systems and customize them to fit the local conditions or whether to invest in an own “custom-build” system, which comes with major costs and resource implications. IFMIS implementation also involves major hardware requirements. In Malawi for example, IFMIS requires 50 servers, one central server and a local IFMIS sever in each line ministry (Bhatt, 2005). Power shortage and interruptions imply that in some countries, generators and power supply units need to be installed as well.

### **IT infrastructure & System Integration and Success/Failure of E-Procurement**

In past research, emphasis has been placed on some of the information systems related issues that were obscuring effective implementation and causing the slow uptake of e-procurement systems. More emphasis has particularly been on software integration, including discussion of 24 XML related opportunities (IDC, 2003). Other studies have cited user adoption as an essential factor in successful e-procurement deployment (Aberdeen Group, 2011). Using a single case study, the critical nature of critical both web content management and content rationalization for e-procurement operation has been highlighted (Lin & Hsieh, 2000). Such studies have observed that constantly changing prices, specifications and account details across the on-line supply base caused major hurdles in the maintenance of supplier catalogues. Furthermore, the description of an item, item coding, was found to be a critical data management issue for e-procurement. They further claim that material code proliferation within ERP systems has posed the same challenges for the management of the IS infrastructure (Lin & Hsieh, 2000).

The effectiveness in integration of e-procurement system with other IS, especially production planning and control and finance systems, is a fundamental determinant of the efficiency and effectiveness of an e-procurement system (Subramaniam & Shaw, 2002). Systems integration has been identified as a critical success factor for e-procurement implementation both with the customer's information infrastructure and in its links to suppliers (Rajkumar, 2001). KPMG (2001) mentioned that it is vital to establish the extent of integration needed between the e-procurement solution and existing information systems. It is also crucial to link the e-procurement system to the financial management system so as to facilitate the suppliers' online payment process (WB, 2003).

Given that an e-procurement system undergoes vertical and horizontal integration across systems and enterprises, it is important that the system be built around well-accepted technical content and process standards. In addition, since the system has to meet legal requirement of audit-ability, it should also comply with legal/administrative frameworks

prevalent in the country (Cagliano et al., 2005). The system must be developed around open source technologies and standards. Hardware optimizations such as active-active failover, load balancers, proper sizing of servers and finally disaster recovery of the setup should be planned and implemented. There should be intuitive interface design, easy to use and with proper upward-downward navigation. There needs to be efforts to minimize the number of mouse clicks required for getting the required information. This is to optimize the interface of the system for faster access over slow Internet speeds (Dooley & Purchase, 2006).

### **Challenges Hindering Successful Implementation of E-Procurement**

Despite its benefits, e-procurement is also faced with some problems that hinder its adoption in various departments. There have been identified notable challenges such as company culture and upper management support (Eadie et al, 2007). Resistance to change, lack of a widely accepted solution and lack of leadership, which are cultural, are some of the biggest barriers to the introduction of e-procurement within the public sector (Davila et al, 2003). To counter this problem, a cultural change needs to take place prior to adoption of an e-procurement system (Eadie et al, 2007). People need to be appointed and backed with full senior management support in order to effect this change. Adequate sensitization on the system will greatly reduce the resistance to the change. It is the cultural change brought about by senior management support which can enable e-procurement to be successfully implemented (Eadie et al, 2007).

Another identified challenge is lack of IT infrastructure (Wong and Sloan (2004) cited in Eadie et al, 2007). On the same note, technological integration, data quality, system-to-system integration, and ICT/technical issues have also been identified as major challenges for many organizations when implementing e-procurement (Williams & Hardy, 2006). A survey at Florida Atlantic University pointed to a common set of obstacles for e-procurement initiatives (Prier & Mc Cue, 2007). The survey identified the following set of obstacles: Too expensive to implement; Lack of financial system interoperability; Limited resources; Technology barriers; Governing body resistance; Interoperability with other systems; Supplier resistance; Finance department resistance; Concern about local business competitiveness; Capacity or skills shortage across the entity (Prier & McCue, 2007).

