# INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM AND PROCUREMENT PERFORMANCE OF THE PUBLIC SECTOR IN KENYA

**BY**

**MORGAN FUNDI MUTUI**

**SUPERVISOR**

**MICHAEL K CHIRCHIR**

**A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF MASTER OF BUSINESS ADMINISTRATION (MBA) DEGREE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**OCTOBER 2014**

# DECLARATION

## STUDENT'S DECLARATION

I declare that his research project is my original work and has not been presented to any other university for the award of a degree.

**Signature: ……** **Reg. No: D61/75734/2012**

**Morgan Fundi Mutui** **Date: ……**

## SUPERVISOR'S DECLARATION

This research project has been submitted with my permission as the University Supervisor.

**Signature: ……** **Date: ……**

**Supervisor's Name: Michael K Chirchir**

Lecturer, University of Nairobi School of Business

# ACKNOWLEDGEMENTS

It gives me immense pleasure to thank a large number of individuals for their cordial co-operation and encouragement, who have contributed directly or indirectly in preparing this research project. Firstly, I express my gratefulness to the Lord God Almighty for protection, provision, intellect, health and enabling me pursue my studies this far. This entire course would have not been possible without your divine enablement. Thank you Lord.

To my dear parents, Mr & Mrs Mutui, words cannot express my gratitude for all the priceless treasures you have freely imparted in my life, one being the importance of education. I appreciate the sacrifices you willingly made to ensure that I become an empowered gentleman and a lighthouse in my generation. You are my guardian angels. May the Lord continue to bless you with extraordinary health and length of days.

I acknowledge with gratitude my project supervisor, Michael K Chirchir, whose patience, guidance, co-operation, suggestions and constructive criticisms were instrumental in the preparation of this research paper. Your availability and dedication to your students, puts you a class above the rest.

I am very grateful to the staff and workers of government ministries in Kenya who extended their whole hearted co-operation during my survey period. You are as good as anyone could hope for. God Bless you all.

I convey my gratitude to my classmates. Your selfless and noble actions throughout the pursuit of this entire course are the most radiant pages in the biography of my soul. I am especially grateful for the support you offered, to enable me concentrate on this course. I am thankful for your intellectual contribution on various aspects of this project. To my sisters and brothers, Linda, Alice and Philip, you inspire me to continuously improve myself and be a better person. Thank you for your prayers and the sincere interest you took in my academic progression.

# DEDICATION

I would like to dedicate this research work to my family who are my pillars and sources of great inspiration. My best friend Hannah for her unceasing prayers for God's blessings upon me to be the best I can. And finally, to my brothers and sisters who have supported me during my studies. May the Almighty God bless you all.

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# LIST OF ABBREVIATIONS

| | |
|---|---|
| GDP | Gross Domestic Product |
| GPPC | Government Procurement Process Cycle |
| ICT | Information and Communication Technology |
| IFMIS | Integrated Financial Management Information Systems |
| IMF | International Monetary Funds |
| IT | Information Technology |
| MDA | Millennium Development Agenda |
| OECD | Organization for Economic Cooperation and Development |
| OTS | Off-The-Shelf |
| P2P | Procure to Pay |
| PFM | Public Financial Management |
| PPDA | Public Procurement and Disposal Act |
| PPOA | Public Procurement Oversight Authority |
| TMCC | Top Management Commitment to Change Management |
| TMCR | Top Management Commitment to Resources |
| US | United States (of America) |
| USAID | United States Agency for International Development |

# ABSTRACT

IFMIS has been promoted as a core component of public financial reforms in many developing countries. The study sought to establish the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. The researcher used descriptive research design. The population of interest consisted of the staff working in the various departments in the state ministries' head offices in Nairobi. The heads of departments, their assistants and supervisors as well as other officers were involved in responding to the research questions. This study mainly used primary data collected using questionnaires. The questionnaire included structured and unstructured questions and was administered through drop and pick later method. Data collected was quantitative in nature. The descriptive statistical tools helped the researcher to describe the data and determine the extent used. This included frequency distributions, tables, figures, percentages, means and standard deviations. Further, descriptive statistics and content analysis was used to analyze the information on factors affecting the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. In addition, the study conducted a multiple regression analysis to show the relationship between implementation of IFMIS and procurement performance in the public sector in Kenya. The study concludes that there has been a moderate level of implementation of IFMIS among the government ministries in Kenya. IFMIS forms part of the financial management reform practices of developing countries globally. The results have shown that difficulties can be experienced with the implementation of an IFMIS. It will thus not always achieve the desired functionality and impact on public financial management that was originally anticipated. Obstacles such as a lack of capacity, a lack of commitment, and institutional and technical challenges pose a risk to the successful implementation of an IFMIS. The study recommends among other things that the government reviews all prohibitive legislations relating to public procurement and information management in order to make itself an open system where information can be accessed by the public without restrictions. In order to address the challenges of IFMIS implementation the researcher recommends that the National government needs to have a strong policy and legal framework supporting IFMIS. The system should be setup to ensure that the IFMIS processes strongly match with manual processes in place to minimize the need for any legislative interventions or to teach the staff new ways of doing things on top of learning the new program. There is need to ensure that the requisite infrastructure are in place especially in outlying areas out of Nairobi where ICT connectivity leave alone electricity availability is a real challenge. The study recommends that the government employs a change agent to oversee the implementation of the IFMIS and that the users of the system to undergo on the job training, in order to improve their skills and capabilities to use the system.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Public procurement has always been a big part of the developing countries' economy accounting for 10-40% of their Gross Domestic Products (GDPs). Public e-procurement involves the use of electronic communications and transactions by government institutions and public sector to tendering services or public works (Wilson, 2002). Beyond the simple transition from systems based on paper to those which use electronic communications, public e-procurement can provide significant improvements in the effectiveness of individual markets and the overall functioning of the markets. Their gradual introduction is part of an ambitious e-government program aimed at transforming the delivery and performance of public administration.

The goal of a Public Financial Management (PFM) system is to support the achievement of fiscal discipline, strategic and efficient allocation and use of funds, value for money and probity in the use of public funds Some stages in public procurement, such as the invitation, submission and evaluation stages, require bespoke solutions. According to Agaba & Shipman (2008) the Organization for Economic Cooperation and Development (OECD) estimates the value of government procurement in the world to be over US$ 2,000 billion equivalent to 7% of world GDP and 30% of global merchandise trade. The submission, evaluation and order stages are the most complex, requiring a common set of protocols and standards in order to organize the exchange of complex documents and the interaction between public purchasers and suppliers. Juma (2009) argues that in developing countries, the public procurement sector is often the largest domestic market.

As Dorotinsky & Junghun (2003) posit the procurement system is the bridge between public procurement and private sector providers. This gives the government the obligation of providing goods, works and services to meet a variety of citizen needs. For some aspects of public procurement, manual processing is still necessary. For example, some stages of complex contracts such as projects or tasks can be difficult to reduce to standard formats and may require human intervention. However, there are possibilities for a large part of the procurement activities to be transferred to an electronic database. Just as businesses must purchase the goods and services they need to keep their plants running and their customers

satisfied, so must governments. However, there are some key differences between the ways governments and businesses obtain these items (Diamond & Pokar, 2005). In the past decades, the public procurement system in Kenya has undergone significant developments.

### 1.1.1 Integrated Financial Management Information System

Integrated financial management information system (IFMIS) is the integrated financial management information system. According to Diamond & Pokar (2005) IFMIS is an automated system that is used for public financial management and control, accounting, audit and reporting. A financial management information system, or integrated financial management information system, is an information system that tracks financial events and summarizes financial information. In its basic form, an IFMIS is little more than an accounting system configured to operate according to the needs and specifications of the environment in which it is installed. Generally, the term IFMIS refers to the use of information and communications technology in financial operations to support management and budget decisions, fiduciary responsibilities, and the preparation of financial reports and statements.

In the government realm, IFMIS refers more specifically to the computerization of public financial management (PFM) processes, from budget preparation and execution to accounting and reporting, with the help of an integrated system for financial management of line ministries, spending agencies and other public sector operation (Casals & Associates, 2004). An IFMIS stores, organizes and makes access to financial information easy. It not only stores all the financial information relating to current and past years' spending, but also stores the approved budgets for these years, details on inflows and outflows of funds, as well as completes inventories of financial assets (e.g. equipment, land and buildings) and liabilities (debt).The scale and scope of an IFMIS can vary, from simple General Ledger System to a comprehensive system addressing Budget, Revenue, Expenditure Control, Debt, Resource Management, Human Resources, Payroll, Accounting, Financial Reporting, and Auditing processes across central government or even including local government and other public sector and quasi-governmental agencies and operations.

By recording information into an integrated system that uses common values, IFMIS users can access the system and extract the specific information they require to carry out different

functions and tasks. All manner of reports can be generated: balance sheets, sources and uses of funds, cost reports, returns on investment, aging of receivables and payables, cash flow projections, budget variances, and performance reports of all types. Some systems have libraries consisting of hundreds of standard reports (Brennan, 2007). Managers can use this information for a variety of purposes: to plan and formulate budgets; examine results against budgets and plans; manage cash balances; track the status of debts and receivables; monitor the use of fixed assets; monitor the performance of specific departments or units; and make revisions and adjustments as necessary, to name a few. Reports can also be tailored to meet the reporting requirements set by external agencies and international institutions like the International Monetary Fund (IMF).

### 1.1.2 Procurement Performance

The significance of public procurement reform for developing countries is increasingly being appreciated by development agencies globally, recognizing that the social and economic costs (Schapper & Malta, 2004) of the weaknesses in public procurement governance are compounded by increases in sovereign risk that this represents for foreign investment (Jones, 2002). The application of new technology in this discipline offers a qualified potential to substantially resolve these tensions. Governments worldwide continue to receive a lot of attention as providers of essential services to their citizens. This is so, because the citizens are the taxpayers of funds that the governments use in providing important services such as health, education, defense and infrastructure. To provide these critical services, governments purchase goods and services through public procurement which must be done within the legal framework and policies in place.

The contribution that public procurement can make to expenditure reduction and the stimulation of economic growth is the focus of increasing policy attention. According to Agaba & Shipman (2008) public procurement frameworks in developed and developing countries alike are recognized as being characterised by an unstable tension between the public expectations of transparency and accountability, and of efficiency and effectiveness of resource management. This conformance - performance tension, manifest throughout a complex procurement environment, is further destabilized by conflicting stakeholder interests

at the political, business, community and management levels and exacerbated by competing claims between executives, lawyers, technologists and politicians for lead roles in this arena.

Mahmood (2010) observes that as part of efforts to adopt long-term and strategic view of their procurement needs and management, most countries have resorted to turning to their annual procurement plans as a possible problem solver. The effectiveness of procurement practice is very important in any organization for the realization of high levels of performance. Its success can be very beneficial to the organization given that it can help reduce cost and help in bringing efficiency in the organization's operations, contributing to the organization's success and giving it a competitive advantage over its competitors in terms of better services. The procurement function ensures that materials are readily available for the production of goods and services.

According to Weele (2000), purchasing is obtaining from external sources all goods and services which are necessary for maintaining and managing the company's primary activity and support them at the most favorable conditions. Although a lot of research has been done on the effective procurement process in an organization there is still need for continuous study on the best procurement processes considering the dynamics of present business world that is changing depending on the development in the business world. These changes affect the way procurement is done in the organization. According to Muthoni (2010) any organization that therefore does not adapt good procurement practices is disadvantaged given that it will not achieve its goals and objective. It is important ant that the organization considers the elements that affect an effective procurement processes and adapts the best practices in order to ensure that the processes is carried on well.

There is need to continuously consider the effectiveness of the present process in order to identify its weaknesses and strengths. Such evaluations are important to both the organization and the suppliers that supply the goods to the organization. Koskey (2010) further states that as much as the government has set up rules and regulations on how procurement should be done in all government institutions the need to have a good managerial good will in order for the effective of the procurement function is more than important for the procurement process in the organization. All government institutions follow the regulations provided for in the Public Procurement act 2005 these regulations provided there in must be followed to the

letter in order for them to effectively manage and control the procurement process in such organizations.

Understanding of individual factors that affect procurement function in a public institution or government cooperation should be emphasized in order for the organization to effectively operationalize its procurement functions. These understanding would help the organization to develop good policies that can ensure that the buying of goods is done in the best way possible (Bartel, 2006). Public procurement is therefore subjected to various regulations including laws, statutes and ministerial decrees in form of regulations specifically enacted to protect the interest of the public and donors. It is also subject to scrutiny and close observation by the auditing arm of government or some established regulatory body like the Public Procurement Oversight Authority (PPOA) in Kenya, which ensures that all public procurement processes are conducted as provided for in the regulatory framework (PPOA, 2007).

