

**EFFECT OF INTEGRATED FINANCIAL MANAGEMENT SYSTEM ON  
IMPROVEMENT OF SERVICE DELIVERY IN THE KENYAN PUBLIC SECTOR:  
(A CASE STUDY OF GARISSA COUNTY)**

**BY**

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**JANUARY 2017**

**DECLARATION**

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere presented for any award or degree. I hereby declare that this document contains no material or published by other people except where due reference is made and author duly acknowledged.

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## **DEDICATION**

I dedicate this work to God Almighty, all my family members, my college mates, my workmates, members who spared their time to attend to my questionnaires and my lectures.

Thank you for your support and guidance. May God bless you.

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## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>DEDICATION.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>viii</b>
<b>LIST OF FIGURES .....</b>	<b>ix</b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>x</b>
<b>ABSTRACT.....</b>	<b>xi</b>
<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>1</b>
1.1 Background to the Study .....	1
1.1.1 Integrated Financial Management Information System (IFMIS) .....	4
1.1.2 Kenyan Perspective of Financial Systems –Government Institutions in Garissa County .....	5
1.2 Statement of the problem .....	5
1.3 Objectives of the Study .....	6
1.3.1 Specific Objectives .....	6
1.4 Research Questions .....	7
1.5 Significance of the Study .....	7
1.6 Scope of the Study.....	8
<b>CHAPTER TWO: LITERATURE REVIEW.....</b>	<b>9</b>
2.1 Introduction .....	9
2.1 Theoretical Framework .....	9
2.1.1 Technology Acceptance Model .....	9
2.1.2 Contingency Theories.....	10

2.1.3	System Theory .....	12
2.1.4	Diffusion of Innovation Theory .....	13
2.2	Empirical Review .....	14
2.2.1	Electronic Platforms and Service Delivery in Public Sector .....	15
2.2.2	Training and Service Delivery in Public Sector .....	17
2.2.3	Adoption of IFMIS and Service Delivery in the Public Sector .....	19
2.3	Conceptual Framework .....	21
2.4	Summary of Literature .....	23
2.5	Study Gaps from Reviewed Literature .....	23
3.1	Introduction .....	24
3.2	Research Design .....	24
3.3	Target Population .....	24
<b>3.4</b>	<b>Sample Size and Sampling Procedure .....</b>	<b>24</b>
<b>3.5</b>	<b>Data Collection .....</b>	<b>25</b>
<b>3.6</b>	<b>Reliability of the Study .....</b>	<b>26</b>
<b>3.7</b>	<b>Validity of the Research Instrument .....</b>	<b>26</b>
<b>3.8</b>	<b>Data Analysis Technique .....</b>	<b>26</b>
<b>3.9</b>	<b>Ethical Consideration .....</b>	<b>27</b>
<b>CHAPTER FOUR.....</b>	<b>.....</b>	<b>28</b>
<b>PRESENTATION OF FINDINGS AND DISCUSSIONS .....</b>	<b>.....</b>	<b>28</b>
4.0	Introduction .....	28
4.1	Response Rate .....	28
4.2	Demographic Characteristics of Respondents.....	28
4.3	IFMIS Training and Extent of Use.....	32
4.3.1	Extent of use of IFMIS .....	34
4.4	Electronic Platforms and Service Delivery .....	37
4.5	IFMIS Training and Service Delivery.....	40

4.6 IFMIS Adoption and Service Delivery in County and Government offices.....	43
4.7 Regression Model.....	46
4.7.1 Coefficient of Determination.....	46
4.7.3 Regression Coefficients.....	48
<b>CHAPTER FIVE .....</b>	<b>49</b>
<b>SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>49</b>
5.1 Introduction.....	50
5.2 Summary of Findings.....	50
5.3 Conclusion.....	52
5.4 Recommendations.....	54
5.5 Areas for Further Research.....	55
<b>REFERENCES.....</b>	<b>55</b>
<b>APPENDIX I: QUESTIONNAIRE.....</b>	<b>66</b>

## LIST OF TABLES

Table 3.1: Target Population.....	25
Table 3. 2: Operationalization of Variables.....	27
Table 4. 1 : Demographic Characteristics of Respondents.....	30
Table 4.2 : IFMIS Training.....	34
Table 4.3 : Extent of IFMIS Use in Different Sectors .....	35
Table 4.4 : Extent of IFMIS Implementation in the County and National Government .....	36
Table 4.5: Electronic Platforms and Service Delivery.....	39
Table 4.6 : Relationship between Electronic Platforms and Service Delivery .....	40
Table 4.7: IFMIS Training and Service Delivery .....	42
Table 4.8 : Correlation between IFMIS Training and Service Delivery.....	42
Table 4.9 : IFMIS Adoption and Service Delivery.....	45
Table 4.10 : Relationship between IFMIS Adoption and Improved Service Delivery.....	46
Table 4.11 : Model Summary .....	47
Table 4. 12 : ANOVA.....	47
Table 4. 13 : Coefficients.....	48

## LIST OF FIGURES

Figure 2. 1: Otley (1980) Contingency theory Framework .....	11
Figure 2.2: Conceptual Framework .....	22
Figure 4. 1: Departments where the respondents work.....	32
Figure 4. 2: Use of IFMIS currently .....	37
Figure 4.3: Electronic Platforms and Service Platforms.....	38
Figure 4.4: Effects of IFMIS training on service .....	41
Figure 4.5: IFMIS adoption and service delivery .....	44

## ACRONYMS AND ABBREVIATIONS

**AFDB:** Africa Development Bank

**COA:** Chart of Accounts

**DFID:** Department for International Development

**E-Government:** Electronic government

**GPSC:** Garissa Public Service Commission

**IIA:** Institute of Internal Auditors

**ICT:** Information Communication Technology

**IDPM:** Institute for Development and Policy Management

**IFAC:** International Federation of Accountants

**IFMIS:** Integrated Financial Management Systems

**ISACA:** Information Systems Audit and Control Association

**ISO:** International organization of Standardization

**IT:** Information Technology

**MIS:** Management Information System

**PFM:** Public Financial Management

**PPDA:** Public Procurement and Disposal Act

**PRSP:** Poverty Reduction Strategy Paper

**PSC:** Public Service Commission

**PSWP:** Public Sector Work Program

**SPSS:** Statistical Package for Social Sciences

**USAID:** United States Agency for International Development

**WB:** World Bank

**ABSTRACT**

The government of Kenya has over the past few years taken measures that are geared towards improving transparency and accountability in the operation of the government. One of the measures that the government introduced is the use of Integrated Financial Management Information Systems (IFMIS) in its operation both across counties and national government, with an expectation that the use of IFMIS will improve service delivery, albeit both directly and indirectly. Thus the study focused on analyzing the effect of IFMIS on service delivery, with a focus on understanding the impact of IFMIS on its use, training and technology in the government. The study used a descriptive study design and targeted a population of 91 employees from financial, procurement and internal audit departments where IFMIS is used. Out of a target population of 91 staff in both National and County government in Garissa, a census survey was used in the study. The study used questionnaire method to collect data, with the questionnaire subjected to a pilot test to test for reliability and validity. Data collected was analyzed through SPSS version 20 with both descriptive and inferential statistics used. Descriptive statistics is provided through frequencies, percentages, graphs, and tables while inferential statistics was performed through ordinal regression and cross tabulations and data presented through cross tabulation tables and regression tables. The findings of the study indicated that there is statistically significant relationship between electronic platforms and improvement in service delivery. The study also found out that there is a statistically significant relationship between IFMIS training and improvement in service delivery. Additionally, the study results demonstrated that IFMIS adoption is statistically significantly associated with improvement in service delivery. The regression analysis showed that a significant improvement in service delivery can be occasioned by IFMIS training, IFMIS adoption and electronic platforms. The study concludes that IFMIS training, IFMIS adoption and electronic platforms affect service delivery in national and county government. This study recommends that there is need to align the IFMIS system with the needs of the county and national government to improve service delivery.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

Financial management consists of all the activities concerned with obtaining money and using it effectively and efficiently (Asah, 2014). Financial management involves careful planning and efficient use of resources. Proper financial management can ensure that financial priorities are established in line with organizational goals and objectives. Spending is planned and controlled in accordance with established priorities and sufficient financing is available when it is needed (Koitaba, 2013). It's generally recognized that most developing countries have ineffective governmental financial control system. The serious deficiency in the financial control systems in most developing countries is generally recognized as the major factors which facilitate the misuse of public resources and financial corruption in these countries (Njihia, 2015). Historically the public sector has faced capacity constraints compounded by inadequate information processes and systems, noncompliance with internal controls and corruption. To address these challenges the government since 2002 has embarked on public financial management reforms such as integrated financial management information system (IFMIS) (Wanjau, Muiruri & Ayodo, 2012).

The financial management system (IFMIS) is a government to government or inter-agency system. It automates the public financial management process from budget preparation and execution to accounting and reporting, with the help of an integrated system for financial management of line ministries, agencies and other public sector operations (Wamuyu, 2014). Governments in developing countries are increasingly exploring methods and systems to modernize and improve public financial management. For example, over the years, there has been an introduction of the integrated financial management system (IFMIS) as one of the most common financial management reform practices aimed at the promotion of efficiency, effectiveness, accountability, transparency, security of data management and comprehensive

financial reporting. The scope and functionality of an IFMIS varies across countries, but normally it represents an enormous, complex, strategic reform process (Chene, 2009).

The introduction of Integrated Financial Management System (IFMIS) has become a core component of financial reforms to promote efficiency, security of data management and comprehensive financial reporting (Ahmadi, Sanaz, & Ahmadi, 2010). The government of Kenya introduced the IFMIS system in the year 2008. This program was to be rolled out in all the government ministries and departments within a period of five years. The government has over the years introduced and implemented reforms in all the ministries through the Treasury in order to increase the accountability and transparency in the use of government funds (Kasumba, 2009).

Integrated Financial Management Systems (IFMIS) provide an integrated computerized financial package to enhance the effectiveness and transparency of public resources 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 Integrated Financial Management Systems (IFMIS) can vary across countries, but sub-systems normally include accounting, cash management, debt management and related core treasury systems (Bonett & Wriite, 2014). In addition to these core sub-systems, some countries have chosen to expand their IFMIS with non-core sub-systems such as tax administration, procurement management, asset management, human resource and payroll systems, pension and social security systems and other possible areas as supporting the core modules (Chebet, 2013).

There are a number of benefits that are associated with the adoption of IFMIS, *inter alia* the improved recording and processing of government financial transactions to allow prompt and efficient access to reliable financial data, and strengthening of financial controls thus

facilitating a full and updated picture of commitments and expenditure on a continuous basis. Once a commitment is made, the system should be able to trace all the stages of the transaction processing from budget releases, commitment, purchase, payment request, reconciliation of bank statements, and accounting of expenditure. This allows a comprehensive picture of budget execution (WB, 2012). Third, it provides the information to ensure improved efficiency and effectiveness of government financial management and service delivery. Generally, increased availability of comprehensive financial information on current and past performance assists budgetary control and improved economic forecasting, planning, and budgeting. In addition to the aforementioned benefits, IFMIS has an indirect positive effect on service delivery. For example: 'Better payment systems and better cash management through IFMIS make it more likely that payments can be made on time, including wages, transfers, operations and management and investments (WB, 2012).

In the past decade, developing countries have been encouraged to reform their expenditure management systems and have increasingly embarked on major projects to computerize their government operations. The most popular ones have been projects to computerize government accounting and payment operations, by introducing government financial management information systems (Akkaya et al, 2013). In accounting and organizational theory, Internal control is defined as a process effected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives (Lundu & Shale, 2015).

Internal Control-Integrated Framework, a widely-used framework that integrates information system with public financial management is designed to reduce waste of resources and improve efficiency and effectiveness. These integrated frameworks for internal control have been championed by financial institutions such as International Monetary Fund (IMF) and

World Bank (WB) with an aim of encouraging transparency, accountability, minimizing cost of operation in the long term and improving quality of service delivery (Brar, 2010).