Another challenge is the cost implications of the system. Some organizations perceive the system as being too expensive to implement. This relates to budgeting and costs, change management, as well as need of training and resources (Williams & Hardy, 2006). Therefore in their opinion, they would rather stick to their system. Furthermore, engaging suppliers in the process - especially smaller organizations - is also proving to be difficult given the level of investment expected in terms of providing catalogue information to buyers, and marketplaces using different technologies, platforms and business languages (Williams & Hardy, 2006).

Sometimes, e-Procurement results in large investments of time and money, without absolute certainty that its' full potential will be achieved every time. Besides, there is also lack of technical expertise (Heywood, 2002). Most organizations lack the expertise to operate the system if initiated. In their view, embracing e-procurement technology implies employing the necessary manpower to operate it (Heywood, 2002). Some part of the older generation has not kept up to the advances in IT related issues (World Bank, 2003). This makes them rely heavily on traditional forms and means of procurement. In fact, this forms the majority of those against change, especially when the change requires anything more than the training they already have. Therefore, 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 (World Bank, 2003).

There is also lack of a business relationship with suppliers capable of e-procurement (Eadie, 2007). Lack of business relationships with suppliers showing the need for an e-procurement makes supply chain another barrier for the implementation of e-procurement (Hawking et al, 2004). Security of transactions is another challenge (Jennings, 2001). Working on the internet has become risky due to hacking of information. This has made organizations fear using it. Banks have lost money. Data which is transmitted on the World Wide Web can be garbled, can reassemble wrongly at the other end, or can display only partially because of incompatible software (Jennings, 2001). There are also interoperability concerns. Providing procurement information over the internet produces interoperability concerns (Rankin, Chen & Christian, 2006). This is due to the fact that software companies have sought to make their product unique. In doing so, they have endeavored to stop migration of data between systems. Compatibility, interfacing with other systems and stability, are technical issues which have become barriers to e-procurement implementation (Rankin, Chen & Christian, 2006).

The impact of technological errors, system constraints and technological failures, which are seldom discussed or acknowledged, are also a major concern for e-procurement (Coulthard & Castleman, 2001). While tools such as e-signature, e-notice or e-bids do significantly reduce processing time – these constructs might raise security issues, cause costly errors and authenticating bidders ‘problematic (Sun et al., 2011). In this sense, much of the responsibility of ethical behavior is placed on the vendors which, given their motives, may place additional pressure on procurement to validate the integrity of the process; again driving up implementation costs. The public agency is limited in its ability to insure that the internal structures of suppliers fits within the broader context of the rigorous ethical expectations of the public sector (Sun et al., 2011)

### 3. RESEARCH METHODOLOGY

The research design constitutes the blue print for the collection, measurement and analysis of data, Kothari, (2003). Choice of research design depends on the way the researcher views the world in which he/she carries out the research. A qualitative research is subjective, uses non- mathematical procedures in explaining and interpreting the outcome of the research, and it is used to study way organizations, groups and individuals behave and interact (Robson, 2002). A quantitative research, sometimes referred to as positivist is objective, scientific in approach and collects and uses numerical data (Robson, 2002). A triangulation of the two research methodologies was applied in this study. The researcher used descriptive research design. A descriptive research is a research design that attempts to show the status quo of study items (Cooper & Schindler, 2006). The main idea behind using descriptive research was to better define the opinions and attitudes held by a group of people on the success of implementation of e-procurement by the KCC. In addition the researcher used explanatory research design in this study. Explanatory design can be used when collecting information about people’s attitudes, opinions habits or any other social issues Orodho & Kombo, (2002). The choice of this design is appropriate for this study since it utilizes a questionnaire as a tool of data collection. This is supported by (Gall et al 2003) who assert that this type of design enables one to obtain information with sufficient precision so that hypothesis can be tested properly. Creswell (2003) observes that explanatory research design is used when data is collected to describe persons, organizational settings or phenomenon. The design also has enough provision for protection of bias and maximized reliability (Kothari, 2008). Explanatory design uses a pre-planned design for analysis (Mugenda & Mugenda, 2003).

Population refers to an entire group of persons or elements that have at least one thing in common. Population also refers to the larger group from which a sample is taken Orodho and Kombo, (2002). A population can also be defined as including all people or items with the characteristic one wish to understand. Target population for this study consists of 30 staffs in procurement department. According to Kombo & Tromp (2006), an effective population should have ideas on the topic investigated. The target populations have adequate information to address the study objectives of this research.