### 1.1.3 IFMIS and Procurement Performance

In the area of Procurement, procurement performance refers to quantitative and qualitative assessment of the degree to which the procurement functions and those employed therein achieve the general or specific objectives assigned to them (Lysons et al., 2006). Quantitative assessment includes number of orders placed, reduction in lead times, price savings and reduction of administrative costs. Where purchasing is regarded as clerical or commercial activity focus is on efficiency. Qualitative assessments on the other hand are subjective & intuitive contribution of purchasing to supplier goodwill, partnership sourcing, value analysis and internal customer satisfaction. Where Procurement is regarded as strategic business function the focus is on effectiveness.

The introduction of Integrated Financial Management Systems (IFMIS) has become a core component of financial reforms to promote efficiency, security of data management and comprehensive financial reporting. According to Bartel (2006) IFMIS provide an integrated computerized financial package to enhance the effectiveness and transparency of public resource management by computerizing the budget management and accounting system for a government. It consists of several core sub-systems which plan, process and report on the use of public resources. The scope and functionality of IFMIS can vary across countries, but sub-

systems normally include accounting, budgeting, cash management, debt management and related core treasury systems. In addition to these core subsystems, some countries have chosen to expand their IFMIS with non-core sub-systems such as tax administration, procurement management, asset management, human resource and pay roll systems, pension and social security systems and other possible areas seen as supporting the core modules.

The performance of procurement department has become a fierce debate in matters concerning service delivery in the civil service. Competency is highlighted as a factor which has an impact on performance and can affect performance (Cornelia, Muhumuza & Basheka, 2010). The more the person's competences match the requirements of a job, the more effective the person will be performing. The scale of IFMIS may also vary and be limited to specific country-level institutions such as the Ministry of Finance. However, IFMIS is generally meant to be used as a common system across government institutions, including in the more ambitious schemes for federal, state and local governments. The integration of IFMIS across the board ensures that all users adhere to common standards, rules and procedures, with the view to reducing risks of mismanagement of public resources.

### 1.1.4 The Public Sector in Kenya

In Kenya, PPOA states that public procurement system has been undergoing transformation consistent with the global trend since the mid-1990s (RoK, 2010). Owegi & Aligula (2006) argue that previous to these reforms, the legal framework governing public procurement was very amorphous, providing conducive environment for the perpetration of various ill practices in public procurement including the endemic corruption that characterized the system. The introduction of the Integrated Financial Management Information Systems (IFMIS) in public procurement is a noble idea to drive e-procurement as a reform measure, but only if it is implemented in a transparent, accountable manner and to its fullest with adequate relevant administrative structures and resources deployed to support the process (Owegi et al, 2006).

According to the Accountant General Department's service charter, the IFMIS software was procured in 1998 to provide modern systems for effective financial management and accounting (RoK, 2009). However, the process of implementing has been slow because, out of thirteen modules, only three have been partially configured and operating in few

Millennium Development Agendas (MDAs), a factor that has remained retrogressive force to the procurement reforms initiative that has been on for close to two decades. Reform initiatives in Kenya have centered on making the government procurement process more efficient, essentially by blocking the legal loopholes believed to be avenues for waste and rent seeking in the system. The development of IFMIS started in 1998. In February 2011, the Ministry of Finance (now The National Treasury) formulated the IFMIS Re-engineering strategic plan 2011-2013 which provided strategic direction for the re-engineering, re-branding and re-packaging of IFMIS.

Its main objective is to improve the efficiency and effectiveness of the processes, involved in management of public funds. The ultimate goal of IFMIS is to enhance the quality of public service delivery by providing timely and accurate financial and accounting information across both the National and County Governments. One of the components of IFMIS is the Procure to pay (P2P) as an automated procurement process from requisition, tendering, contract award to payment. Consequently, much effort has been devoted in bringing together existing procurement regulations and directives into a single document, the Public Procurement and Disposal Act, (PPDA), 2005 (Njiraini & Moyi, 2006). However, streamlined legislation and IFMIS roll out have seemingly failed to sufficiently reform and improve the performance of public procurement in Kenya (Owegi and Aligula, 2006).

In Kenya, the government structure can be split into two namely, administrative and economic structures. The government ministries derive their mandate from the Constitution of Kenya, which provides for proper budgetary and expenditure management of government financial resources. As a main function, the Ministries are charged with the responsibility of formulating financial and economic policies. The ministries are responsible for developing and maintaining sound fiscal and monetary policies that facilitate socio-economic development in all the government sub sectors. The government Ministries coordinates government departments in the preparation of the annual national budget. It is the responsibility of the Ministry to initiate and guide all departments to prepare their ministerial budgets. This study seeks to establish the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.

## 1.2 Research Problem

IFMIS has been promoted as a core component of public financial reforms in many developing countries. Sound IFMIS systems can help not only developing country governments gain effective control over their finances, but also enhance transparency and accountability, reducing political discretion and acting as a deterrent to corruption and fraud (Davenport & Brooks, 2004). The implementation of IFMIS is affected by factors like clear commitment of the relevant authorities to financial reform objectives, Information and Communication Technology (ICT) readiness, sound project design, a phased approach to implementation, project management capability, as well as adequate resources and human resource capacity allocated to the project. Contextually, the public procurement system in Kenya has evolved from a crude system with no regulations to an orderly legally regulated procurement system. With the introduction of information technologies in procurement like IFMIS effective procurement management and performance of public corporations directly affects the relative success or partial failure of public organizations in Kenya.

IFMIS and procurement performance have drawn much attention among scholars and researchers. For instance, Gallagher (2007) in his study on building fiscal infrastructure in post-conflict societies found that lack of high level commitment, ineffective project coordination, loose project design and planning while Bartel (2006) in the study entitled "Integrated Financial Management Systems: A Guide to Implementation Based on The Experience in Latin America" found that institutional resistance to change, inadequate technology and lack of human resource capacity are some of the factors often cited for the failure of such schemes among others. Locally, Owegi et al (2006) state that in the year, 2007 OECD, report on procurement in Kenya concluded that massive upgrading of qualification through training as well as an increase in the supply of specialized graduates was required to help fill the professional gap in the public procurement. However, the report did not present a case for professionalization of the function through the existing legislation of the Supplies Practitioners Management Act, 2007.

According to Mosoba (2012) and Aketch (2013) there has been a contributory factor to public procurement in Kenya perpetually remaining vulnerable to all manner of irregularities with a spate of court cases and controversies continuing to plague procurement procedures

for a number of public projects. However, the Kenyan government is still committed to implementing reforms to create a leaner, efficient, motivated and more productive public service, public procurement included. To the best of the researcher's knowledge, there is little or no study that has sought to investigate the effects of integrated financial management information system on procurement performance of the Kenyan Government Ministries. It was against this backdrop that the current study seeks to fill the existing gap by investigating the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. To this end the study sought to answer the research question: what are the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries?

### 1.3 Research Objectives

The study was guided by the following research objectives:

i. To determine the extent to which the Government Ministries in Kenya have implemented IFMIS in procurement.
ii. To establish the factors affecting the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.
iii. To assess the effect of integrated financial management information system on procurement performance of the Government Ministries in Kenya.

### 1.4 Value of the Study

The findings of the research study would be useful to the employees and other users of the procurement exercise in the process of understanding the laid down principles and practices of the effective procurement exercise which would bring the desired results in the end. The research study would be helpful to the procurement personnel both in the private sector and the public sector.

The findings of the study would also be significant to the government ministries in Kenya as well as other public offices. The findings would provide the information on the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries on addressing the governance issues that

have significantly affected the procurement function of state ministries in terms transparency, accountability, corruption, fraud, efficiency and effectiveness. The findings of this research would benefit the procurement profession and the certified procurement body by adding to the body of knowledge of public procurement performance.

The findings of this research would benefit the procurement profession and the certified procurement body by adding to the body of knowledge of public procurement performance. The study in addition would be of use to the scholars and academicians who want to have knowledge on the effects of IFMIS on procurement performance as well as general operation of state corporations.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

This study investigates the effects of the implementation of integrated financial management information system on procurement performance in the public sector. This chapter summarizes the information from other researchers who have carried out their research in the same field of study. In this section, the study explores IFMIS and Public Procurement, implementation of IFMIS and public procurement and finally the conceptual model is shown.

## 2.2 IFMIS

According to Priem & Butler, (2001), a well designed IFMIS can provide a number of features that may help detect excessive payments, fraud and theft. Procurement has always been integral to the performance of an organization. There are a number of key measures that are found to be common in evaluating performance, namely; cost saving, vendor quality, delivery metrics, price effectiveness and inventory flow. Although these key measures are common, the weight placed on these measures is by no means uniform and will vary between industry to industry and business to business. In addition the importance of these measures to the overall effectiveness of a purchasing department will change over time and therefore need to be assessed and modified on a periodic basis.

In many cases, IFMIS reforms have been introduced as a process innovation involving a radical and comprehensive restructuring of procedures to jumpstart and improve the financial management system (Brockman & Anthony, 2002). In such an approach, IT is being used as the driver of change rather than in support of the financial management reform process. Some authors challenge this approach by arguing that financial procedures set out in most countries' statutory and regulatory frameworks are generally likely to be sound, and it is both possible and desirable to pursue a strategy of process change focused on improving what exists rather than replacing it. Experience shows that improvements are best made through gradual strengthening of processes and skills. This strategy is more likely to mitigate the risks associated with IFMIS reforms, as it works with existing requirements, developed knowledge and user capacity which are usually relatively limited in developing countries.

Eisenstat (2003) argues that IT should support and not drive financial management reform, using a process change approach where IT is used in a supportive role to evolve rather than replace existing procedures. In other words, here a strategy of improvement has been favored over a strategy of replacement with a successful outcome, while more radical attempts such as in Ghana or Uganda have failed to deliver the expected changes. The paper concludes that since the basic designs of public financial systems are reasonably sound in Africa, there is a strong base and potential from which to evolve using a process change approach.

Keeping in mind that governments are the single largest purchaser of a national economy and that the public procurement systems in low- and middle-income countries are typically far away from spending money in a transparent and efficient way, the application of digital technology offers opportunities for improvements that the public sector cannot afford to ignore. As Subramaniam & Shaw (2002) posit benefits of e-GP are in line with the objectives of internationally recognized public procurement systems: enhanced transparency & compliance, increased performance & quality, and economic development. Realizing the full potential of these technological advances in the area of public procurement is a challenge in itself. To perceive these developments simply as technological issues is to misunderstand their reach and relevance for policy, training, infrastructure, design, production and delivery, as well as technical literacy and awareness.

As established ways of doing business and managing government procurement have long traditions and significant change will often encounter professional and vested interests, the most important ingredient for change will be government leadership, vision and change management capabilities (World Bank, 2006). As Baily (2008) indicates with accurate relevant information at hand, procurement professionals become strategists who can focus on strategic activities such as contract negotiations and supplier compliance. This reduces operating costs and turns the procurement department into a far greater asset to the organization.

### 2.3 Procurement Performance Measurement

According to Brennan (2007) measuring procurement performance is important as the procurement department plays an ever increasingly important role in the supply chain in an economic downturn. A reduction in the cost of raw material and services can allow

companies to competitively market the price of their finished goods in order to win business. An obvious performance measure of the success of any procurement department is the amount of money saved by the company. However there are a number of performance measurements that businesses can use when they measure procurement performance. The performance of the procurement function can be measured using a variety of measurements. A company can decide which of these measurements of effectiveness are relevant to the performance of their procurement department. One of the key problems with performance measurement systems is that they have traditionally adopted a narrow, or uni-dimensional, focus. Developing a balanced scorecard is a complex process and is now the subject of considerable research. Designing a performance measure, however, involves much more than simply specifying a robust formula. For issues such as the purpose of the measure, the frequency of measurement and the source of data all have to be considered.

Huse & Gabrielsson (2004), observed that to successfully improve the overall probability that the strategy is implemented as intended, senior executives must abandon the notion that lower-level managers have the same perceptions of the strategy and its implementation, of its underlying rationale, and its urgency. Instead, they must believe the exact opposite. Governments often base their reforms on the assumption that public procurement is an effective tool for pursuing a heterogeneous array of socially relevant objectives. Often, unfortunately, policy debates tend to focus on how to expand the list of objectives rather than to assess the potential compatibility of those agreed objectives.