### **1.1.1 Integrated Financial Management Information System (IFMIS)**

A financial management information system, or integrated financial management information system (IFMIS), 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 (GoK, 2011).

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 operations. The principal element that “integrates” an IFMIS is a common, single, reliable platform database (or a series of interconnected databases) to and from which all data expressed in financial terms flow (Imbuye, 2013).

Integration is the key to any successful IFMIS. In a nutshell, integration implies that the system has the following basic features: Standard data classification for recording financial events; Internal controls over data entry, transaction processing, and reporting; and Common processes for similar transactions and a system design that eliminates unnecessary duplication of data entry. Integration applies only to the core financial management functions that an IFMIS supports, but in an ideal world it would also cover other information systems with which the core systems communicate, such as human resources, payroll, and revenue (tax and customs) (Karanja & Ng’ang’a, 2014). At a minimum, the IFMIS should be

designed to interface with these systems. IFMIS system is composed of three functions: Management function which applies the information function to execute the three roles of a financial system: control, management and planning: Information function which translates financial data into information and system function that embeds financial procedures in software applications, data stores, and communications infrastructure (Ministry of Finance, 2010).

### **1.1.2 Kenyan Perspective of Financial Systems –Government Institutions in Garissa County**

Geographically, Garissa County is one of the largest counties in Kenya. It covers an area of 54,000 square kilometers, which is slightly more than 9% of the total size of the country. The county borders Wajir to the North, Lamu to the South East, Tana River and Isiolo counties to the West and The Republic of Somalia to the East. It has a total population of 623,060, of which 334,939 are males and 288,121 females.

Garissa County provides a better chance to the researcher as one of the less developed counties (formerly northern frontier districts during the colonial era) which benefitted doubly from vision 2030 and the inauguration of the Constitution in 2010. The communities residing in the county are pastoralists with unique cultural backgrounds.

The use of Integrated Financial Management Information Systems (IFMIS) was introduced into the departments of the national government much earlier but the same was introduced at the county government departments in 2014. Garrissa County was selected by the researcher because of his familiarity with staff in both national and county governments. This helped to reduce the cost associated with data collection.

## **1.2 Statement of the problem**

Kenyan government like other states have been faced with the pressures of the need to high-quality services delivery to its citizens and businesses, and at the same time, improve

efficiencies and reduce costs. This has necessitated the adoption of various strategies to improve service delivery and one such strategy is Information Communication Technology (ICT) adoption in public service delivery through IFMIS system (PSC, 2015). The Kenya Government adopted the use of IFMIS in 2005, with this based on Public Financial Reform Management (PFRM) Strategy Paper 2001-2006. The strategy championed for the use of IFMIS as the sole accounting system in government with improvement in service delivery and financial management been cited as some of the expected benefits (Sigei, 2013).

IFMIS introduction was initially targeted at central bank of Kenya, ministry of finance and latter to include other ministries in the national government. The establishment of county government in 2013 led to the need for introduction of IFMIS system in the county governments to promote proper financial management (WB, 2014). The implementation of IFMIS in both the national and county government has not been with varied success, with implementation challenges faced in county government and some departments in the national government. (Karanja, Ng'ang'a & Nyamburan, 2014). Some of these challenges include lack of preparedness and readiness in counties in regard to IFMIS, in particular lack of skilled personnel and infrastructure. It is thus evident that the introduction of IFMIS on service delivery in both counties and national government has faced some challenges. Thus the effect of IFMIS on national and county government is still unclear thus this study which focused on establishing the effect of IFMIS on service delivery in the public sector.

### **1.3 Objectives of the Study**

The main objective of this study is to assess the effect of IFMIS on service delivery in the Kenyan public sector specifically ministries and departments at both national and county government.

#### **1.3.1 Specific Objectives**

The specific objectives of the study are:

- a) To establish the effect of electronic platforms on service delivery in the Kenyan public sector.
- b) To determine the effect of IFMIS training on service delivery in the Kenyan public sector.
- c) To explore the effect of IFMIS adoption on service delivery in Kenyan public sector.

#### **1.4 Research Questions**

- a) How has the adoption of electronic platforms affected service delivery in the Kenyan public sector?
- b) How has IFMIS training enhanced service delivery in the Kenyan public sector?
- c) How has IFMIS adoption improved service delivery in Kenyan public sector?

#### **1.5 Significance of the Study**

##### **1.5.1 Contribution to Theory and Practice**

The study shall assist the National Treasury to determine the effects of IFMIS on service delivery in the public sector and possible ways of strengthening financial internal controls. This study will be premised on theories, and thus this study will further enhance the development of the theories through the study findings.

##### **1.5.2 Contribution to Stakeholders**

The National Government will benefit from the study in that it will facilitate the formulation of laws and regulations that will help to strengthen IFMIS use, training and technology. The National Treasury is the supervisor of Government Ministries, State corporations and county Governments. The study shall assist the National Treasury to determine the effects of IFMIS on service delivery in the public sector and possible ways of strengthening financial internal controls.

## **1.6 Scope of the Study**

The research was selected so as to fulfill the objective of the study, and for this reason the study was conducted on ministries and departments in both levels of government. The study focused on the effects of IFMIS on service delivery but with a specific focus on electronic platforms, IFMIS training and IFMIS adoption in the public sector; specifically ministries and departments in both National and County governments in Garissa county. There are about 40 departments in Garissa County. The study was carried out for a period of three months. The study was limited through the use of quantitative approach and excluded qualitative approach.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

Chapter two entails a review of literature that is relevant to the effects of Integrated Financial Management Information Systems on service delivery in the public sector. The chapter covers the theoretical review, empirical review and the conceptual framework.

### **2.1 Theoretical Framework**

According to Ruchala and Mauldin (1999), research on accounting information systems has been sourced from various disciplines, basically computer science, cognitive psychology and organizational theory. In this regard, it has been asserted that ICT has an important role to play in management accounting system.

#### **2.1.1 Technology Acceptance Model**

Technology acceptance model was introduced by Davis (1986). According to this theory, emerging technologies cannot improve organizational effectiveness and performance if the change has not been accepted by the users (Davis, 1986). The theory of technology acceptance is one of the most popular theories in understanding adoption of ICT. Adoption of any innovation or especially information technology based requires investment in infrastructure to support decision making, planning and communication. However, these systems may be risky. It is therefore very critical that the systems are specified on organizational preference and logic. It is also necessary to understand that people may resist technological changes. There must be an effort to understand why people resist changes and the possible ways through which such issues can be resolved. Appropriate organizational culture must be inculcated; the change must be adopted in an incremental way accompanied by communication. Everyone involved must be informed on their roles and be empowered to perform the respective roles (Kamel, 2014).

Theory of technology acceptance is based on two assumptions; perceived usefulness of the system such as; improved performance, enhanced productivity, effectiveness and efficiency in operations etc. and the perceived ease of use of the new systems such as ease to learn, ease to use, ease to control and ease to remember. This theory brings an understanding that acceptance and use of new technology is a function of the user's feelings about the system and its perceived benefits (Park, 2009).

Technology Acceptance Model (TAM) models how users come to accept and use technology. The model suggests that when users of an information system are presented with a new technology, a number of factors influence how and when they will use it notably the perceived usefulness and perceived ease of use (Kamel, 2014). This theory helped in determining the level to which users use IFMIS in their operation and their perceived usefulness.

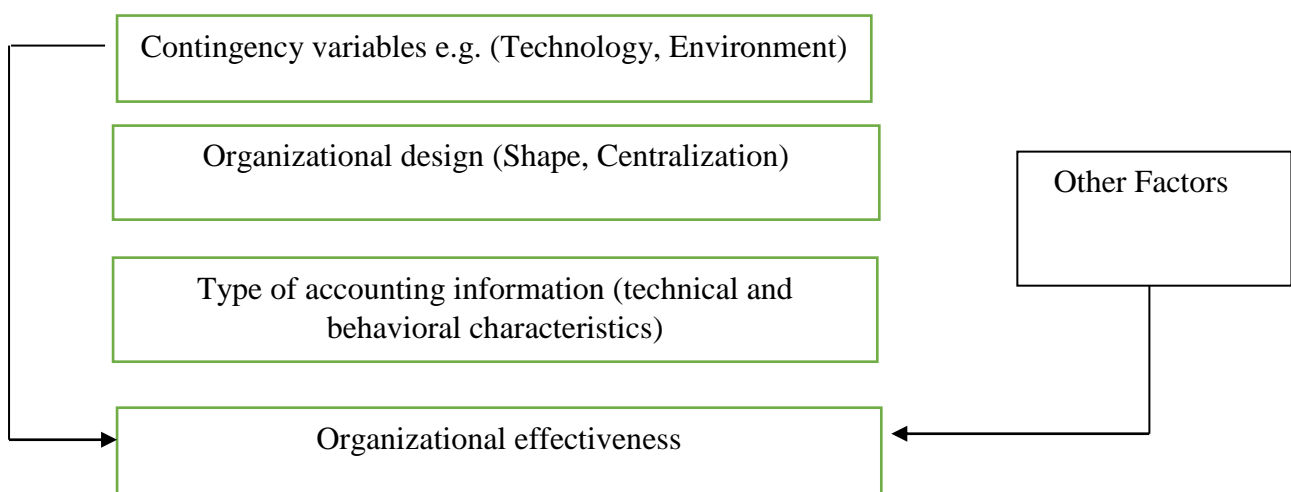
Technology Acceptance Model provides a framework for the understanding of the employees' attitude towards IFMIS which not only determines usability of IFMIS but also the delivery of service through IFMIS. TAM explains the links between a user's perceptions, which are: ease of use and perceived usefulness, and a user's attitudes, intentions and actual IFMIS adoption behavior (Bolgherini, 2007). The TAM model will help to explain and forecast user acceptance of information shared through the system thus gaining more knowledge on the impact of IFMIS on service delivery. TAM is also important in this study since it was used to explain how IFMIS was adopted by both the national and county government.

### **2.1.2 Contingency Theories**

Otley's (1980) contingency theory states that the effectiveness and structure of an organization depends on its technology, environment and the effectiveness of management accounting system. A description of contingency framework theory is shown at figure 2.1. The contingency theory is modeled along the following variables: societal variables;

environment of the enterprise; organizational attributes; and user characteristics. It is argued that these variables could explain the choice of management in the use of financial management information system. Organizational variables should be conceptualized in terms of the sources that are available to an organization and the way in which these resources are organized. The two organizational attributes that receive the most consideration in the theory are organization size and technology. Societal variables consist of those factors to which all organizations within a particular country are subject and consist of the economic, legal and political sub-systems (Bhimani, 2009).

Otley (1980) Contingency theory Framework:



**Figure 2. 1: Otley (1980) Contingency theory Framework**

The contingency theory has been used for identification, analysis and the evaluation of the factors that affect the design of accounting information systems and financial information systems. The conceptual framework has been coined to explore how management accounting relates with the features of the organization. The environment of the organization could be conceived as the industry in which it operates (Al-Nimer, Sleihat, Abbadi, & Almahamid, 2012). The application of the theory to the study was used in understanding the adoption, training and use of IFMIS. This is because the contingency variables of societal variables;

environment of the organization; organizational attributes; and user characteristics are key determinants to the degree to which departments or ministries adopt financial management information system. The importance of contingency theory cannot be underscored since it is crucial in understanding the effectiveness of IFMIS at national and county government.

### **2.1.3 System Theory**

System theory originated in the natural sciences in efforts to understand sets of objects, the relationships between those objects, and the relationship between sets of objects and their environments. System theory was introduced by Ludwig Von Bertalanffy in 1901 and employs system approach to understand complex phenomenon and problem. A system is a set of interrelated components surrounded by a boundary which absorb inputs from other systems and transforms them into outputs that serve a function in other systems. Complex organizations are open systems, interacting with an outside environment and adjusting to it. An organization must react to changes in the environments from which it takes its inputs or resources (e.g. suppliers of raw materials), and to changes in the environments in which it delivers outputs or goods and services (i.e. to clients or customers). System theory is concerned with improving service delivery and to improve this it argues that information is central (Kast & Rosenzweig, 1972).