According to Creswell (2002) data collection is the means by which information is obtained from the selected subject of an investigation. The tool of data collection for this study will be questionnaires addressed procurement managers, procurement staffs and selected KCC suppliers. The questionnaire is used for data collection because it offers considerable advantages in its administration. It gives opportunity to the researcher to collect data from large numbers of respondents simultaneously and provides the investigation with an easy accumulation of data. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. It is also anonymous and is able to produce more candid answers than is possible in an interview. The researcher with the assistance of the supervisors developed the research instrument. The questionnaire is developed in accordance with the objectives and research questions. The questionnaire contained both structured and unstructured questions. The open-ended questions will be used to limit the respondents to given variables in which the researcher is interested, while unstructured questions will be used in order to give the respondents room to express their views in a more pragmatic manner Kothari (1990).

Data collected was analyzed using descriptive statistic. Quantitative data was analyzed using mean and tables. Qualitative data was analyzed based on content analysis. Data was analyzed with the help of electronic spreadsheet-SPSS program- which has analysis tools. The collected data will be presented using Statistical techniques which would include frequency distribution and tables



#### 4. RESEARCH FINDINGS AND DISCUSSION

##### Effects of IFMIS on Financial Reporting in KCC.

The researcher wanted to establish effects of IFMIS on financial reporting in KCC.

##### IFMIS enables one to understand service delivered by KCC per activity

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	12	40	40
	Agree	14	47	87
	Neutral	4	13	100
	Disagree	0	0	0
	Strongly disagree	0	0	0
<b>Total</b>		<b>30</b>	<b>100</b>	

##### Source: Research

From the above analysis majority of respondents (47%) agreed that IFMIS enables one to understand service delivered by KCC per activity, 40% strongly agree and 13% were neutral. In general 87% of respondents felt that IFMIS enables one to understand service delivered by KCC per activity while 13% of respondents neither agreed nor disagreed.

##### IFMIS enables easy extraction and presentation of data analysis

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	9	30	30
	Agree	17	57	87
	Neutral	3	10	97
	Disagree	0	0	97
	Strongly disagree	1	3	100
<b>Total</b>		<b>30</b>	<b>100</b>	

##### Source: Research

From the above analysis 57% of respondents agreed, 30% strongly agreed, 10% were neutral and 3% strongly disagreed that IFMIS enables easy extraction and presentation of data and analysis. In summary 87% of respondents agreed that IFMIS enables easy extraction and presentation of data and analysis.

##### One can access IFMIS to derive specific information to carry out his work

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	13	43	43
	Agree	12	40	83
	Neutral	5	17	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

From the above analysis 43% of respondents strongly agreed, 40% agreed and 17% were neutral relating to the fact that one can access IFMIS to derive specific information to carry out his work. Generally, 83% of respondents agreed that one can access IFMIS to derive specific information to carry out his work while 17% neither agreed nor disagreed.

**IFMIS has built-in analytical tools to enable trend analysis of various elements of fiscal operations at KCC.**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	12	40	40
	Agree	13	43	83
	Neutral	4	14	97
	Disagree	1	3	100
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

On IFMIS has built-in analytical tools to enable trend analysis of various elements of fiscal operations at KCC, 43% of respondents agreed, 40% strongly agreed, 14% remained neutral while 3% of respondents disagreed. In summary 83% of respondents agreed that IFMIS has built-in analytical tools to enable trend analysis of various elements of fiscal operations at KCC while 3% of respondents felt otherwise.

**IFMIS enables data transaction reconciliation in real time**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	27	27
	Agree	17	57	84
	Neutral	4	13	97
	Disagree	1	3	100
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

From the above analysis 57% of respondents agreed, 27% strongly agreed, 13% were neutral that IFMIS enables data transaction reconciliation in real time while 3% of respondents disagreed. The overall picture indicates that 84% of respondents agreed that IFMIS enables data transaction reconciliation in real time.

**EFFECTS OF IFMIS ON TRANSACTIONS PROCESSING IN KCC****1 KCC transactions are processed through IFMIS**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	22	73	73
	Agree	8	27	100
	Neutral	0	0	
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

The analysis above indicates that 73% of respondents strongly agreed and 27% agreed that all KCC transactions are processed through IFMIS. In general 100% Of respondents felt and confirmed that all KCC transactions are processed through IFMIS.