A major problem, however, has to be solved even before getting to the compatibility issue, namely how to measure the effectiveness of procurement choices for each single objective (Cornelia, Muhumuza, & Basheka, 2010). The difficulty is such that most discussions about the outcomes of public procurement strategies boil down to estimating the value of savings from competitive procedures and/or from streamlining processes by using electronic means, although it far from being clear that commonly shared methodology on how to compute savings has been reached. Gallagher (2007) also observe that the lack of staff with required IT-knowledge cannot be easily remedied by training and hiring.

Performance measures are recognized as an important element of all Total Quality Management programs. Managers and supervisors directing the efforts of an organization or

a group have a responsibility to know how, when, and where to institute a wide range of changes. These changes cannot be sensibly implemented without knowledge of the appropriate information upon which they are based (Wall, 2003). The implementation of performance measurements for a specific process should involve as many cognizant employees as possible to stimulate ideas and reinforce the notion that this is a team effort requiring buy-in from all involved in order to succeed. Substantial benefits are realized by organizations implementing performance measurement programs. These benefits are realized almost immediately through an improved understanding of processes by all employees.

Furthermore, individuals get an opportunity to receive a broadened perspective of the organization's functions, rather than the more limited perspective of their own immediate span of control (Wall, 2003). Performance measures are always tied to a goal or an objective (the target). The use of performance measures in business is hardly new. Organizations have been measuring costs, quality, quantity, cycle time, efficiency, productivity, etc., of products, services, and processes as long as ways to measure those things have existed.

### 2.4 IFMIS and Public Procurement Performance

There are a number of ways in which IFMIS can improve public finance management, but generally IFMIS seek to enhance confidence and credibility of the budget through greater comprehensiveness and transparency of information (Woods & Joyce, 2003). They seek to improve budget planning and execution by providing timely and accurate data for budget management and decision making. IFMIS allow a more standardized and realistic budget formulation across government, while promoting better control over budget execution through the full integration of budget execution data. They also allow for the decentralization of financial functions and processes under the overall control of the Ministry of Finance, force financial discipline, decrease operating costs by reducing administrative tasks and civil servants' workload.

In addition, IFMIS also seek to strengthen the efficiency of financial controls by making comprehensive, reliable and timely financial information available to the Auditor General, parliament, investigative and prosecutorial agencies, etc., as they improve accounting, recording and reporting practices through the provision of timely and accurate financial data, a standardized integrated financial management reporting system and an upgraded

computerized accounting system (Sauer & Willcocks, 2003). When they work well, they make bank reconciliation automatic and allow a closer monitoring of outstanding bills and cash in bank accounts. There are no systematic assessments of the impact of IFMIS impact on corruption. However, the literature considers that IFMIS can have a deterrent function on corruption by increasing the risks of detection.

A well designed IFMIS can provide a number of features that may help detect excessive payments, fraud and theft (Priem & Butler, 2001). These include, for example, automated identification of exceptions to normal operations, patterns of suspicious activities, automated cross-referencing of personal identification numbers for fraud, cross-reference of asset inventories with equipment purchase to detect theft, automated cash disbursement rules, identification of ghost workers, etc. In addition, high speed comparisons of data can help identify promptly weaknesses and exceptions and alert managers to suspicious patterns of activities. However, some authors are relatively cautious about the impact IFMIS can have on reducing corruption, as many corrupt transactions and cases of abuse of office never enter the system.

A paper by Dorotinsky (2005) suggests that, although it can be a very powerful tool against corruption, one should be aware of its limitations. Implementing and maintaining IFMIS is a complex task that involves the Ministry of Finance and all line ministries. There are many risks involved that go far beyond mere technological risks of failure and deficient functionality. According to IMF (2005) working paper on introducing Financial Management Information Systems more specifically highlights a number of challenges that explain why IFMIS projects tend to stall in developing countries. IT reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform. Many IFMIS projects have also failed due to the lack of clarity in ownership of the system and unclear authority to implement. Due to the institutional segmentation of public expenditure management, it is not always immediately clear who, from the Ministry of Finance or Accountant General Department, should be in charge of an IFMIS project.

## 2.5 Factors Affecting IFMIS Implementation

Electronic procurement includes a range of technologies that apply the speed of computer processing and the connectivity of the internet to accelerate and streamline the processes of identifying and selecting suppliers of goods and services; placing, receiving and paying for orders; assuring compliance with procurement procedures; consolidating purchasing to achieve leverage and providing visibility of information between collaborative partners (Baily, 2005). There are high risks involved in implementing too many components of the reform at once and practitioners believe that risks can be mitigated with a phased approach that rolls out across government institutions in a gradual and flexible process. Large IT-projects require substantial investments in equipment, training and infrastructure, and involve high risks of delays and failure, because of interdependency of the various project components. It is recommended to favour a pragmatic step-by-step approach to reform, based on a detailed assessment of existing conditions and needs (Casals & Associates, 2004).

The process should therefore start by a comprehensive assessment of the current institutional conditions, including an analysis of the current governance system, ICT infrastructure, incentives structure, legal framework in place, and human resources available (Luft & Shields, 2003). The analysis should also cover the training needs and potential implementation challenges. The system should only be rolled out once it has been pre-tested with real data, to assess the way the chart of accounts, the software and integration processes, recording of real transaction and producing report work in practice. The roll-out strategies should ensure that: reform is built around clear benchmarks and milestones; reform is divided into self-contained modules and IFMIS implementation is broken down into definite steps. The factors that affect the implementation of IFMIS include top management support, employee commitment, training/capacity building and reporting accountability.

### 2.5.1 Top Management Support

Among IS implementation studies, top management commitment is one of the most studied factors in successful IS implementation. Top management commitment to change management (TMCC) depicts the extent to which top management engages in promoting organizational receptivity of IT innovation by training, by formal presentation, and by establishing communication channels with targeted users (Marginson, 2002). By informing

targeted users about the characteristics of innovation and their impact on the organization and targeted users, TMCC reduces uncertainties around technical changes and organizational transformation. Also, it promotes the fit between innovation and targeted users' values, and eventually alleviates misuse and resistance to innovation usage.

In addition, it is believed that efforts devoted to solving difficult change management problems would pay off in terms of implementation success, whereas inability to manage organizational change would most likely lead to implementation failure. The most important factor when implementing a strategy is the top level management's commitment to the strategic direction itself. This is undoubtedly a prerequisite for strategy implementation. Therefore, top managers must demonstrate their willingness to give energy and loyalty to the implementation process. This demonstrable commitment becomes, at the same time, a positive signal for all the affected organizational members (Rapa & Kauffman, 2005).

To successfully improve the overall probability that the strategy is implemented as intended, senior executives must abandon the notion that lower-level managers have the same perceptions of the strategy and its implementation, of its underlying rationale, and its urgency. They must not spare any effort to persuade the employees of their ideas (Rapa & Kauffman, 2005). Overall though, it is increasingly acknowledged that the traditionally recognized problems of inappropriate organizational structure and lack of top management backing are the main inhibiting factors to effective strategy implementation (Aaltonen & Ikåvalko, 2002). In addition to the above, another inhibitor to successful strategy implementation that has been receiving a considerable amount of attention is the impact of an organization's existing management controls and particularly its budgeting systems (Marginson, 2002).

Top management is essential to the effective implementation of strategic change. Top management provides a role model for other managers to use in assessing the salient environmental variables, their relationship to the organization, and the appropriateness of the organization's response to these variables. They also shape the perceived relationships among organization components. Top management is largely responsible for the determination of organization structure (e.g., information flow, decision-making processes, and job assignments). Management must also recognize the existing organization culture and learn to

work within or change its parameters (Otley, 2001). Top management is also responsible for the design and control of the organization's reward and incentive systems.

### 2.5.2 Employee Commitment

Institutional factors determine the outcome of automating public financial management. Experience shows that the best designed project will fail without firm commitment. It is therefore important to adequately assess commitment to reform. In Malawi for example, the lack of political will led to major implementation delays: 10 years after the start of the project, the system was still not running. Such examples demonstrate that in many cases, the role of individual incentives and political will were not taken sufficiently into account when introducing IFMIS. For example, the initial World Bank appraisal assumed the political risk for such projects to be low due to the technical nature of the intervention (Miller & Wilson, 2004).

However, some authors argue that there need not necessarily be high-level commitment to reform for successful implementation. The Ethiopian case study shows that what matters most in the process is the midlevel management's commitment to reform, as the changes ultimately have to be implemented at this level. Projects that are to some extent "obscure" evade high expectations, scrutiny and micro-management which tend to impede technical proceedings (Tavakoli and Perks, 2001). In Ethiopia, senior management contribution to the reform was limited to securing funding at critical phases of the project, accepting the advice of the chief technical assistance advisor and monitoring the project's progress.

The most important thing when implementing a strategy is the employee's commitment to the strategic direction itself. This is undoubtedly a prerequisite for strategy implementation. Therefore, top managers must demonstrate their willingness to give energy and loyalty to the implementation process. This demonstrable commitment becomes, at the same time, a positive signal for all the affected organizational members. To successfully improve the overall probability that the strategy is implemented as intended, senior executives must abandon the notion that lower-level managers have the same perceptions of the strategy and its implementation, of its underlying rationale, and its urgency. Instead, they must believe the exact opposite. They must not spare any effort to persuade the employees of their ideas (Huse & Gabrielsson, 2004).

### 2.5.3 Training/Capacity Building

Capacity building is a major factor affecting the success of IFMIS implementation, especially in developing countries where IT-capacity is limited and the public sector's salary structure and terms of employment usually can not attract and retain well trained staff. Capacity building and training need to be scoped during the early stage of the need assessment process. The process should allow for the identification of various user groups, assess the level of knowledge, recruiting needs, and define the scope of the training curricula, targeting the various key audiences (Balogun, 2003). Training should begin from the beginning of the reform, starting by those who will be most immediately affected by IFMIS reform. A broader and permanent training programme should also be developed and implemented.

IFMIS implementation involves considerable human resources requirements and capacity building needs throughout the entire government. The low level of computer literacy in developing countries must first be adequately addressed before such projects can be truly viable. The lack of staff with required IT-knowledge cannot be easily remedied by training and hiring. The current salary structure and terms of employment in the public sector are usually not attractive enough to compete with private sector employment conditions and to incentivise candidates with required IT-skills. There is also a risk that trained staff leaves for better job opportunities (Gallagher, 2007).

Project management goes beyond managing the technical aspects of implementation. An adequate project implementation team should be set up, ideally comprising a project manager, a public finance economist, a qualified accountant, a change management/training expert, IT-system experts and logistic experts (Diamond & Pokar 2005). It is recommended to set up a steering committee to oversee the process at the highest level, chaired by a high-level figure, such as the Minister of Finance, that meets regularly and produces minutes on issues and milestones. According to Bhatt (2005) training programs need to address various audiences, from senior members of the bureaucracy down to mid- and entry-level civil servants. The training programs, along with change management, should begin as early as possible in the project, using nationals, who are both committed to the project and to public service, to deliver the programs as much as possible. This process builds local capacity and

helps build confidence among users, who through this process are re-assured that there will be some constants amid the change.

Given the nature of institutions and organizations, capacity building is a never-ending process. It needs to be ongoing and permanent (Davenport & Brooks, 2004). This requires, therefore, establishment of a sound permanent authority within government, empowered to carry these functions forward. Chakravarthy & White, (2001) suggest that education and training policies depend on a firm's management culture and forms of management-led organizational change. Fahy, (2000) indicated that there are two management characteristics; innovation commitment and resistance to change. Two forms of management-led organizational change; firm downsizing and work redesign, shape education and training strategies. He also finds that tr aining, development and school relations are a focal point for redesigning management, while downsizing focuses on entry-level training.

### 2.5.4 Reporting Accountability

Implementing IFMIS requires that many government structures start working with common tools. For the information to be coherent, all administrative units at national, regional and local level need to adopt a common language in the form of unified budget classifications and charts of account. This can be a very lengthy and cumbersome process, which for example took more than five years in Vietnam Pittsburgh, (Dorotinsky & Junghun, 2003). There are also challenges due to centralized treasury operations**.** IFMIS reform is often accompanied by the consolidation of all government financial resources in a single treasury account or a set of linked accounts. The introduction of IFMIS involves more than the "simple" automation of public finance tasks and processes. IFMIS imply both efficiency reforms and reforms that change existing procedures. They should therefore be seen as an organisational reform which deeply affects work processes and institutional arrangements governing the management of public finance. Failure to undertake parallel reforms required by IFMIS is one of the reasons that often impede successful implementation (Hyvönen, 2003).