In the systems theory, (Zhu, Rohm, Zhu, & Lin, 2014) states regarding information, that assuming information does not of necessity entail any conscious mind, and that the circulating patterns in the system brought about by feedback can be referred to as information. Based on Kang'ethe (2002) a system is a unit of related components that interact and work harmoniously to realize a predetermined purpose. Control elements, according to Kang'ethe (2002) are necessary tools if the process is to attain maximum output and minimize losses. In the process of attaining efficiency and effectiveness, there arises the need to create synergy and harmony between major components. The components include

resources, especially, the human resource on one hand, and other tools of trade, especially modern ICT on the other hand. The purpose of harmonizing these components is to enhance the realization of the organization's objective (Jackson, 2010).

The need to comprehend the perception of the human resource and any other resources that show potential for conflict is paramount. This understanding is necessary when the human resource interacts with modern ICT. The combination of communication technologies and computer technologies brings about information technology. The term information technology refers to any technology that enhances production, manipulation, storage, communication, and dissemination of information. In general, 'InfoTech' denotes the connection between computers and information (Chene, 2009).

The adoption of IFMIS has been advanced as a vital component in improving service delivery in public sector (Kogetsidis, 2011). Thus system theory was crucial in the study for it enabled the researcher understand how the use of IFMIs has influenced service delivery in both national and county governments.

#### **2.1.4 Diffusion of Innovation Theory**

Rogers' diffusion theory (Rogers, 2004) is a dominant theory in understanding the process of diffusion and adoption of innovations. It can be considered an overarching framework that explains the social and relational aspects of innovation diffusion and how this occurs over time in an organization. Although the name of the theory might suggest that it mainly addresses the diffusion of innovations at the population level, it also zooms-in on how the adoption takes place at the individual level or within the single organization (Lyytinen & Damsgaard, 2000).

In Rogers' framework on innovations "an idea, practice, or object that is perceived as new by an individual or any other unit of adoption" (Rogers, 2004). Its diffusion is intended as the

process by which it is communicated through certain channels over time among the members of an organization. The portion of the organization that adopts an innovation is approximately normally distributed over time. Breaking this normal distribution into segments, five typologies of adopters can be distinguished: innovators, early adopters, early majority, late majority, and laggards (Dearing, 2009).

The four key elements that govern the adoption of an innovation are: the innovation itself; communication channels; the social system; time. Knowing of a new idea or object creates uncertainty in the potential adopter, in terms of advantages and outcomes of adoption. Accordingly, the adoption decision process is defined as essentially an information seeking activity in which the adopter is motivated to reduce uncertainty about the advantages and the disadvantages of the innovation. In doing so it accumulates knowledge on the innovation and forms a positive or negative attitude towards it on the basis of the characteristics of the innovation (Al-Jabri, Sohail, & Sadiq, 2014).

Communication channels are all the means through which the innovation is communicated from an individual to another. These include both mass media but also interpersonal channels that include training of organizational; staff. Through such training on financial management system the counties and national government is able to implement and adopt IFMIS systems in their operations. Thus diffusion of Innovation theory helped in the understanding of the role of training in service delivery, particularly the effect of IFMIS training at both the national and county government.

## **2.2 Empirical Review**

A review of literature that was carried out on the study objectives and is presented in the subsequent sections.

### **2.2.1 Electronic Platforms and Service Delivery in Public Sector**

There are quite some research efforts on ICT investments on service delivery. However, understanding ICT investments' contribution to organization performance and service delivery has been challenging and perhaps more challenging in developing countries due to generally less predictable changes in social, political, and economics infrastructure (Karim, 2015). Findings in the work of Hakkı et al (2015) that examined the impact of ICT infrastructure on public organizations in Iran revealed that the Iranian organizations are not yet completely committed to the revolution of the information technology. This lack of initiative is primarily explained by the fact that these new technologies require investments, including development of human resources, which the government may not be ready to commit over time. This study was focused on public sector in Tunisia thus necessitating the need for more studies in Sub-Saharan Africa, specifically in Kenya.

Lundu & Shale (2015) in a study that focused on effect of IFMIS on supply chain performance. The study found that technological infrastructure is another aspect of IFMIS implementation that affects Supply Chain Management (SCM) performance in Nairobi City County Government. It was established that Nairobi City County Government has the required and reliable technological infrastructure for IFMIS implementation process. Nairobi City County Government needs to acquire new ICT system and infrastructure for IFMIS implementation to a moderate extent. The study was carried out in a cosmopolitan urban area that tends to have good ICT infrastructure as compared to towns in rural areas that have poor ICT infrastructure thus necessitating the need for studies in such areas.

Also, Prasad (2008) conducted a study of intangible benefits of ICT investments among government departments and ministries in Fiji. The findings indicated that for organization in developing countries, their ICT infrastructure provide intangible benefits, especially at the process level and this contributes to improved service delivery. In a similar research effort,

Alghamdi, Goodwin, & Rampersad, (2011) presented a framework for evaluating ICT infrastructure by integrating the value chain model with activity-based costing in emerging economies, where the primary motivation of the many ICT investments is an improvement in service delivery. Furthermore, in the work of (Ranaweera, 2015), a value chain analysis framework was presented for evaluating the role of ICT infrastructure in service delivery in public sector. They argued that in order to achieve improved service delivery there is need to continuously develop the ICT infrastructure to support the goal of efficient and effective service delivery. This study provides an understanding on the role of ICT infrastructure on the improvement of service delivery in public sector.

Njuki and Kagiri (2015) in a study which sought to establish the factors affecting the implementation of IFMIS in Nairobi County, the study established that availability of computer hardware, network topology, Computer hardware for example computers, server and Computer software such as windows, linux, unix, influences e-procurement implementation to a great extent. The study found that the more we embrace on the technology, the more we adopt e-procurement as the most preferred mode. E-procurement was thus deemed more appropriate to be used rather than the manual way in Nairobi county government. The Study focused on ICT infrastructure and did not focus on electronic platforms thus necessitating the need for studies that focus on electronic platforms.

Yang (2009) examined the impact of ICT on public institutions in the education sectors. The study also explored the issues that emerged from the implementation of ICT in higher education institutions, in the University of Tasmania. His finding revealed that ICT infrastructure employed in learning and teaching can be both advantageous and disadvantageous to service delivery. Like many studies that have been mentioned, this study was focused on ICT infrastructure and did not focus on exploring other components of ICT system such as electronic platforms.

Assar and Boughzala (2011) in a study that was carried in France on e-government applications in France and in the European Community, they evaluated electronic platform with the study showing that many solutions have been developed, but for the moment, there seem to be no technological standard and no general pattern for the supported processes. The study found out that electronic applications are increasingly been developed and tested in the public procurement sector with great success. The study was limited to e-government platforms in procurement and excluded the application of other electronic platforms in service delivery. Thus the need for the studies that focused on other electronic platforms application.

According to Ahmadi, Sanaz, & Ahmadi, (2010), in a study carried out in Iran it was established that e-government platforms in Iran offer opportunities for governments. However, the ability of developing countries to reap the full benefits of e-government services is limited and is largely hampered by the existence of a myriad of political, social and economic hindrances that affect its management. They further noted that e-government platforms in Iran are generally more problematic in comparison to those in the developed nations. The study used desktop review approach to compare the application of electronic platforms across different countries. Thus there is need for studies that use primary data not only across countries but also within each county.

### **2.2.2 Training and Service Delivery in Public Sector**

Njihia (2015) conducted a study whose aim was to establish the determinants to the performance of IFMIS in the public sector. From the study, it was established that human resource capacity influenced performance of IFMIS in the organization, with a majority of the respondents stating that adequate technical staff is key to improving the efficiency that is associated with the use of IFMIS. Though, the study focused on understanding the human

resource capability as a determinant of IFMIS performance, it still fell short exploring how training affects service delivery at both levels of government.

Odolo and Gekara (2015) carried out a study that sought to inquire the skill level of employees using IFMIS in public institutions. The study established that majority of the employees lacked proper training program on the use of IFMIS. The study also revealed that due to lack of proper skill set, there was high resistance among employees on the use of IFMIS. The study concluded that there is a significant relationship between employee skill set in IFMIS and service delivery. The study concluded that the employees at the ministry lacks proper training program on the use of IFMIS. Though the study delved into studying skill set component of human resource capacity building, it only focused on ministries and excluded the county government.

Kaua (2013) in a study that was entitled “Business Processes Reengineering and Change Management in Public Sector”, established that training attempts have been made to provide knowledge to staff in the public sector on change management. Study results also indicated that there exists no training strategy that can enhance the implementation of IFMIS at the departmental and ministerial levels of government. This study was carried out at a time when IFMIS had only been implemented in some departments of national government and had not been implemented in the county governments. Thus there is need for studies that are carried out when IFMIS implementation has fully taken root in the both levels of government in Kenya.

Chebet (2013) in a study that sought to establish the role of human resource capacity on implementation of IFMIS at the county level, the study found out that human resource capacity challenges is one of the major challenges that implementation of IFMIS faces in developing countries. The study contended that the human resource development issue within

government needs prioritization, the education system needs to be aligned with the information and communication technologies (ICT) as per the demands of the country and scarce of ICT skills need to be attracted and retained particularly within government (Farelo and Morris, 2006).

In their study of developing countries specifically Ghana, Malawi, Tanzania, Uganda and Kenya, Diamond and Khemani (2006) argue that necessary measures should be taken to reinforce the capacity of personnel in the implementation team. At the same time, they noted that it is equally important to develop the necessary skills and capacity of the staff to provide strong support to the IFMIS. For the success of the IFMIS project it ought to be ensured that there is continuity of key personnel involved in the system's development and implementation. The study used a desktop review approach to determine the importance of training on the implementation of IFMIS thus necessitating the need for primary study to understand the role of IFMIS.

It is noteworthy that according to Brar (2010), low capacity for system implementation at the sub-national level such as provincial and regional governments is one of the main challenges in the implementation of the IFMIS in developing countries. This factor according to him is very pertinent to the South African context with its nine provinces and the consequent demand that the duplication of efforts creates for skills and knowledge, of which a shortage already exists.

### **2.2.3 Adoption of IFMIS and Service Delivery in the Public Sector**

Adoption of IFMIS has become an important topic that many researchers were interested to study and conduct a research on, even though it was proven that it is one of the most challenging issues in information technology research. There are many different studies that have been established towards adoption of IFMIS and each had varied results and findings. These studies are presented in the subsequent paragraphs.

Lundu & Shale (2015) carried out a study whose purpose was to identify the effects of IFMIS implementation on the performance of supply chain management in Nairobi City County Government. The study established that implementation of IFMIS affects the overall SCM performance in the Nairobi City County Government where top management support and training/capacity building affect the SCM performance of Nairobi City County Government to moderate extents, whereas reporting accountability and employee commitment affect the SCM performance in Nairobi City County Government. In addition, implementation of IFMIS affects cost savings, SCM efficiency and SCM performance functionality and increased quality. This study focused on Supply chain Performance an aspect of service delivery and did not focus on general improvement in service delivery in the county.

Asah (2014) carried out a study in Ghana on Integration of IFMIS in public sector. Based on the study objectives it was established by the study that the level of adoption varied across ministries, with relatively big budgets being among the first to adopt IMFIS system. On the other hand, the study failed to establish the level of adoption of IFMIS among other government structures such as council authorities and other devolved units.

Njuki and Kagiri (2015) carried out a study that sought to establish factors affecting the adoption of e-procurement in the Nairobi County. The study established that different factors had hampered the adoption of IFMIS in different departments in the county. This study only focused on the implementation of procurement practices and did not focus on the adoption of other IFMIS functionalities as envisioned in IFMIS academy.