**IFMIS has led to significant reductions in wasteful expenses and irregular expenditure**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	27	27
	Agree	12	40	67
	Neutral	9	30	97
	Disagree	1	3	100
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

Analysis above indicates that 40% of respondents agreed, 27% strongly agreed and 30% remained neutral and 3% of respondents disagreed that IFMIS has led to significant reductions in wasteful expenses and irregular expenditure. In a nut shell, 67% of respondents agreed that IFMIS has led to significant reductions in wasteful expenses and irregular expenditure, 3% felt otherwise while 30% remained neutral.

**IFMIS has streamlined procedures and significantly reduced opportunity for corruption**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	14	47	47
	Agree	11	37	84
	Neutral	5	16	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

On IFMIS has streamlined procedures and significantly reduced opportunity for corruption, data analysis indicates that 47% of respondents strongly agreed, 37% agreed and 16% remained neutral.. Generally 84% o respondents felt that IFMIS has streamlined procedures and significantly reduced opportunity for corruption.

**IFMIS has ensured KCC budget is executed in accordance with rules to prevent overspending**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	4	13	13
	Agree	11	37	50
	Neutral	12	40	90
	Disagree	3	10	100
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

On IFMIS has ensured KCC budget is executed in accordance with rules to prevent overspending, data analysis indicates that 37% of respondents agreed, 13% strongly agreed, 40% remained neutral and 10% disagreed. Generally 40% o respondents who are neutral and 10% who disagreed is quite a high percentage enough to raise alarm whether it's true or not that IFMIS has ensured KCC budget is executed in accordance with rules to prevent overspending.

**IFMIS has automated procedures and internal controls which promotes accountability**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	12	40	40
	Agree	13	43	83
	Neutral	5	17	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

Analysis above indicates that 43% of respondents agreed, 40% strongly agreed and 17% remained neutral that IFMIS has automated procedures and internal controls which promote accountability. In a nut shell, 83% of respondents agreed that IFMIS has automated procedures and internal controls which promotes accountability.

**EFFECTS OF IFMIS ON FINANCIAL CONTROL AND GOVERNANCE IN KCC****IFMIS allows cross-referencing of personal identification codes thus reducing cases of fraud**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	7	23	23
	Agree	19	63	86
	Neutral	4	14	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Researcher**

On whether IFMIS allows cross-referencing of personal identification codes thus reducing cases of fraud, data analysis indicates that 63% of respondents strongly agreed, 23% agreed and 14% remained neutral. Generally 86% felt IFMIS allows cross-referencing of personal identification codes thus reducing cases of fraud.

**IFMIS can trace all stages of transaction process hence transparency and accountability of process**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	12	40	40
	Agree	15	50	90
	Neutral	3	10	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

From the above analysis 50% of respondents agreed, 40% strongly agreed and 10% remained neutral that IFMIS can trace all stages of transaction process hence transparency and accountability of process. On overview, 90% of respondents agreed that IFMIS can trace all stages of transaction process hence transparency and accountability of process.

**IFMIS assists management in accountability for deployment of public resources**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	27	27
	Agree	18	60	87
	Neutral	4	13	100
	Disagree	0	0	
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

**Source: Research**

On IFMIS assists management in accountability for deployment of public resources, the analysis indicates that 60% of respondents agreed, 27% strongly agreed and 13% remained neutral. In a nutshell, 87% of respondents felt that IFMIS assists management in accountability for deployment of public resources.

**Built in features within IFMIS facilitates effective monitoring evaluation of KCC activities**

		Frequency	Valid Percent	Cumulative Percent
Valid	Strongly agree	11	37	37
	Agree	17	57	94
	Neutral	1	3	97
	Disagree	1	3	100
	Strongly disagree	0	0	
<b>Total</b>		<b>30</b>	<b>100</b>	

From the data analysis above 57% of respondents agreed, 37% strongly agreed, 3% remained neutral and 3% disagreed that Built in features within IFMIS facilitates effective monitoring evaluation of KCC activities. 94% of respondents in overall agreed that Built in features within IFMIS facilitates effective monitoring evaluation of KCC activities while 3% felt otherwise.

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