According to Woolcock (2008) IFMIS must be underpinned by a coherent legal framework governing the overall public finance system. IFMIS generally imply fundamental changes in operating procedures and should be preceded by a detailed functional analysis of processes,

procedures, user profiles and requirement that the system will support. Many IFMIS projects have also failed because the basic system functionality had not been clearly specified from the onset of the intervention. IFMIS must be carefully designed to meet agency's needs and functional requirements, including the accounting and financial management tasks the system should perform. In some cases, interfaces with existing IT systems have to be created to fit the country's specific circumstances.

As documents on the functional requirements – which will often serve as a blueprint for later phases of the system – are difficult to rectify at a later stage, it is of crucial importance to spend enough time on the design phase of the project (Parr & Shanks, 2000). As IFMIS core systems need to be adapted to the local context and environment, a key issue to consider 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, 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 mean that in some countries, generators and power supply units are needed as well.

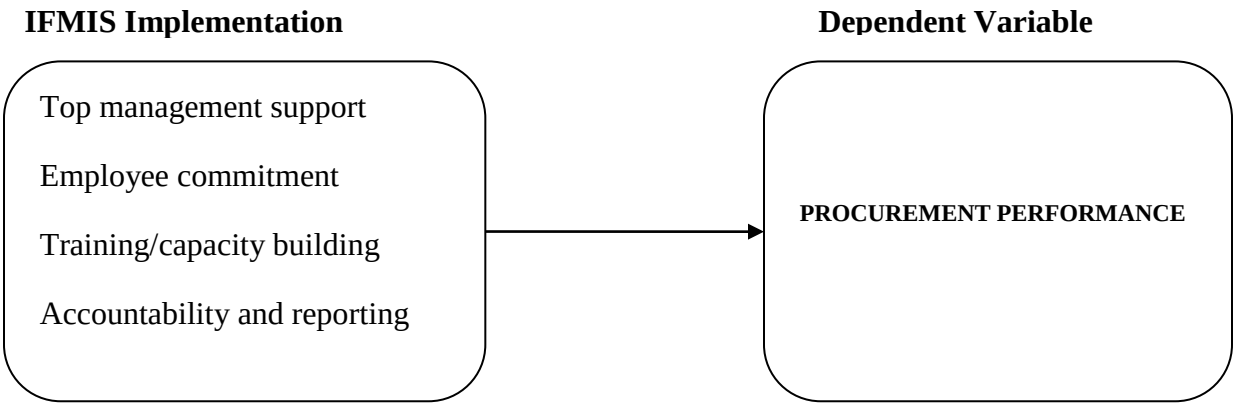
### 2.6 Conceptual Model

The effectiveness of procurement practice is very important in any organization for the realization of high levels of performance. Its success can be very beneficial to the organization given that it can help reduce cost and help in bringing efficiency in the organization's operations, contributing to the organization's success and giving it a competitive advantage over its competitors in terms of better services. The underlying causes of poor procurement performance in organizations need to be studied carefully because their understanding has the potential of improving procurement practices and outcomes.

Identifying the various ways in which effects of the implementation of integrated financial management information system on procurement performance of the public sector can have long-term implications for economic development of individuals, organizations and nations in general. From the literature review, the various effects of the implementation of integrated financial management information system on procurement performance of public corporations in Kenya and government Ministries in particular form the conceptual

framework in this study. The independent variables in this study are top management support, employee commitment, training/capacity building and reporting accountability, while the dependent variable is procurement performance as the undernoted diagram elucidates.

**Figure 2.1: Conceptual Model**




**Source: Author (2014)**

# CHAPTER THREE: RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter involved the methods the researcher used to collect the data for the study. This included research design, target population, sampling design, data collection instruments, data collection procedure and data analysis procedure.

## 3.2 Research Design

The researcher used descriptive research design. The design was preferred because it is concerned with answering questions such as who, how, what which, when and how much (Cooper & Schindler, 2006). A descriptive study was carefully designed to ensure complete description of the situation, making sure that there is minimum bias in the collection of data and to reduce errors in interpreting the data collected.

## 3.3 Target Population

The population of interest consisted of the staffs working in the various departments in the state ministries' head offices in Nairobi. The heads of departments, their assistants and supervisors as well as other officers were involved in responding to the research questions. As such, the target population was the public sector of Kenya comprising of 18 government ministries (Appendix III). The study adopted a census survey owing to the small number of ministries. The study purposively selected the ICT, finance and procurement managers to participate in the study.

## 3.4 Data Collection

This study mainly used primary data collected using questionnaires. The questionnaire included structured and unstructured questions and was administered through drop and pick later method. The structured questions were used in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form; while the unstructured questions were used so as to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information. The 5 point Likert scale was used.

This helped in determining the extent to which extent to which the Government Ministries in Kenya have implemented IFMIS in procurement and the effect of implementation of

integrated financial management information system on procurement performance of the cabinet ministries in Kenya. Three (3) people were picked from each ministry headquarter in Nairobi to ensure a fair representation. As such, one (1) senior staff (comprising of either procurement, finance or ICT heads of departments and two (2) other employees were chosen purposively from the departments in the ministries' headquarters making a sample of 54.

### 3.6 Data Analysis

Data collected was quantitative in nature. Analysis was done quantitatively and qualitatively by use of descriptive statistics. The descriptive statistical tools helped the researcher to describe the data and determine the extent used. This included frequency distributions, tables, figures, percentages, means and standard deviations. Data analysis used Microsoft excel and SPSS to summarize responses for further analysis and facilitate comparison. To analyze the first objective on the extent to which the Government Ministries in Kenya have implemented IFMIS in procurement, descriptive analysis was applied as well as the second objective on the effects of integrated financial management information system on procurement performance of the Government Ministries in Kenya. Further, descriptive statistics and content analysis was used to analyze the information on factors affecting the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. In addition, the study conducted a multiple regression analysis to show the relationship between implementation of IFMIS and procurement performance in the public sector in Kenya. The regression equation will be: $Y= \beta_0+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3+ \beta_4X_4+ \alpha)$, where $\beta_0$ is a constant, $B_1$, $\beta_2$, $\beta_3$ and $\beta_4$ are the beta coefficients and $X_1$, $X_2$, $X_3$ and $X_4$ are the variables representing top management support, employee commitment, training/capacity building and reporting accountability respectively.

# CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

## 4.1 Introduction

This chapter presents the analysis of data obtained on the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. It presents analysis and findings of the study as set out in the research methodology. The data obtained was fed into SPSS version 21.0 and used to compute the ratios used as proxies to measure the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.

## 4.2 Response Rate

The study intended to collect data from 54 sample respondents from the target population with regard to the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. The questionnaire return rate results are shown in Table 4.1.

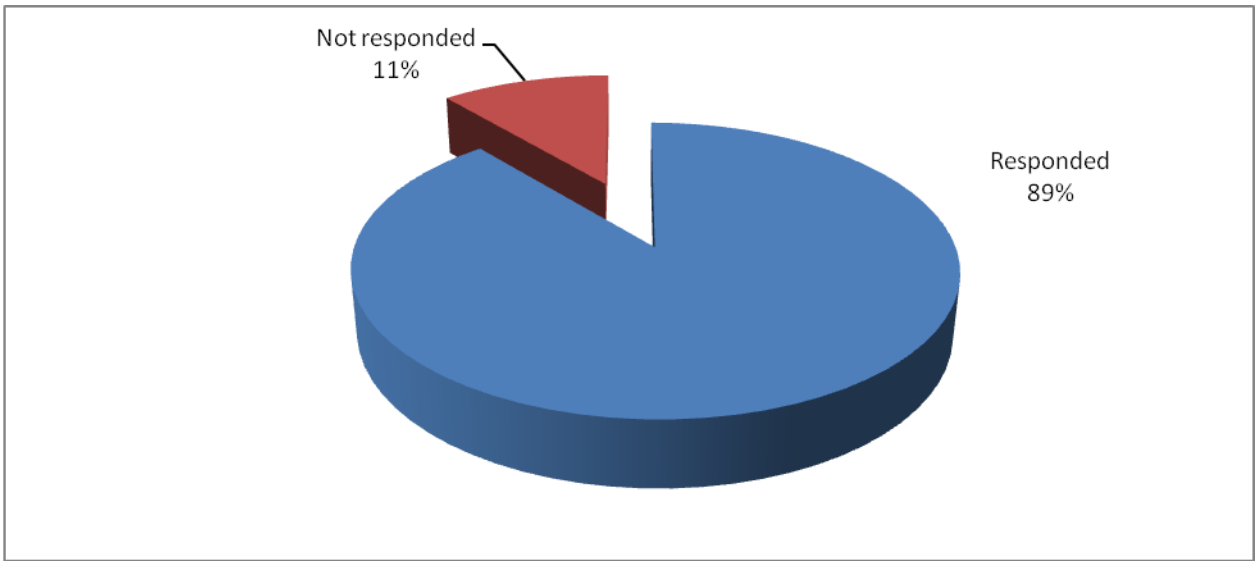
**Table 4.1: Response Rate**

| **Response** | **Frequency** | **Percentage** |
|---|---|---|
| Responded | 48 | 88.9 |
| Not responded | 6 | 11.1 |
| **Total** | **54** | **100.0** |

**Source: Research Data (2014)**

From the study, 48 out of the sampled 54 respondents in the population filled in and returned the questionnaire contributing to 88.9%. This response rate was made possible after several personal calls were made and visits to remind the respondents to fill-in and return the questionnaires as well as explaining the importance of their participation in this study. The response rate largely demonstrates a willingness of the respondents to participate in the study.

**Figure 4.2: Response Rate**




**Source: Research Data (2014)**

The study involved the senior staff (comprising of procurement, finance or ICT heads of departments and two other employees since they are the ones conversant with the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. In order to get the background information the demographic data of the respondents was investigated in the first section of the questionnaire. They are presented in this section under gender, age bracket, respondents' departments, designation, length of time worked in the state ministries office and the highest formal qualification.

### 4.2.1 Distribution of the Respondents by Gender

The research sought to find out the gender of the respondents. Table 4.2 shows the distribution of the respondents by gender.

**Table 4.2: Gender of the Respondents**

| Gender | Frequency | Percentage |
|---|---|---|
| Male | 29 | 60 |
| Female | 19 | 40 |
| **Total** | **48** | **100** |

**Source: Research Data (2014)**

From the study, majority of the respondents were male staffs, shown by 60.0%, while 40.0% of them comprised of female staffs. The findings show that the state ministries studied had both male and female members; however the majority of them are males. The findings imply that the views expressed in these findings are gender sensitive and can be taken as representative of the opinions of both genders as regards to the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries. This means that the views expressed in this study are gender sensitive and hence are likely to be supported by all.

### 4.2.2 Age Brackets of the Respondents

The study investigated the composition of the respondent in terms of age. Table 4.3 shows the results of the findings on the age brackets of the respondents.