Alhujran, (2009) carried out a study that applied Technology Acceptance Model (TAM) in the adoption of IFMIS. The survey was based on the internal and external variables of Technology Acceptance Model (TAM). The internal variables included perceived usefulness, perceived ease of use, attitude and intention to use the system. The external variables of TAM

are national culture, trustworthiness and perceived public value. The results of the study found out that the internal variables, perceived usefulness and perceived ease of use have a significant positive impact on citizens' attitude toward using e-government services. The most variable that had a major positive impact among the external variables of TAM is perceived public value. The overall finding of this study is that perceived public value has more influence on perceived adoption of IFMIS. The study only focused on the application of one theory (TAM) and did not apply other theories thus there is need to establish the application of more theories in the adoption of IFMIS in the Kenyan public sector.

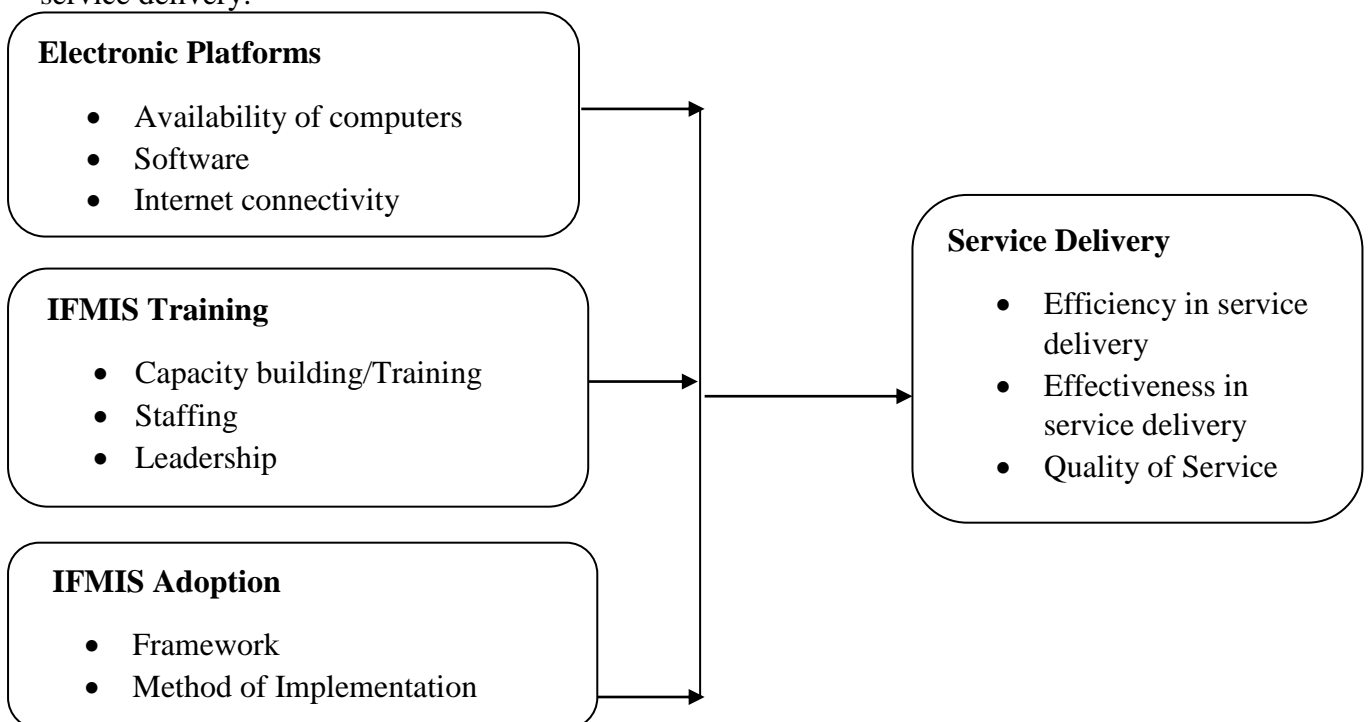
A more careful study conducted by Akkaya et al (2013) regarding to e-government adoption by citizens in Germany found that the factors of data protection, privacy and security are the most factors that have a major influence the consumers engagement to e-government platforms followed of the reliability of systems and completeness of information. The lowest factors that barely have influence on e-government adoption are information about status, convenience followed by a variety of services. From the research findings, they noticed that citizens' trust in government and technology, including the supporting infrastructure and the transmitting medium are very important to enhance citizens' intention to adopt the online services.

### **2.3 Conceptual Framework**

The conceptual framework is a hypothesized model that identifies the concepts under study and their relationship (Mugenda & Mugenda, 2003). A conceptual framework shows the relationship between the dependent and independent variables. The study conceptualizes the effect of IFMIS on service delivery in the Kenyan public sector, with IFMIS being the independent variable while service delivery being the dependent variable.

Conceptual frameworks, according to educational researcher Yadav (2010) are structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. Most academic research uses a conceptual framework at the outset because it helps the researcher to clarify his research question and aim (Van Kamp et al. 2003).

According to Selfano and Serah (2014), for there to be improved service delivery occasioned by the use of IFMIS, there is need for staff with the necessary knowledge and skills. Lack of capacity is regarded as one of the main impediment to improvement in service delivery through technology use. Chêne (2009) posits that an ICT infrastructure is a critical component to the performance of e-government, with both software and hardware components playing a key role in service delivery. Kerzner (2013) states on the other hand that the adoption of IFMIS is dependent on the implementation approaches and methods that have been put in place to encourage the uptake of technology with an aim of improving service delivery.



**Figure 2.2: Conceptual Framework**

*Source Author (2015)*

## **2.4 Summary of Literature**

A review of literature indicates that there are a number of theories that have been used to underscore the relationship between IFMIS and service delivery in public sector. Some of the theories that have been used to explain the relationship between IFMIS and service delivery include: Technology acceptance theory, Contingency theory, System theory, Diffusion of Innovation theory, Institutional theory, Human Capital theory and Upper Echelon theory.

On understanding the relationship between IFMIS and service delivery, reviewed literature show that relationship between IFMIS and service delivery has been established, with these explained by components such as human resource capability, electronic platforms, usage of IFMIS, attitude towards IFMIS technology and support given in the implementation of IFMIS service.

## **2.5 Study Gaps from Reviewed Literature**

From the reviewed literature it is evident that a number of studies have been carried out on IFMIS process in both developed and developing countries. A great majority of these studies have focused on understanding the implementation of IFMIS process, with a focus on factors and challenges that have affected the implementation of IFMIS. Most studies that have been carried out in Kenya have focused on factors affecting the implantation, adoption of IFMIS and the effect of IFMIS on service delivery. However, a reviewed studies indicated that majority of the studies have focused on the national government, with few studies focusing on the county government. Much more limited studies have focused on both levels of government. This can be attributed to the fact that full roll-out of IFMIS to the counties was realized in April 2015 (Council of Governors, 2015). Thus it can be deduced that there exists limited studies that have attempted to understand the relationship between IFMIS and service delivery in both the county and national government.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter outlines the various stages and approaches that were used to carry out the research so as to meet the objectives of the study. This chapter covers research design, target population, sample size and sampling technique. Other topics covered are instrumentation, data collection and data analysis.

### **3.2 Research Design**

The study employed descriptive research design to describe the effect of IFMIS on service delivery in both national and county governments. Descriptive research is used to obtain information concerning the current status of the phenomena and to describe what exists with respect to the variable or condition in a situation (Kothari, 2009). Descriptive design also offers the opportunity for a logical structure of the inquiry into the problem of the study. Besides, descriptive surveys are good at providing information and explanations to research questions (Cooper & Schindler, 2016).

### **3.3 Target Population**

The population is defined as the total collection of all elements which the researcher wishes to make some inferences (Kothari, 2009). The target population of the study will consist of all the employees both in the National and County governments in Garissa County, working in finance, procurement and audit departments. These are the departments which heavily make use of the IFMIS system (Government of Kenya, 2015).

### **3.4 Sample Size and Sampling Procedure**

The sample will consist of members of the finance, procurement and audit in both levels of governments, as shown in Table 3.1.

The basic idea of sampling is that by selecting part of the elements in the population, it is possible to make conclusion about the entire population (Cooper & Schindler, 2016). The researcher adopted census method of sampling because the population size was small and accessible. This fits the use of census method that is used for small and homogenous population.

**Table 3.1: Target Population**

<b>Population</b>	<b>Garissa County</b>	<b>National Government</b>	<b>Total</b>
Staff in Finance Department	30	36	66
Procurement Staff	5	10	15
Internal Auditors	6	4	10
Total	41	50	91

**Source GoK (2015)**

### **3.5 Data Collection**

Data was collected from primary and secondary sources. Primary data was collected through the use of a questionnaire method. Questionnaire method was adopted because it enabled the researcher to collect information that met the research objectives at minimal costs possible. A self-administered questionnaire with both open and close ended questions was used in the study. Questionnaires were preferred for the study since they are simple to administer, reliable, have fixed response to reduce variability and for easy coding, analysis and interpretation of data. (Omokonga, 2014) The questionnaire was subjected to a pilot test for reliability and validity. Secondary data was collected from the internet, library and government websites.

### **3.6 Reliability of the Study**

Reliability is the degree of consistency and precision in which the measuring of the instrument demonstrates under same circumstances, same research respondents. Using the same instrument should generate the same results under identical conditions (Amin, 2005). To determine the reliability of the tool, the researcher administered 10 questionnaires to ten staff members in Garissa County and who did not participate in the actual study. Cronbach's Alpha Coefficient was used to determine the reliability of the instrument. A score of 0.7 was obtained. This is considered reliable (Wanyama & Zheng, 2011).

### **3.7 Validity of the Research Instrument**

The study used construct validity measurement with convergent validity used in the study. Convergent validity was used in the study because the study used same concepts in the study. Validity measures the degree to which contents of an instrument measures the phenomenon in which it is intended to measure (Babbie, 2015). To measure the validity of the instrument the researcher relied on expert review from the supervisors and borrowing research questions from related studies that have been carried out.

### **3.8 Data Analysis Technique**

Data collected was edited first to check for its completeness, consistency, uniformity and eliminate errors made by the respondents. Coding was then done to translate questionnaire responses into specific categories. The coded items were analysed with the aid of Statistical Package for Social Sciences (SPSS) analytical software version 20. Descriptive statistics such as frequency distribution, percentages, were used to analyse the data. Regression analysis was also used to test the relationship between IFMIS and service delivery.

A regression model was used in the study to explore the relationship between IFMIS and service delivery. This regression model is of the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \dots \dots \dots \text{Equation 1}$$

Where  $\beta_0$  is a constant,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are the beta coefficients and  $X_1$ ,  $X_2$ , and  $X_3$  are the independent variables representing Electronic Platforms, IFMIS Training and IFMIS Use respectively and were also the predictor variables.  $Y$  is the dependent variable representing the Service Delivery and  $\epsilon$  represents the error term.

### 3.9 Ethical Consideration

The researcher assured the respondents of the purposes of the study, confidentiality and privacy was also assured. A letter of introduction and permission for the study was sought from the County administration and the national department of science and technology, with a letter presented to the respondents.

**Table 3. 2: Operationalization of Variables**

Variable	Indicator	Measurement	Question
Electronic Platforms	Presence of computers and websites	Nominal and ordinal	Section B
IFMIS Training	Number of Trained Staff	Nominal and ordinal	Section D
IFMIS adoption	Payment made through IFMIS, Number of reports made through IFMIS	Nominal ordinal	Section E
Service delivery	IFMIS account entries, Imprests issued	Nominal ordinal	Section C

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS AND DISCUSSIONS**

#### **4.0 Introduction**

This chapter covers the presentation and discussions of the results on the study. The results were obtained from analysis and interpretation of data using the SPSS version 20. The data was obtained from questionnaires which were administered by the researcher and the discussions are in the subsequent paragraphs.

#### **4.1 Response Rate**

Data was collected from a sample of 91 respondents at both the national and county governments. The completed questionnaires were 80 in total resulting in a response rate of 88%. On the other hand, 12% of the questionnaires were not responded to. A response rate of 88% is more than adequate for this study. Mugenda (2008) pointed out that a response rate of 50% is adequate for analysis and reporting, 60% is good and a response rate of 70% and above is excellent for analysis and reporting.