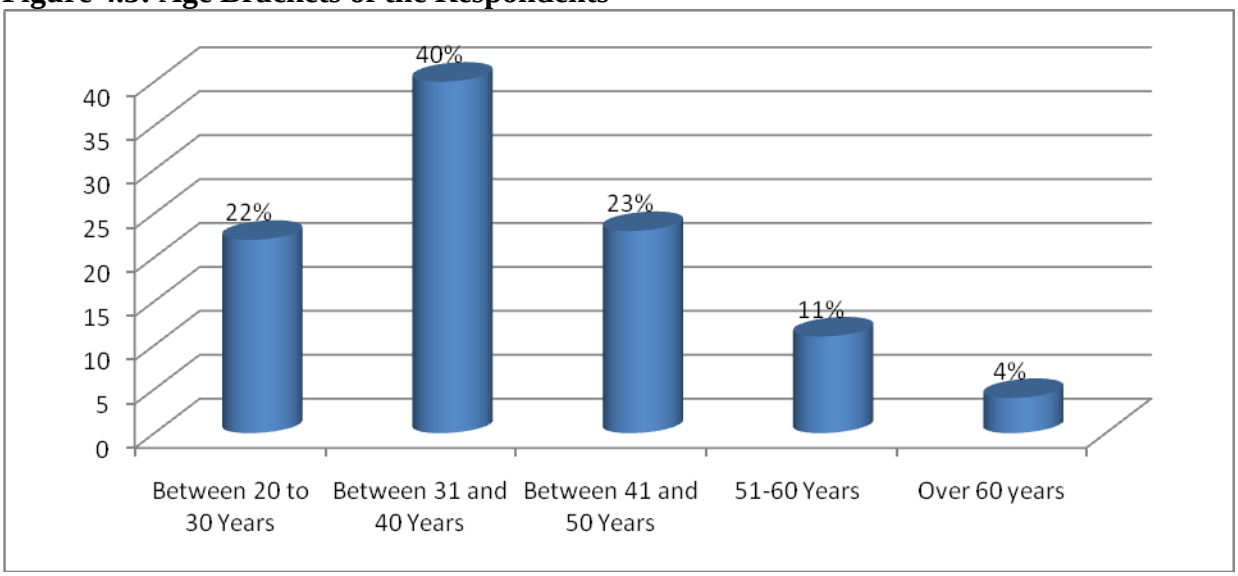
**Table 4.3: Composition of the Respondent in Terms of Age**

| Range In Years | Frequency | Percentage |
|---|---|---|
| Between 20 to 30 Years | 11 | 22 |
| Between 31 and 40 Years | 19 | 40 |
| Between 41 and 50 Years | 11 | 23 |
| 51-60 Years | 5 | 11 |
| Over 60 years | 2 | 4 |
| **Total** | **48** | **100** |

**Source: Research Data (2014)**

From the results depicted in table 4.3, majority of the respondents were aged between 31 and 40 years comprising 38 percent of the respondents, 26% of the respondents were aged between 20 and 30 years, 19% of the respondents were aged between 41 and 50 years, 12% indicated that they were between 50 and 59 years of age, while 5% of the respondents were aged above 60 years. The study findings show that more than majority of them were well distributed in terms of age and that they are active in productivity and hence can contribute constructively in this study.

**Figure 4.3: Age Brackets of the Respondents**




**Source: Research Data (2014)**

### 4.2.3 Level of Education

The government ministries in Kenya employ staffs in different work stations hence different academic qualifications. The study thus sought to establish the highest academic qualifications attained by the respondents. The responses on this question are depicted in table 4.4.

**Table 4.4: Highest Formal Qualification**

| Academic Qualification | Frequency | Percent |
|---|---|---|
| Certificate/ Diploma | 12 | 24.2 |
| Undergraduate | 29 | 60.6 |
| Post graduate level | 7 | 15.2 |
| **Total** | **48** | **100.0** |

**Source: Research Data (2014)**

The study results reveal that 60.6% of the respondents had acquired a Bachelor's or undergraduate degrees level of education, 24.2% of the respondents indicated that they had acquired college certificates or diplomas, while 15.2% of them indicated that they had acquired post graduate level. This results imply that majority of the respondents had at least an undergraduate degree and hence understood the information sought by this study. These findings further imply that all the respondents were academically qualified and also familiar with their duties and could dispense them effectively in terms of professional work ability and performance.

### 4.2.4 Working Experience

The length of service/working in an organization determines the extent to which one is aware of the issues sought by the study. The study therefore sought to establish the length of time that the respondents had been working in the state ministries. The results on this question are presented in Table 4.5.

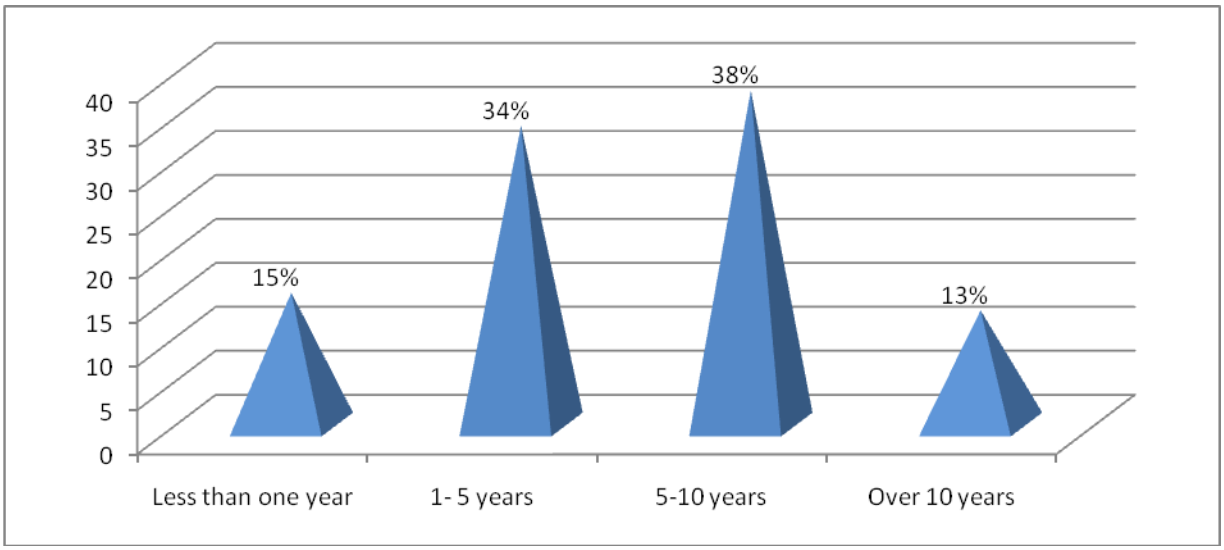
**Table 4.5: Duration Worked in the Ministry**

| **Length of Service** | **Frequency** | **Percentage** |
|---|---|---|
| Less than one year | 7 | 15 |
| 1- 5 years | 16 | 34 |
| 5-10 years | 18 | 38 |
| Over 10 years | 6 | 13 |
| **Total** | 48 | 100 |

**Source: Research Data (2014)**

From the study, 38% of the respondents unanimously indicated that they had worked with the government ministries for a period of 5 - 10 years, 34% of them had been working in the government ministries for 1-2 years, 15% of them had been working at the government ministries for less than one year whereas 13% of them had worked in the government ministries for a period of more than 10 years. This implies that most of the staffs participating in this study had been operating for an ample time thus they were conversant of the information that the study sought pertaining to the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.

**Figure 4.4: Working Experience in the Government Ministries in Kenya**




**Source: Research Data (2014)**

### 4.2.5 Departments of the Respondents

The procurement decisions made within a given organization are vested in the hand of various staffs spread across the various departments within the organization. As such the study sought to establish the distribution of the respondents in various departments within the ministries. Table 4.6 shows the results.

**Table 4.6: Distribution of the Respondents by Department**

| Department | Frequency | Percent |
|---|---|---|
| Procurement | 23 | 48 |
| Finance | 6 | 12 |
| ICT | 17 | 36 |
| Others | 2 | 4 |
| **Total** | **48** | **100** |

**Source: Research Data (2014)**

From the study, majority of the respondents recapped that they worked in the procurement department shown by 48%, another 36% of them indicated that they were working in the ICT department, 12% of them worked in the finance department, while 4% of the respondents worked in other departments like human resource and administration. These results imply

that the respondents were drawn from all the departments within the ministries and thus are representative of the views of the various departments involved in implementation of integrated financial management information system and procurement performance of the Kenyan government ministries.

### 4.2.6 Managerial Positions of the Respondents

Further the study was interested to investigate the various managerial positions held by the respondents in their departments. This was relevant to assess the distribution of the respondents across the management levels. Table 4.7 and Figure 4.4 shows the results obtained.

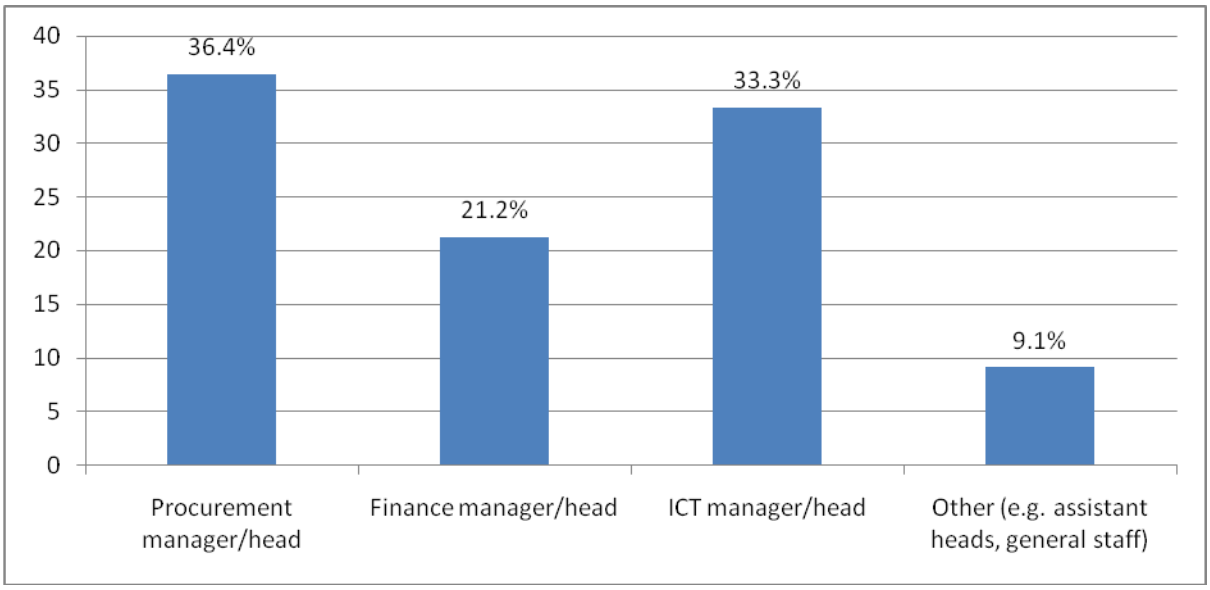
**Table 4.7: Designation of the Respondents**

| Job Position | Frequency | Percent |
|---|---|---|
| Procurement manager/head | 17 | 36.4 |
| Finance manager/head | 10 | 21.2 |
| ICT manager/head | 16 | 33.3 |
| Other (e.g. assistant heads, general staff) | 4 | 9.1 |
| **Total** | **48** | **100** |

**Source: Research Data (2014)**

According to table 4.7 36.4% of the respondents indicated that they were procurement managers/head of departments, 33.3% of them were heads of the ICT departments, 21.2% of them indicated that they were heads of the finance departments, while 9.1% of the respondents comprised of other staffs like assistant heads of departments and the general staffs. These findings show that the respondents that participated in the study were mainly those involved in the formulation and implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.

**Figure 4.5: Designation of the Respondents**




**Source: Research Data (2014)**

### 4.3 Extent to which the Ministries have Implemented IFMIS

In order to achieve its main purpose the first objective of the study was to determine the extent to which the Government Ministries in Kenya have implemented IFMIS in procurement. In this regard the respondents were required to indicate the extent of implementation of IFMIS in their ministries.

**Table 4.8: Extent of Implementation of IFMIS in the Government Ministries**

| Extent | Frequency | Percent |
|---|---|---|
| To a very great extent | 6 | 11.9 |
| To a great extent | 11 | 23.8 |
| To a moderate extent | 25 | 52.4 |
| To a little extent | 6 | 11.9 |
| **Total** | **48** | **100.0** |

**Source: Research Data (2014)**

Based on the results as tabulated in table 4.9, 52.4% of the respondents unanimously indicated that their ministries have implemented IFMIS to a moderate extent, 23.8% indicated to a great extent, while 11.9% reiterated that their ministries have implemented IFMIS to a very great extent. Another 11.9% of the population studied believed that their

ministries have implemented IFMIS to a little extent. From the data, it is clear that there has been a moderate level of implementation of IFMIS among the government ministries in Kenya.

The respondents were further required to rate the extent to which various aspects affect the implementation of IFMIS in the government ministries. A scale of 1 to 5 was provided where 1= no extent, 2= little extent, 3= moderate, 4= large extent and 5 is to a very large extent

**Table 4.9: Aspects affecting Implementation of IFMIS in the Government Ministries**

| Aspects that affect the implementation of IFMIS | Mean | Std dev. |
|---|---|---|
| Training/capacity building | 3.7222 | 1.17851 |
| Employee commitment | 3.5528 | 1.1843 |
| Human resources available | 3.5152 | .75503 |
| Top management support | 3.3322 | 1.4923 |
| ICT infrastructure | 3.3322 | 1.4923 |
| Governance system | 3.2972 | 1.6102 |
| reporting accountability | 3.2222 | 1.30859 |
| Incentives structure | 3.1515 | .87039 |
| Legal framework in place | 2.9697 | 1.01504 |

**Source: Research Data (2014)**

Majority of the respondents reiterated that training/capacity building, employee commitment, human resources available affect the implementation of IFMIS in the government ministries to great extents as shown by mean scores of 3.7222, 3.5528 and 3.5152 respectively. On the other hand the respondents recapped that top management support, ICT infrastructure, governance system, reporting accountability, incentives structure and legal framework in place affect the implementation of IFMIS in the government ministries to moderate extents as shown by mean scores of 3.3322, 3.3322, 3.2972, 3.2222, 3.1515 and 2.9697 in that order. This is a clear indication that there are several factors that affect determine the level of implementation of IFMIS in the Kenyan government ministries.

### 4.4 Effects of IFMIS on Procurement Performance

The other objective of this study was to assess the effect of integrated financial management information system on procurement performance of the Government Ministries in Kenya. As such the study sought to ascertain the extent to which implementation of IFMIS affects the overall procurement performance in the government ministries.

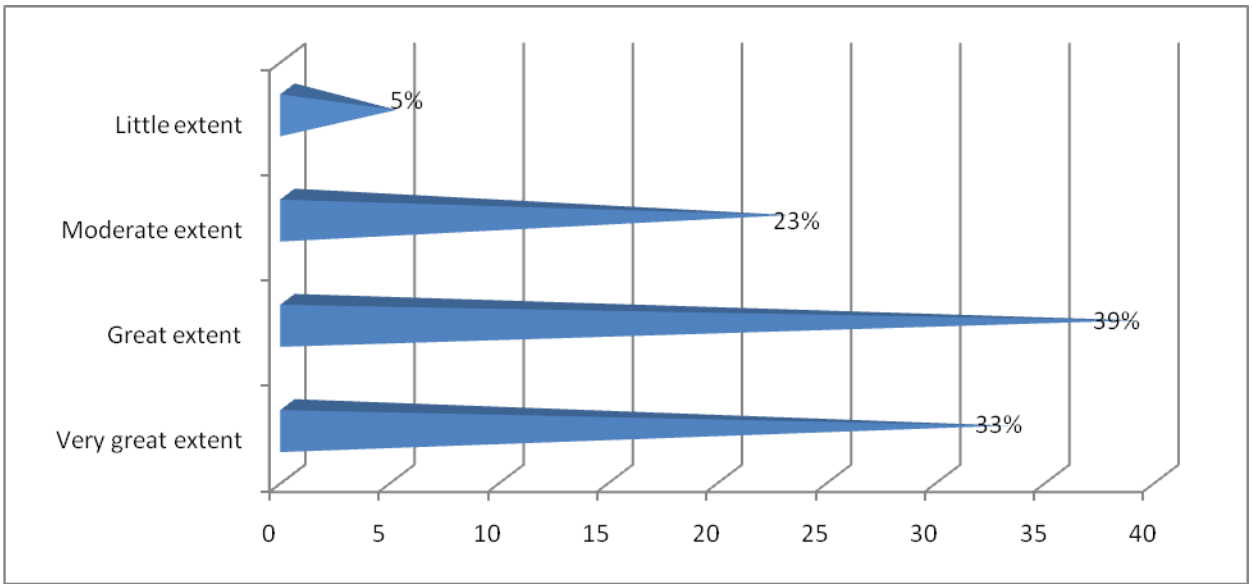
**Table 4.10: Extent to which IFMIS affects Procurement Performance of the Ministries**

| Extent | Frequency | Percentage |
|---|---|---|
| Very great extent | 16 | 33 |
| Great extent | 19 | 39 |
| Moderate extent | 11 | 23 |
| Little extent | 2 | 5 |
| **Total** | **48** | **100.0** |

**Source: Research Data (2014)**

According to Table 4.10, majority (39%) of the respondents stated that implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya to a great extent and 33% to a very great extent while 23% said that implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya to a moderate extent. According to 4.5% of the respondents, implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya to a little extent. These results indicate that implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya to a great extent as shown by majority of the respondents, 72%.

**Figure 4.6: Extent to which IFMIS affects Procurement Performance of the Ministries**




**Source: Research Data (2014)**

The respondents were further required to rate the extent to which various aspects of implementation of IFMIS affect the procurement performance of the government ministries in Kenya. The responses are as presented in Table 4.11 below.

**Table 4.11: Aspects of implementation of IFMIS that affect Procurement Performance**

| **Aspects of the implementation of IFMIS that affect the procurement performance** | **Mean** | **Std dev.** |
|---|---|---|
| Top management support | 3.6061 | .60927 |
| Training/capacity building | 3.5845 | 0.77251 |
| Reporting accountability | 3.3636 | .69903 |
| Employee commitment | 3.2727 | .80128 |

**Source: Research Data (2014)**

From the study, majority of the respondents indicated that top management support affect the procurement performance of the government ministries to a great extent as shown by a mean score of 3.6061 and training/capacity building affect the procurement performance of the government ministries to a moderate extent as shown by a mean score of 3.5845, while reporting accountability affect the procurement performance of the government ministries to a great extent as shown by a mean score of 3.3636 as well as employee commitment shown

by a mean score of 3.2727. These results imply that the aspects of top management support, training/capacity building, reporting accountability, employee commitment in the implementation of IFMIS affect the procurement performance of the government ministries in Kenya.

In addition, the study sought to determine the extent to which implementation of IFMIS affect the various aspects of procurement performance in the ministries. The results are as depicted in Table 4.12 below.

**Table 4.12: Extent to which IFMIS affect aspects of Procurement Performance**

| Aspects of procurement performance | Mean | Std dev. |
|---|---|---|
| Procurement Effectiveness | 3.7222 | 1.1785 |
| Cost Savings | 3.6954 | 1.2543 |
| Procurement Efficiency | 3.5521 | 1.1842 |
| Procurement Functionality | 3.5428 | 1.5152 |
| Increased Quality | 3.3714 | .83703 |

**Source: Research Data (2014)**

Majority of the respondents reiterated that implementation of IFMIS affects procurement effectiveness to a great extent as shown by a mean score of 3.7222, cost savings to a great extent as shown by a mean score of 3.6954, procurement efficiency to a great extent as shown by a mean score of 3.5521 and procurement functionality to a great extent as shown by a mean score of 3.5428 while it leads to increased quality to a moderate extent as shown by a mean score of 3.3714. According to these results, IFMIS affects procurement effectiveness, cost savings, procurement efficiency, procurement functionality and increased quality in the ministries.

### 4.5 Factors affecting the Implementation of IFMIS

The study sought to establish the extent to which the ministries experience various challenges in the implementation of IFMIS in procurement Department. Table 4.13 shows the results of the study.

**Table 4.13: Extent to which Ministries face Challenges in implementation of IFMIS**

| IFMIS Skills and knowledge areas | Mean | Std dev. |
|---|---|---|
| Framework contracting | 3.7533 | 1.1823 |
| Proficiency in IT applications | 3.6954 | 1.25435 |
| Negotiation skills | 3.5528 | 1.1843 |
| Public relations skills | 3.5489 | 1.1812 |
| Records management skills | 3.5000 | .5933 |
| Communication and Interpersonal skills | 3.3714 | .83703 |
| legal knowledge in procurement | 2.7083 | 1.352 |

**Source: Research Data (2014)**

According to the results shown in Table 4.13, the government ministries experience challenges of framework contracting to a great extent as shown by a mean score of 3.7533, proficiency in IT applications to a great extent as shown by a mean score of 3.6954, negotiation skills to a great extent as shown by a mean score of 3.5528, public relations skills to a great extent as shown by a mean score of 3.5489 and records management skills to a great extent as shown by a mean score of 3.5000 in their endeavors of implementing IFMIS in procurement. Further they face challenges of communication and interpersonal skills and legal knowledge in procurement to moderate extents as shown by mean scores of 3.3714 and 2.7083 respectively.

The respondents were further required to indicate their level of agreement with various statements that relate to the factors affecting implementation of Integrated Financial Management Information Systems in the government ministries. A scale of 1-5 was provided such that 1= strongly disagree and 5 = strongly agree.

**Table 4.14: Agreement with statements on Factors affecting implementation of IFMIS**

| Factors affecting implementation of IFMIS | Mean | Std dev. |
|---|---|---|
| Failure to undertake parallel reforms in resource mobilization required by IFMIS is one of the reasons that often impede successful implementation | 3.7533 | 1.1823 |
| Implementing IFMIS requires that many government structures start working with common tools. | 3.7250 | .71055 |
| Poor implementation is due to lack of a change management expert, IT-system experts and logistic experts | 3.6250 | 1.4083 |
| Many IFMIS projects have failed because the basic system functionality and resources had not been clearly specified from the onset of the intervention. | 3.5845 | 0.77251 |
| Lack of shared understanding between senior officers about an IT innovation and its contributions to organizational competitive advantage contributes to the most severe problems in IFMIS implementation | 3.5528 | 1.1843 |
| I.T reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform. | 3.5428 | 1.5152 |
| Lack of shared I.T vision contributes to the most severe problems in IFMIS implementation | 3.5428 | 1.5152 |
| Capacity building and training need to be scoped out during the needs assessment process | 3.4612 | 1.2633 |
| IFMIS implementation requires major costs and resource implications that the ministry can hardly meet | 3.3725 | 1.2021 |
| There is lack of staff with required IT-knowledge at the ministry for the IFMIS implementation | 3.3714 | .83703 |
| There are challenges due to centralized treasury operations | 3.2840 | .94740 |
| Many IFMIS projects have also failed due to the lack of clarity in ownership of the system and unclear authority to implement. | 3.0769 | .75955 |
| Joint ownership may result in a loss of accountability and real ownership of the project. | 3.0769 | .75955 |

**Source: Research Data (2014)**

Majority of the respondents agreed that failure to undertake parallel reforms in resource mobilization required by IFMIS is one of the reasons that often impede successful implementation as shown by a mean score of 3.7533, implementing IFMIS requires that many government structures start working with common tools as shown by a mean score of 3.7250, poor implementation is due to lack of a change management expert, IT-system

experts and logistic experts as shown by a mean score of 3.6250, many IFMIS projects have failed because the basic system functionality and resources had not been clearly specified from the onset of the intervention as shown by a mean score of 3.5845, lack of shared understanding between senior officers about an IT innovation and its contributions to organizational competitive advantage contributes to the most severe problems in IFMIS implementation as shown by a mean score of 3.5528, I.T reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform as shown by a mean score of 3.5428 and that lack of shared I.T vision contributes to the most severe problems in IFMIS implementation as shown by a mean score of 3.5428. On the other hand they remained neutral on that capacity building and training need to be scoped out during the needs assessment process, IFMIS implementation requires major costs and resource implications that the ministry can hardly meet, there is lack of staff with required IT-knowledge at the ministry for the IFMIS implementation, there are challenges due to centralized treasury operations, many IFMIS projects have also failed due to the lack of clarity in ownership of the system and unclear authority to implement and that joint ownership may result in a loss of accountability and real ownership of the project as shown by a mean score of 3.4612, 3.3725, 3.3714, 3.2840, 3.0769 and 3.0769 respectively.

### 4.6 Relationship between implementation of IFMIS and Procurement Performance

The researcher conducted inferential analysis so as to establish the relationship between various dimensions of the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries.

**Table 4.15: Correlation Analysis**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| Top management support | 0.097 | 0.009 | 0.003 | 0.718 |
| Employee commitment | 0.257 | 0.066 | 0.060 | 0.697 |
| Training/capacity building | 0.365 | 0.085 | 0.076 | 0.564 |
| Reporting accountability | 0.275 | 0.026 | 0.194 | 0.820 |

**Source: Research Data, 2014**

The above table presents the correlation and the coefficient of determination between procurement performance (dependent variable) and the independent variables (top

management support, employee commitment, training/capacity building and reporting accountability). From the findings, the study found that there was a positive but weak relationship between the dependent variable and the independent variables.

Of all the four independent variables, training/capacity building had the highest relationship with the IFMIS implementation of 0.085 followed by reporting accountability with a value of 0.026, then employee commitment with 0.066, while coordination of activities came fourth with a correlation value of 0.020 top management support had the weakest relationship with strategy implementation of 0.009.

The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. Regression tests were done which included Model goodness of fit (Coefficient of determination). The coefficient of determination is a measure of how well a statistical model is likely to predict future outcomes. The coefficient of determination, $r^2$ explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (procurement performance) that is explained by all the independent variables (top management support, employee commitment, training/capacity and reporting accountability).

The researcher conducted a multiple regression analysis so as to establish the relationship between various dimensions of implementation of IFMIS and procurement performance and the four independent variables.