#### **4.2 Demographic Characteristics of Respondents**

This section gives the general information of the respondents such as their gender, age bracket, education level and their work departments. The targeted respondents were employees in the public sector (both national and county governments) in Garissa County. The distribution of respondents by gender was as shown in Table 4.1. Majority (71%) of the respondents were males while a few (29%) were females. This could be attributed to the culture of the people of Garissa who prefer to educate a male child as opposed to a girl child. These findings corroborates results of an evaluation study carried out by Public Service Commission (PSC) of Kenya which established that the gender representation of women is 36% while male representation stands at 64% for the financial year 2013/2014 (KNBS, 2014). These findings also corroborate a study by Mahinda (2015) who found out that

majority of the respondents in a similar study carried out at Kenya Ports Authority were males.

On being asked about their level of education, majority (39%) of the respondents said they had a diploma level of education, 29% had a degree level of education, 16% had a postgraduate education, 14% had a secondary education while a few (2%) had a primary level of education as shown on table 4.1. This shows that majority of the respondents attained either a diploma or a degree. Being a nomadic population, majority of the people does not go to school and thus a few who manage to be educated at least attain a diploma level of education. As a result, the government does not find qualified personnel to employ. This study also supports a report by Public Service Commission (PSC) that indicated that majority of employees working in government sector have at least a diploma level of education. The findings of the study are similar to a study by Njonde and Kimanzi (2014) who established that majority of their respondents had at least diploma level of education at Nairobi County. This aligns well with the study considering that both the studies were carried out at the county level of government. These results imply that majority of the respondents had at least a diploma level of education and thus were considered able to provide answers to meet the research objectives and also qualified to undertake required duties and responsibilities.

**Table 4. 1 : Demographic Characteristics of Respondents**

<b>Variable</b>		<b>Frequency</b>	<b>Percentage</b>
Level of Education attained	Diploma	31	38.8
	Degree	23	28.8
	Postgraduate	13	16.3
	Secondary	11	13.8
	Below Primary	2	2.5
	<b>Total</b>	<b>80</b>	<b>100.0</b>
Gender	Male	56	70.9
	Female	23	29.1
	Total	79	100.0
Age in years	above 45 years	21	26.3
	25-30 years	17	21.3
	below 25 years	16	20.0
	41-45 years	11	13.8
	36-40 years	9	11.3
	31-35 years	6	7.5
	<b>Total</b>	<b>80</b>	<b>100.0</b>
	Years worked	More than 10 years	37
1-3 years		23	28.8
4-10 years		17	21.3
Less than 1 year		3	3.8
<b>Total</b>		<b>80</b>	<b>100.0</b>

On being asked about their age, majority (26%) of the respondents were above 45 years old, 21% were aged between 25 and 30 years, 20% were aged below 25 years, 14% were aged between 41 and 45 years, 11% were aged between 36 and 40 years while a few (8%) were aged between 31-35 years as shown on table 4.1. The findings indicated a mix up in age

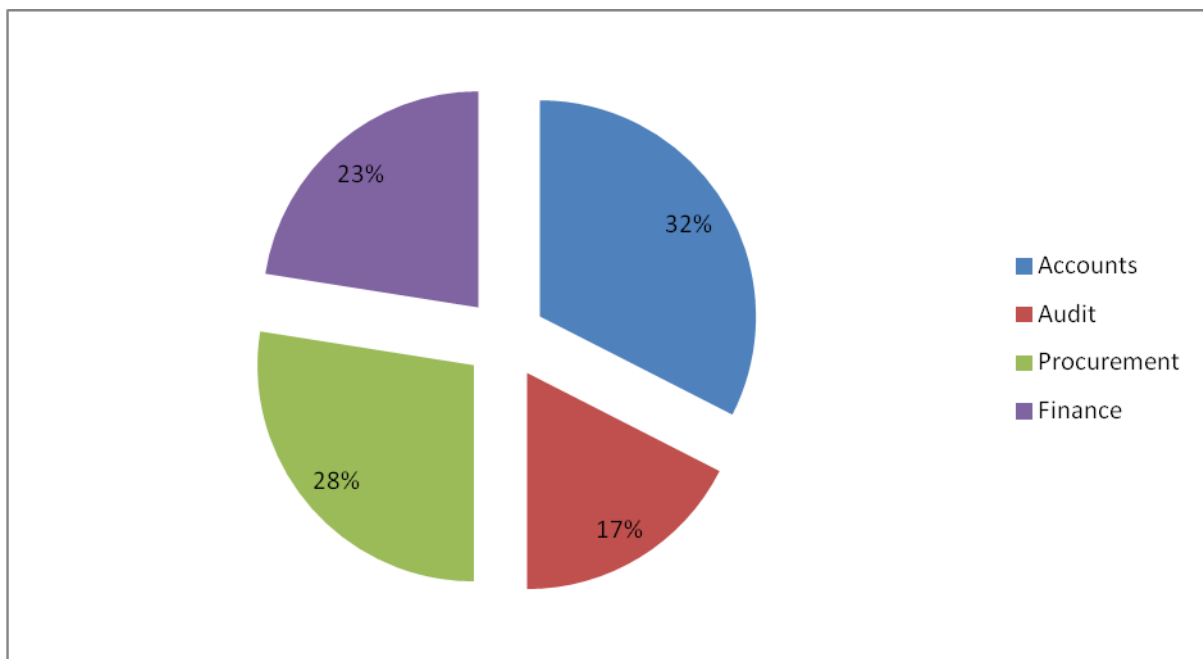
groups with no age group having a majority. This could probably be attributed to the employment of staff in both national and county government of various age groups. This is in line with the PSC report that established that there is a mix up of different age groups in public sector (PSC, 2014). On the other hand, the study findings contradict the results of Njonde and Kimanzi (2014) who found out that majority of the employees were aged 45 years. This can be associated with the reason that the County government of Nairobi inherited a great majority of its workforce from the defunct city council of Nairobi unlike county government of Garissa that employed a good majority of its employees with the establishment of devolved government structure.

On being asked about their tenure, the results revealed that majority of the employees (46%) had worked in the service for more than 10 years, 29% had worked between 1 and 3 years, 21% had worked between 4 and 10 years and only a few (4%) had worked for less than one year as shown on table 4.1. These findings confirm that even with the establishment of county government, the county government took in employees from local government and national government. This absorption of employees implies that majority of the workforce has been in operation for more than 10 years. It can also be inferred that the reduction and ban in employment in past years contributed to majority of employees being over 45 years.

The findings also indicated that 32% of the employees have been working between 1 to 3 years. This period is associated with the establishment of county governments, resulting in a number of employees being recruited by the county public service boards. These findings contradict that the results of Biwott (2015) who established that majority of the employees had worked for less than 10 years. This could be attributed to the fact that Biwott (2015) study was carried out on procurement department in national government, with a number of employees in those department employed after the passing of Public Procurement and Disposal (PPDA) Act of 2005. This is unlike the current study that focused on four different

departments at both national and county government. The results of the study implied that most of the employees in the department had adequate experience in government to be able to provide answers on the effectiveness of IFMIS in the public performance.

On being asked about their departments, majority (32%) were from the accounts department, 28% from procurement, 23% from finance and a few (17%) were from the audit department as shown in figure 4.1. These results testify to the selected departments of the study and where IFMIS as a system had been majorly adopted in both the national and the county governments. Additionally, the results also testify that respondents were drawn from the necessary department and thus were representative of the views from the target departments.



**Figure 4. 1: Departments where the respondents work**

### **4.3 IFMIS Training and Extent of Use**

On being asked about their training on IFMIS, majority (90%) had undergone IFMIS training while a few (10%) had not received any IFMIS training. Among those already trained, majority (54%) had been trained once, 25% more than twice and a few (21%) had been trained two times. IFMIS training is important to ensure efficient use of the system for better

results. These results corroborate the findings of an evaluation report by IFMIS academy that mentioned that the academy has trained majority of staff in all the ministries and counties on IFMIS. In addition the report by IFMIS academy mentioned that the first initial training on IFMIS in all counties was completed in July, 2015 thus affirming that majority of the respondents have only been trained once (IFMIS Academy, 2014). On the contrary these results contradict the results of Muthui (2014) who found out that majority of the staff in county government were yet to be trained. This difference could be explained by the reason that IFMIS training was completed in the county government in the year 2015.

On being asked about how frequently the respondents used IFMIS, majority (26%) used IFMIS daily, 26% monthly, 19% weekly, 21% quarterly while a few (7%) use IFMIS annually as shown on table 4.2. The frequency in the use of IFMIS could be explained by the reason that the implementation of IFMIS was targeted in phases and in certain departments, with only a few key person involved in initial training. These results are similar to the results of Miheso (2013) that established that 38% of employees used IFMIS to a large or very large extent with most employees in the national government having used IFMIS to some extent or little extent.

**Table 4.2 : IFMIS Training**

<b>Variable</b>		<b>Frequency</b>	<b>Percentage</b>
Received IFMIS training	Yes	72	90
	No	8	10
	<b>Total</b>	<b>80</b>	<b>100</b>
Number of times trained	Once	39	54
	More than twice	18	25
	Twice	15	20
	<b>Total</b>	<b>72</b>	<b>100</b>
Use of IFMIS	Daily	19	26
	Monthly	19	24
	Quarterly	15	20
	Weekly	14	19
	Annually	5	7
	<b>Total</b>	<b>80</b>	<b>100</b>

#### **4.3.1 Extent of use of IFMIS**

On being asked about the extent of use of IFMIS across various departments, the results showed that its use varied in different departments. This was measured by asking the respondents to give their level of agreement (1-very little extent and 5-very large extent) regarding the use of IFMIS in different sectors. The means were then calculated and results presented in the table 4.3. In the public sector budgeting, IFMIS use was to a little extent (mean=2.48) while in purchase ordering its use was moderate (mean=2.85). In the accounts payable department IFMIS use was to a moderate extent too (mean=3.35), general ledger

department mean=2.83, cash and procurement sections mean=2.94 and mean=3.03 respectively meaning that the use was moderate as shown in table 4.3. Therefore it can be observed that IFMIS use was moderately applied in the different sections. These results only conform to the government priorities in the training on IFMIS modules with priority given to modules on recording, modules on procurement, modules on budgeting and account payable. These findings are similar to the findings of Miheso (2013) that established purchase ordering, accounts payable and general ledger as the most commonly used modules of IFMIS system.

**Table 4.3 : Extent of IFMIS Use in Different Sectors**

Descriptive Statistics	N	Mean	SD
Extent of use of IFMIS in public sector budgeting	77	2.48	1.304
Extent of use of IFMIS in purchase ordering	78	2.85	1.339
Extent of use of IFMIS in accounts payable	80	3.35	1.459
Extent of use of IFMIS in general ledger	80	2.83	1.439
Extent of use of IFMIS in cash management	78	2.94	1.199
Extent of use of IFMIS in procurement	80	3.03	1.423

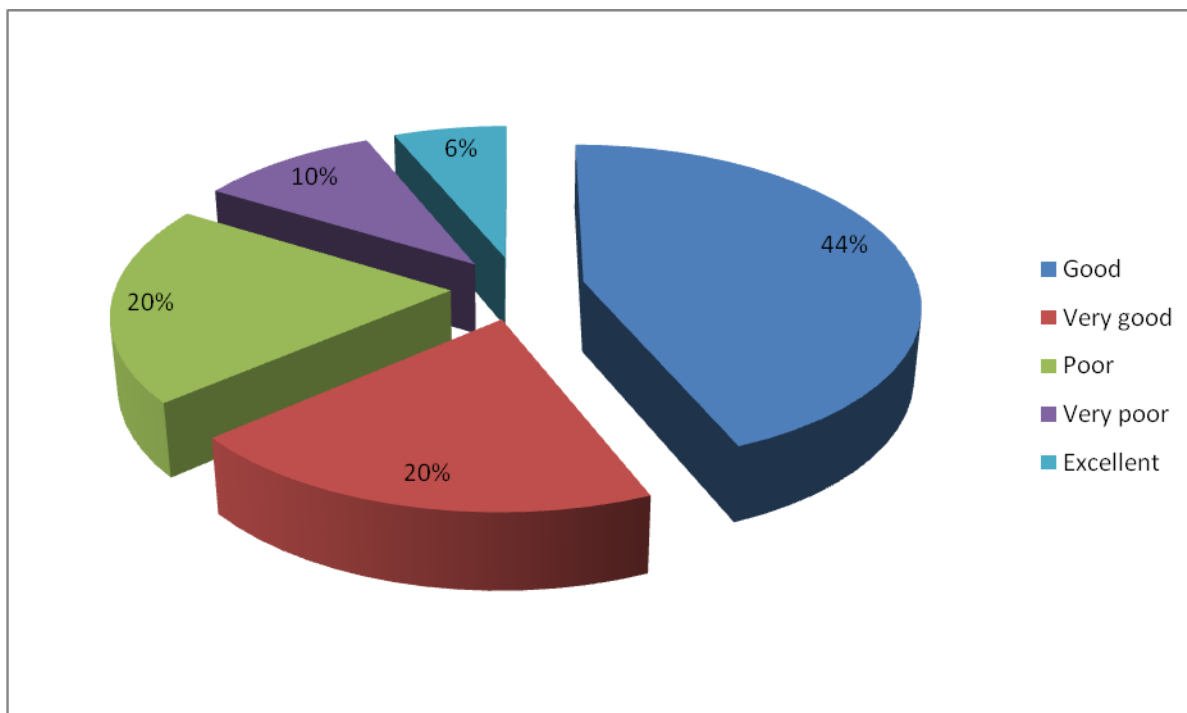
From table 4.4 the study results revealed that majority (42%) mentioned that IFMIS had been implemented in the national and county government to a moderate extent 27% to a great extent, 15% to a little extent, and 10% to very great extent. However, a few (5%) felt that implementation had not happened at all. The mean of the results showed that implementation was moderate as indicated on table 4.4. These findings are explained by phase implementation of IFMIS at both national and county level, with IFMIS implementation yet to take full implementation at county level unlike the national level. These findings are

aligned to the findings of Mutui (2014) who established that 52.4% of the respondents unanimously indicated that their ministries have implemented IFMIS to a moderate extent.

**Table 4.4 : Extent of IFMIS Implementation in the County and National Government**

<b>IFMIS implementation in Government ministries and county government</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>
To a moderate extent	33	42.3	2.78
To a great extent	21	26.9	
To a little extent	12	15.4	
To a very great extent	8	10.3	
No extent	4	5.1	
<b>Total</b>	<b>78</b>	<b>100</b>	

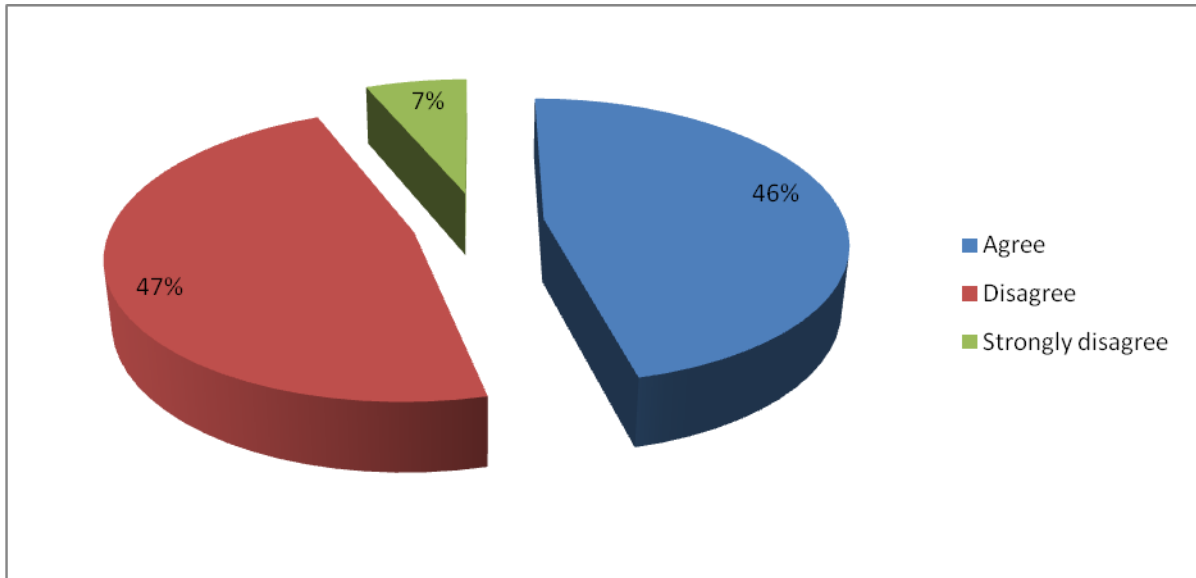
On being asked about the current use of IFMIS in the government offices, majority (44%) rated it good, 20% very good, 20% rated it poor, 10% rated it very poor while a few (6%) rated it as excellent as shown on figure 4.2. This relatively high number of respondents that agreed that implementation was good could be attributed to the fact that the target respondents were from department that had implementation of IFMIS. These results are similar to the findings of Muigai (2012) where 50% of the respondents rated use of IFMIS within their ministries as excellent while another 30% rated it as very good and 3% of the respondents rated the use of IFMIS within their ministries as poor.



**Figure 4. 2: Use of IFMIS currently**

#### **4.4 Electronic Platforms and Service Delivery**

On being asked regarding their level of agreement on the use of electronic platforms and their impact on service delivery, majority (47%) of the respondents disagreed, 46% of the respondents agreed that electronic platforms had had an impact on service delivery, while a few (7%) strongly disagreed that electronic platforms had impact on service delivery as shown on figure 4.3. These findings illustrate that electronic platforms such as websites improve accessibility of information to the public and as such can improve the public sector service delivery. Majority of the respondents disagreed that electronic platforms do not impact service delivery. This could be attributed to the reason that the study site is known to have poor infrastructure on energy and internet which according to the respondents are the major determinants of improved service delivery. These findings are similar to Abdi (2014) who established that electronic platforms improve service delivery. This could be attributed to the fact that county government and government ministries have created websites and make use of social media platform to communicate to the public and consumers.



**Figure 4.3: Electronic Platforms and Service Delivery**

Respondents were required to give their level of agreement for various statements regarding the use of electronic platforms and their impact on service delivery. Various statements measuring the use of e-systems were rated on a scale of 1-4 (1- strongly agree and 4-strongly disagree). The results revealed that respondents agreed (mean=1.86) that electronic platforms had improved customer delivery.

Regarding transparency in the government offices, respondents agreed that electronic platforms had improved transparency and accountability (mean=2.04) in the public sector. In addition, electronic platforms were also seen to have improved service efficiency (mean= 1.92). Further the respondents agreed that electronic platforms had reduced the cost of service delivery at both levels of governments (mean=2.23). However the respondents disagreed that electronic platforms had minimized corruption (mean=2.75).

In general, electronic platforms such as use of websites and social media platforms had improved service delivery in the public sector.

**Table 4.5: Electronic Platforms and Service Delivery**

<b>Descriptive Statistics</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
The use of electronic Platform system(e-government) has improved customer delivery	80	1.86	0.775
The use of electronic platform has improved transparency and accountability in the public sector	78	2.04	0.763
The use of electronic platforms has improved service efficiency in national/county government departments	78	1.92	0.619
Electronic platforms has lowered the cost of service delivery in national/county government departments	78	2.23	0.719
Electronic platforms has minimized corruption in the departments/ministries in both levels of government	79	2.75	1.056

The results shown in Table 4.6 indicate that there is significant relationship between electronic platforms and improvement in service delivery. This was indicated by p-value of 0.004 which is less than the significant test of 0.01. However, the results indicated that the relationship is a weak relationship. Possible explanation for this was on how the use of mobile phone, particularly mobile money transfer system has simplified payment challenges in the county and national government. Though electronic platforms impacted on service delivery, the relationship was established to be low, and this can be explained by other supporting basic services in the county such as energy and internet to drive the functionality of electronic platforms and these have been lacking in the county thus lowering the effectiveness of electronic platforms. This is corroborated by IFMIS academy (2015) report that cited energy and lack of internet as challenges limiting the use of IFMIS in rural county governments. These results corroborate the findings of Kaua (2011) who established that electronic platforms such as websites and mobile phone play a major role in improving service delivery.

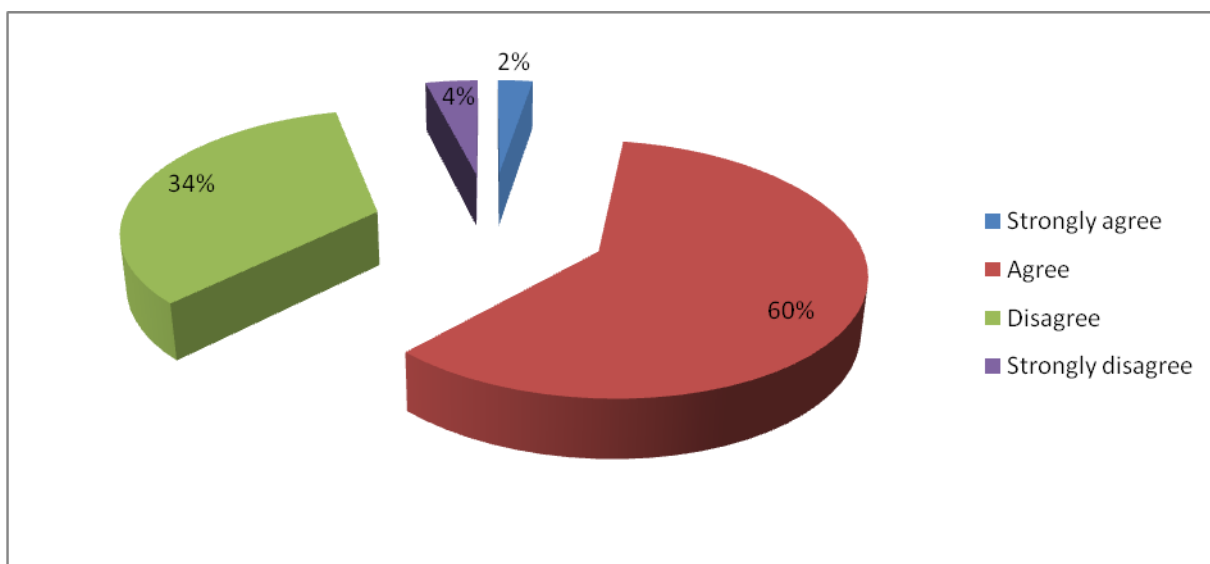
**Table 4.6 : Relationship between Electronic Platforms and Service Delivery**

Correlations		Extent to which service delivery improved
Electronic platform	Correlation Coefficient	.303**
	Sig. (2-tailed)	0.004
	N	74

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### **4.5 IFMIS Training and Service Delivery**

On being asked on their perceptions on the effects of IFMIS training on service delivery, majority (60%) agreed that IFMIS training had had an impact on service delivery, 34%, disagreed, 4% strongly disagreed and a few (2%) of the respondents strongly agreed that electronic platforms had had an impact on service delivery as shown on figure 4.4. These findings illustrate that training is important in improving the effectiveness of information system since it provides support infrastructure that can enhance performance of public service. This is because as Njuki and Kaguri(2015) asserts that training has provided the employees in both county and national government with the requisite technical skills required to use IFMIS services.



**Figure 4.4: Effects of IFMIS training on service delivery**

The significance of IFMIS training was also proven by the respondents who agreed that the training had improved service delivery. The results revealed that the respondents agreed (mean=1.89) that IFMIS had provided specific information that guided the decision making in the government. They also agreed that training of staff on the use of IFMIS had improved the efficiency service delivery (mean=1.86). Further the public servant agreed that IFMIS training on reporting had enhanced record keeping thus improved service delivery (mean=1.91) as shown on table 4.7.