**Table 4.16: Multiple Regression Analysis**

| | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
|---|---|---|---|---|---|
| | **B** | **Std. Error** | **Beta** | | |
| (Constant) | 3.374 | .842 | | 4.009 | .000 |
| Top management support | 0.205 | .105 | 0.089 | 0.849 | .0067 |
| Employee commitment | 0.118 | .084 | 0.023 | 0.954 | .046 |
| Training/capacity | 0.853 | .146 | 0.330 | 2.276 | .0015 |
| Reporting accountability | 0.753 | .088 | 0.167 | 1.379 | .0041 |

**Source: Research Data (2014)**

**a. Predictors: (**Constant), top management support, employee commitment, training/capacity building and reporting accountability.

**b. Dependent variable:** procurement performance

The regression equation (**$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4$)** now becomes:

**Y = 3.374+ 0.089X1 + 0.023X2 + 0.330X3 + 0.167X4**

Whereby;

Y = procurement performance

X1 = top management support

X2 = employee commitment

X3 = training/capacity

X4 = reporting accountability

β1, β2, β3, β4 = Standardized coefficients of determination

ε = Error term

From the above regression model, for every added unit in top management support, employee commitment, training/capacity and government intervention there will be a decrease in procurement performance by 0.089, 0.023, 0.330 and 0.167 respectively. These results infer that training/capacity contributes more to procurement performance of Government Ministries followed by reporting accountability, top management support and employee commitment respectively.

Based on the results, all the explanatory variables are statistically significant (p=.0067, P=. 046, P= .0015, P= .0041). In statistics, a significant level of p <0.05 is significant. This means that the four predictor variables are useful for predicting the procurement performance at Government ministries.

**Table 4.17: Coefficient of Determination**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .981(a) | 0.863 | 0.691 | 0.752 |

**Source: Research Data (2014)**

Table 4.17 presents the regression model goodness of fit statistics to determine whether procurement performance has a linear dependence on top management support, employee

commitment, and training/capacity and reporting accountability. The study established a correlation value of 0.981. This depicts a very good linear dependence between procurement performance and the four predictor variables.

An R-squared value of 0.863 was established in the model and adjusted to 0.691. The coefficient of determination depicts that the four independent variables contribute about 86.3% to the variation in procurement performance while other factors not included in the study contribute 13.7% of the procurement performance. Therefore, further research should be conducted to investigate the other factors (13.7%) that affect procurement performance.

**Table 4.18: ANOVA**

| | **Sum of squares** | **Df** | **Mean Square** | **F** | **Sig or P-value** |
|---|---|---|---|---|---|
| Regression | 46.294 | 4 | 11.574 | 11.815 | 000(a) |
| Residual | 97.953 | 44 | 980 | | |
| Total | 144.248 | 48 | | | |

**Predictors: (Constant), top management support, employee commitment, training/capacity building and reporting accountability.**

ANOVA findings as explained by the P-value of 0.000 which is less than 0.05 (significance level of 5%) confirms the existence of correlation between the independent and dependent variables. The model shows the model fitness i.e. how well the variables fit the regression model. The sum of squares gives the model fit and hence the variables fit the regression model. From the results, the F ratio of 11.815 and the significance of 0.000 shows that there was no much difference in the means. Since F calculated is greater than the F critical (value = 11.815), this shows that the overall model was significant.

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This is the final chapter in this study which gives the summary of the findings, the conclusions and recommendations of the study based on the objective of the study. It comes after identifying the background, problem at hand and the objectives in chapter one, literature review was done in chapter two, chapter three set out the methodology that the study used to collect data and chapter four analyzed the data obtained from the study. The chapter finally presents the suggestions for further studies.

## 5.2 Summary of the Findings and Discussions

The study found that there has been a moderate level of implementation of IFMIS among the government ministries in Kenya. From the study, training/capacity building, employee commitment, human resources available affect the implementation of IFMIS in the government ministries to great extents, while top management support, ICT infrastructure, governance system, reporting accountability, incentives structure and legal framework in place affect the implementation of IFMIS in the government ministries to moderate extents. From the available literature Bartel (2006) IFMIS provide an integrated computerized financial package to enhance the effectiveness and transparency of public resource management by computerizing the budget management and accounting system for a government.

The study further found that implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya to a great extent. In this regard, top management support and training/capacity building affect the procurement performance of the government ministries to moderate extents, whereas reporting accountability and employee commitment affect the procurement performance of the government ministries to moderate extents. The results further show that implementation of IFMIS affects procurement effectiveness, cost savings, procurement efficiency and procurement functionality to great extents while it leads to increased quality to a moderate extent. The findings concur with Otley (2001) who posited that management must also recognize the existing organization culture and learn to work within or change its parameters. In addition,

the most important thing when implementing a strategy is the employee's commitment to the strategic direction itself.

The study found that the government ministries experience challenges of framework contracting, proficiency in IT applications, negotiation skills, public relations skills and records management skills to great extents in their endeavors of implementing IFMIS in procurement as well as challenges of communication and interpersonal skills and legal knowledge in procurement to moderate extents. failure to undertake parallel reforms in resource mobilization required by IFMIS is one of the reasons that often impede successful implementation, implementing IFMIS requires that many government structures start working with common tools, poor implementation is due to lack of a change management expert, IT-system experts and logistic experts, many IFMIS projects have failed because the basic system functionality and resources had not been clearly specified from the onset of the intervention and lack of shared understanding between senior officers about an IT innovation and its contributions to organizational competitive advantage contributes to the most severe problems in IFMIS implementation

In addition, I.T reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform and that lack of shared I.T vision contributes to the most severe problems in IFMIS implementation. From the available literature review, there are high risks involved in implementing too many components of the reform at once and practitioners believe that risks can be mitigated with a phased approach that rolls out across government institutions in a gradual and flexible process. As Subramaniam & Shaw (2002) posit, realizing the full potential of these technological advances in the area of public procurement is a challenge in itself.

### 5.3 Conclusions

The study concludes that there has been a moderate level of implementation of IFMIS among the government ministries in Kenya. Training/capacity building, employee commitment, human resources available, top management support, ICT infrastructure, governance system, reporting accountability, incentives structure and legal framework in place affect the implementation of IFMIS in the government ministries. IFMIS forms part of the financial

management reform practices of developing countries globally. It holds benefits such as effective control over public finances, contributes to the enhancement of transparency and accountability and serves as a deterrent to corruption and fraud.

The study also established that implementation of IFMIS affects the overall procurement performance in the government ministries in Kenya where top management support and training/capacity building affect the procurement performance of the government ministries to moderate extents, whereas reporting accountability and employee commitment affect the procurement performance of the government ministries. In addition, implementation of IFMIS affects procurement effectiveness, cost savings, procurement efficiency and procurement functionality to great extents while it leads to increased quality.

The study concludes that the government ministries experience challenges of framework contracting, proficiency in IT applications, negotiation skills, public relations skills and records management skills to great extents in their endeavors of implementing IFMIS in procurement as well as challenges of communication and interpersonal skills and legal knowledge in procurement. The results have shown that difficulties can be experienced with the implementation of an IFMIS. It will thus not always achieve the desired functionality and impact on public financial management that was originally anticipated. Obstacles such as a lack of capacity, a lack of commitment, and institutional and technical challenges pose a risk to the successful implementation of an IFMIS.

### 5.4 Recommendations

The study recommends among other things that the government reviews all prohibitive legislations relating to public procurement and information management in order to make itself an open system where information can be accessed by the public without restrictions. This will enable effective public participation in procurement decision making and assist in promoting positive performance, severe and punitive disciplinary measures should be meted to all procurement malpractices including the PPOA's ineffectiveness to reign in on all irregularities reported to them. This should include repossession of irregularly acquired assets, complete overhaul of PPOA and stiffer penalties.

In order to address the challenges if IFMIS implementation the researcher recommends that the National government needs to have a strong policy and legal framework supporting IFMIS. The system should be setup to ensure that the IFMIS processes strongly match with manual processes in place to minimize the need for any legislative interventions or to teach the staff new ways of doing things on top of learning the new program. Note should be taken of the fact that this is recommendation does not negate the need where the change is to reduce wastage, increase efficiencies and eliminate graft amongst other evils. There is need to ensure that all activities where possible are run within the IFMIS system to make it a true e-government system. The system should be designed to accommodate all financial transactions within the government to reduce waste, enhance record keeping, for planning and reduction of corruption.

There is need to ensure that the requisite infrastructure are in place especially in outlying areas out of Nairobi where ICT connectivity leave alone electricity availability is a real challenge. If the infrastructure cannot be put in place in the whole country, the result will be that it will be seen as an urban or Nairobi "project" while in the outlying areas it will be things as usual using the manual systems.

The study recommended that the government employs a change agent to oversee the implementation of the IFMIS and that the users of the system to undergo on the job training, in order to improve their skills and capabilities to use the system. There also needs to be strong project implementation committees with a champion at each of the ministries coordinated by the national IFMIS secretariat. Finally challenges faced with manual input of records needs to be erased and the system needs to be implemented from the management or decision making level, down to the user level.

### 5.5 Limitations of the Study

The researcher faced limitations in data collection as some respondents felt the questionnaire should have clearly demarcated whether it is for management or users. Some users were reluctant to respond as they felt their areas of operation are confidential and needed higher authority to respond which due to time constraints the researcher was not able to get. Other limitations faced was that as the IFMIS system is still very new in Kenya, data from local

sources for literature review was not readily available and the researcher had to rely on literature from outside the country and in some instances for general ICT adoption principles.

### 5.6 Suggestions for Further Research

The researcher suggested issues for further study on the drivers/determinants that influence the adoption of the following IFMIS reengineering modules; plan to budget, procure to pay, and revenue to cash among the government entities in Kenya as a way of gathering generalizable findings that could act as guidelines for policy recommendations in public procurement in this era of technological advancements.

# REFERENCES


Aaltonen, P., Ikåvalko, H. (2002), *Implementing strategies successfully*, Integrated Manufacturing Systems, Vol. 13 No.6, pp.415-18

Agaba. E and Shipman, N. (2008). Public Procurement Reforms in developing Countries: The Uganda Experience

Bartel, M. L. (2006). Integrated Financial Management Systems: A Guide to Implementation Based on The Experience in Latin America. Washington, DC: Institute For Democratic Strategies, LATPS Occasional Paper Series.

Bhatt, G.D. (2005), Enterprise information systems integration and business process improvement: an empirical study, Proceedings of the Americas Conference on Information Systems, August 25-27,

Brennan, P.J. (2007) Promoting The Value of Public Procurement: Measurement Systems and Performance Metrics for Public Procurement. Radcliffe Publishing Ltd, Oxon.

Brignall, S., Ballantine, J. (2004), Strategic enterprise management systems: new directions for research, *Management Accounting Research*, Vol. 15 No.2, pp.225-40.

Casals and Associates (2004). Integrated Financial Management Systems Best Practices: Bolivia and Chile, funded under USAID Contract AEP-I-00-00-00010-00, Task Order No. 01 Transparency and Accountability, 2004.

Cooper, D. and Schindler, P. (2003), *Business Research Methods* (8th edn), McGraw-Hill: New York

Cornelia K.S., Muhumuza, E. and Basheka, B.C. (2010). Developing Public Procurement Performance Measurement Systems in Developing Countries: The Uganda Experience. In Piga, G & Thai, K.V. (2007). *Advancing Public Procurement: Practices, Innovation and Knowledge-sharing,* Pr Academics Press: USA

Davenport, T.H., Brooks, J.D. (2004), Enterprise systems and the supply chain, *Journal of Enterprise Information Management*, Vol. 17 No.1, pp.8-19.

Diamond, J. and Pokar K. (2005), Introducing Financial Management Information Systems in Developing Countries, International Monetary Fund.

Dorotinsky, W. and Junghun, C. (2003). The World Bank's Experience with Financial Management Information System (FMIS) Projects, Washington, D.C.: World Bank, PRMPS, draft, 4/16/03.

Eisenstat, R.P. (2003), Implementing strategy: developing a partnership for change, *Planning Review*, Vol. 21 No.5, pp.33-6.

Fahy, M.J. (2000), Strategic enterprise management: the implications for management accounting and control, paper presented at the 23rd Annual Congress of the European Accounting Association, Munich, March 29-31.

Gallagher, M.C. (2007) Building Fiscal Infrastructure in Post-Conflict Societies, funded by USAID under Contract GEG-I-06-04-00001-00 Task Order No. 06.