On being asked on their views on the effects of IFMIS on revenue allocation, the results showed that respondents agreed (mean=2.14) that IFMIS training on revenue to cash had increased revenue collection therefore leading to an increased money allocation for service delivery. The respondent also agreed that IFMIS training on plan to budget had sped up the budgeting process and training on procurement to pay had reduced corruption (mean=1.99) and (mean=2.27) respectively. It can therefore be concluded that IFMIS training for use in different sections and departments had greatly improved service delivery and combat some of the challenges that were previously faced.

**Table 4.7: IFMIS Training and Service Delivery**

<b>Descriptive Statistics</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
IFMIS provides specific information on which decision to be made	80	1.89	0.763
The training of staff on IFMIS support software has improved efficiency of service delivery	78	1.86	0.618
IFMIS training on record to report has enhanced record keeping thus improving service delivery	79	1.91	0.701
IFMIS training on revenue to cash has increased revenue collection therefore increasing money allocation for services	80	2.14	0.791
IFMIS training on plan to budget has improved the budgeting process thereby improving service delivery	79	1.99	0.742
IFMIS training on procurement to pay has reduced corruption thus improving service delivery	79	2.27	0.858

### **Relationship between IFMIS Training and Service Delivery**

An analysis was performed on the relationship between IFMIs training and improvement in service delivery. From the analysis the following results were established.

**Table 4.8 : Correlation between IFMIS Training and Service Delivery**

Correlations	Extent to which service delivery improved	
Ifmis_trainin	Pearson Correlation	.394**
	Sig. (2-tailed)	0.001
	N	73

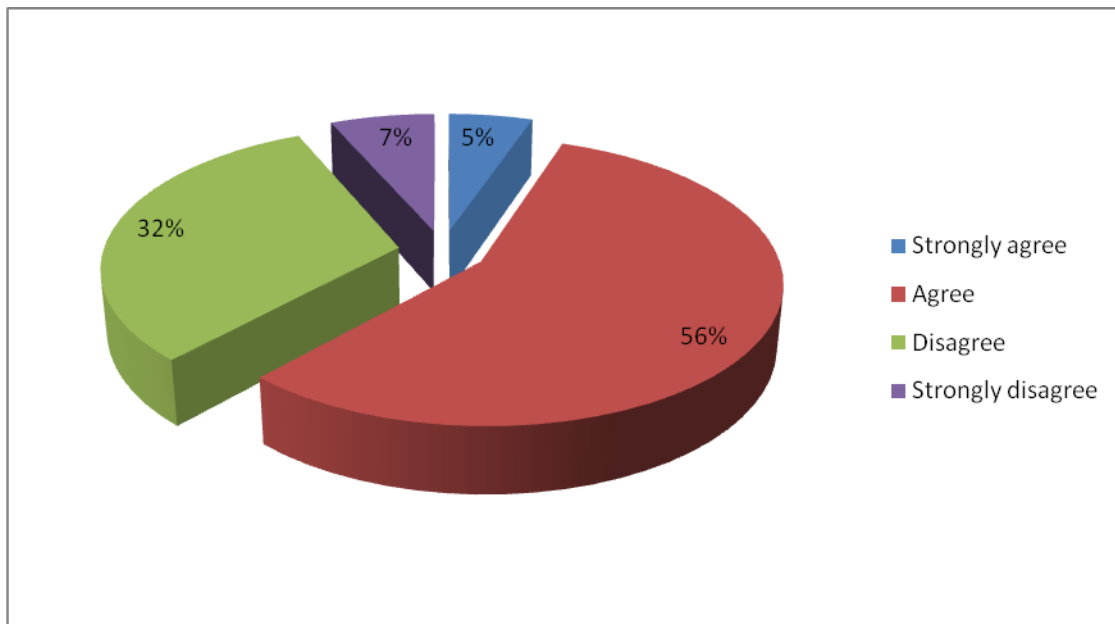
\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 4.8 revealed that there is a significant relationship between IFMIS training and improvement in service delivery. This was indicated with a p-value of 0.394 that was

significant at 0.01 confidence interval. This result affirms that training during the introduction of new information system is important in enhancing the performance of such a system and thus improving service delivery. However, the study established that training had a low effect of service delivery. This could be because of complimentary factors such as attitude, state of technology that impacts on training skills of employees. Another possible explanation for the weak relationship between IFMIS training and service delivery could be attributed to what Odolo and Gekara (2015) labelled as difference in employee skill set out that is still lacking in the implementation of IFMIS in both county and national government. The results of the study were affirmed in a study by Kwena (2013) that advanced that continuous IFMIS training is one critical factor in enhancing the role of IFMIS in the public sector service delivery.

#### **4.6 IFMIS Adoption and Service Delivery in County and Government offices**

On being asked about the effect of IFMIS adoption on service delivery, majority (56%) of the respondents were in agreement that IFMIS adoption had led to improved service delivery, 32% disagreed, 7% strongly disagreed and a few (5%) strongly agreed that IFMIS adoption has led to improvement in service delivery. This could be associated to the economies of scale that is associated with the use of technology, particularly in reducing the work load of employees, improving efficiency and effectiveness as Armstrong (2005) states. These findings are in agreement with the findings of Wainaina (2014) who advanced that adoption of IFMIS has led to improved performance of government departments albeit with varied improvement in different departments.



**Figure 4.5: IFMIS adoption and service delivery**

The study further sought to establish the effects of IFMIS adoption through various likert questions on allocation of resources, resource wastages in the government, corruption and delivery of services in the public service. The means of each of the statement was calculated and results tabulated on table 4.9. Regarding the effect of IFMIS on efficient allocation of resources, the respondents agreed that IFMIS adoption had led to efficient allocation of resources (mean=1.91) as shown on table 4.9.

The study also sought to find the respondents views on IFMIS impact on reducing wastages of government resources. Most of them were in agreement that IFMIS adoption had indeed reduced wastages of government resources (mean=2.01). IFMIS use was also believed to have lowered corruption and fraud issues (mean=2.34). Regarding timely delivery of services, the respondents agreed (mean=2.20) that IFMIS use had led to timely service delivery to citizens and businesses.

**Table 4.9 : IFMIS Adoption and Service Delivery**

<b>Descriptive Statistics</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
IFMIS use has led to efficient allocation of resources thus improving service delivery	77	1.91	0.764
IFMIS use has led to reduction of wastage of government resources	78	2.01	0.73
IFMIS use has lowered corruption that has greatly hampered service delivery strategies	79	2.34	0.846
IFMIS use has led to timely delivery of public services to citizens and businesses	79	2.20	0.723

### **Relationship between IFMIS Adoption and Service Delivery**

An analysis was performed on the relationship between IFMIs training and improvement in service delivery. From the analysis the following results were established. The results of the study as shown in table 4.10 indicated that there is significant relationship between IFMIS adoption and improvement in service delivery, with the relationship being strong relationships. According to Biwott (2015) the use of IFMIS has resulted in reducing wastage in public resources and in reducing time delivery in service thus resulting in significant improvement in service delivery. This was indicated by p-value of 0.0001 and coefficient of correlation of 0.48. These results corroborates the findings of Muingai (2012) and Miheso (2013) who found out that adoption of IFMIS is associated with significant improvement in service delivery in public sector.

**Table 4.10 : Relationship between IFMIS Adoption and Improved Service Delivery**

<b>Correlations</b>	<b>Extent to which service delivery has improved</b>	
IFMIS_adoption	Pearson Correlation	.480**
	Sig. (2-tailed)	0.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### **4.7 Regression Model**

In order to obtain the regression implications of the independent variables, the data was regressed and the following results obtained. The results were as follows:

##### **4.7.1 Coefficient of Determination**

Table 4.11 shows the model summary with  $R^2$  of 0.116 meaning that 12% of the improvement in service delivery was predicted by the independent variables; Electronic Platforms, IFMIS adoption and IFMIS training. This means that 12% of the improvement in service delivery in public sector can be occasioned by the use of IFMIS system. On the other hand, 88% of improvement in service delivery can be associated with other variables that are not part of the regression model.

**Table 4.11 : Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
	0.341 <sup>a</sup>	0.116	0.078	0.468

a Predictors: (Constant), Ifmis\_adoption, Elec\_platform, Ifmis\_trainin

#### 4.7.2 Analysis of Variance

Table 4.12 presents the results of ANOVA which explains how well the regression equation fits the data. The results show that the regression model predicts the improvement in service delivery significantly well as shown by the significance value of 0.033. This shows that the effects of IFMIS adoption were statistically significant and therefore the change is not by chance. The study also realized an F-static of 3 which is significantly greater than 0 thus affirming the significance of the model. Greater the F-statistic the more significant the p-value.

**Table 4. 12 : ANOVA**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	2.02	3	0.673	3.072	0.033 <sup>b</sup>
Residual	15.344	70	0.219		
Total	17.365	73			

a Dependent Variable: Has service delivery in the county or national government department improved over the past two years

b Predictors: (Constant), Ifmis\_adoptionn, Elec\_platform, Ifmis\_trainin

### 4.7.3 Regression Coefficients

The coefficients of analysis gives  $\beta_0$  (Beta) at 0.381,  $\beta_1$  at 0.341,  $\beta_2$  at 0.105 and  $\beta_3$  at -0.277.

Where  $\beta_0$  is the constant,  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are parameter for estimation of the independent variables; electronic platform, IFMIs training and IFMIs adoption consecutively. The regression equation below was used;

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$  :Where electronic platforms, is denoted by  $X_1$ , IFMIS training by  $X_2$  and IFMIS adoption as  $X_3$  while service delivery is  $Y$ , the regression equation of the model becomes;

$$Y = 0.381 + 0.341 X_1 + 0.105 X_2 - 0.277 X_3$$

It is evident from the above regression model that if all factors were to be held constant including electronic platforms, IFMIS training and IFMIS adoption then changes in service delivery would be at 0.381 of a unit.

**Table 4. 13 : Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.381	0.251		1.518	0.134
Electronic platforms	0.341	0.125	0.433	2.72	0.008
IFMIS training	0.105	0.148	0.132	0.712	0.479
IFMIS adoption	-0.277	0.138	-0.396	-2.01	0.048

a Dependent Variable: Has service delivery in the county or national government department improved over the past two years

The study results from the regression model indicated that 11.6% of predictor variables (IFMIS training, IFMIS adoption and Electronic platforms) cause a change in service delivery. These results confirm that ICT can play a role in improving public service delivery. The results of the study testify that 11.6% of the predictor’s variables provide opportunities that the national and county government can leverage to improve service deliver. In addition, two factors were significant, electronic platforms and IFMIS adoption. The two factors were positively and negatively significant respectively.

The Study result confirms the findings of Njuki and Gakiri (2015) that established that IFMIS use have an impact on public service delivery at the national government. The findings also agree with the findings of Njonde and Kimanzi (2015). However, unlike these findings that established that IFMIS adoption has led to significant increase in service delivery, the current study established a low significant increase in service delivery. These can be possibly attributed to the challenges that IFMIS implementation has faced in county governments unlike the national government.

**Table 4.14: Summary of Results**

<b>Variable</b>	<b>Significance</b>	<b>Result</b>
Electronic Platforms	0.05	0.008
IFMIS Training	0.05	0.0479
IFMIS adoption	0.05	0.0048

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

## **5.1 Introduction**

This chapter presents the summary of the study findings, the conclusion of the study and the recommendations which are based on the conclusion of the study. The general objective of the study was to investigate the effect of IFMIS on service delivery in both national and county government. In particular, the study sought to establish the effect of electronic platforms, IFMIS training and IFMIS adoption on service delivery in both national and county governments.

## **5.2 Summary of Findings**

One of the objectives of the research was to determine the effect of electronic platforms on service delivery in the public sector in Kenya. The results of the study indicated that there is significant positive relationship between electronic platforms and improvement in service delivery. This results means that an increase in the use of electronic platforms results in improvement of service delivery in the public sector. These results are similar to the findings of Abdi (2014) and Boughzala (2010) who established that electronic platforms have a positive significant effect on service delivery. This appears to be occasioned by partial implementation of IFMIS in the counties unlike the previous studies that focused on the national government where IFMIS implementation has fully taken root. The study findings thus imply that the use of IFMIS needs to be encouraged at both levels of government with an aim of improving service delivery. Similarly the study findings support the technology acceptance theory that argues that the use of technology, electronic platforms has a perceived effect on performance improvement in organizations.