Huse, M., Gabrielsson, J. (2004), Past trends and future challenges in research on boards and governance: *A review of major management journals between 1990-2002*, paper presented at 4th EURAM Annual Conference, St Andrews, 5-9 May.

Hyvönen, T. (2003), Management accounting and information systems: ERP versus BoB, *European Accounting Review*, Vol. 12 No.1, pp.155-73.

Jones, D. S. (2002). "Procurement Practices in the Singapore Civil Service: Balancing Control and Delegation." *Journal of Public Procurement, 2* (1): 29-53.

Juma, M.J.O., (2010): *Public Procurement Reforms in Kenya,* Presentation to the OECDDAC Conference, 3rd-5th May, PPOA- Nairobi.

Kipkorir (2010) Effects of tendering processes on the performance of CDF funded projects: A case Study of Bomet Constituency. An Unpublished MBA Project, UoN

Koskey, J., (2010) Public Sector Procurement in Kenya: The need for a coherent policy framework. Journal of economics, KIPPRA Kenya

Luft, J., and Shields, M.D. (2003), Mapping management accounting: graphics and guidelines for theory-consistent empirical research, *Accounting, Organizations and Society*, Vol. 28 No.2-3, pp.169-249.

Lysons K. and Farrington B., (2006). *Purchasing and Supply Chain Management* (1st Edition). London: Prentice Hall.

Mahmood, S. A. I. (2010). Public Procurement and Corruption in Bangladesh. Confronting the Challenges and Opportunities: Journal of public administration and policy research, 2(6), 103-111: University of Maine, Orono.

Marginson, D.E.W. (2002), Management control systems and their effects on strategy formation at middle management levels: evidence from a UK organisation, *Strategic Management Journal*, Vol. 23 pp.1019-31

Miller, S., Wilson, D., and Hickson, D. (2004), *Beyond planning strategies for successfully implementing strategic decisions*, Long Range Planning, Vol. 37 No.1, pp.201-18.

Mugenda, O.M and Mugenda, A.G (2003) *Research Methods*, Quantitative & Qualitative Approaches, Acts Press, Nairobi

Muthoni, K., (2010) Procurement and Contracting in Public Organizations in Kenya. Journal of Public Procurement, Vol. 3 No.2, pp.215-26.

Njiraini, P., and Moyi E., (2006), *Supporting MSEs to Access Public Procurement Market in Kenya*, DP/65/2006, KIPPRA, Nairobi

Obiero Makori (2008). The challenges in the implementation of the 2005 procurement act on the Kenyan Ministry of Higher Education, Science and Technology. Unpublished MBA project. University of Nairobi.

Odhiambo, W., Kamau, P. (2003) Public *Procurement: Lessons from Kenya, Tanzania and Uganda*, Working Paper No. 208, OECD Development Centre, Kenya.

Organization for Economic Cooperation and Development (2006). Integrity in Public Procurement: Good Practice from A to Z. OECD Paris, France

Owegi, F., and Aligula, E., (2006) Public sector procurement in Kenya: The need for a coherent policy framework: Kenya Institute for Public Policy Research and Analysis, Nairobi.

Pittsburgh, PA, .Booth, P., Matolcsy, Z., and Wieder, B. (2000), The impacts of enterprise resource planning systems on accounting practice – the Australian experience, *Australian Accounting Review*, Vol. 10 No.2, pp.4-18.

Public Procurement Oversight Authority, (2007), *Assessment of the Procurement System in Kenya*. Rambøll Management A/S

Rapa, A. and Kauffman, D (2005) *Strategy implementation – an insurmountable obstacle*? *Handbook of Business Strategy*, Volume 6, Number 1, pp 141-146

Redding, J.C., Catalanello, R.C. (2004), *Strategic Readiness*, Jossey-Bass, San Francisco, CA.

Republic of Kenya (2009) The Exchequer and Audit (Public Procurement) Regulations 2001, Legal Notice No. 51, Government Press, Nairobi.

Sauer, C., Willcocks, L. (2003), Establishing the business of the future: the role of organizational architecture and information technologies, *European Management Journal*, Vol. 21 No.4, pp.497-508.

Schapper, P. R., & Veiga Malta, J. (2004). Electronic Business Solutions. Paper presented at the Business Forum of the Millennium, held at the University of Western Australia, Perth, Western Australia, June 6-9.

Stoddard, D.B, and Jarvenpaa, S.L (2005), Business process redesign: tactics for managing radical change, *Journal of Management Information Systems*, Vol. 12 No.1, pp.81-107.

Wall, F.R. (2003), Organizational efficiency by integrated information systems versus management control? *An agency-based approach, paper presented at the 2nd Conference on Performance Measurement and Management Control, Nice*, September 18-19.

Weele, A.J., (2000). Professional development of purchasing in organizations: towards a purchasing development model *In: WMRC (Ed.), Global Purchasing and Supply Chain Strategies. Touch Briefings, London, pp. 170–175*

Wilson, C.L., (2002), E-procurement and energy: Power Economics, Wilkington Publishing, Great Britain, Vol. 6 , ISSU11.

Woods, A., Joyce, P. (2003), Owner-managers and the practice of strategic management, *International Small Business Journal,* Vol. 21 No.2, pp.181-96

Woolcock, S. (2008) *Public Procurement and the Economic Partnership Agreements: Assessing the potential impact on ACP Procurement Policies.* Commonwealth Secretariat

# APPENDICES

## Appendix I: Introductory Letter

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 30th September 2014

**TO WHOM IT MAY CONCERN**

The bearer of this letter MUTUI MORGAN FUNDI

Registration No. D61/75734/2012

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

UNIVERSITY OF NAIROBI * P.O Box 30197 - 00100, NAIROBI * SCHOOL OF BUSINESS 30 SEP 2014

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

**Appendix II: Research Questionnaire**

This research is in partial fulfillment of requirements for a degree in Masters of Business Administration from the University of Nairobi and I will be most grateful if you could kindly complete this questionnaire. This questionnaire consists of two parts; kindly answer all the questions by ticking in the appropriate box or filling in the spaces provided. Kindly answer the following questions by ticking in the appropriate box or filling the spaces provided. The information given here will only be used for purposes of this study and will be treated with utmost confidentiality. Your cooperation will be highly appreciated.

**PART A: GENERAL INFORMATION**

1. What is your gender?

| | | | |
|---|---|---|---|
| Male | [ ] | Female | [ ] |

2. Indicate your age category:

| | | | |
|---|---|---|---|
| Below 20 years | [ ] | 41-50 years | [ ] |
| 21-30 years | [ ] | Above 51 years | [ ] |
| 31-40 years | [ ] | | |

3. What is your highest level of education?

| | | | |
|---|---|---|---|
| Post Graduate | [ ] | Diploma | [ ] |
| Graduate | [ ] | Certificate | [ ] |
| Any other (specify)…… | | | [ ] |

4. Years of service/working period in the Ministry/public sector department (Tick as applicable)

| | | | |
|---|---|---|---|
| Less than 1 year | [ ] | 6-10 years | [ ] |
| 1-5 years | [ ] | Over 10 years | [ ] |

5. Indicate your Department

| | | | |
|---|---|---|---|
| Procurement | [ ] | Finance | [ ] |
| ICT | [ ] | Other (Specify…….) | [ ] |

6. Please indicate your designation

| | | | |
|---|---|---|---|
| Procurement manager/head | [ ] | Finance manager/head | [ ] |
| ICT manager/head | [ ] | Other (Specify…….) | [ ] |

**PART B: EXTENT TO WHICH THE MINISTRIES HAVE IMPLEMENTED IFMIS**

7. How would you rate the extent of implementation of IFMIS in this Government Ministry?

| To a very great extent | To a great extent | To a moderate extent | To a little extent | To no extent |
|---|---|---|---|---|
| | | | | |

8. To what extent do the following aspects affect the implementation of IFMIS in this Ministry? Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate, 4= large extent and 5 is to a very large extent

| **Aspects that affect the implementation of IFMIS** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Top management support | | | | | |
| Employee commitment | | | | | |
| Training/capacity building | | | | | |
| reporting accountability | | | | | |
| Governance system | | | | | |
| ICT infrastructure | | | | | |
| Incentives structure | | | | | |
| Legal framework in place | | | | | |
| Human resources available | | | | | |
| Others (Specify.....) | | | | | |

**PART C: EFFECTS OF IFMIS ON PROCUREMENT PERFORMANCE**

9. To what extent does implementation of IFMIS affect the overall procurement performance in this Ministry?

| To a very great extent | To a great extent | To a moderate extent | To a little extent | To no extent |
|---|---|---|---|---|
| | | | | |

10. Kindly rate the extent to which the following aspects of the implementation of IFMIS affect the procurement performance of this Ministry? Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate, 4= large extent and 5 is to a very large extent

| **Aspects of the implementation of IFMIS that affect the procurement performance** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Top management support | | | | | |
| Employee commitment | | | | | |
| Training/capacity building | | | | | |
| reporting accountability | | | | | |
| Others (Specify.....) | | | | | |

11. In your view to what extent does implementation of IFMIS affect the following aspects of procurement performance in this Ministry? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate, 4= large extent and 5 is to a very large extent

| **Aspects of procurement performance** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Procurement Efficiency | | | | | |
| Procurement Effectiveness | | | | | |
| Procurement Functionality | | | | | |
| Cost Savings | | | | | |
| Increased Quality | | | | | |
| Others (Specify.....) | | | | | |

**PART D: FACTORS AFFECTING THE IMPLEMENTATION OF IFMIS**

12. To what extent does the Ministry experience the following challenges in the implementation of IFMIS in procurement Department?

| **IFMIS Skills and knowledge areas** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| Negotiation skills | | | | | |
| Framework contracting | | | | | |
| legal knowledge in procurement | | | | | |
| Communication and Interpersonal skills | | | | | |
| Records management skills | | | | | |
| Proficiency in IT applications | | | | | |
| Public relations skills | | | | | |
| Others (specify……) | | | | | |

13. What is your level of agreement with the following statements that relate to the factors affecting implementation of Integrated Financial Management Information Systems in the Ministry? Use a scale of 1-5 where 1= strongly disagree and 5 = strongly agree.

| **Factors affecting implementation of IFMIS** | **1** | **2** | **3** | **4** | **5** |
|---|---|---|---|---|---|
| I.T reforms are perceived as complex, risky, resource intensive and requiring major procedural changes, often involving high-level officials lacking incentives for reform. | | | | | |
| Many IFMIS projects have also failed due to the lack of clarity in ownership of the system and unclear authority to implement. | | | | | |
| Joint ownership may result in a loss of accountability and real ownership of the project. | | | | | |
| Implementing IFMIS requires that many government structures start working with common tools. | | | | | |
| There are challenges due to centralized treasury operations | | | | | |
| Failure to undertake parallel reforms in resource mobilization required by IFMIS is one of the reasons that often impede successful implementation | | | | | |
| Many IFMIS projects have failed because the basic system functionality and resources had not been clearly specified from the onset of the intervention. | | | | | |
| IFMIS implementation requires major costs and resource implications that the ministry can hardly meet | | | | | |
| There is lack of staff with required IT-knowledge at the ministry for the IFMIS implementation | | | | | |
| Poor implementation is due to lack of a change management expert, IT-system experts and logistic experts | | | | | |
| Capacity building and training need to be scoped out during the needs assessment process | | | | | |
| Lack of shared I.T vision contributes to the most severe problems in IFMIS implementation | | | | | |
| Lack of shared understanding between senior officers about an IT innovation and its contributions to organizational competitive advantage contributes to the most severe problems in IFMIS implementation | | | | | |
| Others (specify……) | | | | | |

14. Give any other information that you would like to share about the implementation of IFMIS and its effect on the procurement performance of government ministries in Kenya?

.....

.....

**THANK YOU!**

**Appendix III: List of Government Ministries**

1. Interior and Coordination of National Government
2. Devolution and Planning
3. Foreign Affairs
4. Defense Ministry
5. Education, Science & Technology
6. The National Treasury
7. Health Ministry
8. Transport & Infrastructure
9. Environment, Water & Natural Resources
10. Land, Housing & Urban Development
11. Information, Communication & Technology (ICT)
12. Sports, Culture and the Arts
13. Labour, Social Security and Services
14. Energy & Petroleum
15. Agriculture, Livestock & Fisheries
16. Industrialization & Enterprise Development
17. East African Affairs, Commerce & Tourism
18. Mining Ministry

**Source: http://www.presidency.go.ke/index.php/ministries: Accessed 30th July, 2014, 1023hrs**