The study sought to establish the effect of IFMIS training on the service delivery in public sector in Kenya. From the regression results it was noted that the IFMIS training results in improvement of service delivery by 0.105 units as indicated with a regression co-efficient of 0.105. This signifies that IFMIS training results to improvement in services delivery, albeit

to a small increase. The findings align themselves to the results of Lundu & Shale (2015) who also found out that training on the use of IFMIS results in a small improvement in service delivery. From the findings it can be seen that training of staff on the use of IFMIS technology is paramount to an improvement in service delivery. These findings also contradict the results of Njuki & Gakiri (2015) who noted that IFMIS training results into a greater improvement in service delivery. This difference could be attributed to the reason that the study by Njuki & Gakiri (2015) was conducted on only one major department, procurement department where the use of IFMIS was first introduced and has taken root. This is unlike the current study that focused on four departments where the use of IFMIS is implemented at both levels of government. These findings lend credence to contingency theory, where training is considered as one of the contingencies that is necessary to improving the performance of an organization.

Somewhat surprisingly on the third objective the study established that the adoption of IFMIS has led to a slight decrease in service delivery at both the national and county level of government. This was indicated by a regression co-efficient of -0.277. This could be possibly be explained by the lack of political will in regards to adoption of IFMIS by county government in service delivery. Lack of political will reduces the degree of top management support that is necessary to encourage the adoption of IFMIS technology among the lower cadre of workers at the county level of government. This has the potential to create confusion among the county government worker because of contradiction on whether they should adopt IFMIS in county government. These findings contradict the Njonde and Kimanzi (2015) and Miheso (2013) who established that adoption of IFMIS had contributed to significant improvement in service delivery. From these findings it can be established that the adoption of IFMIS can result to improved service delivery given that policies between national and county government are put in place to make the adoption of IFMIS technology easier. It is

worth mentioning that the findings of the study do not lend credence to the theory of technology acceptance which propagates that adoption of technology leads to improved service delivery. This possibly highlights the weakness of technology acceptance theory that contends that the adoption of technology results in better performance.

The regression analysis showed that R square value of 12% indicates that change in service delivery can be explained to a small extent by the electronic platforms, IFMIS training and IFMIS adoption. The relatively low effect of IFMIS on service delivery can be explained by lack of structure and policies that have been put in place to improve the effectiveness of IFMIS technology. These findings are contrary to the findings of Biwott (2015), Miheso (2013) and Njihia (2015) who all found that IFMIS has contributed to a significant improvement in service delivery. This can be attributed to the fact that these studies were carried out in national government where the adoption of IFMIS had been on since 2010. The same is not true of this study which focused on both county and national government departments, with the adoption of IFMIS by county government which has not fully taken root as opposed to the national government. This study implies that the use of technology in public sector can result in improvement in services delivery, albeit to a small degree. These findings also support technology acceptance theory which argues that technology adoption results in improved performance in public sector.

### **5.3 Conclusion**

There are several main conclusions emerging from this survey. The conclusions of the study were based on the research objectives.

First, the introduction of an IFMIS in Kenya should be regarded as a component of a wider reform process. From the findings the study conclusions are drawn from the most significant factors presented in the preceding sections.

The study thus concludes that the technology infrastructure plays a role in the improvement of service delivery, albeit at minimum role on service delivery in public sector. Thus there is need for both county and national government to invest in technology infrastructure to provide a good platform that can enhance service delivery. This affirms the theory of technology acceptance model argument on the performance of public sector. The theory emphasises that adoption of any innovation especially Information Technology based requires investment in infrastructure to support decision making, planning and communication.

The study concludes that training on IFMIS contributes to improvement in public sector service delivery. In line with the study also concludes that improvement in different employee skill set can result to increasing the significance of training on service delivery. This is a possible reason for the small significant effect of training on service delivery. The study confirms the importance of contingency theory in service delivery, training being a contingency that can improve service delivery. The theory emphasises that in the process of attaining efficiency and effectiveness, there arises the need to create synergy and harmony between major components like human resource and other tools like modern technology.

From the study it is concluded that adoption of IFMIS does not necessarily result to service delivery improvement. Thus it can be concluded that adoption of IFMIS technology ought not to be encouraged at the exclusion of political will, top management support and government policy. Thus the effectiveness of IFMIS is better enhanced with government support. This results affirm that the theory of technology acceptance model cannot be used alone to explain the impact of technology on service delivery.

Finally, it can be concluded that the implementation of IFMIS at both county and national government does not necessarily result into significant improvement of service delivery.

However, with complimentary and supportive structure and policies in place, IFMIS can result into significant improvement of service delivery in public sector. It can also be affirmed that technology acceptance model cannot on its own explain the relationship between technology use and service delivery in public sector.

#### **5.4 Recommendations**

This study therefore recommends that all public institutions at both levels of government should come up with a policy on IFMIS training. This will increase the expertise of the IFMIS users and thus contribute greatly to the efficiency in the implementation of IFMIS at both levels of government. In turn this will help the government achieve vision 2030 which had laid emphasis on transparency and accountability under the political pillar strategy (Vision 2030).

As of any information system there is need for the IFMIS to be carefully designed and aligned to meet the needs of both the county and national governments. This requires continuous improvement based on lessons learnt during the implementation of IFMIS at both levels of government.

The study finally recommends that there is need to ensure that the requisite technological infrastructure is in place especially in outlying areas such as Garissa where technological infrastructure is still relatively poor.

In general, the study recommends among other things that the government engages the county governments fully to win their support in the implementation of IFMIS at the county level. In line with this there is need for the government to develop a support fund to help the county government in implementing IFMIS fully.

### **5.5 Areas for Further Research**

Some of the variables are dynamic in nature e.g. IFMIS training and thus a longitudinal study would be more preferable than a cross-sectional design study in which data is gathered just once by the researcher.

A sample size of 91 is a bit small and may not be generalizable and thus future studies should include a bigger sample which can generate more accurate and reliable results.

The study included such three factors of IFMIS. It is expected that there are more factors affecting IFMIS performance and thus future studies should include more factors of IFMIS than the three used in this study. This will help to generate more elaborate results.

This study took place in one county out of the forty seven (47) counties in the republic of Kenya. This may not be generalizable. Future studies should include more counties, especially both rich and poor.

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## APPENDIX I: QUESTIONNAIRE

### SECTION A

1. Highest Level of Education attained:  
Below Primary  Secondary  Diploma  Degree  Postgraduate
2. Gender: Female  Male
3. Age in years: below 25 years  25-30 years  36-40 years  40-45 years   
Above 45 years
4. Which department do you work in  Accounts  Audit   
Procurement  Finance
5. Have you ever received any training on IFMIS? Yes  No
6. How many times have you been trained on IFMIS  
Once  Twice  More than twice
7. How long have you worked in your department?  
Less than 1 year  1 – 3 years  4 – 10 years  More than 10 years
8. How frequent do you use IFMIS as part of your work?  
Daily  Weekly  Monthly  Quarterly  Annually
9. To what extent does your organization use the following IFMIS features/modules?  
(On the scale of 1-5, indicate 1-very little; 2-little; 3-moderate; 4-large; 5-very large)

Statement	1	2	3	4	5
The Public Sector Budgeting					
Purchase Ordering					
Accounts Payable					
General Ledger (GL)					
Cash Management (CM)					
Procurement					

10. How would you rate the extent of implementation of IFMIS in this Government Ministry or County Government?  
To a very great extent  To a great extent  To a moderate extent   
To a little extent  To no extent
11. How do you rate IFMIS currently in use within the national department and county government?

Excellent [ ] Very good [ ] Good [ ] Poor [ ] Very poor [ ]

**SECTION B: ELECTRONIC PLATFORMS**

12. To what extent do you agree with the following statement listed below? Please indicate any of the following answers for each statement .Strongly agree [SA] Agree [A] Disagree [D] Strongly Disagree [SD]

Statement	SA	A	D	SD
The use of electronic platform systems (e-government) has improved customer delivery.				
The use of electronic platforms has improved transparency and accountability in the public sector.				
The use of electronic platforms has improved service efficiency in national/county government.				
Electronic platforms lowered cost of service delivery in both national/county government.				
Electronic platforms have minimized corruption in the department/ministries in both levels of government.				

**SECTION C: IFMIS TRAINING**

13. To what extent do you agree with the following statement listed below? Please indicate any of the following answers for each statement .Strongly agree [SA] Agree [A] Disagree [D] Strongly Disagree [SD]

Statement	SA	A	D	SD
IFMIS provides specific information on which decision is to be made.				
The training of staff on IFMIS support software has improved efficiency of service delivery.				
IFMIS training on record to report has enhanced record keeping thus improving service delivery.				
IFMIS training on revenue to cash has increased revenue collection thereby increasing money allocation for services.				

IFMIS training on plan to budget has improved the budgeting process thereby improving service delivery				
IFMIS training on procurement to pay has reduced corruption thus improving service delivery				

**SECTION D: IFMIS ADOPTION**

14. To what extent do you agree with the following statement listed below? Please indicate any of the following answers for each statement .Strongly agree [SA] Agree [A] Disagree [D] Strongly Disagree [SD]

Statements	SA	A	D	SD
IFMIS use has led to efficient allocation of resources thus improving service delivery				
IFMIS use has led to reduction of wastage of government resources				
IFMIS use has lowered corruption that has greatly hampered service delivery strategies				
IFMIS use has led to timely delivery of public services to citizens and businesses				

**SECTION E: SERVICE DELIVERY**

15. Has service delivery in the county or national government department improved over the past two years?

Yes [ ] No [ ] I don't Know [ ]

16. If yes in above to what extent has service delivery improved in the county over the past two years?

To a very great extent [ ] To a great extent [ ] To a moderate extent [ ]

To a little extent [ ] To no extent [ ]

17. Has the use of IFMIs in the county or national department improved service delivery over the past two years

Yes [ ] No [ ] I don't know [ ]

18. If yes in above to what extent can improved in service delivery be attributed to the adoption of IFMIS in county and national government?

To a very great extent [ ] To a great extent [ ] To a moderate extent [ ]

To a little extent [ ] To no extent [ ]

**I SINCERELY THANK YOU FOR YOUR COOPERATION.**

**THANKS AND GOD BLESS.**

**APPENDIX II: Description of Factors of the Study Variables:**

Variable	Construct	Description
Electronic Platforms	<ul style="list-style-type: none"> <li>• Availability of Computers</li> <li>• Software</li> <li>• Internet Connectivity</li> </ul>	<p>The use of electronic platform systems (e-government) has improved customer delivery.</p> <p>The use of electronic platform has improved transparency and accountability in the public sector.</p> <p>The use of electronic platforms has improved service efficiency in national/county government departments</p> <p>Electronic platforms has lowered cost of service delivery in national/county government departments</p> <p>Electronic platforms have minimized corruption in the department/ministries in both levels of government.</p>
IFMIS Training	<ul style="list-style-type: none"> <li>• Capacity building/Training</li> <li>• Staffing</li> <li>• Leadership</li> </ul>	<p>IFMIS provides specific information on which decision is to be made.</p> <p>The training of staff on IFMIS support software has improved efficiency of service delivery.</p> <p>IFMIS training on record to report has enhanced record keeping thus improving service delivery</p> <p>IFMIS training on revenue to cash has increased revenue collection thereby increasing money allocation for services</p>
IFMIS Adoption	<ul style="list-style-type: none"> <li>• Framework</li> <li>• Method of Implementation</li> </ul>	<p>IFMIS use has led to efficient allocation of resources thus improving service delivery</p> <p>IFMIS use has led to reduction of wastage of government resources</p> <p>IFMIS use has lowered corruption that has greatly hampered service delivery strategies</p>

		IFMIS use has led to timely delivery of public services to citizens and businesses
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